2025 REAPPRAISAL
SCHEDULES OF RULES, STANDARDS AND VALUES FOR MARKET VALUE AND PRESENT-USE VALUE

ORANGE COUNTY, NORTH CAROLINA

Presented by:
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Submitted to the:

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THE APPRAISAL FOUNDATION

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INTRODUCTION

Orange County, like all other North Carolina counties, faces the continuous and challenging task of determining fair and equitable assessments of properties which are subject to ad valorem tax within its jurisdiction. The applicable statutes of our State require that a reappraisal be conducted at least once every eight years but permits more frequent general reappraisals when it is necessary to maintain equitable assessments. The primary objective is to maintain an equitable tax base among all taxpayers.

The economic principle of change has a constant effect upon the properties which are subject to ad valorem taxation, although the effect is not the same on all properties. The effects of change such as inflation, appreciation, depreciation, deterioration, and improvement must be frequently recognized in order to produce equitable assessments.

To accomplish the goal of determining just and equitable values the assessor must turn to mass appraisal methods and techniques based on appraisal principles. In mass appraising, as in any kind of appraising, the realities of the local market along with state and local laws must be considered. Also, fundamental to any mass appraisal system are knowledge, judgment, and the ability to adapt a standardized system to the local market. A standardized system and method of handling both data and the application of the three basic approaches to value is necessary to achieve uniformity in the valuation process.

The three basic approaches that may be used to arrive at a fair market value are summarized as follows:

COST APPROACH	This approach consists of estimating the land value and the depreciated cost of the improvements to arrive at a value. Theoretically, the substitution principle is the basis for determining the maximum value of the property by this approach. The substitution principle assumes the value is equal to the cost of acquiring a substitution of equal utility assuming no cost delay is encountered.
MARKET APPROACH	This approach utilizes the application of prior sales data from the market and is also referred to as the sales comparison approach. The use of this approach requires that the sales used be analyzed to determine that the conditions of market value have been met.
INCOME APPROACH	The two most common applications of this approach in mass appraising are the capitalized net income and the gross rent multiplier. In this approach the income generated from the property is used to estimate its market value.

The use of any of the three approaches requires careful consideration to be given to:

- The relevancy of the approach applied to the property under consideration.
- The inherent strengths and weaknesses of the approach used.
- The amount and reliability of the data collected.
- The effect of the local market on the data collected.

Reappraisals are dependent on data and the expertise to analyze and interpret that data. Under the guidance of the North Carolina Department of Revenue's Property Tax Division we have expanded our use of the Assessment/Sales Ratio Reports. From a randomly selected base of arm's-length sales, a comparison is made between the actual sales price of a series of property transactions and their respective assessed values.

The Orange County Tax Assessor and Assessment Staff are constantly collaborating with other County Assessors, staff from the North Carolina Department of Revenue, staff from the UNC School of Government, and with professional appraisal companies to share and analyze data to provide the most accurate and up-to-date reappraisal.

All appraisals are under the jurisdiction of the Uniform Standards of Professional Appraisal Practice (USPAP), the relevant portions of which have been included in the Addendum, and which by reference are hereby made a part of this proposed set of Schedules, Standards, and Rules.

The Orange County reappraisal will be effective as of January 1, 2025. Due to the current nature of the market, we will continue to collect market data through December 31, 2024. By ruling of the North Carolina Appellate Courts, sales occurring after January 1, 2025 are not to be considered for valuations established on January 1, 2025. The schedules presented will allow us to continue to examine the market with the latest available activity occurring in calendar year 2024 and by so doing, permit us to be as accurate and up-to-date as the data will allow.

Respectfully submitted,

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Orange County Tax Administrator

PROPERTY AND VALUE

CONCEPTS OF PROPERTY AND PROPERTY RIGHTS

Before an assessor can undertake his or her responsibilities and duties properly, he or she must be familiar with the legal framework in which the function is performed. In addition to the specific statutory direction and appellate court rulings, it is necessary to be well-versed with the nature of appraised values and property and with the basic economic principles that serve as the foundation of the valuation process.

A discussion of property and property rights should begin with a definition of property. When one thinks of property, he or she tends to think of a thing. Legally, however, property is associated with the *right* of any person to possess, use, enjoy, and dispose of a thing. Property, then, is a broad term expressing the relationship between owners and their rights in and to possessions. In appraising real property, the parcel to be appraised includes the rights inherent in the ownership of the property be included in the opinion of value rendered by the reappraisal.

All property may be divided into two major categories-real property and personal property. Real property is defined as the sum of the tangible and intangible rights in land and improvements. It refers to the interest, benefits, and rights inherent in the ownership of physical real estate. A synonym for real property is realty. Real estate, on the other hand, is the physical land and everything permanently attached to it. Personal property consists of movable items not permanently affixed to, or part of, the real estate and is commonly known as “personalty" or "chattels".

Real estate may be divided into two categories: land and improvements. Land may be defined as the surface of the earth together with everything under its boundary and everything over it, extending indefinitely. The shape of a parcel of land can be described as an inverted pyramid with its apex at the center of the earth and extending upward through the surface into space. Certain legal limitations have been imposed throughout the years by the Courts, such as the right of aircraft to fly over the land. Improvements (land improvements, such as paving, fencing, structures, and landscaping) consist of immovable items affixed to and becoming part of the real estate. "Permanently affixed" refers to the original intent of the owner and the economic life of the improvements rather than forever.

In discussing the distinction between real estate and personal property, the term “affixed” was used. Defining “fixture” has been the subject of much litigation, and the courts do not always agree. Generally speaking, personal property affixed to land is called a fixture. Chattels that have been affixed to land are called fixtures.

Chattels that have been affixed to the land so as to lose their character as chattels become real estate for ad valorem tax purposes. In determining the nature of the annexation of personal property, there are two basic

considerations: first, the adaptability of the personal property to the use of that part of the realty and, second, the person by whom the annexation is made and his interest in the land and the personal property.

Courts tend to agree that, if the chattel is affixed to the land so that it loses its original physical character and cannot be restored to its original condition as a practical matter then it loses its nature as personal property and becomes real property. In some cases, there are two basic tests to determine whether personal property becomes real property: (1) the intention of the person who put the item in its place and (2) whether the item may be removed from the real estate without damaging either the item or the real estate.[1] An excellent example is in how NC law distinguishes manufactured homes as personal versus real property.

N.C.G.S. 105-273(13) b. reads:

"Real property, real estate, or land. – Any of the following:

a. The land itself.
b. Buildings, structures, improvements, or permanent fixtures on land.
c. All rights and privileges belonging or in any way appertaining to the property.
d. A manufactured home as defined in G.S. 143-143.9(6), unless it is considered tangible personal property for failure to meet all the following requirements:
    1. It is a residential structure.
    2. It has the moving hitch, wheels, and axels removed.
    3. It is placed upon a permanent foundation either on land owned by the owner of the manufactured home or on land in which the owner of the manufactured home has a leasehold interest pursuant to a lease with a primary term of at least 20 years and the lease expressly provides for disposition of the manufactured home upon termination of the lease."

Another important distinction in property is that of tangible and intangible property. Tangible property consists of actual physical property. Intangible property is evidence of ownership of property rights. Examples of intangible property are patent rights, copyrights, notes, mortgages, deeds of trust, and stock certificates.

OWNERSHIP OF PROPERTY

There are six basic rights associated with the ownership of property:

1. The right to use.
2. The right to sell.
3. The right to lease or rent.
4. The right to enter or leave (real property).
5. The right to give away.
6. The right to refuse to do any of these.

[1] For example, if a tenant places a screen in front of a fireplace, there is no intent of permanent installation, and the screen can be easily removed when the tenant leaves, the screen is therefore personal property. However, if a property owner installs a light switch in the wall, the wall would be damaged by its removal. The light switch is considered part of the real estate. In more difficult cases involving this question, state statutes and court decisions should be the reference sources.

These rights are known as the "bundle of rights", which is the ownership of all the legal rights obtained with fee-simple title. The bundle of rights may be compared to a bundle of sticks, each representing one property right. Property rights are divisible. Property ownership is sometimes transferred without the exchange of the full bundle of rights.

Unless property is owned by the government, it is subject to certain public and possibly private restrictions. The United States and other nations impose certain limitations for the common good. These public, or legal, restrictions thrust limitations on the full bundle of rights. The bundle of rights is further restricted by governmental control, identified as follows:

- Taxation - right to tax property for support of the government.
- Eminent domain - right to take property for public use for "just compensation".
- Police power - right to regulate the use of property for public welfare in the areas of safety, health, morals, zoning, building codes, and traffic and sanitary regulations.
- Escheat - right to have property revert to the State for nonpayment of taxes or where there are no legal heirs of a decedent who dies intestate.

Some examples of private limitations which affect fee-simple ownership of property are (1) the rights of other co-owners of the property; (2) covenants, conditions, and restrictions that are found in the chain of title to the property; (3) mortgages (a mortgage is a written instrument pledging specified real estate as a guarantee for the repayment of a loan used to purchase property); (4) easements and rights of way (an easement is a right held by one person to use the land of another); (5) liens and judgments (a lien is a legal right to hold property or to have it sold or applied for a payment of a claim); and (6) leases.

ESTATES IN PROPERTY

An "estate" may be defined as the legal position or status of an owner with respect to the property and the degree or quantity of interest owned with respect to the nature of the right, its duration, or its relation to the rights of others. Estates in real property may be categorized according to the quality and duration of the property rights. The two main divisions in estates are freehold and non-freehold. A freehold estate is one which is to endure for an uncertain period of time, but which usually lasts during the life of some person. Non-freehold estates endure for a specified period of time and may be subject to immediate termination. There are three basic types of freehold estates: fee simple absolute, leased fee, and life estates.

An "estate in fee simple" is one which has been given to an individual, and his heirs without any end or limit put to his estate. Fee-simple title is the greatest possible degree of ownership. It is title free and clear of all encumbrances, including easements, rights of way, liens, and so forth. In other words, it is the ownership of all legal rights. With certain statutory exceptions, fee-simple title is the only estate which the assessor values. Personal property is always valued by the assessor as free and clear of all encumbrances.

N.C.G.S. 105-302 sets forth the statutory direction regarding whose name real property should be listed. In North Carolina, the property will be listed, appraised, and assessed at "fee simple" to the holder of the life estate, usually referred to as the "life tenant". A life estate is granted with ownership limited to the life of the owner or that of another party.

G.S. 105-302 (c)(8) reads:

> **"A life tenant or tenant for the life of another shall be considered the owner of real property, and it shall be his duty to list the property for taxation, indicating on the abstract that he is a life tenant or tenant for the life of another named individual."**

Estates in real property may also be categorized according to the way in which title is held: tenancy in severalty indicates ownership interest by one owner; tenancy in common indicates ownership by more than one person where the interest is not divided and descends individually to each owner's heirs; tenancy by the entirety indicates joint ownership by husband and wife where ownership reverts to the survivor and cannot a disposed of individually during the lifetime of either. There are many different types of tenancy in which the assessor is interested primarily for the purpose of keeping ownership records up to date. Ultimately, North Carolina General Statutes control how ownership of all real property is determined for ad valorem tax purposes.

NATURE OF PROPERTY APPRAISAL AND VALUE

The word "value" is an abstract word; generic in nature, with many acceptable definitions and meanings, the term defying an exact definition to suit all circumstances. Generally speaking, its definition is largely dependent upon the context in which it is being used. In a broad sense, value can be defined as the relationship between an object desired and a potential purchaser. It is the ability of a commodity to command another commodity (money) in exchange. For purposes of real property appraisal, value may be described as the present worth of future benefits arising from the ownership of real property.

A major distinction must be made between value in use and value in exchange. A property may have relatively little value in use and a significantly different value in exchange. Value in use embodies the objective premise, which maintains that value is within the object itself. A hose rack built into a fire station is a useful and valuable item as long as the building is used as a fire station. If use as a fire station is abandoned, however, the hose rack probably will not add value to the property unless it can be used for an almost identical purpose. Under the concept of value in exchange, the subjective element is accentuated. In a subjective context, value is within the mind of man. For example, meat is valuable only if hunger exists; stated differently, meat is desirable and therefore valuable because it satisfies hunger when and if hunger exists. The value-in-use concept easily accommodates cost. In an economic sense, value in exchange is the primary concern for the assessor because this value – market value – reflects the actions and reactions of buyers, sellers, and investors.

In order for property to have value, there must be desirability, utility, scarcity, and economic purchasing power. Utility is the capacity of goods to excite desire for possession and should not be confused with usefulness. Diamonds possess utility in that they excite a desire for possession in the minds of most people and usefulness in that they are the hardest substance known and have many industrial uses. Utility is a subjective concept, in the mind of man; usefulness is an objective concept, inherent in the property.

Scarcity is the third requirement for value. The air we breathe has utility, but it is not valuable, primarily because it is not scarce. There are two economic forces that determine scarcity: supply and demand. As demand increases or supply decreases, the value of the goods will increase. Conversely, if the supply increases or the demand decreases, the value of the goods will decrease.

Utility and scarcity by themselves do not confer value on an object, unless the desire by the purchaser is present, a desire backed by the economic purchasing power of the buyer(s).

A comparison of the terms "cost" and "price" is useful in a discussion of value. Cost may be defined as the sacrifice made in the acquisition of property and commonly reflects the perspective of the buyer. It may be incurred in either the purchase of an existing property or the construction of a new property. Price may be defined as the amount of money given or expected or arrived at when arranging for the exchange of property. Cost and price may be the same. If a purchaser pays $100,000 to buy a property, it may be stated that the property costs the purchaser $100,000. However, while price is defined in terms of money, cost is expressed as a sacrifice. A sacrifice may be in terms of money, labor, or time. Also, when a property is sold, the price may be either above or below the owner's cost.

MARKET VALUE AND SALES UTILIZATION

UNIFORM APPRAISAL STANDARD

While the term "value" remains quite difficult to define, the term "market value" does not suffer from the same limitation. The constitutions and statutes of the 50 states have different definitions of market value; they also have different definitions of value for property taxation, eminent domain, corporate reorganization, and public utility rate regulation. The assessor must adhere to the definition of market value as stated in N.C.G.S. 105-283 and as interpreted in various decisions rendered by the North Carolina Appellate Courts, as set forth below:

N.C.G.S. 105-283. Uniform Appraisal Standard.

> **"All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words "true value" shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land."**

NOTE: In analyzing sales of property, close attention is paid to identifying all transactions that are the result of a foreclosure or short sale. Such sales are not retained for further consideration in determining the schedules set out elsewhere in this document, and neither will they be considered in analyzing the reappraisal results via the State-mandated assessment/sales ratio study.[2]

Several Appellate Court cases have addressed the issue of defining market value:

- Neither this section nor G.S. 105-317(a) requires the commission to value property according to its sales price in a recent arm's length transaction when competent evidence of a different value is presented. In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).

- The purpose of the statutory requirement that all property be appraised at its true

[2] For a complete list of conditions (in addition to foreclosure and short sales), that the NC Department of Revenue distributes to all 100 NC counties to be used in determining whether a particular sale is qualified or disqualified, please refer to the Addendum, Document 1.

value in money is to assure, as far as practicable, a distribution of the burden of taxation in proportion to the true values of the respective taxpayers' property holdings, whether they be rural or urban. In re *King*, 281 N.C. 533, 189 S.E.d 158 (1972).

- In substance, this section and G.S. 105-317.1 provide that all property shall be appraised at market value, and that all the various factors which enter into the market value of property are to be considered by the assessors in determining this market value for tax purposes. In re *Bosley,* 29 N.C.App. 468, 224 S.E.2d 686, cert. denied, 290 N.C. 551, 226 S.E.2d 509 (1976).

- Where sale was not between a willing buyer and a willing seller, as contemplated by this section, sales price was not indicative of property's true value. In re *Phoenix Ltd. Partnership,* 134 N.C. App. 474, 517 S.E.2d 903 (1999)

- Section 105-317(a), in fixing the guide which assessors must use in valuing property for taxes, includes as a factor the past income therefrom, and its probable future income. But the income referred to is not necessarily actual income. The language is sufficient to include the income which could be obtained by the proper and efficient use of the property. To hold otherwise would be to penalize the competent and diligent and to reward the incompetent or indolent.
  In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).

- To find the true value of property subject to conservation easements, the Commission must determine the market value prior to the granting of the easements and then reduce that value by applying a damage factor caused by the granting of the conservation easements. Determining the highest and best use of the property prior to the granting of the easement is a critical part of the appraisal process. In re *Rainbow Springs Partnership v. County of Macon,* 79 N.C. App. 335, 339 S.E.2d 681, cert. denied, 316 N.C. 736, 345 S.E.2d 392 (1986).

- A post-octennial valuation sale is not a statutory permissive basis for adjusting a property's tax valuation. In re *Allred,* 351 N.C. 1, 519 S.E.2d 52 (1999)

- State Tax Commission's reliance upon an independent appraiser's collateral determination of petitioners' property value, without challenge or correlation to the county's schedules of value or the application of those schedules to the property, was in violation of the statutory requirement of this section that any permissible increase or decrease in the appraised value of real property be calculated using the schedules and standards established by the county. In re *Allred,* 351 N.C. 1, 519 S.E.2d 52 (1999)

- In order for a taxpayer to have valuation set aside, he must show more than a failure to follow statutory procedures. It is not enough for the taxpayer to show that the means adopted by the tax supervisor were wrong; he must also show that the result arrived at is substantially greater than the true value in money of the property assessed, i.e., that the valuation was unreasonably high. In re *Highlands Dev. Corp.,* 80 N.C. App. 544, 342 S.E.2d 588 (1986).

Other General Legal References that bear on the Concept of Value:

- The North Carolina General Assembly determines how property in this State should be valued for purposes of ad valorem taxation. In re *Amp, Inc.,* 287 N.C. 547, 215 S.E.2d 752 (1975).

- The legislature has decreed that all property, real and personal, within the jurisdiction of the State, is subject to taxation whether owned by a resident or a nonresident. The purpose of this strong decree is to treat all property owners equally so that the tax burden will be shared proportionately, and to gather in all the tax money to which the various counties and municipalities are entitled. In re *Plushbottom & Peabody, Ltd.,* 51 N.C. App. 285, 276 S.E.2d 505, cert. denied, 303 N.C. 314, 281 S.E.2d 653 (1981).

- Uniformity in taxation relates to equality in the burden of the State's taxpayers. In re *Martin*, 286 N.C. 66, 209 S.E.2d 766 (1974).

- Ad valorem tax assessments are presumed to be correct, and when such assessments are challenged, the burden of proof is on the taxpayer to show that the assessment was erroneous.
In re *Bosley,* 29 N.C.App. 468, 224 S.E.2d 686, cert. denied, 290 N.C. 551, 226 S.E.2d 509 (1976).

- Ad valorem tax assessments are presumed correct. In order to rebut this presumption, the taxpayer must present evidence to show that an arbitrary method of valuation was used, or that an illegal method of valuation was used, and that the assessment substantially exceeded the true value in money of the property. In re *Interstate Income Fund I,* 126 N.C. App. 162, 484 S.E.2d 450 (1997).

- In order to obtain relief from valuations upon their property by the State Board of Assessment, appellant electric membership corporations must show that the methods used in determining true value were illegal and arbitrary, and that appellants were substantially injured by a resulting excessive valuation of their property. In re *Albemarle Elec. Membership Corp. v. Alexander,* 282 N.C. 402, 192 S.E.2d 811 (1972).

- Burden is on the taxpayer to show that it comes within the exemption or exception.
In re *Martin*, 286 N.C. 66, 209 S.E.2d 766 (1974).

- Exemption from taxation is exceptional. Such exemptions should be strictly construed. In re *Notice of Attachment & Garnishment Issued by Catawba County Tax Collector*, 59 N.C. App. 332, 296 S.E.2d 499 (1982), cert. denied, 307 N.C. 576, 299 S.E.2d 645 (1983).

The following important points regarding market value should be noted:

- It is the most probable price.
- It is not the highest, lowest, or average price.
- It is expressed in terms of money.
- It implies a reasonable time for exposure to the market.
- It implies that both buyer and seller are well-informed of the uses to which the property may be put. It requires an arm's length transaction in the open market.
- It requires a willing buyer and willing seller, with no advantage being taken by either buyer or seller. This is a constraint against consideration of foreclosures and short sales.
- It recognizes the present use as well as the potential use of the property.

HIGHEST AND BEST USE

The way in which property is used, or could be used, plays an essential role in determining its market value.

Most appraisal organizations recognize the highest and best use of a given property must conform to the following four points:

- It must be a legal use. (in many instances zoning will identify the legal use)
- It must be a physically possible use.
- It must be an economically feasible use. And,
- It must be the use that generates the greatest net return to the owner.

Almost all property is subject to competing uses. Rural land is subject to the competition of farming and grazing. Urban land is subject to many competing uses; a single parcel of land may be sought after as the site for a store, gas station, apartment building, or office building. When determining an opinion of market value, it is necessary to determine which of the competing uses is the highest and best use.

Highest and best use may be defined as that use which will generate the highest net return to the property over a period of time. Further amplification of this definition is necessary for a clear understanding of the term.

The highest and best use must be a legal use. This means not only that the use cannot be criminal but also that it must be permitted under local administrative regulations, such as zoning. Assuming that zoning regulations are strictly enforced, the highest and best use may be limited. If it is easy to obtain a change or variance in zoning, uses not permitted by current regulations must be considered along with the probability that zoning will be changed. The use also must not be prohibited by enforceable restrictions contained in the chain of title to the property.

The use must be a probable use and not a highly unlikely or speculative one. There must be a demand for the use either in the present or in the near future. This, of course, is determined by persons in the market and not by a bias on the part of the assessor. It is important to consider as well that the highest and best use *may* be the present use or an entirely different one. It may even be a combination of uses over a period of time. Imagine, for example, a site in a good downtown location on which stands a three-story store with a 75 percent vacancy factor. Assume that the site could be developed with a modern fifteen-story office building. However, since there is currently too much unrented office space on the market, the highest and best use of the property might be as a parking lot for the next five years. Once the excess office space is absorbed, its highest and best use could be as an office building.

The highest and best use will be a complementary use rather than a competitive use. For example, if there are gas stations on three of four corners, a fourth gas station will reduce the customers that are available to all four stations. However, suppose that on the fourth corner a fast-food restaurant were established. The restaurant would draw business from the gas station customers. Conversely, the gas stations would draw business from the restaurant's customers.

The highest and best use must be the most profitable for the entire property, land, buildings, and other improvements-since the market deals with the total property unit and land and buildings usually are not sold separately. Also, when estimating highest and best use, the assessor should not combine parcels of common ownership that are used independently for different purposes.

The highest and best use generates the highest net return over a reasonable period of time. A use that yields a very high immediate income but one of short duration may not be as valuable as a use that results in a lower but more prolonged income stream. Just as everything changes with time, the highest and best use of property will change. The character of a neighborhood may be altered, thereby creating demands for different uses. The assessor periodically reviews conclusions as to highest and best use and revises them according to the data that is collected.

Properties in transition present a difficult appraisal problem. Not only must a new highest and best use be found for the property, but also an estimate must be made as to when the property will begin the new use. Occasionally, there will be an interim use prior to the future highest and best use. In order to estimate the value of these consecutive uses, the benefits must be identified, valued, and summed. The total value is the sum of:

1. The present worth of the income stream from the interim use for the period of that use less the cost of erecting interim improvements.
2. The present worth of the salvage value of the interim improvements less the present worth of removing them.
3. The present worth of the income stream from the future use less the present worth of erecting the future improvements.

For example, assume that a vacant parcel of land downtown has the highest and best use as a parking lot for five years and as a twenty-five-story office building thereafter. The sum of the future benefits is shown as pluses and minuses in the following example:

Pluses

1. Present worth of parking-lot income for five years,
2. Present worth of salvage value of parking-lot improvements deferred five years,
3. Present worth of sixty-year income stream from twenty-five-story office building deferred six years (one year for construction)

Minus

1. Cost of erecting parking-lot improvements: paving, fencing, and small office.
2. Present worth of cost to demolish parking-lot improvements deferred five years.
3. Present worth of cost to construct a 25-story office building deferred six years.

BASIC PRINCIPLES OF VALUE

These principles, which have evolved from economic doctrine, are generally accepted as having a direct effect on the modern concept of value. It should be emphasized that these principles rarely if ever can be considered in isolation; it is typical to conceive of them in an interrelated setting, for they tend to complement and accompany one another. It should also be pointed out that highest and best use is the resulting use after considering the interrelationship among the basic appraisal principles.

The following are generally regarded as essential to the understanding of the appraisal function. They are listed (in alphabetical order) as follows:

Principle of Anticipation

Market value is the present worth of all the anticipated future benefits to be derived from the property. The benefits may be in the form of an income stream or amenities. Anticipated future benefits are those benefits anticipated by the market. The assessor should not allow personal opinion to influence the determination of anticipated future benefits. Past sales of the property and past income are of importance only when they are an indication of what may be expected in the future. The principle of anticipation works in conjunction with the principle of change.

Principle of Balance

The principle of balance has dual significance. When applied to an individual property, the principle states that maximum market value is reached when the four agents of production: labor, coordination or management, capital, and land attain a state of equilibrium. In the case of individual properties, the principle works in conjunction with the principles of contribution, increasing and decreasing returns, and surplus productivity. When applied to a neighborhood, the principle of balance indicates that maximum market value is reached when the complementary uses of land attain equilibrium. For example, a single-family residential neighborhood requires commercial facilities such as grocery stores, gasoline stations, drugstores, and so forth. It also needs residential support facilities such as churches, schools, recreational facilities, and the like. When these complementary uses are in balance, the individual properties (and the neighborhood) achieve maximum market value. When the principle of balance is applied to a neighborhood, it works in conjunction with the principle of competition.

Principle of Change

This principle states that market value is never constant, because economic, social, and governmental forces are at work to change the property and its environment. In addition, property itself is constantly changing. For example, the forces of nature can change the quality of the soil, and improvements change by aging. Because change is continuous, the estimate of market value is valid only on the effective day for which it is made. The principle of change works in conjunction with the principle of anticipation.

Principle of Competition

The principle states that when substantial profits are being made, competition is created. This leads to the aphorism that profit tends to breed competition and that excess profit breeds ruinous competition. A neighborhood can support only a certain number of bowling lanes, department stores, gasoline service stations, and shopping centers. An excess of any one type of facility will tend to decrease the value of most, if not all, other such facilities.

Principle of Conformity

This principle states that maximum market value is reached when a reasonable degree of economic and social homogeneity is expected in the foreseeable future. When the principle is applied to improvements, reasonable homogeneity implies reasonable similarity, not monotonous uniformity. When it is applied to the residents, it means similarity in age, income, background, education, attitudes, and so on. Conformity works in conjunction with the principles of progression and regression and is essential in understanding the neighborhood concept as a mass appraisal technique.

Principle of Consistent Use

This principle states that the property must be valued with a single use for the entire property. It is improper to value a property on the basis on one use for the land and another use for the improvements. This is not to say that consecutive uses for the entire property would violate the principle of consistent use. The principle of consistent use is especially applicable to a property in transition from one use to another. While the improvements on a parcel ready for a higher use may theoretically have a long physical life, their economic life may have already terminated. In this case the improvements may have a negative value, namely, the cost of demolition.

Principle of Contribution

This principle states that the value of an agent of production (or a property component) depends upon its contribution to the whole. This is another way of saying that cost does not necessarily equal value. Some examples are:

1. Cost does not always equal value. Ten thousand dollars is spent on labor, (which is a cost), to build a two-car garage. What has the $10,000 worth of labor contributed to the value of the property – less than $10,000, $10,000 or more than $10,000?
2. The real estate market tends to look at the contribution of a property characteristic in broad terms. While there can be significant cost differences between a stucco chimney and a very plain fireplace profile versus a stone chimney and fireplace profile, that difference in cost may very likely not be likewise reflected in the value of the two homes located in the same neighborhood with the very different chimneys and fireplaces.
3. An owner spends $20,500 to erect a garage for use with the home. Based on a hypothetical comparable sales analysis, it is determined that such a garage adds $21,500 to the overall market value of the property. In this case $21,500 is the value contribution of the garage.
4. In the case of income-producing properties, the value of an agent in production (or property component) ran be measured by the amount it contributes to net income, since net income can be capitalized into value. For example, assume that the owner of a small retail store finds that, by spending $2,000 for an air-conditioning unit, annual gross income from rents can be increased by $650. Additional operating expense due to the air-conditioning unit will be only $400, including amortization of the investment. Consequently, installation of this unit will add value to this property in excess of its cost. If the additional annual income were less than $400, the expense would not be practical.

This principle is the basis for the adjustment process of the comparative sales approach to value and the direct sales comparison method of land valuation, for determining whether physical deterioration and functional obsolescence are curable or incurable, and for justifying remodeling and modernization. Many of the adjustments to value that are detailed herein for various property characteristics are based on their contribution to the whole property, not their actual cost.

The principle of contribution works in conjunction with the principles of balance, increasing and decreasing returns, and surplus productivity.

Principle of Increasing and Decreasing Returns

This principle states that when successive increments of one agent of production are added to fixed amounts of other agents, future net benefits (income or amenities) will increase up to a certain point (point of decreasing

returns), after which successive increments will decrease future net benefits. For example, assume a number of hypothetical buildings, each constructed on the same site:

A 10,000 square foot building that can earn 1.4 percent on its cost.
A 20,000 square foot building that can earn 5.5 percent on its cost.
A 30,000 square foot building that can earn 8.0 percent on its cost.
A 40,000 square foot building that can earn 5.8 percent on its cost.
A 50,000 square foot building that can earn 1.2 percent on its cost.

In this illustration, constructing larger buildings will produce increasing returns up to the point of a 30,000 square foot building. Beyond this point, additional investment to construct a larger building starts to contribute to diminishing returns. The principle of increasing and decreasing returns works in conjunction with the principles of balance, contribution, and surplus productivity.

Principles of Progression and Regression

Progression indicates that the value of a lesser object is enhanced by association with better objects of the same type. For example, a $72,000 house among $125,000 homes may bring a higher price in the market. The principle of regression states that when there are dissimilar properties within the same general classification and in the same area, the better property will be adversely affected. Thus, when a $150,000 house is located in an area where the typical home is in the $75,000 category, the market value of the former will tend to fall. The $150,000 house, in this example, is an over-improvement for the neighborhood. The principles of progression and regression work in conjunction with the principle of conformity. This principle is sometimes referred to as the “hydraulic principle” – all waters tend to seek the same level – whereas comparable properties within a given neighborhood tend to seek a common market level.

Principle of Substitution

A property's market value tends to be set by the cost of acquiring an equally desirable and valuable substitute property, assuming that no costly delay is encountered in making the substitution. This principle serves as the basis of the three approaches to value-cost, comparative sales, and income.

Principle of Supply and Demand

This principle states that market value is determined by the interaction of the forces of supply and demand. A sudden increase in the population of an area would increase demand. If, at the same time, mortgage interest rates rose sharply, demand might lessen.

Principle of Surplus Productivity

This principle states that the net income remaining after the cost of the agents of production-labor, coordination, and capital has been paid is considered surplus productivity. The surplus productivity is the income earned by or attributable to the land. The agents in production must be satisfied in the following order: labor (wages), coordination (management), capital (improvements), and land. As a result, land value tends to be set by the cost of labor, coordination, and capital. The principle of surplus productivity works in conjunction with the principles of balance, contribution, and increasing and decreasing returns.

Important Concepts Regarding Property:

1. Real property is the sum of tangible and intangible rights in land and improvements. Real estate is the physical land, and everything permanently attached to it. Personal property consists of movable items not permanently affixed to, or part of, the real estate.
2. Land is the surface of the earth together with everything under its boundary and everything over it. Improvements are movable items affixed to and becoming part of the real estate.
3. The six basic rights associated with the ownership of property are the rights to use, sell, lease or rent, enter or leave, give away, and refuse to do any of these.
4. The four limitations imposed by governments on the private ownership of property are taxation, eminent domain, police power, and escheat.
5. Fee-simple title is the greatest possible degree of ownership and is title free and clear of all encumbrances.

CONCEPTS OF VALUE

1. Value in use embodies the objective premise, which maintains that value is within the object itself. Value in exchange holds that value is within the mind. Value in exchange – market value – is the primary goal of the assessor.
2. Desire, utility, scarcity, and economic purchasing power are essential in creating value.
3. Market value is the most probable price, expressed in terms of money, that a property would bring if exposed for sale in the open market in an arm's-length transaction between a willing seller and a willing buyer, both of whom are knowledgeable concerning all the uses to which it is adapted and for which it is capable of being used.
4. Estimating market value is dependent upon determining the highest and best use of the property. Highest and best use is defined as the legal, physically possible and economically feasible use which will generate the highest net return to the property over a period of time.
5. The determination of highest and best use requires the proper application of the interrelated appraisal principles.

TRADITIONAL APPROACHES TO VALUE

Value is an elusive item that occurs in many different forms. The forces and influences which combine to create, sustain, or destroy value are numerous and varied. It is the appraiser's function to define the type of value sought (market value in North Carolina for ad valorem tax purposes), to compile and to analyze all related data, and giving due consideration to all the factors which may influence the value, to process and translate that data into a final opinion or *estimate of value. A*ppraisers must do this for each parcel appraised.

The processing of converting this data into an estimate of value generally takes the form of three recognized approaches to value: Cost Approach, Sales Comparison Approach and Income Approach. The use of one or all three approaches in the valuation of a property is determined by the quantity, quality, and accuracy of the data available to the appraiser for that particular property type. Underlying each of the approaches is the Principle of Substitution; that the justifiable price of a property is no more than the cost of acquiring and/or reproducing an equally desirable substitute property.

The cost approach involves making an estimate of the depreciated cost of reproducing or replacing the building and site improvements. *Reproduction Cost* refers to the cost at a given point in time of reproducing an exact replica of the improvements, whereas *Replacement Cost* refers to the cost of producing improvements of equal utility but

using modern materials and construction techniques. Depreciation is deducted from this cost new for loss in value caused by physical deterioration, functional obsolescence, and economic obsolescence. The resulting depreciated cost is then added to the estimated value of the land, resulting in an indication of value derived by the Cost Approach.

The significance of the Cost Approach lies in its extent of application. It is the one approach that can be used on all types of construction. It is a starting point for appraisers, and therefore it is a very effective "yardstick" in any equalization program for ad valorem taxes. Its widest application is in the appraisal of properties where the lack of adequate market and income data precludes the reasonable application of the other traditional approaches.

The sales comparison approach involves compiling sales and offerings of properties, which are comparable to the property being appraised. These sales and offerings are then adjusted for any dissimilarity, and a value range obtained by a comparison of said properties. The approach is reliable to the extent that the properties are comparable, and the appraiser's judgment of proper adjustments is sound. The procedure for using this approach is essentially the same for all types of property with the only difference being the elements of comparison.
The significance of this approach lies in its ability to produce estimates of value, which directly reflect the attitude of the market. Its application is contingent upon the availability of comparable sales, and therefore finds its widest range in the appraisal of vacant land and residential properties. Applicable North Carolina case law includes:

> **Neither this section nor G.S. 105-317(a) requires the commission to value property according to its sales price in a recent arm's length transaction when competent evidence of a different value is presented.** In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).
>
> **Where sale was not between a willing buyer and a willing seller, as contemplated by this section, sales price was not indicative of property's true value.**
> In re *Phoenix Ltd. Partnership,* 134 N.C. App. 474, 517 S.E.2d 903 (1999)

Essentially, North Carolina law prohibits the presumption that the sale price of any particular property must be the basis for its appraised value for ad valorem tax purposes. Instead, reliance is placed on the greater weight of evidence determined from a larger sampling of comparable properties and as a result, the appraised value may be less than or greater than the sale price of any particular property.

The income approach measures the present worth of the future benefits of a property by the capitalization of the net income stream over the remaining economic life of the property. The approach involves making an estimate of the "Effective Gross Income" (EGI), of a property, derived by deducing the appropriate "Vacant and Collection Loss" from its estimated "Gross Potential Income" (GPI), based on its economic rent, as evidenced by the yield of comparable properties. From this figure applicable operating expenses are deducted, the cost of taxes and insurance, and reserve allowances for replacements resulting in an estimate of "Net Operating Income" (NOI), which may then be capitalized into an indication of value.

The income approach has its basic application in the appraisals of properties universally bought and sold on their ability to generate and maintain a stream of income for their owners. The effectiveness of the approach lies in the appraiser's ability to relate to the changing economic environment and to analyze income yields in terms of their relative quality and durability. Applicable North Carolina case law includes:

> **Section 105-317(a), in fixing the guide which assessors must use in valuing property for taxes, includes as a factor the past income therefrom, and its probable future income. But the income**

referred to is not necessarily actual income. The language is sufficient to include the income which could be obtained by the proper and efficient use of the property. To hold otherwise would be to penalize the competent and diligent and to reward the incompetent or indolent. In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).

Neither this section nor G.S. 105-317(a) requires the commission to value property according to its sales price in a recent arm's length transaction when competent evidence of a different value is presented. In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).

If it appears that the income actually received is less than the fair earning capacity of the property, the earning capacity should be substituted as a factor rather than the actual earnings. The fact-finding board can properly consider both. In re *Property of Pine Raleigh Corp.,* 258 N.C. 398, 128 S.E.2d 855 (1963);
In re *Valuation of Property Located at 411-417 W. Fourth St.,* 282 N.C. 71, 191 S.E.2d 692 (1972).

SALES QUALIFICATION

Sales of some residential, but primarily agricultural, industrial and commercial properties often include personal property. There are also a number of inter-company or intra-family transfers, distressed sales, etc., many of which have limiting terms and conditions. For these reasons and others, further qualification of sales of this type through conversations with one or more of the parties involved may be necessary to determine if the sales price should be adjusted for terms, personal property, etc., or, disqualified entirely.

For this purpose, we have designed a Sales Confirmation Questionnaire that will help standardize the procedure and build a source of useful sales data. Since qualified, recent sales are the best indication of market value and because of their effect on the entire mass appraisal process, their careful review cannot be overemphasized.

The following is a sample letter and Sales Confirmation Questionnaire.

<Date>

Jane Doe
100 Main Street
Hillsborough, NC 27278

Dear Property Owner:

North Carolina General Statute 105-283 requires that all property be assessed at 100% of its market value as of the date of the County's last revaluation. To accomplish this, we must gather statistical information about transfers of real estate in Orange County. On the reverse side is a brief questionnaire regarding a recent property transaction. Answers to these questions will be used by the Orange County Tax Office in an annual independent study to qualify sale prices of real estate. By providing your knowledge of the transaction, you will contribute to the fair and equitable assessment of ALL properties in Orange County. These results will help in reviewing assessments in the County's next revaluation.

Please complete and return the enclosed questionnaire within 15 days. Return options include: (1) the enclosed self-addressed envelope, (2) by email to reval@orangecountync.gov. Your cooperation is appreciated and helpful in accomplishing assessment fairness and equity.

Sincerely,

Roger Gunn, AAS
Real Property Appraisal Manager
(919)245-2118
rgunn@orangecountync.gov

SALES CONFIRMATION QUESTIONNAIRE

Property Owner:
Date of Deed: Deed Book/Page: Revenue Stamps:
Property Description:
Parcel Identification Number (PIN): NBC:

Type of Property Transaction:

_____ Single family residence
_____ New Construction
_____ Duplex
_____ Apartment
_____ Condo
_____ Farm
_____ Commercial
_____ Industrial
_____ Vacant Land / Acreage
Other_____

Building Information:

Above grade heated square feet_____ Below grade heated square feet _____
Below grade unheated square feet_____
Number of Full Baths _____ Number of Half Baths _____

If vacant land, reason acquired:

_____ Investment
_____ To Build
_____ Privacy Buffer
_____ Other, Please Explain_____

Total Purchase Price: _____ Purchase Date: _____/_____/_____

If any personal or business property, in excess of $1,000 in value, was included in the sale price, please list the specific item(s) ***AND*** the estimated associated value. Example: Automobile $2,500 -Tractor $2,000 - Copier $1,800 - Hot Tub $3,000
_____

Was the transaction between relatives or related businesses? _____No _____Yes
If Yes, please explain relationship: _____

If this transaction was any of the following please check as appropriate; otherwise, disregard:
_____ Transfer in/out of a Trust
_____ Foreclosure or Bankruptcy Sale
_____ Divorce or Separation Settlement
_____ Estate Settlement / Inheritance
_____ Auction Sale
_____ Transfer of one property for another, no monies exchanged (excluding IRS 1031 exchange)
_____ Gift
_____ Name Change or Addition of Spouse Name
Do you consider the total sale price to be a fair market value? _____Yes _____No
Comments: _____
_____

Print Name: _____ Date: _____ Day Phone: _____

THE SALES QUALIFICATION FORM

Sales Qualification forms are a record of the sales research performed to establish the quality of a specific sale. Qualified sales are of inestimable value in establishing unit land values, base rates, depreciation schedules, and for checking the quality and degree of equalization of all work performed.

The first step in any sales qualification procedure is the deed qualification of ALL sales parcels. In this step, an appraiser will review the deed transfer for, in part, type of title conveyed, relationship of parties and any abnormalities. The sales should then be further qualified as necessary with the use of a sales qualification form, MLS records or additional information.

STEP 1: Deed Qualification of All Sales. This step entails examining deeds for any conditions or statements which might indicate the sale was not an arm's-length transaction. Those deeds having any of the following conditions should be entered on the maintenance document as "U" or an unqualified sale unless further review deems them qualified:

1. Quitclaim, corrective or tax deeds
2. State documentary stamps, $.50
3. Same family name as to grantee and grantor
4. Deeds from or to banks or loan companies
5. Deeds indicating a trade or exchange or conveying less than whole interest, i.e. life estates, etc.
6. Deeds including livestock or personal property, i.e. trucks, equipment, cattle, etc.
7. Multi-parcel sales unless the amount paid for each parcel is specified
8. Deeds including exchanges of real or personal property
9. Deeds to or from any of the following:

Administrators	Clerks of Court
Executors	County Commissioners
Guardians	Counties
Receivers	Trustees of Internal Imp. Fund
Sheriffs	Cities and/or municipalities
Masters	United States of America or Federal Agencies
Churches	Utility Companies
Lodges	Educational Institutions
Fraternal Institutions	Benevolent Institutions

All sales that are deemed to be not arms-length transactions should be identified as such using the appropriate Sales Validity Code (NAL). Sales Validity Codes as provided in the below table correspond strictly to the North Carolina Department of Revenue's guidelines.

SALES VALIDITY CODES (N.A.L. NOT ARMS LENGTH)(TABLE)

Code	*Description*	*Full Description*
Q	Qualified	Qualified
U	Unqualified	Unqualified
UA	Mult Parcels	Multiple Parcels Involved in Sale
UB	After Sale	Improvements Not Included in Sale
UD	Date Out	Deed Date is Outside Study Period
UE	Related	Transaction is Between Related Parties
UF	Fractional	Grantor Conveying Fractional Interest
UG	Life Estate	Reserves Grantor, Life Estate or Other Interest
UH	Lease After	Reserve Grantor Possession for Period After Sale
UI	Govt/Bank	Gov't, Public Utility, Lending Institution
UJ	Tax Exempt	Tax Exempt or Cemetery Property
UK	Non Profit	Church, School, Lodge or Educational Organization
UM	Two Counties	Property Situated in More than 1 County
UN	Timbermine	Minerals, Timber, or Rights to Mine
UO	Inc Personal	Includes Personal Property
UP	Forced	Forced Sale or Auction
UQ	Cont Deed	Contract for Sale Made Prior to Study Date
UR	Exchange	Trade or Exchange of Real Property
US	Unidentified	Real Property is Unidentified on County Records
UX	Other	Other
UZ	Value Unk	Assessed Value Unknown due to NC, Split, etc.

Sales Confirmation Questionnaire

Changes in sales prices can be made to compensate for personal property included in the sales, up to and including disqualification of the sale. Having done this, a sale may be treated as qualified and used as a guide for establishing values for similar properties. The qualification process enables the appraiser to gather the information necessary to adjust sales prices so they will reflect fair market sales.

During sales review, other factors may come to light indicating that an adjustment is necessary to the sales price for what appears to be an otherwise qualified sale. These include market and economic factors. For example, if a property had to remain on the market for an excessive period of time prior to selling, an adjustment may be appropriate. An appraiser can find himself or herself in a most advantageous position in determining the type of adjustments required because of his or her familiarity with the local market conditions. Adjustments should be made to the sales price for any valid reason in order to supply a qualified comparable for valuing similar properties. Note that tax assessments shall not be adjusted due to economic conditions, among other reasons, in a non-revaluation year. Therefore, said adjustments to sales prices are for future use.

It is most important to remember that the sales confirmation questionnaire should be properly filled out and filed for future reference.

COST APPROACH

INTRODUCTION

If the highest and best use of a property is its current use, a valid indication of value may be derived by estimating the value of the land, and adding the land value to the depreciated value of the structures on the land; the resulting equation being...

Estimated Land Value
\+ Estimated Replacement Cost New of Structures
\- Estimated Depreciation
= Estimate of Property Value

Since estimating the land value is covered in a separate section, this section will address itself to the two remaining elements: Replacement Cost and Depreciation.

REPLACEMENT COST

Replacement Cost is the current cost of producing an improvement of equal utility to the subject property; it may or may not be the cost of reproducing a replica property. The distinction being drawn is one between Replacement Cost, which refers to a substitute property of equal utility, versus Reproduction Cost, which refers to an exact replica of the property. In a particular situation the two concepts may be interchangeable, but they are not necessarily so. They both, however, have application in the Cost Approach to value, the difference being reconciled in the consideration of depreciation allowances.

In actual practice, outside of a few historic type communities in this country, developers and builders, for obvious economic reasons, most often replace buildings, not reproduce them. It logically follows that if an appraiser's job is to measure the actions of knowledgeable persons in the marketplace, the use of proper replacement costs should provide an accurate point of beginning in the valuation of most improvements.

The replacement cost includes the total cost of construction incurred by the builder whether preliminary to, during the course of, or after completion of the construction of a particular building. Among these are material, labor, all subcontracts, builders' overhead and profit, architectural and engineering fees, consultation fees, survey and permit fees, legal fees, taxes, insurance, and the cost of interim financing.

Estimating Replacement Cost

There are various methods that may be employed to estimate replacement cost new. The methods widely used in the appraisal field are the quantity survey method, the unit-in-place or component part-in-place method, and the model method.

The Quantity-Survey Method involves a detailed itemized estimate of the quantities of various materials used, labor and equipment requirements, architect and engineering fees, contractor's overhead and profit, and other related costs. This method is primarily employed by contractors and cost estimators for bidding and budgetary purposes and is much too laborious and costly to be effective in everyday appraisal work, especially in the mass appraisal field. The method, however, does have its place in that it is used to develop certain unit-in-place costs, which can be more readily applied to estimating for appraisal purposes.

The *Unit-in-Place Method* is employed by establishing in-place cost estimates (including material, labor, overhead and profit) for various structural components. The prices established for the specified components are related to their most common units of measurement such as cost per yard of excavation, cost per lineal foot of footings, and cost per square foot of floor covering.

The unit prices can then be multiplied by the respective quantities of each component as they are found in the composition of the subject budding to derive the whole dollar component cost, the sum of which is equal to the estimated cost of the entire building, providing of course, that due consideration is given to all other indirect costs which may be applicable. This components part-in-place method of using basic units can also be extended to establish prices for larger components in-place such as complete structural floors (including the finish flooring, sub-floor, joists and framing), which are likely to occur repeatedly in a number of buildings.

The *Model Method* is still a further extension, in that unit-in-place costs are used to develop base unit square foot or cubic foot costs for total specified representative structures in place, which may then serve as "models" to derive the base unit cost of comparable structures to be appraised. The base unit cost of the model most representative of the subject building type is applied to the subject building and appropriate tables of additions and deductions are used to adjust the base cost of the subject building to account for any significant variations between it and the model.

Developed and applied properly, these pricing techniques will assist the appraiser in arriving at valid and accurate estimates of replacement cost new as of a given time, which for ad valorem tax purposes is always January 1 of the reappraisal year. That cost generally represents the upper limit of value of a structure. The difference between its replacement cost new and its actual value is depreciation. The final step in completing the Cost Approach then is to estimate the amount of depreciation and deduct said amount from the replacement cost new.

DEPRECIATION

Simply stated, “accrued depreciation” is defined as a loss in value from all causes. As applied to real estate, it represents the loss in value between market value and the sum of the replacement cost new of the improvements plus the land value as of a given time. The causes for the loss in value may be divided into three broad classifications: Physical Deterioration, Functional Obsolescence, and Economic Obsolescence.

Physical Deterioration pertains to the wearing out of the various building components, referring to both short-life and long-life terms, through the action of the elements, age, and use. The condition may be considered either curable or incurable, depending upon whether it may or may not be practical and economically feasible to cure the deficiency by repair and replacement.

Functional Obsolescence is a condition caused by either inadequacies or super-adequacies in design, style, composition, or arrangement inherent to the structure itself, which tends to lessen its usefulness and desirability in the marketplace. Like physical deterioration, the condition may be considered either curable or incurable. Some of the more common examples of functional obsolescence are inadequate wall and ceiling heights, excessive structural construction, surplus capacity, and ineffective layouts.

Economic Obsolescence is a condition caused by factors extraneous to the property itself, such as encroachment of inharmonious land uses on adjoining or nearby parcels. The condition is generally incurable in that the causes lie outside the property owner's realm of control.

ESTIMATING DEPRECIATION

An estimate of depreciation represents an opinion of the appraiser as to the degree that the present and future appeal of a property has been diminished by deterioration and obsolescence. Of the three estimates necessary to the cost approach, it is the one most difficult to make. The accuracy of the estimate will be a product of the appraiser's experience in recognizing the symptoms of deterioration and obsolescence and the ability to exercise sound judgment in equating all observations to the proper monetary allowance to be deducted from the replacement cost new.

Physical deterioration and/or functional obsolescence can be measured by observing and comparing the physical condition and/or functional deficiencies of the subject property as of a given time with either an actual or hypothetical, comparable, new and properly planned structure.

Curable physical deterioration and functional obsolescence can be measured respectively by estimating the cost of restoring each item of depreciation to a physical condition as good as new, or estimating the cost of eliminating the functional deficiency.

Functional and economic obsolescence can be measured by capitalizing the estimated loss in rental due to the structural deficiency or lack of market demand.

Total accrued depreciation may be estimated by first estimating the total useful life of a structure and then translating its present condition, desirability, and usefulness into an effective age (rather than an actual age), which would represent that portion of its total life (percentage), which has been used up.

Total accrued depreciation may also be estimated by deriving the amount of depreciation recognized by purchasers as evidenced in the prices paid for property in the marketplace; the loss of value being the difference between the cost of replacing the structure new and its actual selling price (total property selling price less the estimated value of the land).

INCOME APPROACH

INTRODUCTION

The justified price paid for income producing property is no more than the amount of investment required to produce a comparably desirable return; and since the market can be analyzed in order to determine the net return actually anticipated by investors, it follows that the value of income producing property can be derived from the income which it is capable of producing. Involved is an estimate of income through the collection and analysis of available economic data, the development of a proper capitalization rate, and the processing of the net income into an indication of value by employing one or more of the acceptable capitalization methods and techniques.

The caveat to a sole reliance on the above premise in the income approach occurs when actual and/or economic rents will not support the sales price. In those instances, other forces must be assumed to be present; the anticipation of future benefits being foremost.

THE PRINCIPLES OF CAPITALIZATION

Capitalization is the process for converting the net income produced by property into an indication of value. Through the years of appraisal history, a number of procedures have been recognized and employed by appraisal authorities in determining the value of real estate by the income approach. For ad valorem tax purposes, when and where reliable data is available, direct capitalization will be used.

EXPLORING THE RENTAL MARKET

The starting point for the appraiser is an investigation of current economic rent in a specific area in order to establish a sound basis for estimating the gross income, which should be returned from competitive properties. The appraiser must make a distinction between *economic rent,* the rent which the property would normally be expected to produce on the open market, as opposed to *actual rent,* that which the property is actually producing at the time of the appraisal, usually due to lease terms established sometime in the past.

The first step then is to obtain specific income and expense data on properties, which best typify normal market activity. The data is necessary to develop local guidelines for establishing the economic rent and related expenses for various types of properties.

The next step is to similarly collect income and expense data on individual properties, and to evaluate the data against the established guidelines. The collection of income and expense data (I & E) is an essential phase in the valuation of commercial properties. The appraiser is primarily concerned with the potential earning power of the property. The objective is to estimate its expected net income. Income and Expense Statements of past years are valuable only to the extent to which they serve this end. The statements must not only be complete and accurate, but also must stand the test of market validity. Consideration of the following factors should assist the appraiser in evaluating the Income & Expense data in order to arrive at an accurate and realistic estimate of net income; sometimes expressed as “Net Income Before Recapture”.

Orange County may send surveys soliciting income and expense data from property owners of commercial (income-producing) property. Historically, a more significant amount of additional information becomes available upon the mailing of the reappraisal notices of value. At that point, as part of the local appeals process, income and expense data is generally provided by the property owner in support of a claim. The quality of the data is dependent on the documentation provided. Lease information (lease rates, terms, and other stated considerations) is best. Undocumented statements are least useful.

QUESTIONS RELATING TO INCOME DATA

A. Was the reported income produced entirely by the subject property? Very often the rental will include an amount attributable to one or more additional parcels of real estate. In this case, it would be necessary to obtain the proper allocations of rent.

B. Was the income attributable to the subject property as it physically existed at the time of the appraisal, or did the appraisal include the value of leasehold improvements and remodeling for which the tenant paid in addition to rent? If so, it may be necessary to adjust the income to reflect economic rent.

C. Does the reported income represent a full year's return? It is often advisable to obtain both monthly and annual amounts as a crosscheck.

D. Does the income reflect current economic rent? Is either part or all of the income predicated on old leases? If so, what are the provisions for renewal options and rates?

E. Does the reported income reflect 100% occupancy? What percentage of occupancy does it reflect? Is this percentage typical of this type of property, or is it due to special non-recurring causes?

F. Does the income include rental for all marketable space? Does it include an allowance for space, if any, which is either owner or manager occupied? Is the allowance realistic?

G. Is the income attributable directly to the real estate and conventional amenities? Is some of the income derived from furnishings and appliances? If so, it will be necessary to adjust the income or make provisions for reserves to eventually replace them, whichever local custom dictates.

H. In many properties an actual rental does not exist because the real estate is owner occupied. In this event it is necessary to obtain other information to provide a basis to estimate economic rent. The information required pertains to the business operation using the property. Proper analysis of the annual operating statements of the business, including gross sales or receipts, can provide an accurate estimate of economic rent. Caution must be exercised to relate the income and expense data as it is attributable to the property and not the business enterprise. Information requirements for a few of the more common property uses are as follows:

Retail Stores	The annual net gross sales (Gross sales less returned merchandise), and leased space if any.
Hotels and Motels	The annual operating statement of the business. If retail or office space is leased in these properties, obtain the actual rent paid.
Theaters	The annual gross receipts (including admissions and concessions) and seating capacity.
Automobile Parking	The annual gross receipts.

ANALYSIS OF EXPENSE DATA

The appraiser must consider only those expenses which are applicable to the cost of ownership; that is, those expenses, which are normally owner-incurred. Any portion of the expenses incurred directly or indirectly by the tenant should not be considered. Each expense item must stand the test of both legitimacy and accuracy. How do they compare with the established guidelines and norms? Are they consistent with the expenses incurred by comparable properties?

Management refers to the cost of administration. These charges should realistically reflect what a real estate management company would actually charge to manage the property. If no management fee is shown on the statement, the appraiser must make a proper allowance. On the other hand, if excessive management charges are reported, as is often the case, the appraiser must disregard the reported charges and use an amount which he deems appropriate and consistent with comparable type properties. The cost of management bears a relationship with the risk of ownership and will generally range between 4 to l0% of the gross income.

General expenses may include such items as the cost of services and supplies not charged to a particular category. Unemployment and F.I.C.A. taxes, Workmen's Compensation, and other employee insurance plans are usually legitimate deductions when employees are a part of the building operation.

Reimbursed expenses refer to the cost associated with the maintenance of public or common areas of the commercial property. This expense is passed on to the tenants and should, therefore, only be considered when the amount of reimbursement is included as income.

Miscellaneous expenses are the "catch-all" category for incidentals. This item should reflect a very nominal percentage of the income. If expenses reported seem to be excessive, the appraiser must examine the figures carefully in order to determine if they are legitimate and if so, to allocate them to their proper category.

Cleaning expenses are legitimate charges. Many are for such items as general housekeeping and maid service and include the total cost of labor and related supplies. All or a portion of the cleaning services may be provided by outside firms working on a contract basis. Cleaning expenses vary considerably and are particularly significant in operations such as offices and hotels. Rule of thumb norms for various operations are made available through national management associations. The appraiser should have little difficulty in establishing local guidelines.

Utilities are generally legitimate expenses and if reported accurately, need very little reconstruction by the appraiser, other than to determine if the charges are consistent with comparable properties. Local utility companies can provide the appraiser with definite guidelines.

Heat and Air Conditioning costs are often reported separately and in addition to utilities. The expenses would include the cost of fuel other than the above-mentioned utilities, and may include, especially in large installations, the cost of related supplies, inspection fees, and maintenance charges. These are generally legitimate costs, and the same precautions prescribed for "utilities" are in order.

Elevator expenses, including the cost of repairs and services, are legitimate deductions, and are generally handled through service contracts. These fees can generally be regarded as fairly stable annual recurring expenses.

Decorating and minor alterations are necessary to maintain the income stream of many commercial properties. In this respect they are legitimate expenses. However, careful scrutiny of these figures is required. Owners tend to include the cost of major alterations and remodeling which us, in fact, capital expenditures, and as such are not legitimate operating expenses.

Repairs and Maintenance expenses reported for any given year may not necessarily be a true indication of the average or typical annual expense for these items. For example, a statement could reflect a substantial expenditure for a specific year (possibly because the roof was replaced and/or several items of deferred maintenance were corrected); yet the statement for the following year may indicate that repairs and maintenance charges were practically none. It is necessary for the appraiser to either obtain complete economic history on each property in order to make a proper judgment as to the average annual expense for these items, or include a proper allowance based on norms for the type and age of the improvements to cover annual expenses. Since it is neither possible nor practical to obtain enough economic history on every property, the latter method is generally used, and the amounts reported for repairs and maintenance are then estimated by the appraiser.

Insurance. Caution must be used in accepting insurance expense figures. The cost shown may be for more than one year, or may be for blanket policies including more than one building. It is generally more effective for the appraiser to establish his own guidelines for insurance. The appraiser must also be careful to include only items applicable to the real estate. Fire extended coverage and owner's liability are the main insurance expense items. Separate coverages on special component parts of the buildings, such as elevators and plate glass, are also legitimate expenses.

Real Estate Taxes. In making appraisals for tax purposes, the appraiser must exclude the actual amount reported for real estate taxes. Since future taxes will be based on his appraised value, the appraiser must express the taxes as a factor of the estimated value. This can be done by including an additional percentage in the capitalization rate to account for real estate taxes.

Depreciation. The figure shown for depreciation on an operating statement is a bookkeeping figure which the owner uses for Internal Revenue purposes and should not be considered in the income approach. This reflects a tax advantage, which is one of the benefits of ownership.

Interest. Although interest is considered a legitimate expense, it is always included in the Capitalization Rate. Most property is appraised as if it were free and clear; however, the appraiser does consider the interest of a current mortgage in the Capitalization Rate build-up.

Land Rent. When appraising for real estate tax purposes, only the sum of the leasehold and the leased fee is usually considered. Land rent is not deducted as an expense. Considered separately, rent from a ground lease would be an expense to the leasehold interest and an income to the leased fee. However, if land were rented from another property to supply additional parking for example, that land rent would be an allowable expense.

It is obvious that there are some expense items encountered on operating statements that the appraiser should not consider as allowable. This is because he is interested in legitimate cash expenses only. Income statements are usually designed for income tax purposes where credit can be taken for borrowing costs and theoretical depreciation losses.

It is virtually impossible and certainly not always practical to obtain a complete economic history on every commercial property being appraised. On many properties, however, detailed economic information can be obtained through the use of Income and Expense forms. One must realistically recognize the fact that the data obtainable on some properties is definitely limited.

In most cases, the gross income and a list of the services and amenities furnished can be obtained during the data gathering operation. However, in order to ensure a sound appraisal, it may be necessary to estimate the fixed operating expenses. This is best accomplished by setting guidelines for expenses, based on a percentage of Effective Gross Income or a cost per square foot of leasable area. These percentages or costs will vary depending on the services supplied and the type of property.

CAPITALIZATION METHODS

The most prominent methods of capitalization are Direct, Straight Line, Sinking Fund, and Annuity. Each of these is a valid method for capitalizing income into an indication of value. The basis for their validity lies in the action of the market, which indicates that the value of income producing property can be derived by equating the net income with the net return anticipated by informed investors. This can be expressed in terms of a simple equation:

Value = Net Income ÷ Capitalization Rate

The *Straight Line and Sinking Fund* methods are both actual forms of Straight Capitalization, with one using Straight Line recapture and the other using Sinking Fund recapture. Both methods follow the same basic principles as Direct Capitalization, differing only in that they provide for separate capitalization rates for land and buildings; the building rate differing from the land rate in that it includes an allowance for recapture.

Straight Line Capitalization allows for recapture based on remaining economic life of the building – implying that at the end of that period of time, there would be zero improvement value.
There are three fallacies in this thinking. First, the potential buyer (investor) has no intention of holding the property that long. The average investment period might average ten years. Second, the investor anticipates that at the end of that period he/she will either get all the money back or will make a profit. And third, is the depreciation allowance possible in connection with federal income taxes.

Depreciation allowances may begin to run out between seven and ten years, so the advantages of owning the property are reduced considerably. A prudent owner may choose to sell the property at this point and re-invest in another property so that he may begin the depreciation cycle again and continue to take full advantage of the favorable tax laws.

For these reasons, the Straight Line Capitalization Method does not usually follow what the market indicates.

Straight Line Recapture calls for the return of investment capital in equal increments or percentage allowances spread over the estimated remaining economic life of the building.

Sinking Fund Recapture calls for the return of invested capital in one lump sum at the termination of the estimated remaining economic life of the building. This is accomplished by providing for the annual return of a sufficient amount needed to invest and annually re-invest in safe interest-bearing accounts, such as government bonds or certificates of deposit, which will ultimately yield the entire capital investment during the course of the building's economic life.

Annuity Capitalization lends itself to the valuation of long-term leases. In this method, the appraiser determines, by the use of annuity tables, the present value of the right to receive a certain specified income over the stipulated duration of the lease. In addition to the value of the income stream, the appraiser must also consider the value that the property will have once it reverts to the owner at the termination of the lease. This reversion is valued by discounting its anticipated value against its present-day worth. The total property value then is the sum of the capitalized income stream plus the present worth of the reversion value.

CURRENT TECHNIQUES

There are two methods, however, that do lend themselves to an accurate measure of market value based on potential income. These are Direct Capitalization, utilizing the Direct Comparison Method of Rate Selection, and Mortgage Equity Capitalization.

Direct Capitalization

In *Direct Capitalization,* the appraiser determines a single overall capitalization rate. This is done by analyzing actual market sales of similar types of properties. The appraiser estimates the net income of each property, and divides the net income by the sales price to arrive at an overall rate to provide an indication of value. Many of the appellate court rulings regarding the valuation of income-producing properties for ad valorem tax purposes have relied on direct capitalization.

Mortgage Equity Capitalization

Mortgage Equity Capitalization is a form of direct capitalization with the major difference in the two approaches being the development of the overall capitalization rate. In this method, equity yields and mortgage terms are considered influencing factors in construction of the interest rate. In addition, a plus or minus adjustment is required to compensate for anticipated depreciation or appreciation. This adjustment can be related to the recapture provisions used in other capitalization methods and techniques.

Residual Techniques

It can readily be seen that any one of the factors of the Capitalization Equation (Value = Net Income ÷ Capitalization Rate) can be determined if the other two factors are known. Furthermore, since the value of property is the sum of the land value plus the building value, it holds that either of these can be determined if the other is known. The uses of these mathematical formulas in capitalizing income into an indication of value are referred to as the *residual techniques,* or more specifically, the property residual, the budding residual, and the land residual techniques.

The Property Residual Technique is an application of Direct Capitalization. In this technique, the total net income is divided by an overall capitalization rate (which provides for the return on the total investment) to arrive at an indicated value for the property. This technique has received more popular support in recent years because it closely reflects the market. With this technique, the capitalization rate may be developed by either direct comparison in the market or by the Mortgage Equity Method.

The *Building Residual Technique* requires the value of the land to be a known factor. The amount of net income required to earn an appropriate rate of return on the land investment is deducted from the total net income. The remainder of the net income (residual) is divided by the building capitalization rate (which is composed of a percentage for the return on the investment, plus a percentage for the recapture of the investment) to arrive at an indicated value for the building.

The *Land Residual Technique* requires the value of the building to be a known factor. The amount of net income required to provide both a proper return on and the recapture of the investment is deducted from the total net income. The remainder of the net income (residual) is then divided by the land capitalization rate (which is composed of a percentage for the return on the investment) to arrive at an indicated value for the land.

INCOME MODEL ATTRIBUTES (TABLE)

	Annual Income per SF	Vacancy	Operating Expenses	Reserves	Direct Capitalization Rate
Apartment	$5.00-$35.00	1%-20%	20%-70%	2%-6%	.0400 - .1500
Luxury Apt	$6.00-$50.00	1%-20%	20%-70%	2%-6%	.0400 - .1500
Student Apt	$5.00-$35.00	1%-20%	20%-70%	2%-6%	.0400 - .1500

	Average Daily Rate	Food/Bev Ratio	Misc. Income	Vacancy	Operating Expenses	Departmental Expenses	Reserves	Direct Cap
Hotel/Motel - Full	$50.00-	0%-35%	0%-20%	20%-60%	10%-60%	10%-80%	2%-8%	.0600 -
Hotel/Motel -	$30.00-	0%	0%-10%	20%-60%	10%-60%	10%-50%	2%-8%	.0600 -
Motel Extended	$25.00-	0%	0%-10%	20%-60%	15%-60%	15%-50%	2%-8%	.0600 -
Motel -	$25.00-	0%	0%-10%	10%-60%	20%-60%	20%-50%	2%-8%	.0600 -
Hotel High Rise	$65.00-	0%-40%	0%-30%	15%-65%	20%-60%	30%-60%	2%-8%	.0600 -
Hotel Luxury	$100.00-	0%-40%	0%-30%	15%-55%	20%-60%	30%-60%	2%-8%	.0600 -

	Annual Income per SF	Vacancy	Operating Expenses	Reserves	Direct Capitalization Rate
General Retail	$5.00-$75.00	1%-30%	2%-40%	2%-5%	.0500 - .1500
Super Regional Mall	$5.00-$100.00	1%-30%	2%-40%	2%-5%	.0500 - .1500
Community SC	$8.00-$50.00	1%-30%	3%-40%	2%-5%	.0500 - .1500
Neighborhood SC	$5.00-$50.00	1%-30%	3%-40%	2%-5%	.0500 - .1500
Multi-Tenant Shops	$5.00-$50.00	1%-30%	2%-40%	2%-5%	.0500 - .1500
Department Store	$1.00-$35.00	1%-30%	2%-40%	2%-5%	.0500 - .1500
Discount Store	$2.00-$35.00	2%-30%	2%-40%	2%-5%	.0500 - .1500
Supermarket	$2.00-$25.00	2%-30%	2%-35%	2%-5%	.0500 - .1500
Junior Anchor	$2.00-$25.00	2%-30%	2%-40%	2%-5%	.0500 - .1500
Junior Dept Store	$2.00-$25.00	2%-30%	2%-40%	2%-5%	.0500 - .1500
Bulk Retail	$2.00-$25.00	2%-30%	2%-40%	2%-5%	.0500 - .1500

	Annual Income per SF	Vacancy	Operating Expenses	Reserves	Direct Capitalization Rate
Gen Office Gross Lease	$5.00-$50.00	2%-20%	10%-40%	1%-5%	.0500 - .1500
Medical Office	$5.00-$75.00	2%-20%	0%-50%	2%-5%	.0500 - .1500

	Annual Income per SF	Interior Finish per SF	Air Conditioning per SF	Vacancy	Operating Expenses	Reserves	Direct Capitalization Rate
General Warehouse	$1.00-$15.00	$1.00-$10.00	$.50-$4.00	1%-50%	0%-50%	2%-5%	.0500 - .1500
Bulk/Dist. Warehouse	$1.00-$15.00	$1.00-$10.00	$.50-$4.00	1%-50%	2%-50%	2%-5%	.0500 - .1500
Flex Warehouse	$2.00-$20.00	$1.00-$10.00	$.50-$4.00	1%-50%	2%-50%	2%-5%	.0500 - .1500
Mini- Warehouse	$5.00-$20.00	NA	NA	2%-30%	15%-50%	2%-5%	.0500 - .1500

	Annual Income per SF	Vacancy	Operating Expenses	Reserves	Direct Capitalization Rate
Restaurant	$5.00-$75.00	2%-25%	2%-50%	2%-5%	.0500 - .1500
Fast Food	$5.00-$75.00	2%-25%	2%-50%	2%-5%	.0500 - .1500
Bank	$20.00-$80.00	2%-20%	2%-50%	0%-5%	.0400 - .1500
Free-Standing - Drugstore	$15.00-$75.00	2%-20%	0%-50%	2%-5%	.0400 - .1500
Public Parking Deck	$10.00-$40.00	10%-40%	10%-50%	2%-5%	.0400 - .1500
Convenience Store/ Food	$10.00-$75.00	3%-25%	2%-50%	2%-5%	.0400 - .1500
Auto Service	$5.00-$30.00	5%-25%	2%-50%	2%-5%	.0500 - .1500
Premium Service Garage	$5.00-$50.00	5%-25%	2%-50%	2%-5%	.0500 - .1500
Oil & Lube	$15.00-$75.00	5%-25%	2%-50%	2%-5%	.0500 - .1500

SALES COMPARISON APPROACH

INTRODUCTION

The sales comparison approach to value is a method for estimating the market value of a property based on information from sold properties. It is the most commonly used approach in the minds of many participating in the market, as it mimics their general inclinations whether buying and selling a car, a piece of furniture, or an item of clothing. In the process of making comparisons, the buyer generally is aware of a comparable car, similar piece of furniture, or a similar piece of clothing available at a different business for a different or not-so-different price. Sellers are also mindful of what is being offered in the market that is in direct competition with what they are attempting to sell.

The sales comparison approach is so named because the act of comparison is the basic technique being employed. Actually, comparisons are made in each of the three valuation approaches. It is more accurate to say the entire appraisal process is a series of comparisons. This is especially true in the mass appraisal process for property tax administration, where in the final analysis it must be demonstrated that all taxable properties have been uniformly, accurately and equitably valued.

THE SALES COMPARISON APPROACH

Constitutions, statutes, and case law define a market value standard for assessment purposes. When sales data is available, the sales comparison approach is generally considered the most reliable. However, in North Carolina assessment litigation, under the "rules of evidence" a bona fide sale of the subject property may not be considered the best evidence of market value “when competent evidence of a different value is presented”. In re *Greensboro Office Partnership,* 72 N.C.App. 635, 325 S.E.2d 24, cert. denied, 313 N.C. 602, 330 S.E.2d 610 (1985).

The purpose, in both the North Carolina statutory language and the interpretation of relating actual sales to market value by the North Carolina Courts, is to emphasize uniformity and the equitable distribution of the tax burden relative to the premise that similar properties should share similarly in that burden. For that reason, a property may not be appraised and assessed for its most recent sales price. Instead, each sale will be included in the sales file from which sales will be analyzed by property type, location, etc., and from which assessments can be fine-tuned for greater uniformity.

The sales comparison approach models the behavior of the market by comparing properties being appraised (subject property) with similar properties that have recently sold (comparable properties). Comparable properties are selected for their similarity to the subject property. Their sales prices are then adjusted for their differences from the subject. Finally, a market value for the subject is determined from the adjusted sales prices of the comparable properties.

The economic principles of supply and demand provide a framework for understanding how the market works. The interaction of supply and demand factors impacts property prices. Supply depends on current inventories and, in the longer run, on the availability of human skills, material, and capital. Demand is influenced by population levels, mortgage rates, income levels, local services, personal housing preferences, and the cost of substitutes. One demand factor is the cost of substitutes, which ensures that prudent consumers will pay no more for a piece of property than for comparable properties with equal utility, assuming no unreasonable delays. The Principle of Substitution implies that the market will recognize differences in utility between the subject and its best alternatives by a difference in price.

The sales comparison approach requires the following steps:

- Definition of the appraisal problem.
- Data collection.
- Analysis of market data to develop units of comparison and select attributes for adjustments.
- Development of reasonable adjustments.
- Application of the model to adjust the sales prices of comparable properties to the subject property.
- Analysis of the adjusted sales prices to indicate the value of the subject property.

The entire valuation process depends on accurately defining the appraisal problem, because the nature of the problem determines the sources of information, methods of comparable selection, and adjustment techniques.

Defining the appraisal problem includes:

- Identifying the property (Parcel Number or PIN for ad valorem tax purposes)
- The rights to be appraised (generally Fee Simple for ad valorem tax purposes)
- The date of appraisal (January 1 of the reappraisal year)
- The use (Highest and Best Use)
- The type of value to estimate (Market Value, for North Carolina ad valorem tax purposes)

The rights to be valued can be a partial interest or fee simple absolute interest. Fee simple absolute interest is usually assumed for both the subject and comparable sales. The date of the appraisal, the as of date, is usually defined by statute. In narrative appraisals, the date of appraisal is identified on the valuation report. All comparable properties are adjusted to the as of date.

The collection of accurate data is also essential to the sales comparison approach. The appraiser analyzes data to identify important supply and demand factors and determine data needs.

Although the sales comparison approach has such a wide application as a method of estimating value there are factors which do or can limit its usefulness. Examples of these limitations include:

1. No provision is made for arriving at an estimate of value in those cases where no comparable properties have been sold in recent months or years.

2. No two properties are ever exactly alike. At the very least, they vary in location, even if they are alike in other respects.

3. Depreciation affects value. Because houses are dissimilar in quality of construction and materials, they depreciate at varying rates. Even structures built exactly alike depreciate at different rates because of inevitable differences in maintenance, occupancy, and use.

4. Amenities, being intangible qualities, are difficult to compare. The value of otherwise similar houses may not be the same because of the direction in which one house faces or the view it affords its occupants.

5. Learning the exact conditions attending each sale is essential so that the validity of the sale as comparative data may be substantiated. If the owner could not wait for an informed buyer and/or was unaware of the current market, the price accepted may not be indicative of the property's value in the market. Many motivations lead to the transfer of real property at figures unrelated to its market value. Transfers of property between relatives frequently do not give a true indication of market value and are rarely relied upon as being "arms-length".

6. Properties can vary considerably in their appointments and equipment, heating system, plumbing and electrical equipment and fixtures, insulation, kitchen facilities, and built-in features. All of these factors may be considered in the comparative process, adjusting for the degree of variation. The more factors to be compared and adjusted, the greater the number of decisions and judgments the appraiser must make. Obviously, the more decisions and judgments that must be made, the greater the opportunity for error.

In spite of its limitations, the sales comparison approach has broad application in all appraisal work. The value estimates found by the use of this approach are considered particularly significant because they are expressions of value as established by transactions in the market.

Orange County employs the sales comparison approach to estimating market value for both the residential category and some commercial properties. Additionally, some valuation parameters of the other valuation approaches (cost & income) are influenced by the application of, and observations gleaned from the sales comparison approach.

EXPLANATION OF THE SALES COMPARISON APPROACH PROCESS

There are five specific applications of the sales comparison approach in the appraisal process. Three relate to residential properties and two relate to commercial properties.

Residential

- Multiple Regression Analysis via Group Modeling (MRA)
- Comparable Sales Estimate of Value (Comp Sales)
- Time Adjustment of Previous Selling Price (TASP)

Commercial

- Capitalization of Net Income *(Income)*
- Comparable Value Approach

The quality of these five applications, moreover, the quality of the appraisal/assessment base for real property, depends upon the quality of the sales file.

Conceptually, the database is made up of two separate, interacting storage files:

1. A large file (Property Characteristics File) that houses the property characteristics on all properties.
2. A smaller sub-file (Sales Information File) created from the Property Characteristics File that houses a "snapshot" of the information stored in the characteristics file, plus, additional information such as sales date, sale amount, etc.

The purpose of the Sales Information File, in addition to facilitating faster processing time, is to permit adjustments to a parcel so that the condition of the property as of the time of sale can be reflected without alteration to the current property characteristics stored in the Property Characteristics File.

In determining market value by the sales comparison approach, a sufficient number of complete and valid sales is imperative. Therefore, proper procedures should be developed and adhered to in the creation and maintenance of a Sales File. Otherwise, the results produced from an unverified Sales File would be unreliable, and most likely, misleading.

TIME ADJUSTED SALES PRICE (TASP)

The time adjusted sales price (TASP) is an extrapolation to the present day (January 1 of the reappraisal year), of a previously known selling price as of a specific date for a particular property, based upon the market trend in the area of the property in question. It should be noted in particular that two parameters must be known about the particular property before this extrapolation is made, namely the exact date and amount of transfer consideration. Moreover, it is also necessary to have an established set of accurate sales data on similar properties in the area, in order to establish the trend of sales prices over a period of time. The important feature of this calculation is that it does not establish a total estimated selling price from a prior calculation; rather it merely calculates the increment of value that has been added to an already established market value. That is to say, the TASP does not attempt to establish the magnitude of the market value, but rather it computes a value increment based on the change in market value in an area. Thus, the market value for a particular property is established by the market itself at some point in the past, while the change in that known market value to today's date is indicated by the trend in market values in that area.

The calculation of the TASP depends upon the knowledge of the selling price at some known time in the past, and the ability to compute the increment of value added (or subtracted) since that time. The standard equation for TASP is as follows:

TASP = PREVIOUS SELLING PRICE + INCREMENTAL VALUE

Where incremental value equals number of months interval x TASP adjustment factor X the previous sale amount.

RESIDENTIAL PROPERTIES CATEGORY

For residential properties, the three market approaches to estimating market value are similar in that they each depend upon measured relationships between property data and sales data. They are different, however, in their specific focus, and accordingly, one market approach may be more appropriate than another, depending upon the information and situation. For example, TASP may be an excellent market approach technique when the subject property has recently been sold. Also, MRA via the analysis of sales of properties similar to the individual property being appraised may produce better results than MRA against a mixed group of sold properties.

CALIBRATING THE SALES COMPARISON MODEL

Determining Adjustment Amounts

During model specification, the appraiser determines the significant attributes and the relationships among the attributes. The adjustment amounts (coefficients) are determined during model calibration. Paired sales analysis, multiple regression analysis, adaptive estimation procedure, and the cost method are often used to calibrate sales comparison models.

Paired Sales

Paired sales analysis is the foundation of single-property appraisal by the sales comparison approach. Paired sales analysis requires that sales properties be identical in all attributes except the attribute being measured or that adjustments have already been made for the other attributes. The assessor compares these sales and isolates the value contribution for the desired attribute.

Calibrating with paired sales analysis is usually impractical in mass appraisal because it is difficult to find sales that meet the above narrow conditions. Even more unreasonable is the expectation that sales are available to measure all the attributes needed in the sales comparison approach. In addition, it is difficult, if not impossible, to determine rates of change using this method, such as when the contribution for additional square feet decreases as the size of the property increases. However, paired sales analysis can be useful when many homogeneous sales are available; for example, in some residential neighborhoods (condominiums are one example), it can be used to determine both time and attribute adjustments.

An analysis of re-sales using paired sales analysis is one method of determining time adjustments. It is necessary to use properties that have had no changes between the sale dates. The steps are:

1. List the sales
2. Calculate the percent change between the first sale price and the resale price
3. Divide the percent change by the number of months

4. Estimate a time adjustment from the results.

As with any data, the level of confidence in the estimate is a function of the recency, amount, variance, and reliability of the data. Proper functional fit to a well-specified model is also essential to good estimates.

When an adequate volume of sales is available, the appraiser can use paired sales to estimate qualitative and quantitative adjustments. Again, the analysis requires that attributes other than the one being measured remain constant. This process differs from estimating the time adjustment because re-sales are not required (sales should occur at the same time or have already been adjusted for time). In paired sales analysis, the appraiser must determine benchmark properties for measurement purposes. The paired sales method can be used for any adjustment including size, style, garage, basement, or location. The greater the number of sales, the greater the level of confidence in the adjustments.

MASS APPRASIAL

INTRODUCTION

In preceding sections, the fundamental concepts, principles, and valuation techniques underlying the appraisal process have been outlined. The task is to reappraise all real property within Orange County via a systematic mass appraisal program, with the goals of producing appraisal results that yield valid, accurate, and equitable property valuations at a reasonable cost, as dictated by budgetary limitations, and within a time span compatible with administrative needs.

The key elements of the program are validity, accuracy, equity, economy, and efficiency. To be effective, the program must:

- incorporate the application of proven and professionally acceptable techniques and procedures,
- provide for the compilation of complete and accurate data and the processing of that data into an indication of value approximating the prices actually being paid in the marketplace as of the effective assessment date,
- provide the necessary standardization measures and quality controls essential to promoting and maintaining uniformity throughout the jurisdiction,
- provide the appropriate production controls necessary to execute each phase of the operation in accordance with a carefully planned budget and work schedule, and
- provide techniques especially designed to streamline each phase of the operation, eliminating superfluous functions, and reducing the complexities inherent in the appraisal process to more simplified but equally effective procedures.

In summary, the objective of an individual fee appraisal is to arrive at an opinion of value, the key elements being the validity of the approach and the accuracy of the estimate. The objective of a mass appraisal for tax purposes is essentially the same. However, in addition to being valid and accurate, the value of each property must be equitable to that of each other property, and what's more, these valid, accurate, and equitable valuations must be generated as economically and efficiently as possible.

OVERVIEW

The primary objective of mass appraisals for tax purposes is to equalize property values. Not only must the value of one residential property be equalized with another, but it must also be equalized with each agricultural, commercial, and industrial property within the County.

The common denominator and the basis for equalization is market value, set forth by N.C.G.S. 105-283 as the Uniform Appraisal Standard, as follows:

> "**All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words**

> **"true value" shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land"**.

The job of the appraiser is to arrive at a reasonable estimate of value. To accomplish this, the coordination of approaches to the valuation of various classes of property must be made relative to one another as to reflect the motives of the prospective buyers and sellers of each property type.

The prospective buyer of commercial property is primarily interested in the potential net return and possible tax shelter the property will provide. Ideally, the property must return the investment made by the purchase price and provide a return on that investment. Real estate, as an investment, not only must compete with other real estate, but also with stocks, bonds, annuities, and other similar investment areas. The commercial appraiser must explore the rental market and compare the income-producing capabilities of one property to another.

The prospective buyer of industrial property is primarily interested in the overall utility value of the property. Of course, in evaluating the overall utility, individual consideration must be given to the land and each improvement thereon. Industrial buildings are generally of special purpose design, and often, cannot readily be divorced from the operation for which they were built. As long as the operation remains effective, the building will hold its value. However, if the operation becomes obsolete, the building likewise will become obsolete. The upper limit is its replacement cost new, and its current value is a measure of its current usefulness relative to the purpose for which it was originally designed.

Any effective approach to value for ad valorem tax purposes must be patterned in such a way as to reflect the typical motivation of buyers in the marketplace. As indicated above, the motives influencing prospective buyers tend to differ depending upon the type of property involved. It follows that the appraiser's approach to value must differ accordingly.

The commercial appraiser will find that since commercial property is not bought and sold as frequently as is residential property, the sales market will likely not be readily established. By relying heavily on the income approach to value, the net economic rent which the property is capable of yielding can be determined, and the amount of investment required to affect that net return at a rate commensurate with that normally expected by investors, can also be determined. This can only be achieved through a comprehensive study of the income-producing capabilities of comparable properties and an analysis of present-day investment practices.

The industrial appraiser will not be able to rely on the market data approach because of the absence of comparable sales, each sale generally reflecting different circumstances and conditions. Also, it is not possible to rely upon the income approach. Again, most industrial property is owner-occupied, and it is difficult to accurately determine the contribution of each building unit to the overall income produced. There is also an absence of comparable investments. Therefore, ad-valorem appraisals typically rely heavily on the cost approach, requiring careful estimates in the loss of value resulting from physical, functional and economic factors.

The fact that there are different approaches to value, some of which are more applicable to one class of property than to another, does not, by any means, preclude equalization between classes. Remember that the objective in each approach is to arrive at a price which a well-informed buyer, fully aware of the existence of competing properties and not being compelled to act, is justified in paying for any one particular property. Underlying and fundamental to each of the approaches is the comparison process. Regardless of whether the principal criteria are actual selling prices, income-producing capabilities, or functional usefulness, like properties must be treated alike.

The primary objective is equalization, the equitable distribution of the tax burden. The various approaches to value, although valid in themselves, must nevertheless be coordinated one to the other in such a way as to produce values which are not only valid and accurate, but are also equitable. The same "yardstick" of values must be applied to all properties and must be applied by uniform procedures.

It is obvious that sales on all properties are not required to effectively apply the market data approach. The same is true regarding any other approach. What is needed is a comprehensive record of all the significant physical and economic characteristics of each property in order to compare the properties of unknown values with the properties of known values. All significant differences between properties must in some measure, either positively or negatively, be reflected in the final estimate of value.

Each property must be given individual treatment, but the treatment must be uniform and standardized, and essentially no different than that given to any other property. All the factors affecting value must be analyzed and evaluated for each and every property within the County. It is only by doing this that equalization between properties and between classes of properties can be ultimately realized.

All this, at best, is an oversimplification of the equalization process underlying the entire Mass Appraisal Program. The program itself consists of various operational phases, and its success depends primarily upon the systematic coordination of collecting and recording data, analyzing the data, and processing the data to an indication of value.

DATA INVENTORY

Basic to the appraisal process is the collecting and recording of pertinent data. The data will consist of general supporting data – that data required to develop the elements essential to the valuation process; neighborhood data – information regarding pre-delineated neighborhood units; and specific property data – property characteristics compiled for each parcel of property. All the resulting information will be processed into an indication of value by the cost, market and/or income approach.

The data must be comprehensive enough to allow for the adequate consideration of all factors which significantly affect property values. In keeping with the economics of a mass appraisal program, it is costly and impractical to collect, maintain, and process data of no or marginal contribution to the desired objectives. Appraisers, if given the choice, would generally opt for too much data. What is more important is having an appropriate amount of data, no more or no less than necessary to support and generate the necessary and defendable valuations.

- *General Supporting Data.* The appraisal staff will be primarily concerned with cost, sales and income data, but they will also find it necessary to research and compile general socioeconomic information pertaining to the entire political unit under appraisal. The information will serve to assist the staff during the analytical phase of the operation and should include, but not necessarily be limited to, population trends, prevailing geographical factors, primary transportation facilities, primary income sources, unemployment and income levels, institutional influences, the annual volume of new construction and ownership transfers, availability of vacant land, construction labor and material costs, preponderance of residential rentals, and the amount of residential vacancies.
- *Cost data* must be sufficient to develop or select and validate the pricing schedules and cost tables required to compute the replacement cost new of improvements needed to apply the cost approach to value.
- All data pertaining to the cost of total buildings in place should include the parcel identification number, property address, and date of completion, construction cost, name of builder, source of information, structural characteristics, and other information pertinent to analysis. Cost information may be recorded on the same form (unassigned property record card) used to record specific property data. The principal sources for obtaining cost data are builders, developers and cost handbooks such as Marshall & Swift. It is generally advisable to collect data in conjunction with new construction.
- *Sales data* must be sufficient to provide a representative sampling of comparable sales needed to apply the market data approach, to derive unit land values and depreciation indicators needed to apply the cost approach, and to derive gross rent multipliers and elements of the capitalization rate needed to apply the income approach.

  All sales data should include the parcel identification number, property classification code, month and year of age, selling price, source of information, i.e., buyer, seller, agent, or fee, and a reliable judgment as to whether the sale is representative of a true arm's length transaction. Sales data should be recorded on the same form (assigned property record card) used to record specific property data and verified during the property-listing phase.

  The principal source for obtaining sales data is the Register of Deeds Office and the real estate transfer returns. Other sources may include developers, Realtors, lending institutions, and individual owners during the listing phase of the operation,

- *Income and expense data* must be sufficient to derive capitalization rates and accurate estimates of net income needed to apply the income approach. Income and expense data should include both general data regarding existing financial attitudes and practices, and specific data regarding the actual incomes and expenses realized by specific properties. The general data should include such information as equity return expectations, gross rentals, vacancy and operating cost expectations and trends, prevailing property management costs, and prevailing mortgage costs. Specific data should include the parcel identification number, property address (or building ID), source of information, the amount of equity, the mortgage and lease terms, and an itemized account of the annual gross income, vacancy loss, and operating expenses for the most recent two-year period.

  The general data should be documented in conjunction with the development of capitalization procedural guidelines. The specific data, since it is often considered confidential and not subject to public access, should be recorded on special forms, designed in such a way as to accommodate the property owner or agent thereof in submitting the required information. The forms should also have space reserved for the appraiser's analysis and calculations.

  The principal sources for obtaining general financial data are investors, lending institutions, and property managers. The primary sources for obtaining specific data are the individual property owners and/or tenants during the listing phase and the appeals phase of the reappraisal effort.

- *Neighborhood data.* At the earliest feasible time during the data inventory phase of the operation, and after a thorough consideration of the living environment and economic characteristics of the overall county, or any political sub-division thereof, the appraisal staff should delineate the larger jurisdictions into smaller neighborhood units, each exhibiting a high degree of homogeneity in residential amenities, land use, economic trends, and housing characteristics such as structural quality, age, and condition. The neighborhood delineation should be outlined on an index (or comparable) map and each assigned a Neighborhood Code (NBC) , which when combined with the PIN system, will serve to uniquely identify it from other neighborhoods.

  Neighborhood data must be comprehensive enough to permit the adequate consideration of value-influencing factors to order to understand the variations in selling prices and income yields attributable to benefits arising from the location of one specific property as compared to another. The data should include the taxing district, the school district, the VCS number, special reasons for delineation (other than obvious physical and economic boundaries), and various neighborhood characteristics such as the type (urban, suburban, etc.), the predominant class (residential, commercial, etc.), the trend (whether it is declining, improving, or relatively stable), its accessibility to the central business district, shopping centers, interstate highways and primary transportation terminals, its housing characteristics, the estimated range of selling prices for residentially-improved properties, and a rating of its relative durability.

All neighborhood data should be recorded on a specially designed form during the delineation phase. The existing property record card can serve in this capacity as it contains the current data on file.

- *Specific property data* must be comprehensive enough to provide the database needed to process the characteristics of each parcel into an indication of value, to generate the tax roll and related tax roll requirements, to generate other specified output, and to provide the assessing officials with a permanent record to facilitate maintenance functions and to administer taxpayer assistance and appeal proceedings.

  The data should include the parcel identification number, ownership and mailing address, legal description, property address, property classification code, local zoning code, neighborhood identification code, site characteristics, and structural characteristics.

  All the data should be recorded on a single, specially designed property record card customized to meet individual assessing needs. Each card should be designed and formatted in such a way as to accommodate the listing of information and to facilitate data processing. In addition to the property data items noted above, space must be provided for a building sketch, land and building computations, summarization, and memoranda. In keeping with the economy and efficiency of a mass appraisal program, the card should be formatted to minimize writing by including a sufficient amount of site and structural descriptive data which can be checked and/or circled. The descriptive data should be comprehensive enough to be suitable for listing any type of land and improvement data regardless of class, with the possible exception of large industrial, institutional, and utility complexes which require lengthy descriptions. In these cases, it will generally be necessary to use a specially designed supplemental property record document, keyed and indexed to the corresponding property record card. The property record card should be made a permanent part of the assessing system, and used not only in conjunction with the revaluation, but also to update the property records for subsequent assessments.

  The specific property data should be compiled from existing assessing records and field inspections. The parcel identification number, ownership, mailing address, and legal description may be obtained from existing tax rolls. Property classification codes may also be obtained from existing tax rolls, whenever available, and verified in the field. Local zoning codes may be obtained from existing zoning maps. Neighborhood identification codes may be obtained from the neighborhood delineation maps. Lot sizes and acreage may be obtained from existing tax maps. The property address, and the site and structural characteristics may be obtained by making a physical inspection of each property.

During the measuring and listing phase of the operation, the appraiser visits each property and tries to make personal contact with the occupant. In the course of the inspection, the following procedures must be adhered to:

- Verify the identification of the property (parcel ID or PIN).
- Verify the ownership (recording any transfers which may have occurred).
- Record or confirm the property's situs address.
- Verify the property classification and zoning codes.
- Interview the occupant of the building and record all pertinent economic data.
- Inspect the interior of the structures when permissible and record all pertinent physical data.
- Verify measurements and inspect the exterior of the building, as well as all other improvements on the property, and record the story height, and the dimensions and/or size of each.
- Record a sketch of the principal building(s), consisting of an overhead view showing the main portion of the structure along with any significant attached exterior features, such as porches, etc. All components must be identified, and the exterior dimensions shown for each.
- Select and record the proper "grade" of the improvement (construction quality).
- Select and record the proper replacement costs and adjustments for all field-priced items.
- Review the property record card for completeness and accuracy.

After the field inspection is completed, the property record cards should be submitted to clerical personnel to review the cards for completeness, calculate the areas, and make any necessary mathematical extensions.

Complete and accurate data are essential to the program. Definite standardized data collection and recording procedures must be followed if these objectives are to be met.

PROCESSING THE DATA

This phase of the operation involves the analysis of data compiled during the data inventory phase and the processing of that data to an indication of value through the use of the cost, market, and income approaches to value.

During the analytical phase, it will be necessary to evaluate cost, market, and income data in order to provide a basis for validating the appropriate cost schedules and tables required to compute the replacement cost new of all buildings and structures; for establishing comparative unit land values for each class of property; for establishing the appropriate depreciation tables and guidelines for each class of property; and for developing gross rent multipliers, economic rent and operating expense norms, capitalization rate tables and other related standards and norms required to effect the mass appraisal of all the property within an entire political unit on an equitable basis.

After establishing the appropriate standards and norms, it is necessary to evaluate the specific data compiled for each property by giving due consideration to the factors influencing the value of that particular property as compared to another, and then to process the data into an indication of value by employing the techniques described in the section of the manual dealing with the application of the traditional approaches to value.

Any one or all three of the approaches, if applied properly, should lead to an indication of market value. The primary concern is applying the approaches on an equitable basis. This requires the coordinated efforts of a number of individual appraisers, each acting as a member of a team, with the team effort directed toward a valid, accurate and equitable appraisal of each property within the County. Each property must be reviewed, during which time the following procedures must be adhered to:

- Verify the property characteristics recorded on the property record card.
- Confirm that the proper schedules and cost tables are used in computing the replacement cost of each building and structure.
- Confirm the determination of the proper quality grade is applied to each building to account for variations from the base specifications.
- Make an appraisal judgment of the overall condition, desirability, and usefulness of each improvement in order to arrive at a sound allowance for depreciation.
- If applicable, capitalize the net income capabilities into an indication of value in order to determine the loss of value attributable to functional and economic obsolescence.
- Confirm that the depreciated value of all improvements has been added to the land value and review the total property value relative to the value of comparable properties.
- Confirm that the property value established can be correlated to actual comparable sales.

Once the final values have been established for each property, the entire program should be evaluated in terms of its primary objectives; do the values reflect a satisfactory level of market value, and what's more important, are the values equitable? Satisfactory answers to these questions can best be obtained through an analysis of recent sales in an assessment/sales ratio study, if sufficient sales are available.

To perform the study, it is necessary to take a representative sampling of recent valid sales and compute the assessment-to-sale ratio for each of the sales. If the sample is representative, the computed median assessment-to-sale ratio will give an indication of how close the appraisals within each district approximate the market value. This is providing, of course, that the sales included represent true market transactions. It is then needed to determine the deviation of each individual appraisal-to-sale ratio from the median ratio, and to compute either the average or the standard deviation, which will give an indication of the degree of equity within each individual district. What remains then is to compare the statistical measures across property classes in order to determine those areas, if any, which need to be further investigated, revising the appraisal, if necessary, to attain a satisfactory level of value and equity throughout the entire jurisdiction.

The techniques and procedures set forth herein, if applied skillfully, should yield highly accurate and equitable property valuations, and should provide a sound property tax base. It should be noted, however, that no program, regardless of how skillfully administered, can ever be expected to be error free. The appraisal must be fine-tuned and can best be done by giving the taxpayer an opportunity to question the value placed upon his or her property and to produce evidence that the value is inaccurate or inequitable. During this time, the significant errors will be brought to light, and taking the proper

corrective action will serve to further the objectives of the program. What's important in the final analysis is to use all these measures and other resources available to assure the highest degree of accuracy and equity possible.

LAND APPRAISAL

INTRODUCTION

The sales comparison approach is the most applicable method for the valuation of land. The income approach may be considered for properties for which sufficient sale data is not available for vacant parcels. As often happens in downtown areas and older subdivisions where no vacant parcels remain, value may be estimated using a land residual approach as detailed in the Income Valuation section.

Land value is generally estimated by comparing the subject property to comparable properties that have recently sold, making adjustments to the comparable properties' sales prices for the different factors affecting land value. Some of the factors which must be considered include location, size, shape, topography, accessibility, present use, highest and best use, zoning, utilities, income to the land, supply and demand for the particular land type, improvements to the land and improvements on the land. Irrigation, drainage, sidewalks, curbs, gutters, etc. are examples of improvements to the land and are included in the value of the land. Building structures are improvements on the land and with few exceptions, some condominium or cooperative buildings, may be valued apart from the land.

LAND APPRAISAL PROCEDURES

Verifying Neighborhood Boundaries

This is accomplished by examining existing neighborhood boundaries in order to determine whether they encompass properties affected by the same economic factors. Neighborhood boundaries consist of a) physical boundaries, such as thoroughfares, streams, railroad rights-of-way, etc., b) uniform land-use controls, such as zoning districts, or c) relatively homogenous types of properties. Generally speaking, appraisers identify and delineate those populations of properties that share similar geographic, economic, legal and physical attributes.

Establishing a Base Lot Value

Appraisers begin by analyzing homogenous subdivision neighborhoods. These areas usually have more current sales data to rely on, making this process relatively efficient. By choosing to work these first, appraisers familiarize themselves with the process, which allows them the opportunity to retain helpful ideas that will assist in working more difficult neighborhoods later.

Appraisers use three primary methods to arrive at base site rates by neighborhood:

Direct sales comparison approach

This is the preferred method of estimating base lot rates when there are sufficient market sales of existing lots available for analysis. Appraisers search for arms-length sales of typical lots within a

neighborhood to determine the base lot value. As part of this analysis, the appraiser should be able to determine if the neighborhood's building lots represent similar values regardless of small differences in size, location, topography, etc., or if the lot should be valued via a method that attributes values to value-driving factors. An important note with this valuation method is that an appraiser may use sales of similar properties that are outside the subject neighborhood as well. When a sale outside the subject neighborhood is used, it may be adjusted for amenities, etc. that differ from the subject neighborhood.

Abstraction (land residual) method

This methodology is used in neighborhoods where there is not a sufficient number of vacant sales to utilize a direct sales comparison approach. Appraisers examine newer construction sales and subtract the depreciated cost value of the improvements to arrive at a residual land value.

Allocation method

Where neither sufficient vacant sales nor newer construction sales exist, the allocation method is available for determining the base lot rate. Sales data can be obtained from other, similar neighborhoods that are near the subject neighborhood. They should contain similar styles, ages and price ranges of homes. The understanding is that these neighborhoods are competing with the subject neighborhood for the same pool of buyers in the marketplace. Relying on current sales data from the comparable neighborhood(s), appraisers establish typical land/building ratios, which are then applied to the subject neighborhood to help arrive at new base lot rate.

For a majority of residential neighborhoods, Lot will be the primary land unit type, and most parcels in the neighborhood are appraised on a per lot basis. For some of the neighborhoods, particularly in the rural areas, an acreage unit type may be needed as well. In those cases, size adjustment curves may be applied.

Reviewing Land Use Codes (LUC) and Influence Codes

Appraisers run the "Land Line Detail by NBHD" report in order to review all the data related to this step. This report is useful because it contains Land Use Codes (LUC), Neighborhood Codes (NBC), base pricing rates, percentage influence codes, current vs. previous land value calculation, and the percentage change in site values. These reports are edited manually and used to update AssessPro.

Quality Control Measures

A "Current vs. Previous by NBHD" report is run for all neighborhoods, focusing on land when the report asks for a previous value to refer to. This report can be used to search for outliers, i.e. those parcels that decreased in land value or those parcels that increased by an amount other than what would be considered normal for that particular neighborhood.

THE BASE PRICE METHOD

The Base Price Method is a sound methodology when utilizing the neighborhood concept for different locations within the jurisdiction being appraised. Land values may change when properties have different factors such as road frontage, public utilities, road types and tract size.

The following is a description of how these factors could affect each parcel of land:

Location
Location is a key factor in the determination of market value in the County. Depending on market demand and sales prices, location areas were established throughout the County. Within each base price area other location factors may be applied to a given parcel. The concept of neighborhood homogeneity may tend to fluctuate values as the parcel comes more under the influence of the neighborhood and less under the influence of the total base area. Desirable subdivisions, availability of water and sewer, proximity to activities, higher base price areas and the existence of amenities are factors which tend to increase market demand. The inverse may be true for parcels near a declining subdivision or undesirable area. These influences must be determined and adjusted on an individual basis by the appraiser.

Size
The size of a parcel could play a role in determining the per acre price at which a parcel of land will sell. Because of diminishing marginal utility, the total price asked for a parcel of land has an indirect correlation with the number of potential buyers in the market. This situation stimulates more price negotiation and longer turnover periods for large tracts. Consequently, the actual cash value per acre decreases as the size of the parcel increases. The value of small lots containing less than one acre depends greatly on zoning and other restrictions.

Topography
Land considered usable but suffering from rough topography may need further adjustment in order to achieve market value. Rough topography may increase the development and building costs required to gain the optimum use from a parcel of land. The usable land on each parcel must be looked at as a whole and adjustments applied as indicated by comparable sales.

Certain tracts of land in Orange County have problems with percolation. Adjustments to the land value will be made only when the property owner's request is accompanied by evidence, such as a rejection certificate from the Environmental Health Department. Such parcels should be assigned an influence code "PERC" (No Perc). The extent of the adjustment provided may depend on a number of factors including parcel size, usable area, etc.

Shape
Shape may affect the utility of a specific parcel. The appraiser determines what is unusable and to what extent it affects the value of the subject parcel.

Easements
Surface easements governing power, natural gas and petroleum rights of way may have varying effects on each parcel. The appraiser may apply the "E" (Easement) influence code to factor the base unit price according to market-extracted data. The extent of the liability and the impact on value is based mainly on the easement's location within the parcel.

LAND UNIT TYPES (TABLE)

Code	*Description*	*Full Description*	*Interrelated Unit Type*	*Conversion*
AA	Altavista	Altavista	SF	*43560
AC	Acres	Acres	SF	*43560
AC_9	Acres Type 9	TYPE 9 METHOD A	SF	*43560
APB	Appling	Appling	SF	*43560
APC	Appling	Appling	SF	*43560
C_AC	Com Acres	Com Acres	SF	*43560
CFB	Cecil	Cecil	SF	*43560
CFC	Cecil	Cecil	SF	*43560
CH	Chewacla	Chewacla	SF	*43560
CP	Congaree	Congaree	SF	*43560
CRB	Creedmoor	Creedmoor	SF	*43560
ENB	Enon	Enon	SF	*43560
ENC	Enon	Enon	SF	*43560
FD	Fut Dev	Future Development	SF	*43560
FF	Front Ft	Front Ft	NA	NA
GC1	Golf View Lt	Golf View Lot	NA	NA
GC2	Golf Non Vw	Golf Non View Lot	NA	NA
GEB	Georgeville	Georgeville	SF	*43560
GEC	Georgeville	Georgeville	SF	*43560
GHC	Georgeville	Georgeville	SF	*43560
GLD	Goldstron	Goldstron	SF	*43560
GLF	Goldstron	Goldstron	SF	*43560
HEB	Helena	Helena	SF	*43560
HHA	Helena	Helena	SF	*43560
HMOA	HMO Com Area	HMO Com Area	NA	NA
HRB	Herndon	Herndon	SF	*43560
HRC	Herndon	Herndon	SF	*43560
HWB	Hiwassee	Hiwassee	SF	*43560
HWC	Hiwassee	Hiwassee	SF	*43560
I_AC	Industrial	Ind Acres	SF	*43560
IRB	Iredell	Iredell	SF	*43560
LG	Lignum	Lignum	SF	*43560
LK	LAKE	LAKE	NA	NA
LOC	Louisburg	Louisburg	SF	*43560
LOF	Louisburg	Louisburg	SF	*43560

LOT	Lot	Lot	NA	NA
OR	Orange	Orange	SF	*43560
SF	Square Ft	Square Ft	AC	/43560
TAD	Tatum	Tatum	SF	*43560
TAE	Tatum	Tatum	SF	*43560
VAB	Vance	Vance	SF	*43560
WMD	Wedowee	Wedowee	SF	*43560
WME	Wedowee	Wedowee	SF	*43560
WSB	White Store	White Store	SF	*43560
WXD	Wilkes	Wilkes	SF	*43560
WXF	Wilkes	Wilkes	SF	*43560

FACTORS DETERMINING BASE ACREAGE VALUES

1. **Location of Property**
    a. Relation of the tract to high or low urban, commercial, or industrial development areas, or to farming and rural areas
    b. Proximity to cities, towns, schools, and churches
    c. Access to roads and highways
    d. Proximity to recreational facilities
    e. Overall desirability
2. **Land Characteristics**
    a. Topography (level or rolling, high or low)
    b. Physical Characteristics
        i. Open land (cultivated, pasture, orchards)
        ii. Woodland
        iii. Wasteland (swamps, gullies, floodplain)
        iv. Ponds
3. **Market Value**
    a. Actual, qualified sales prices of comparable properties
    b. Highest and best use
    c. Supply and demand
4. **Size and Shape of Tract**
    a. The shape of the tract can have a positive or negative effect on value.
    b. Depending upon market reaction, acreage often sells for less per acre as the size of the tract increases, with all other amenities being the same. In other situations, acreage tracts may sell for more per acre as the size of the tract increases. This is often the case in areas experiencing high levels of development activity. The higher price per acre is primarily attributed to the reduction in time and money spent by a developer compared to assembling many separate tracts to achieve comparable development potential.

A most important note is that the base values listed in this section can be further modified to account

for atypical conditions. For example, a property that has been determined to be non-buildable may have a base price per acre of $20,000, but an Influence Factor would be needed to account for its non-buildable status to reduce the price per acre. Similarly, a lakefront lot may be adjusted through the use of a Land Factor or Influence Factor to capture the additional value of being lakefront, which would be in addition to the base price per acres.

SCHEDULE FOR RURUAL LAND

Basis: No relative convenience to towns. Few or no roads. No development activity in immediate area.
$1,000 to $100,000 per acre

Basis: No relative convenience to towns. Average or few roads. Minimum development in immediate area.
$5,000 to $250,000 per acre.

Basis: Convenience to towns. Adequate or average roads. Some development in immediate area.
$10,000 to $500,000 per acre.

Note: Wasteland will have the same base price per acre as surrounding land. The per acre rate is subject to a Influence Factor based on market and economic analysis. The presence of public utilities and market and economic indicators should weigh into any decision to condition the land. Ponds will usually fall into the same category as surrounding land.

SCHEDULE FOR RURAL RESIDENTIAL DEVELOPMENT AREAS

Basis: Average developed area away from metropolitan area with good roads and tertiary desirability.
$10,000 to $200,000 per acre.

Basis: Good development area near metropolitan area with major highways and secondary desirability.
$20,000 to $750,000 per acre.

Basis: Highest development area adjacent to metropolitan area with major highways and primary desirability.
$30,000 to $1,000,000 per acre.

SCHEDULE FOR RURAL RESIDENTIAL HOMESITES

Basis: Primary Development Areas
$20,000 to $2,000,000

Basis: Secondary Development Areas
$10,000 to $1,000,000

Note: Rural home sites may in some cases be valued on a per building site basis

URBAN LAND SCHEDULE

Basis: Residential Acreage
$5,000 to $2,000,000 per acre

Basis: Residential Lots
$2,000 to $5,000,000 per lot

Basis: Commercial
$0.10 to $500.00 per square foot

Basis: Shopping Centers
$40,000 to $5,000,000 per acre, improved
$5,000 to $3,500,000 per acre, unimproved

Basis: Office & Institutional
$40,000 to $10,000,000 per acre

Basis: Apartment Complexes
$4,000 to $200,000 per unit, improved
$40,000 to $4,000,000 per acre, unimproved

2025 USE-VALUE MANUAL FOR AGRICULTURAL, HORTICULTURAL AND FOREST LAND

(Selected Applicable Excerpts with Orange County Notations)

(Complete Document: https://www.ncdor.gov/news/reports-and-statistics/use-value-manual-agricultural-horticultural-and-forest-land

April 2024

North Carolina Use-Value Advisory Board North Carolina Department of Revenue Raleigh, North Carolina

FOREWARD

When originally enacted in 1973, the objective of the Present-Use Value Program was to keep "the family farm in the hands of the farming family." By the early 1970's, North Carolina had become a prime site for industrial and commercial companies to relocate because of its plentiful and reliable work force. With this growth came other improvements to the State's infrastructure to accommodate this growth, such as new and larger road systems, more residential subdivisions, and new commercial and industrial developments. The land on which to build these improvements came primarily from one source: farmland. As the demand for this land skyrocketed, so did its price as well as its assessed value, as counties changed from a fractional assessment to a market value system. Farmers who owned land near these sites soon could not afford the increase in property values and sought relief from the General Assembly.

In response, the General Assembly passed legislation known as the Present-Use Value program. As originally enacted, the basic tenets of this program were that only individuals who lived on the land for which they were applying could immediately qualify and that the land had to have a highest and best use as agriculture, horticulture or forest land. Land might also have qualified if the farmer owned it for seven years. Passage of this law eased the financial burden of most farmers and eliminated to some degree the "sticker shock" of the new property tax values. From that time until the mid-1980's, the present-use value schedules were based on farmer-to-farmer sales, and quite often the market value schedules were very similar to the present use schedules, especially in the more rural areas.

Virtually every session of the General Assembly has seen new changes to the law, causing a constant rethinking as to how the law is to be administered. The mid-1980's saw several court cases that aided in this transformation. Among the legislative changes that resulted from these cases were the use of soil productivity to determine value, the use of a 9% capitalization rate, and the utilization of the "unit concept" to bring smaller tracts under the present use value guidelines.

Through the years the General Assembly has expanded the present-use value program to include new types of ownership such as business entities, tenants in common, trusts, and testamentary trusts. Legislation also expanded the definition of a relative. More recent legislation has established cash rents as the basis for determining present-use value for agricultural and horticultural land, while retaining the net income basis for determining present-use value for forestland.

This Use-Value Advisory Board Manual is published yearly to communicate the UVAB recommended present-use value rates and to explain the methodology used in establishing the recommended rates.

USE-VALUE ADVISORY BOARD MANUAL

Following are explanations of the major components of this manual.

I. Cash Rents

Beginning in 1985, the basis for determining present-use value for agricultural land was based on the soil productivity for growing corn and soybeans. At that time, corn and soybeans were considered the predominant crops in the state. Over time, fewer and fewer acres went into the production of corn and soybeans and the land used for these crops tended to be lower quality. As a result, both the productivity and value of these crops plummeted, thus resulting in lower present-use values. A viable alternative was sought to replace corn and soybeans as the basis for present-use value. Following a 1998 study by North Carolina State University, cash rents for agricultural and horticultural land were determined to be the preferred alternative. Cash rents are a very good indicator of net income, which can be converted into a value using an appropriate capitalization rate.

The General Assembly passed legislation that established cash rents as the required method for determining the recommended present-use values for agricultural and horticultural land. The cash rents data from the NCSU study served as the basis for determining present-use value for the 2004-2007 UVAB manuals. However, starting in 2006, funding became available for the North Carolina Department of Agriculture to perform an extensive statewide cash rents survey on a yearly basis. The 2006 survey became the basis for the 2008 UVAB recommended values,

and this process will continue forward until changes dictate otherwise (i.e. the 2007 survey is used to establish the 2009 UVAB values, etc.).

Forestland does not lend itself well to cash rents analysis and continues to be valued using the net income from actual production.

II. Soil Types and Soil Classification

The 1985 legislation divided the state using the six Major Land Resource Areas (MLRAs). Five different classes of productive soils and one non-productive soil class for each MLRA were determined. Each class identified: agriculture, horticulture and forestry. The net income was then divided by a 9% capitalization rate to determine the present-use value. For 2004 and forward, the following change has taken place. For agricultural and horticultural classifications, the five different soil classes have been reduced to three soil classes and one non-productive soil class. Forestland present-use value has kept the five soil classes and one non-productive soil class. The use of the six MLRAs has been retained.

The six MLRAs are as follows:

MLRA 130	Mountains
MLRA 133A	Upper Coastal Plain
MLRA 136	Piedmont (Orange County)
MLRA 137	Sandhills
MLRA 153A	Lower Coastal Plains
MLRA 153B	Tidewater

The soils are listed in this manual according to the MLRA in which they occur. They are then further broken down into their productivity for each of the three types of use: agriculture, horticulture and forestry. Every soil listed in each of the MLRAs is ranked by its productivity into four classes (with the exception of forestry which retained its previous six classes). The classes for agricultural and horticultural land are as follows:

CLASS I	Best Soils
CLASS II	Average
Soils CLASS III	Fair Soils
CLASS IV	Non-Productive Soils

It should be noted that, in some soil types, all the various slopes of that soil have the same productivity class for each of the usages, and therefore for the sake of brevity, the word "ALL" is listed to combine these soils. Each of the classes set up by the UVAB soils subcommittee corresponds to a cash rent income established by the most recent cash rents survey conducted by the North Carolina Department of Agriculture. This rent income is then capitalized by a rate established each year by the UVAB (see below). The criteria for establishing present-use value for forestry have remained basically unchanged from previous years due to the quantity and quality of information already available.

III. Capitalization Rate

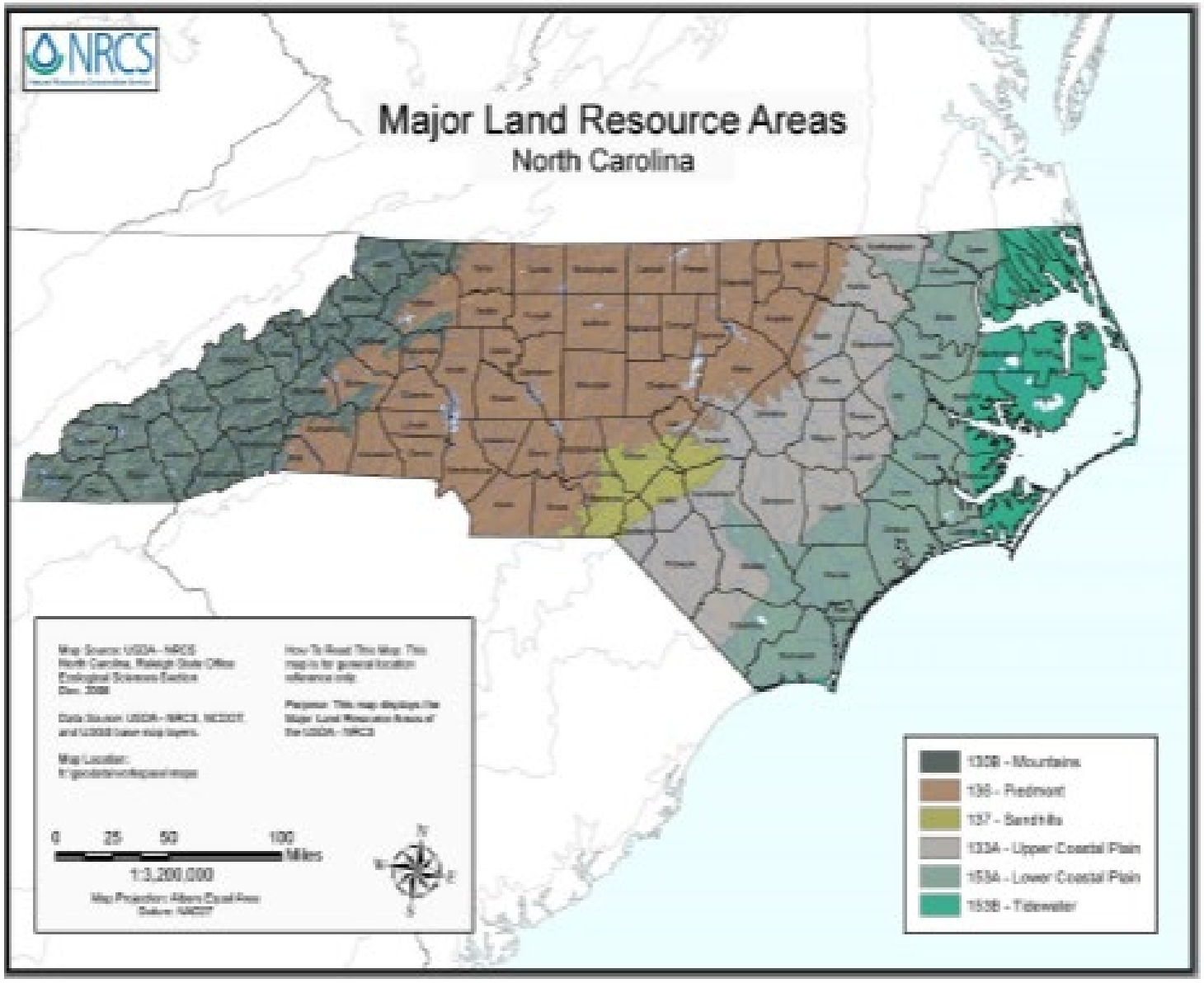
The capitalization rate mandated by the 1985 legislation for all types of present-use value land was 9%. The 1998 study by NCSU strongly indicated that a lower capitalization rate for agricultural and horticultural land was more in line with current sales and rental information. The2002 legislation mandated a rate between 6%-7% for agricultural and horticultural land.

For the year 2004 and the subsequent years, the UVAB has set the capitalization rate at 6.5% for agricultural and horticultural land.

The capitalization rate for forestland continues to be fixed at 9% as mandated by the statutes.

IV. Other Issues

The value for the best agricultural land can be no higher than $1,200 an acre for any MLRA.


NRCS
Major Land Resource Areas
North Carolina
Map Source: USDA - NRCS
North Carolina, Raleigh State Office
Ecological Sciences Section
Dec. 2008
How To Read This Map: This map is for general location reference only.
Purpose: This map displays the Major Land Resource Areas of the USDA - NRCS
Data Source: USDA - NRCS, NCDOT, and USGS base map layers.
Map Location:
N:\geodata\mxd\layout\maps
0 25 50 100
Miles
1:3,200,000
Map Projection: Albers Equal Area
Datum: NAD27
N
W
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130B - Mountains
136 - Piedmont
137 - Sandhills
133A - Upper Coastal Plain
153A - Lower Coastal Plain
153B - Tidewater

PRESENT-USE VALUE SCHEDULES

2025 PRESENT USE VALUE SCHEDULE (TABLE)

Soil Type	Symbol	Agriculture	Forestry	Horticulture
Altavista	Aa	645	260	890
Appling	ApB	645	260	890
Appling	ApC	645	260	890
Cecil	CfB	645	260	890
Cecil	CfC	645	260	890
Chewacla	Ch	645	260	890
Congaree	Cp	645	260	890
Creedmoor	CrB	645	260	890
Enon	EnB	645	260	890
Enon	EnC	645	260	890
Georgeville	GeB	645	260	890
Georgeville	GeC	645	260	890
Georgeville	GhC	645	260	890
Goldston	GlD	645	260	890
Goldston	GlF	645	260	890
Helena	HeB	645	260	890
Helena	HhA	645	260	890
Herndon	HrB	645	260	890
Herndon	HrC	645	260	890
Hiwassee	HwB	645	260	890
Hiwassee	HwC	645	260	890
Iredell	IrB	645	260	890
Lignum	Lg	645	260	890
Louisburg	LoC	645	260	890
Louisburg	LoF	645	260	890
Orange	Or	645	260	890
Tatum	TaD	645	260	890
Tatum	TaE	645	260	890
Vance	VaB	645	260	890
Wedowee	WmD	645	260	890
Wedowee	WmE	645	260	890
White Store	WsB	645	260	890
Wilkes	WxD	645	260	890
Wilkes	WxF	645	260	890

CALCULATION OF SYSTEM VALUES

LAND CALCULATION:

The land calculation is based primarily upon values entered in the Land Data screen, and the Land Price Data Calculation Table, as well as on factors in the descriptive tables. The land calculation is complex. Here it is broken down step by step. In the next section there is an example with screenshots from AssessPro that will walk the user through the entire calculation.

A. NOTE THE CHARACTERISTICS OF YOUR PARCEL FROM THE LAND DATA SCREEN.

1. Go to the Land Data Screen.
2. Note the Neighborhood code for the parcel to be calculated.

   Neighborhood code: _____

3. Note the Unit Type being used to measure the parcel.

   Unit Type: _____

4. Note the Number of Units for the parcel.

   Number of Units: _____

B. CALCULATE YOUR LAND INTERVAL SIZES:

1. Open the Land Price Data Calculation Table.
2. Select the Neighborhood code for the parcel to be calculated in the Neighborhoods list box on the left.
3. Select the Unit Type from the Unit Types Priced list in the Land Price Data Calculation Table.
4. Interval 1: The first interval Range field is the top range listed in the bottom of the Land Price Data table. If the Number of Units is greater than or equal to this number, then the interval 1 actual size is equal to the Range number. If the range given is less, then use the Number of Units as the interval 1 actual size. There will be no interval 2 or 3, so skip to section C.

   Interval 1 Actual size: _____

5. Interval 2: Interval 2 is calculated by first taking the total Number of Units and subtracting the number of units previously applied in Interval 1 (step 4). The second interval is the middle range listed. If the remaining Number of Units is greater than or equal to this number, then the interval 2 actual size is equal

to the Range number. If less than the range given, then use the remaining Number of Units as the interval 2 actual size. There will not be an interval 3, so skip to section C.

Interval 2 Actual size: _____

6. Interval 3: Interval 3 is first calculated by taking the total Number of Units and subtracting the number of units previously applied in Interval 1 and Interval 2 (steps 4 and 5). If there is more land than the range for interval 2 use the Number of Units as the interval 3 actual size.

   Interval 3 Actual size: _____

C. APPLY THE SIZE ADJUSTMENT (SA) TO EACH LAND INTERVAL:

1. The Standard Size Adjustment (SA) Formula is:

[(Standard Size/Actual Size) X (Curve %)] + (1- Curve %)

2. Apply this formula to each of the Intervals. Replace the Actual size with the Interval Actual Sizes listed above. The Curve % and Standard Size will be taken from the interval line on the Land Price Data Calculation Table.
3. Verify that the SA for each interval falls within the allowed range. If the Calculated SA for an interval is less than the value in the Min Factor field for that interval line, then the Min Factor will be the SA.
   If the Calculated SA for an interval is greater than the Max Factor field for that interval line, then note the Max Factor as the SA for that interval in the next step.

   If the Calculated SA is between the minimum allowed and the maximum allowed, then the Calculated SA is the SA to be applied.
4. Note the SA for each interval.

   Interval 1 SA: _____

   Interval 2 SA: _____

   Interval 3 SA: _____

D. FIND THE INTERVAL LAND VALUES:

1. The Interval Value Formula is:

(Interval SA) X (Amount Per Unit) X (Units in Range) = Interval Land Value

2. Apply this formula to each of the Intervals. The Amount Per unit comes from the Land Price Data Calculation Table, Std $ / Unit field. Use the Interval SA from step C and the Interval Actual Size from step

A. The Units in Range are the units that are specifically assigned to a range. For example, for interval 2 the Units in Range would be the number of units that are not accounted by in Interval 1 or 3. So, if the range for interval 2 starts at 5 acres and the range for interval 3 starts at 20 acres and there are more than 20 acres in this parcel, the Units in Range would be 15.

3. Note the Interval Land Value for each interval.

   Interval 1 Land Value: _____

   Interval 2 Land Value: _____

   Interval 3 Land Value: _____

Alternatively, and the most frequently used method to price land in Orange County, the Interval and other table values may be circumvented through the direct use of more-encompassing size adjustment tables. Orange County has defined a size adjustment table titled "SA 9" that can be found in the "Cost Schedules" section. Using this method, one locates the tract size on the table and finds the corresponding size adjustment factor. This factor is then applied to the base acreage price per acre to yield an appropriate size-based price per acre that when applied to the overall size of the tract, yields a total value for the tract.

E. CALCULATE LAND VALUE:

1. The Total Land Value Formula is:

Interval 1 Land Value+ Interval 2 Land Value + Interval 3 Land Value + Base Value = Land Value

2. Use the Interval Land Values as noted above, and the Base Value that is in the Land Price Data Calculation Table.

F. APPLY FACTORS:

Land Value X Neighborhood Factor X LUC Factor X Neighborhood Modifier X Land Type Factor = Factored Land Value

1. Multiply the Land Value times the Land Factor on the Land Price Data Calculation Table. (This factor is displayed on the Land Data screen. It is labeled Neigh Factor)
2. Multiply the resulting Land Value times the Land Use Factor from the Land Factor Column of the Land Use Codes Descriptive table. (This factor is displayed on the Land Data screen. It is labeled LUC Factor)
3. Multiply the resulting Land Value times the Land Factor from the Neighborhood Modifiers Descriptive table. (This value is displayed on the Land Data screen next to the Neigh Mod field)
4. Multiply the resulting Land Value times the Index Value in the Land Types Descriptive table. (This value is displayed on the Land Data screen. It is labeled Land Type Fac.)

G. FACTOR IN INFLUENCE CODES:

1. Note Influence codes on the Land Data screen (if any).
2. For Negative influence codes, subtract the percentage from one to get the factor. For example, if the influence code is -20 then subtract .2 from 1 and the factor will be .8.
3. For Positive influence codes, add the percentage to 1 to get the factor. For example, if the influence code is 10 then add .1 to 1 and the factor will be 1.1.
4. If there are multiple influence codes defined, add the influence factors to have one total influence factor to apply.
5. Total Influence Factor = (1 +- Influence1) + (1 +- Influence2) + (1 +- Influence3)

H. CALCULATE TOTAL LAND VALUE:

(Factored Land Value X Total Influence Factor) + Lump Sum Adjustment = Total Land Value

1. Multiply the Factored Land Value times the Total Influence Factor.
2. Add the Lump Sum Adjustment that is listed on the bottom of the Land Data Screen.
3. Multiply the resulting value times the Jurisdictional Factor from the Jurisdictional Factors Descriptive Table. (This value is displayed on the Land Data screen. It is labeled Jurist Fact.)

I. CALCULATE ASSESSED VALUE:

Total Land Value X Jurisdictional Factor = Assessed Value

Multiply Total Land Value times the Jurisdictional Factor from the Jurisdictional Factors Descriptive Table. (This value is displayed on the Land Data screen. It is labeled Jurist Fact.)

SPECIAL LAND CALCULATION:

Special land calculations generally involve both the calculation of appraised value and the calculation of a use value such as agricultural, forestry or recreational uses. Use value is typically lower than appraised value. The use value may then be multiplied times an assessment factor to derive the assessed value. There are two methods of calculation: overriding the appraised land schedules (Land Price Data calculation table) to set a new land price per unit schedule or multiplying the appraised land value by a factor.

A. CALCULATING SPECIAL LAND VALUES

OVERRIDING THE APPRAISED VALUE LAND SCHEDULE

Special Land Price (Price) X Special Land Code X Special Land Factor X No. Of Units = Special Land Value

1. Go to the Special Land Price descriptive table and note the value in the Price column for the Code (LUC) and Unit Type.
2. Go to the Special Land Factors descriptive table and note the Factor for the Special Land Code.

3. Multiply the Special Land Price (Price) X the Special Land Code Factor X Special Land Factor X the No. Of Units to calculate the Special Land Value.

FACTORING THE APPRAISED VALUE

Special Land Price (Factor) X Appraised Value X Special Land Code X Special Land Factor = Special Land Value

1. Go to the Special Land Price descriptive table and note the value in the Factor column for the Code (LUC) and Unit Type.
2. Go to the Special Land Factors descriptive table and note the Factor for the Special Land Code.
3. Multiply the Special Land Price (Factor) X the Appraised Value X the Special Land Code Factor X Special Land Factor to calculate the Special Land Value.

BUILDING CALCULATION

A. NOTE BUILDING PRICING INFORMATION:

1. Go to the Building Pricing Calculation Table.
2. Select the building type from the building type list.
3. Note the Price Per Unit:

   Price Per Unit: _____

4. While in the Building Pricing Calculation Table note the Building Group for this Building type:

   Building Group: _____

B. CALCULATE THE SIZE ADJUSTMENT:

1. Note the actual size that will be used for calculations on the building. The actual size is the sum of the sub areas that have the "Use in Total Size Adj Area Calc" checkbox selected in the Size Adjustments Calculation Table for the Building Group. The actual size and the finished size are usually the same number. It may be easier to use the finished size because it appears at the bottom of the Sub Area Detail Screen under the table column for finished area.

   Actual Size: _____

2. The Size Adjustment Formula is:

[(Standard Size/Actual Size) X (Curve %)] + (1- Curve %)

3. Use the Size Adjustment Formula. Use the Actual Size noted above; all of the other values are listed for the Building Group in the Size Adjustment Calculation Table.
4. Make sure the Size Adjustment falls between the Min Factor and the Max Factor. Otherwise replace the Size Adjustment with either the Min Factor or Max Factor listed.

C. CALCULATE THE CONSTRUCTION ADJUSTMENT:

1. Construction Adjustment = the Indexes from the building descriptive tables multiplied together.
2. Enter the code used for each building attribute from the Building Description screen into the table below.
3. Go to the Descriptive Table for each of these attributes. Enter the index value for the code used on the building in the table below. If the index is blank, use a 1 for that value. If the field allows for 2 entries use the following formula to calculate the Index for the field.

(Primary Field Index X (1 - Secondary%)) + (Secondary Field Index X Secondary%) = Index for Field

4. Verify whether or not a value has been overridden in the Building Group Factors Calculation table. Select the Building Group, Building Attribute, and Code value used and note any override from the Factor field on the far right.

Building Attribute	Code	Index	Index Override
Story Height			
Foundation Type			
Frame Type			
Exterior Wall Type	Prime: Sec: %:		
Roof Structure			
Roof Material			
View Codes			
Interior Wall Types	Prime: Sec: %:		
Partition Index			
Floor Types	Prime: Sec: %:		
Basement Floor Types Use the Floor Types Descriptive table			
Electric Types			

Insulation Types			
Plumbing Types			
Heating Fuel Types			
Heating System Types	Prime: Sec: %:		
Common Wall	SEE CALCULATION IN STEP 6		
Wall Height	SEE CALCULATION IN STEP 7		

5. Multiply each of the index values together to get the construction adjustment. Any overrides are noted instead of the index they are replacing.
6. Common Wall = 1-(% Common Wall / 100 X Percent off / 100) % Common Wall is from the Building Description Screen.
   The Percent off is from the Common Wall % Off field in the Other Features Pricing Calculation Table.
7. Wall Height = 1+ (Avg. Ht per Fl - Height per Floor) X % Unit) Avg. Ht per Fl is from the Building Description Screen.
   The Height per Floor is from the Other Features Pricing Calculation Table.
8. Note the Construction Adjustment:

   Construction Adjustment: _____

D. CALCULATE THE ADJUSTED SF RATE:

1. The Adjusted SF Rate Formula is:

   Adjusted SF Rate = (Rate per Building Type) X (Construction Adjustment) X (Size Adjustment)

2. Use the values noted in the sections above to calculate the Adjusted SF Rate.

E. CALCULATE THE SUBAREA RATE:

1. The Subarea Rate Formula will be used for every sub-area in the building. The formula is:

   Subarea Rate = Adjusted SF Rate X Units$ for Bldg. Type Factor X Alt Type Factor

2. Use the Adjusted SF Rate calculated above.
3. Use the Unit$ for Bldg. Type from the Subarea Calculations table for the sub-area.
4. Use the Alternate Type factor from the Index Value column in the Alternate Types descriptive table. If the sub-area does not have an alternate type, use 1.00 as the factor.

5. Note the Rate for every Subarea in the building:

Subarea: _____ Rate: _____

Subarea: _____ Rate: _____

Subarea: _____ Rate: _____

Subarea: _____ Rate: _____

Subarea: _____ Rate: _____

F. CALCULATE THE SUBAREA AREA:

1. The Subarea Area Formula will be used for every sub-area in the building. The formula is:

Subarea Area = Subarea SF X Adjusted Sketched Area Factor X % Alternate Type

1. Use the Subarea Square Footage (Subarea SF) from the Sketched Area column on the SubArea Detail Screen.
2. Use the Adjusted Sketched Area Factor from the Subarea Calculations Table. If there is no factor use 1.00 as the factor.
3. Use the % Alternate Type from the Subarea Detail Screen. If there is no Alternate Type use 1.00 as the percentage.
4. Note the Area for each Subarea in your building:

Subarea: _____ Area: _____

Subarea: _____ Area: _____

Subarea: _____ Area: _____

Subarea: _____ Area: _____

Subarea: _____ Area: _____

G. CALCULATE THE RCN (REPLACEMENT COST NEW):

1. The Subarea Area Formula will be used for every Subarea in the building. The formula is:

RCN = Subarea Rate X Subarea Area

2. Note the RCN for every Subarea in the building:

Subarea: _____ RCN: _____

Subarea: _____ RCN: _____

Subarea: _____ RCN: _____

Subarea: _____ RCN: _____

Subarea: _____ RCN: _____

3. Sum all the Subarea RCN values. Note the Total RCN.

Total RCN: _____

H. CALCULATE THE OTHER FEATURES:

1. Note the Number of Units and the Ratings from the following fields on the Building Description Screen.

Feature	# of Units	Rating	Value
Full Baths			
Additional Baths			
3/4 Baths			
Additional 3/4 Baths			
Half Baths			
Additional 1/2 Baths			
Other Features			

Kitchens			
Fireplaces			
W.S. Flues			
Basement Garages			

2. The formula to Calculate the Value for each of these features is:

Feature Value = [First Value + (Extra Units X Additional Value)] X Feature Rating + (Lump Sum X Num of Units)

3. First Value is the amount listed in the Other Features Pricing Calculation Table in the First field for this feature. This is the lump sum that will be assigned to the first feature.
4. The Extra Units equals the # of Units - 1, or the additional units. Enter 0 if there is only one unit.
5. The Additional Value is the amount listed in the Other Features Pricing Calculation Table in the Additional field for this feature.
6. Feature Rating is the rating or index value found in the descriptive table for this feature.
7. Lump Sum is the Lump Sum found in the descriptive table for this feature. If there is no Lump Sum, use 0.
8. Num of Units is the # of units entered in the table above, taken from the Building Description screen.
9. Calculate the value of each of the features listed above and enter them into the Value column of the table.

I. CALCULATE MORE OTHER FEATURES:

1. The rest of the other features are calculated using a combination of base value and or a value per finished square foot for the building. Enter the values for each of the fields listed below from the Building Information Screen. If the screen has a checkbox that is selected enter a value of 1.

Feature	Entry	Value
% Heated		
% A/C		
Solar Hot Water		
% Sprinkler		
Central Vacuum		

2. The formula to calculate these other features is:

Feature Value = Base Value + (Unit Price X Finished Area)

3. The Base Value is from the Other Features Pricing Calculation Table in the Base Value field for this feature.
4. The Unit Price is from the Other Features Pricing Calculation Table in the Unit Price field for this feature.
5. The Finished Area is from the Sub Area Detail Screen. The total finished area appears at the bottom of the screen under the column for Finished Area.

J. TOTAL THE OTHER FEATURE VALUES:

1. Add the Value column for both tables of Other Features. Note the Other Features Value here:

   Other Features Value: _____

K. CALCULATE THE APPRAISED VALUE:

1. The Appraised Value calculation is:

Appraised Value = Total RCN + Other Features Value X (Grade Factor X NBHD Factor X NBHD Modifier) - Depreciation + Special Features

2. Use the Total RCN that was calculated earlier in this process.
3. The Other Features Value is the total of the other features that was calculated above.
4. The Grade Factor comes from the Index column of the Grade Types Descriptive table for the Grade type that is entered on the Building Information Screen.
5. The NBHD Factor is the Building Factor in the Land Price Table.
6. The NBHD Modifier comes from the Build Factor column of the Neighborhood Modifiers Descriptive table for the Neighborhood code entered on the Land Data Screen.
7. Depreciation comes from the Depreciation Creation Calculation Table. Find the Factor by selecting the Building Group from the Existing Tables list. Scroll down until the age of the building is found in the table at the bottom and then read across to the number under the Physical condition rating that was entered on the Depreciation and Remodeling Screen.
8. See the Special Features Calculation for details. The user can enter the Special Features value from the Calculation Ladder Tab on the Valuation Information Screen into this calculation.

L. CALCULATE THE VALUE ADJUSTED FOR THE JURISDICTION:

1. The Value Adjusted for the Jurisdiction calculation is:

Value Adjusted for the Jurisdiction = Appraised Value X Jurisdiction Factor

2. The Jurisdiction Factor is in the Build Factor Column of the Jurisdictional Factors Descriptive Table for the Jurisdiction selected in the Jurisdiction field of the Building Description Screen.

SPECIAL FEATURES AND YARD ITEMS (SFYI) CALCULATION

The SFYI calculation is based primarily upon values entered in the Special Features/Yard Items screen, and the SFYI Pricing Calculation Table. The SFYI calculation is broken down step by step. In the next section there is an example with screenshots from AssessPro that will walk the user through the entire calculation.

A. NOTE THE CHARACTERISTICS OF YOUR PARCEL FROM THE LAND DATA SCREEN.

1. Go to the Special Features/Yard Items screen.
2. Note the SFYI code for the item to be calculated.

   SFYI code: _____
3. Note the Quantity and Units (Size) being used to measure the item.

   Quantity: _____Units (Size): _____
4. Note the Quality, Condition, Year and Unit Price for the item.

   Quality: _____Condition: _____Year: _____ Unit Price: _____
5. Note the Override Price, Depreciation Source, Depreciation%, Completed %, or Income box check.

   Override Price: _____Depreciation Source: _____

   Completed %: _____ Income Box Check: _____
6. Note the LUC, LUC Factor, Jurisdiction Code, Jurisdiction Factor, Neighborhood Factor and Neighborhood Modifier.

   LUC: _____ LUC Factor: _____

   Jurisdiction Code: _____ Jurisdiction Factor: _____

   Neighborhood Factor: _____ Neighborhood Modifier: _____

B. CALCULATE SIZE ADJUSTMENT

1. The Size Adjustment Calculation is:

[(Standard Size/Actual Size) X (Curve %)] + (1- Curve %)

2. The Actual Size is calculated from the Units (Size) field on the Special Features / Yard Items screen.
3. The Standard size and Curve % are from the SFYI Pricing Calculation Table.
4. Make sure the Size Adjustment falls between the Minimum Adjustment and the Maximum Adjustment. Otherwise replace the Size Adjustment with either the Minimum or Maximum Adjustment listed.
5. Note the Size Adjustment here:

   Size Adjustment: _____

C. CALCULATE THE SFYI ITEM.

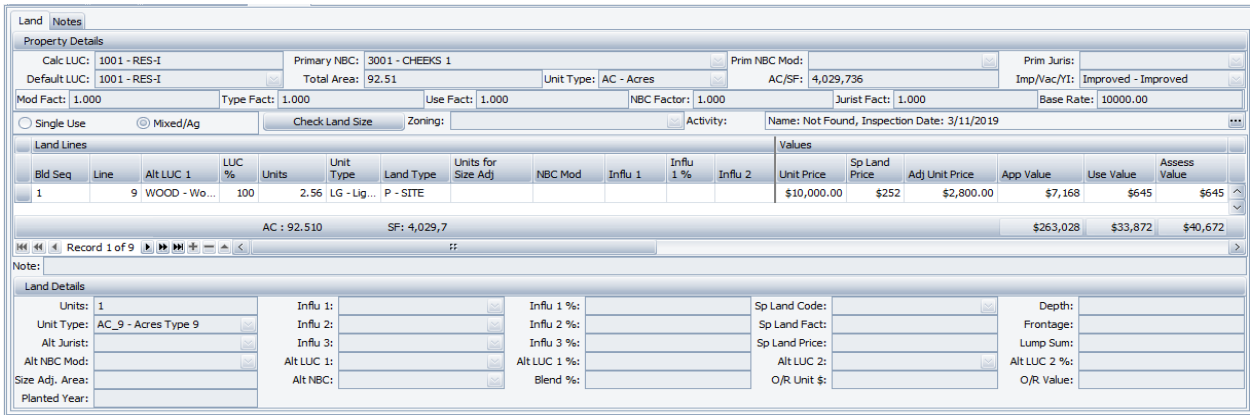
(Quantity X Units)
X
(Unit Price X Size Adjustment X Quality X LUC Factor X Neighborhood Factor X Neighborhood Modifier)
X
[(1- Depreciation) X % Complete] X Jurisdictional Factor

1. Go to the SFYI Pricing calculation table.
2. Select the SFYI Code for the item.
3. Multiply the Item Quantity X the Number of Units X the Size Adjustment (calculated above).
4. Multiply Unit Price per item found in the SFYI Pricing calculation table X the Quality factor found in the SFYI Quality Codes descriptive table ****see note 1****
5. Multiply Step 4 X the LUC factor found in the Land Use Codes descriptive table column labeled SFYI Factor.
6. Multiply Step 5 X Neighborhood Factor found in the Land Price Data calculation table for the parcel's neighborhood in the General Pricing Info field labeled Special Feature and Yard Item Factor.
7. Multiply Step 6 X the Neighborhood Modifier found in the Neighborhood Modifiers descriptive table.
8. Multiply Step 7 X Step 3.
9. Multiply Step 8 X (1 – Depreciation %) ****see note 2 ****
10. Multiply Step 9 X Completed %
11. Multiply Step 10 X Jurisdictional Factor

Notes:

1. The user may override the Unit Price per schedule by entering a value in the Override Price field.
2. The user may select a specific depreciation table constructed for SFYI items in the Depreciation Creation calculation table then default to the same depreciation used by the main building or set a manual amount. The manual amount is entered after the box marked Manual is selected.

LAND CALCULATION



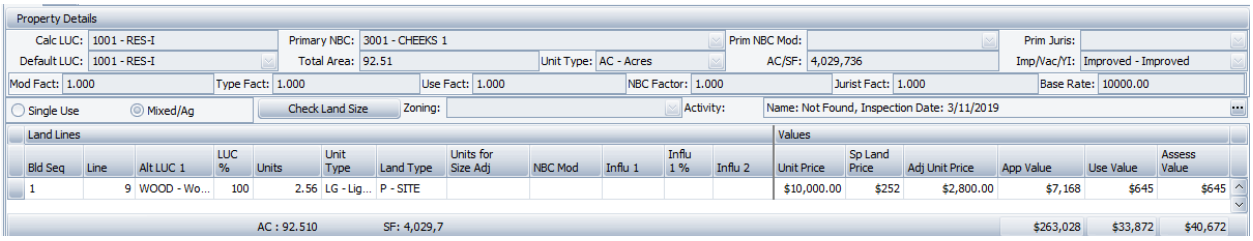
Property Details

This section includes information for the whole parcel: Default LUC, Primary Neighborhood code, Primary Jurisdiction, parcel type, etc.

In this grid you will enter land information. ***Single Use*** and ***Mixed/Ag*** options determine which land lines grid columns will be displayed.

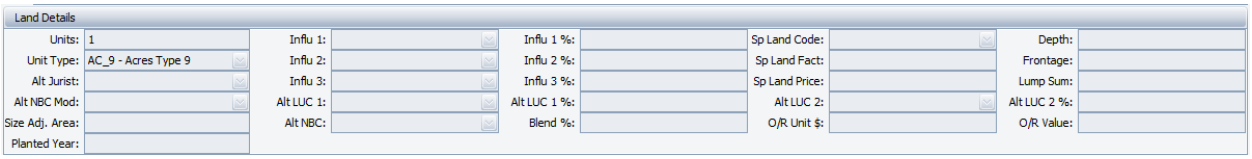
Land Lines

In this section you will enter the land data. An unlimited number of landlines may be entered per parcel. The data such as ***Neighborhood Code*** and ***Land Use Code*** are utilized in the valuation process. Each land can have **alternative LUCs**, **NBC modifier**, **land units**, etc. You can enter this information when adding a land line. If this data is not entered, the valuation process will be using data entered in the **Property Details** section. There are also a variety of ***influences*** and ***modifiers*** available.



Land Details

Here you can view and/or edit information entered in the land lines grid and Notes tab.



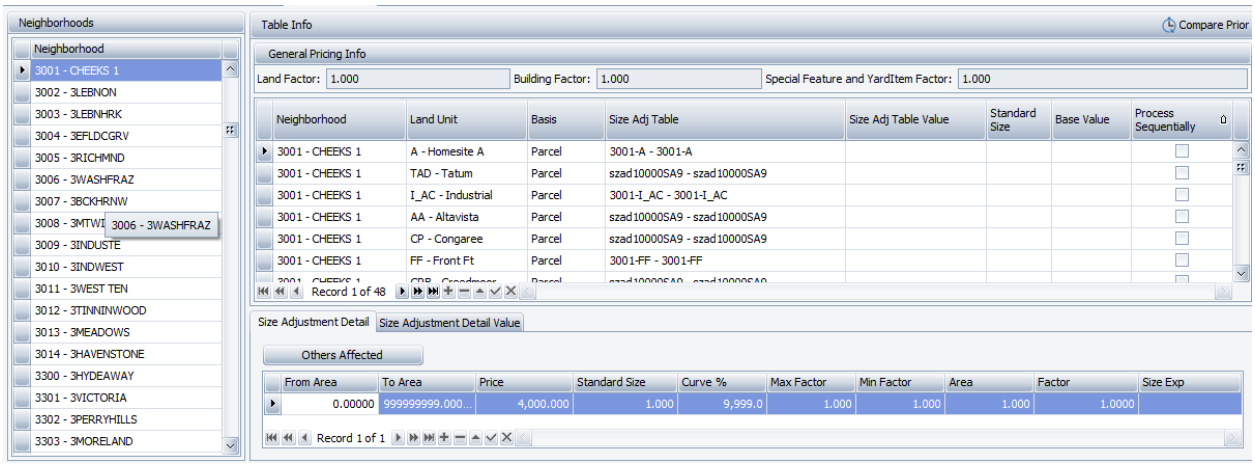
The land calculation is based primarily upon values entered in the Land Screen, and the Land Price Calculation Table, as well as on factors in the descriptive tables.

Note:

1. For Neighborhood Code, Neighborhood Modifier, Jurisdiction, Land Type, Neighborhood and Land Use Factors, these come from the land line if present, else from the property level.

2. If the land price has data in Area and Factor then it will find the closest Area/ Factor points and interpolate the factor rather than using the curve elements.

3. If the Exponent field has data, then it will use the units to the power of the entered exponent not either of the other two methods.



Calculate Land Interval Sizes:

1. Open the Land Price calculation table

2. The Neighborhood code for the parcel you are calculating will be selected by default in the neighborhoods list box on the left.

3. Select the Unit Type from the General Pricing Info grid in the Land Price calculation table.

4. Interval 1: The first interval Range field is the top range listed in the Size Adjustment Detail grid at bottom of the screen. If your Number of Units is less than or equal to this number, then your interval 1 actual size is equal to the Range number. If you have less land then the range given, then use your Number of Units as the interval 1 actual size. You will not have an interval 2 or 3.

Apply the Size Adjustment to each Land Interval:

The Standard size adjustment formula (SA) is:

Standard Size/ Actual Size x (Curve %) + (1- Curve %)=Calculated SA

Find the Interval Land Values:

The Interval value formula is:

(Interval SA) X (Amount per Unit) X (Units in Range) = Interval Land Value

Calculate Land Value:

1. The Total Land Value Formula is:

Interval 1 Land Value+ Interval 2 Land Value+ Interval 3 Land Value + Base Value = Land Value

2. Use the interval land values as noted above, and the base value that is in the land price calculate table.

3. Apply Factors:

Land Value X Neighborhood Factor X LUC Factor X Neighborhood Modifier X Land Type Factor = Factored Land Value

4. Multiply the Land Value times the land Factor on the Land Price Calculation Table.

5. Multiply the resulting Land Value times the value from the Land Factor Column of the Land Use descriptive table.

6. Multiply the resulting Land Value times the Land Factor from the Neighborhood Modifiers Descriptive table.

7. Multiply the resulting Land Value times the Index Value in the Land Types Descriptive table.

Factor in Influence Codes:

1. Note influence codes on the land screen

2. For negative influence codes, subtract the percentage from one to get the factor.

3. For positive influence codes, add the percentage to 1 to get the factor.

4. If you have multiple influence codes defined, multiply the influence factors to have one total influence factor to apply.

Total Influence Factor = (1 =- Influence1) X (1 +- Influence2) X (1 +- Influence3)

5. Calculate Total Land Value:

(Factored Land Value X Total Influence Factor) = Lump Sum Adjustment = Total Land Value

6. Multiply the factored land value times the total influence factor.

7. Add the Lump Sum Adjustment from the land line.

8. Multiply the resulting value times the Jurisdictional Factor from the Jurisdictional Factors Descriptive Table.

9. Calculate Assessed Value

10. Multiply Total Land Value times the Jurisdictional Factor from the Jurisdictional Factors Descriptive Table.

Total Land Value X Jurisdictional Factor = Assessed Value

COST SCHEDULES

REPLACEMENT COST LESS DEPRECIATION

The cost approach to value is applicable for two principal reasons.

1. Appraisals for ad valorem taxes generally require separate land value estimates. N.C.G.S. 105-317(a)(1) requires the following:

   "In determining the true value of land, to consider as to each tract, parcel, or lot separately listed at least its advantages and disadvantages as to location, zoning, quality of soil, waterpower, water privileges, dedication as a nature preserve, conservation or preservation agreements, mineral, quarry, or other valuable deposits, fertility, adaptability for agricultural, timber-producing, commercial, industrial, or other uses, past income, probable future income, and any other factors that may affect its value except growing crops of a seasonal or annual nature."

2. The cost approach can be applied to all classes of property.

The use of one approach to the exclusion of the others is contrary to the appraisal process. The better method would therefore be an integrated approach based essentially upon cost but incorporating both market comparison and income whenever feasible and appropriate. The following cost schedules are based on a typically constructed fifteen hundred square foot dwelling of average quality components and workmanship with eight standard plumbing fixtures (water heater, kitchen sink, and two full, 3-fixture, baths) and a central heating system. All necessary adjustments to reflect any variance from base are also supplied.

SIZE ADJUSTMENT CALCULATION

Within certain parameters, and in varying levels across building types, one could expect an inverse relationship between the size of a property and its cost per square foot. Orange County will recognize this in its 2025 reappraisal. The Size Adjustment Table, located in the Calculation Tables, is used to calculate size adjustments based on the Building Group. There is a standard size, a curve percentage, and maximum and minimum factors. The size adjustment factor is multiplied by the basic unit price for the building type. The size adjustment for any property can be determined through the following formula, subject to both min and max values.

Size Adjustment = **[(Standard Size/Actual Size) X (Curve %)] + (1- Curve %)**

SIZE ADJUSTMENT (TABLE)

Code	Description	Full Description	Std Size	Curve %	Min Factor	Max Factor
1	Office	Office	5000	6	0.94	1.25
10	Farm Buildings	Farm Buildings	15000	6	0.94	1.25
2	Commercial	Commercial	6000	11	0.85	1.15
20	20yr	25 Year Depreciation				
25	25yr	25 Year Depreciation				
3	Institution	Institutional	7000	6	0.95	1.25
30	30yr	30 Year Depreciation				
35	35yr	35 Year Depreciation				
4	Apartments	Apartments	7500	6	0.9	1.15
40	40yr	40 Year Depreciation				
45	45yr	45 Year Depreciation				
5	Industrial	Industrial	7500	9	0.9	1.25
50	50yr	50 Year Depreciation				
55	55yr	55 Year Depreciation				
6	Retail	Retail	6500	11	0.85	1.15
60	60yr	60 Year Depreciation				
7	Government	Government	7000	6	0.95	1.25
70	70yr	70 Year Depreciation				
8	Hotel/Motel	Hotel / Motel	8500	6	0.95	1.2
9	Warehouses	Warehouses	8000	9	0.9	1.25
C	COMMERCIAL		4000	20	1	1
M	Manufactured	Manufactured Home	1150	33	0.85	1.3
ND	No Depreciation	No Depreciation Groups				
R	RESIDENTIAL		1500	36	0.88	1.24

Example:
A dwelling with a finished area of 2,071 square feet would have a size adjustment factor of 0.90074360 as determined by the following procedure.

Standard Size (1,500 Square Feet) divided by Actual Size (2,021 square Feet)
(1,500 / 2,021 = 0.724287784 X Curve% (.36) = .260743602 + 1 = 1.260743602 – Curve% (.36)
Equals the size adjustment factor (0.90074360)

BUILDING USE CODES AND BASE RATES (TABLE)

Building Type	Full Description	Base Price	Building Category	Depreciation Table
C010	Garden Apartment	$ 144.00	4 - Apartments	50 - 50yr
C015	Apartment over Retail/Office	$ 147.00	4 - Apartments	45 - 45yr
C020	Apartment Office/Clubhouse	$ 192.00	2 - Commercial	35 - 35yr
C025	Mixed Use Apartment	$ 147.00	4 - Apartments	45 - 45yr
C030	High Rise Apartment	$ 174.00	4 - Apartments	50 - 50yr
C040	Student Apartment	$ 172.00	4 - Apartments	45 - 45yr
C050	Town House Apartment	$ 162.00	4 - Apartments	40 - 40yr
C055	Basement Apartment	$ 109.00	4 - Apartments	45 - 45yr
C060	Rooming House	$ 123.00	2 - Commercial	50 - 50yr
C065	Group Care Home	$ 183.00	2 - Commercial	45 - 45yr
C070	Hotel-Full Service	$ 207.00	8 - Hotel/Motel	50 - 50yr
C075	Hotel Basement	$ 130.00	8 - Hotel/Motel	50 - 50yr
C080	Hotel-Limited Service	$ 165.00	8 - Hotel/Motel	45 - 45yr
C090	Motel-Extended Stay	$ 119.00	8 - Hotel/Motel	40 - 40yr
C100	Motel	$ 127.00	8 - Hotel/Motel	40 - 40yr
C105	Bed & Breakfast	$ 186.00	8 - Hotel/Motel	50 - 50yr
C130	Dormitory	$ 215.00	2 - Commercial	45 - 45yr
C140	Fraternity House	$ 195.00	2 - Commercial	45 - 45yr
C150	Sorority House	$ 195.00	2 - Commercial	45 - 45yr
C160	Nursing Home	$ 196.00	3 - Institution	40 - 40yr
C165	Assisted Living	$ 135.00	3 - Institution	50 - 50yr
C170	Urgent Care Clinic	$ 185.00	3 - Institution	35 - 35yr
C180	Outpatient Facility	$ 292.00	3 - Institution	40 - 40yr
C190	Day Care	$ 194.00	2 - Commercial	35 - 35yr
C200	Retail Store	$ 114.00	6 - Retail	45 - 45yr
C205	Retail Condo	$ 150.00	6 - Retail	45 - 45yr
C210	Store Multi-Tenant	$ 123.00	6 - Retail	45 - 45yr
C215	Warehouse Showroom Store	$ 75.00	6 - Retail	30 - 30yr
C220	Stores w/Apartments	$ 121.00	6 - Retail	50 - 50yr
C230	Stores w/Offices	$ 124.00	6 - Retail	50 - 50yr
C240	Stores w/Offices & Apartments	$ 122.00	6 - Retail	50 - 50yr
C245	Stores w/Storage	$ 110.00	6 - Retail	50 - 50yr
C250	Neighborhood Shopping Center	$ 123.00	6 - Retail	40 - 40yr
C260	Community Shopping Center	$ 131.00	6 - Retail	45 - 45yr
C270	Regional Mall/Shopping Center	$ 148.00	6 - Retail	50 - 50yr
C280	Department Store	$ 152.00	6 - Retail	45 - 45yr
C290	Mall Anchor Store	$ 120.00	6 - Retail	45 - 45yr

C300	Retail Shell	$ 58.00	6 - Retail	45 - 45yr
C315	Roadside Market	$ 45.00	2 - Commercial	30 - 30yr
C320	Discount Store	$ 90.00	6 - Retail	35 - 35yr
C330	Warehouse Discount	$ 70.00	6 - Retail	30 - 30yr
C335	Market	$ 112.00	2 - Commercial	40 - 40yr
C340	Mini-Mart Convenience Store	$ 204.00	2 - Commercial	35 - 35yr
C345	Multiple-Use Convenience Store	$ 152.00	2 - Commercial	50 - 50yr
C350	Supermarket	$ 117.00	2 - Commercial	45 - 45yr
C355	Convenience Market	$ 152.00	2 - Commercial	40 - 40yr
C360	Drugstore-Stand Alone	$ 172.00	6 - Retail	40 - 40yr
C370	Retail Use-Converted Residence	$ 112.00	6 - Retail	50 - 50yr
C375	Truck Stop Restaurant	$ 183.00	2 - Commercial	30 - 30yr
C380	Restaurant	$ 170.00	2 - Commercial	35 - 35yr
C385	Modular Diner	$ 308.00	2 - Commercial	35 - 35yr
C390	Cafeteria	$ 159.00	2 - Commercial	35 - 35yr
C400	Fast Food	$ 183.00	2 - Commercial	30 - 30yr
C420	Bar/Tavern	$ 138.00	2 - Commercial	40 - 40yr
C425	Unfinished Basement	$ 49.00	2 - Commercial	40 - 40yr
C430	General Office	$ 185.00	1 - Office	50 - 50yr
C435	Dental Clinic	$ 198.00	1 - Office	35 - 35yr
C440	Office Condo	$ 250.00	1 - Office	50 - 50yr
C445	Medical Condo	$ 262.00	1 - Office	50 - 50yr
C450	Medical Office	$ 194.00	1 - Office	40 - 40yr
C455	Office Shell	$ 123.00	1 - Office	50 - 50yr
C460	Office/Apartment	$ 160.00	1 - Office	40 - 40yr
C465	Basement Office	$ 115.00	1 - Office	50 - 50yr
C470	Office-Converted Residence	$ 129.00	1 - Office	45 - 45yr
C475	Basement Parking	$ 74.00	2 - Commercial	50 - 50yr
C480	Branch Bank Building	$ 230.00	1 - Office	50 - 50yr
C485	Banks-Central Office	$ 227.00	1 - Office	55 - 55yr
C490	Drive-in Only	$ 418.00	1 - Office	50 - 50yr
C495	Office Modular	$ 55.00	1 - Office	20 - 20yr
C500	Bank Basement	$ 135.00	1 - Office	50 - 50yr
C510	Vet Clinic	$ 245.00	2 - Commercial	40 - 40yr
C520	Funeral Home	$ 211.00	2 - Commercial	45 - 45yr
C525	Basement Funeral Home	$ 63.00	2 - Commercial	45 - 45yr
C530	Auto Showroom/Office	$ 142.00	2 - Commercial	40 - 40yr
C540	Auto Dealership Service	$ 103.00	2 - Commercial	30 - 30yr
C545	Service (Repair) Garage	$ 75.00	2 - Commercial	40 - 40yr
C550	Auto Service Center	$ 100.00	2 - Commercial	40 - 40yr
C555	Quonset Building	$ 30.00	9 - Warehouses	20 - 20yr

C560	Mini Lube	$ 142.00	2 - Commercial	35 - 35yr
C570	Service Station	$ 175.00	2 - Commercial	20 - 20yr
C590	Car Wash Drive-Thru	$ 133.00	2 - Commercial	25 - 25yr
C595	Full-Service Carwash	$ 165.00	2 - Commercial	25 - 25yr
C600	Self-Serve Carwash	$ 100.00	2 - Commercial	25 - 25yr
C610	Parking Deck	$ 75.00	2 - Commercial	40 - 40yr
C620	Movie Theater	$ 143.00	2 - Commercial	40 - 40yr
C630	Performance Theater	$ 170.00	2 - Commercial	45 - 45yr
C635	Community Recreation Center	$ 176.00	2 - Commercial	40 - 40yr
C640	Horse Arena	$ 36.00	10 - Farm Bldgs.	25 - 25yr
C650	Gymnasium	$ 210.00	2 - Commercial	40 - 40yr
C655	Barber/Beauty Salons	$ 142.00	2 - Commercial	40 - 40yr
C660	Fitness Center	$ 170.00	2 - Commercial	40 - 40yr
C670	Bowling Alley	$ 105.00	2 - Commercial	30 - 30yr
C675	Senior Center	$ 206.00	2 - Commercial	45 - 45yr
C680	Clubhouse	$ 196.00	2 - Commercial	45 - 45yr
C690	Country Club House	$ 255.00	2 - Commercial	45 - 45yr
C695	Tennis Club	$ 116.00	2 - Commercial	35 - 35yr
C700	Shower House	$ 189.00	2 - Commercial	30 - 30yr
C705	Natatorium	$ 168.00	2 - Commercial	40 - 40yr
C710	Bath House	$ 142.00	2 - Commercial	55 - 55yr
C715	Pool Enclosure	$ 67.00	2 - Commercial	45 - 45yr
C720	Snack Bar	$ 102.00	2 - Commercial	30 - 30yr
C730	Guard House	$ 128.00	2 - Commercial	20 - 20yr
C740	Kennel	$ 129.00	2 - Commercial	40 - 40yr
C750	Stable	$ 38.00	10 - Farm Bldgs.	25 - 25yr
C755	Estate Stables	$ 137.00	10 - Farm Bldgs.	35 - 35yr
C800	Dry Cleaners	$ 110.00	2 - Commercial	40 - 40yr
C805	Laundromat	$ 114.00	2 - Commercial	35 - 35yr
C810	Light Commercial Utility Building	$ 30.00	2 - Commercial	25 - 25yr
C815	Material/Lumber Storage Bldg.	$ 32.00	2 - Commercial	20 - 20yr
C820	Golf Cart Storage Building	$ 62.00	2 - Commercial	30 - 30yr
C900	Greenhouse-Low	$ 7.00	10 - Farm Bldgs.	20 - 20yr
C905	Greenhouse-Fair	$ 9.00	10 - Farm Bldgs.	20 - 20yr
C910	Greenhouse-Ave	$ 13.00	10 - Farm Bldgs.	25 - 25yr
C915	Greenhouse-Good	$ 30.00	10 - Farm Bldgs.	35 - 35yr
C920	Poultry House-Breeder	$ 19.00	10 - Farm Bldgs.	20 - 20yr
C925	Poultry House - Broiler	$ 17.00	10 - Farm Bldgs.	20 - 20yr
C930	Poultry House - Enclosed	$ 31.00	10 - Farm Bldgs.	20 - 20yr
C935	Poultry House - Screened	$ 21.00	10 - Farm Bldgs.	20 - 20yr
C940	Farm Utility Building	$ 18.00	10 - Farm Bldgs.	20 - 20yr

E010	Airport Terminal	$ 255.00	2 - Commercial	40 - 40yr
E015	Church Basement	$ 122.00	3 - Institution	45 - 45yr
E020	Amory	$ 225.00	7 - Government	50 - 50yr
E025	Church Education	$ 170.00	3 - Institution	45 - 45yr
E030	Church	$ 175.00	3 - Institution	45 - 45yr
E035	Fellowship Hall	$ 195.00	3 - Institution	40 - 40yr
E040	Fire Station Staffed	$ 250.00	7 - Government	40 - 40yr
E045	Volunteer Fire Dept	$ 93.00	7 - Government	30 - 30yr
E050	Hospital	$ 450.00	3 - Institution	40 - 40yr
E060	Library	$ 260.00	3 - Institution	50 - 50yr
E065	Community Service Building	$ 228.00	7 - Government	50 - 50yr
E070	Governmental Building	$ 275.00	7 - Government	50 - 50yr
E075	Jail	$ 365.00	7 - Government	40 - 40yr
E080	Museum	$ 194.00	2 - Commercial	50 - 50yr
E085	Fraternal Building	$ 166.00	2 - Commercial	40 - 40yr
E090	Post Office	$ 166.00	2 - Commercial	50 - 50yr
E105	Police Department	$ 192.00	7 - Government	45 - 45yr
E115	Administration Office	$ 170.00	3 - Institution	45 - 45yr
E120	High School	$ 225.00	3 - Institution	45 - 45yr
E125	Middle School	$ 215.00	3 - Institution	45 - 45yr
E130	Elementary School	$ 225.00	3 - Institution	45 - 45yr
E135	College Classrooms	$ 255.00	3 - Institution	45 - 45yr
E140	Multipurpose Building	$ 230.00	3 - Institution	40 - 40yr
E145	Manual Arts (Shop)	$ 204.00	3 - Institution	40 - 40yr
E150	Laboratory Classroom	$ 230.00	3 - Institution	40 - 40yr
E155	Academic Library	$ 258.00	3 - Institution	50 - 50yr
E160	Classrooms	$ 170.00	3 - Institution	40 - 40yr
E165	Modular Classroom	$ 130.00	3 - Institution	20 - 20yr
E170	Lecture Hall	$ 250.00	3 - Institution	40 - 40yr
I010	Office/Industrial/Warehouse Flex	$ 100.00	5 - Industrial	50 - 50yr
I020	Light Manufacturing	$ 75.00	5 - Industrial	40 - 40yr
I030	Heavy Manufacturing	$ 160.00	5 - Industrial	50 - 50yr
I040	Mega Storage Warehouse	$ 53.00	9 - Warehouses	40 - 40yr
I050	Laboratories	$ 253.00	5 - Industrial	45 - 45yr
I060	Computer Data Center	$ 230.00	2 - Commercial	45 - 45yr
I070	Research & Development	$ 146.00	5 - Industrial	45 - 45yr
I080	Basement Industrial (Unfinished)	$ 46.00	5 - Industrial	40 - 40yr
I100	Storage Warehouse	$ 74.00	9 - Warehouses	40 - 40yr
I110	Cold Storage Warehouse	$ 92.00	9 - Warehouses	40 - 40yr
I120	Flex Warehouse	$ 68.00	9 - Warehouses	40 - 40yr
I130	Distribution Warehouse	$ 67.00	9 - Warehouses	40 - 40yr

I140	Mini Warehouse	$ 48.00	9 - Warehouses	35 - 35yr
i142	High-Rise Mini-Warehouse	$ 85.00	9 - Warehouses	35 - 35yr
I145	T-Hangar	$ 47.00	9 - Warehouses	30 - 30yr
I150	Storage Hangar	$ 54.00	9 - Warehouses	30 - 30yr
I155	Maintenance Hangar	$ 71.00	9 - Warehouses	35 - 35yr
I160	Transit Warehouse	$ 90.00	9 - Warehouses	40 - 40yr
I170	Mail Processing Facility	$ 123.00	9 - Warehouses	45 - 45yr
I180	Creamery	$ 116.00	5 - Industrial	35 - 35yr
R010	Single Family	$ 126.00	R - RESIDENTIAL	R - Residential
R015	Modular Home	$ 119.00	R - RESIDENTIAL	R - Residential
R020	Two, Three, Four Family	$ 116.00	R - RESIDENTIAL	R - Residential
R025	Designed Rental Single Family	$ 180.00	R - RESIDENTIAL	R - Residential
R030	Condominium	$ 182.00	R - RESIDENTIAL	R - Residential
R040	Residential Townhome	$ 122.00	R - RESIDENTIAL	R - Residential
R060	Manufactured Home	$ 102.00	M - Manufactured	M - Manufactured

STORY HEIGHT MULTIPLIERS

This field reflects the design of a structure. It does not, however, affect actual square footage of a property. A factor of 0.90 is applied to properties with a design of greater than 1.0 story. Market research shows that the area above the main level is not as costly since it is able to capitalize on the sunk costs of foundation, roofing, etc. The 0.90 factor is applied to the building's "Main" area value.

Stories	Rate
1.0 Story	Base
1.25 Story	0.9
1.5 Story	0.9
1.75 Story	0.9
2.0 Story	0.9
2.0 Story w/attic	0.9
2.5 Story	0.9
2.75 Story	0.9
3.0 Story	0.9
3.5 Story	0.9
3.75 Story	0.9
4.0 Story	0.9
4.75 Story	0.9
5.0 Story	0.9
6.0+ Story	0.9

EXTERIOR WALL MULTIPLIERS

Primary exterior wall type should be reflected in this field.

Type	Rate
Frame or Equal	1
Masonry/Brick	1.075
Stone	1

GRADE MULTIPLIERS (TABLE)

To determine the Replacement Cost New (RCN) of a dwelling, the appraiser first analyzes and values the building according to size (main foundation area), story height, and other basic features as listed for that particular subject property, based on the valuation schedule contained herein. This determines the Schedule Value of such a building on the basis of average materials and workmanship. To adjust for quality of construction and finish, the following grading system is then applied. A grade is chosen based on the above descriptions, per the appraiser's observations and analysis of the market. The numeric

which follows the grade enables the appraiser to adjust values within a range, bringing the appraisals as close as possible to market value. The factor shown is the amount the base Schedule Value is adjusted to calculate an RCN for the building being appraised.

Code	*Full Description*	*Index*		*Code*	*Full Description*	*Index*
AA95	Grade AA+95	6.95		A+25	Grade A+25	1.85
AA90	Grade AA+90	6.65		A+20	Grade A+20	1.8
AA85	Grade AA+85	6.35		A+15	Grade A+15	1.75
AA80	Grade AA+80	6.05		A+10	Grade A+10	1.7
AA75	Grade AA+75	5.75		A+05	Grade A+05	1.65
AA70	Grade AA+70	5.45		A	Grade A	1.6
AA65	Grade AA+65	5.15		A-05	Grade A-05	1.55
AA60	Grade AA+60	4.85		A-10	Grade A-10	1.5
AA55	Grade AA+55	4.55		A-15	Grade A-15	1.45
AA50	Grade AA+50	4.25		B+10	Grade B+10	1.4
AA45	Grade AA+45	3.95		B+05	Grade B+05	1.35
AA40	Grade AA+40	3.8		B	Grade B	1.3
AA35	Grade AA+35	3.65		B-05	Grade B-05	1.25
AA30	Grade AA+30	3.5		B-10	Grade B-10	1.2
AA25	Grade AA+25	3.35		B-15	Grade B-15	1.15
AA20	Grade AA+20	3.2		C+10	Grade C+10	1.1
AA15	Grade AA+15	3.05		C+05	Grade C+05	1.05
AA10	Grade AA+10	2.9		C	Grade C	1
AA05	Grade AA+05	2.75		C-05	Grade C-05	0.95
AA	Grade AA	2.6		C-10	Grade C-10	0.9
A+95	Grade A+95	2.55		C-15	Grade C-15	0.85
A+90	Grade A+90	2.5		D+10	Grade D+10	0.8
A+85	Grade A+85	2.45		D+05	Grade D+05	0.75
A+80	Grade A+80	2.4		D	Grade D	0.7
A+75	Grade A+75	2.35		D-05	Grade D-05	0.65
A+70	Grade A+70	2.3		D-10	Grade D-10	0.6
A+65	Grade A+65	2.25		D-15	Grade D-15	0.55
A+60	Grade A+60	2.2		E+10	Grade E+10	0.5
A+55	Grade A+55	2.15		E+05	Grade E+05	0.45
A+50	Grade A+50	2.1		E	Grade E	0.4
A+45	Grade A+45	2.05		E-05	Grade E-05	0.35
A+40	Grade A+40	2		E-10	Grade E-10	0.3
A+35	Grade A+35	1.95		E-15	Grade E-15	0.25
A+30	Grade A+30	1.9				

Table Type	Code	Full Description	Index
ROOF MATERIAL (TABLE)	C	Copper	Null
	M	Metal	Null
	R	Roll	Null
	S	Shingle	Null
	SL	Slate	Null
	T	Tile	Null
	TAR	Tar/Gravel	Null
	W	Shake/ Wood	Null
HEAT FUEL (TABLE)	1	Oil	Null
	2	Gas	Null
	3	Electric	Null
	4	Oil #2	Null
	5	Solar	Null
	6	Wood	Null
	7	Coal	Null
	8	Typical	Null
	9	Wood/ Combo	Null
ROOF STRUCTURE (TABLE)	F	Flat	Null
	G	Gable	Null
	H	Hip	Null
	M	Mansard	Null
	R	Gambrel	Null
FLOOR (TABLE)	A	Asphalt Tile	Null
	B	Parquet	Null
	C	Concrete	Null
	D	Marble	Null
	E	Earth	Null
	H	Hardwood	Null
	P	Softwood/Plywood	Null
	T	Tile	Null
	W	Wall/Wall	Null
	Z	Terrazzo	Null
HEAT SYSTEM (TABLE)	1	Forced air- heat and AC	Null
	2	Radiant Floor or wall heat	Null
	3	Steam or hot water heat	Null
	4	Combination heat and AC	Null
	5	Electric heat pump forced air	Null

	6	Passive solar heat	Null
	7	Non-specific heat	Null
	8	Forced air - gas heat and AC	Null
	9	Electric baseboard heat	0.98
	10	No heat	0.95
	11	Geothermal	Null
FOUNDATION (TABLE)	H	Half basement/ Half Crawl	Null
	M	Masonry	Null
	P	Pier	Null
	Q	3/4 Basement	Null
	S	Slab	Null
	T	1/4 Basement & 3/4 Crawl	Null
INTERIOR WALL (TABLE)	D	Dry Wall	Null
	L	Lath/ Plaster	Null
	P	Panel	Null
	U	Unfinished	Null
PARTITION INDEX (TABLE)	0	None	Null
	1	Below Normal	Null
	2	Normal	Null
	3	Above Normal	Null
	T	Typical	Null
PLUMBING (TABLE)	0	Excellent	Null
	1	Very Good	Null
	2	Good	Null
	3	Average	Null
	4	Fair	Null
	5	Poor	Null

LAND INFLUENCE TYPES (TABLE)

CODE	*DESCRIPTION*	*FULL DESCRIPTION*
1	Unimproved	Unimproved
3	Topography	Topography
4	Shape/Size	Shape/Size
8	View	View
A	Access	Access
COM	Common Area	Common Area
CSV	Consv Esmt	Conservation Easement
DPTH	Depth Factor	Depth Factor
E	Easement	Easement
EX	Excess	Excess
FP	FLOODPLAIN	Floodplain
FW	FLOODWAY	Floodway
G	Golf Course	Adjoins Golf Course
I	Corner/End	Corner/End
K	Use	Use
LL	Low Land	Low Land
MKT	Mkt Adjs	Market Adjustment
O	Other	Other
OP	Open Space	Open Space
PERC	No Perc	No Perc
PL	Power Line	Power Line
Q	Development	Development
REC	Rec Area	Recreation Area
S	Shape	Shape
SIZE	SIZE ADJ	SIZE ADJ
U	Unimproved	Unimproved
V	Vacant	Vacant
W	Waterfront	Waterfront
Z	Size	Size

SUB AREA TYPES (TABLE)

Code	*Full Description*	*Finished*	*Unit Price*	*Sketch Factor*	*Size Adj*	*Pricing Info*	*Sub Area*
AA	Attached Addition	YES	0.95	1	YES	UNIT PRICING	YES
AG	Attached Garage	NO	NULL	NULL	NO	SFYI PRICING	YES
AT25	25% Finished Attic	YES	1	0.0397	YES	UNIT PRICING	YES
AT50	50% Finished Attic	YES	1	0.07	YES	UNIT PRICING	YES
AT75	75% Finished Attic	YES	1	0.1098	YES	UNIT PRICING	YES
ATTF	100% Finished Attic	YES	1	0.15	YES	UNIT PRICING	YES
ATTU	Unfinished Attic	NO	0.1	0.15	NO	UNIT PRICING	YES
BG	Built-in Garage	NO	NULL	1	NO	SFYI PRICING	YES
BSF2	25% Finished Basement	YES	0.8	0.25	NO	UNIT PRICING	YES
BSF4	40% Finished Basement	YES	0.8	0.4	NO	UNIT PRICING	YES
BSF5	50% Finished Basement	YES	0.8	0.5	NO	UNIT PRICING	YES
BSF6	60% Finished Basement	YES	0.8	0.6	NO	UNIT PRICING	YES
BSF7	75% Finished Basement	YES	0.8	0.75	NO	UNIT PRICING	YES
BSFN	Finished Basement	YES	0.8	1	NO	UNIT PRICING	YES
BSU2	25% Unfinished Basement	NO	0.4	0.25	NO	UNIT PRICING	YES
BSU4	40% Unfinished Basement	NO	0.4	0.4	NO	UNIT PRICING	YES
BSU5	50% Unfinished Basement	NO	0.4	0.5	NO	UNIT PRICING	YES
BSU6	60% Unfinished Basement	NO	0.4	0.6	NO	UNIT PRICING	YES
BSU7	75% Unfinished Basement	NO	0.4	0.75	NO	UNIT PRICING	YES
BSUF	Unfinished Basement	NO	0.4	1	NO	UNIT PRICING	YES
C502	Utility Bldg.	NO	NULL	NULL	NO	SFYI PRICING	YES
C503	Patio	NO	NULL	NULL	NO	SFYI PRICING	YES
C504	Open Porch	NO	NULL	NULL	NO	SFYI PRICING	NO
C505	Enclosed Porch	NO	NULL	NULL	NO	SFYI PRICING	YES
C506	Screen Porch	NO	NULL	NULL	NO	SFYI PRICING	YES
C507	Bank Canopy	NO	NULL	NULL	NO	SFYI PRICING	NO
C508	Canopy	NO	NULL	NULL	NO	SFYI PRICING	YES
C509	Deck	NO	NULL	NULL	NO	SFYI PRICING	NO
C510	Truck Well	NO	NULL	NULL	NO	SFYI PRICING	NO
C511	Atrium	NO	NULL	NULL	NO	SFYI PRICING	NO
C512	Loading Dock	NO	NULL	NULL	NO	SFYI PRICING	NO
C513	Covered Loading Dock	NO	NULL	NULL	NO	SFYI PRICING	NO
C514	Attached Garage	NO	NULL	NULL	NO	SFYI PRICING	YES
C515	Warehouse	YES	NULL	NULL	NO	SFYI PRICING	YES
CA	Carport	NO	NULL	1	NO	SFYI PRICING	YES
CO	Commercial Structure	YES	1	1	YES	UNIT PRICING	YES
DK	Deck	NO	NULL	NULL	NO	SFYI PRICING	YES
EP	Enclosed Porch	NO	NULL	NULL	NO	SFYI PRICING	YES
FM	Farm Building (barns, etc.)	NO	NULL	1	NO	SFYI PRICING	NO
GA	Detached Garage	NO	NULL	1	NO	SFYI PRICING	YES
GB	Garage in Basement	NO	NULL	1	NO	SFYI PRICING	NO
GP	Glazed (enclosed) Porch	NO	NULL	1	NO	SFYI PRICING	YES

GR	Greenhouse	NO	NULL	1	NO	SFYI PRICING	YES
HST	Half Story	YES	1	0.5	YES	UNIT PRICING	YES
LG	Living quarters over det garage	YES	NULL	NULL	YES	SFYI PRICING	YES
LQ	Living Quarter Extensions	YES	NULL	1	YES	UNIT PRICING	YES
MA	Main	YES	NULL	1	YES	UNIT PRICING	YES
MH	Mobile Home	YES	NULL	1	NO	SFYI PRICING	NO
MSRY	Masonry Foundation	NO	0.15	1	NO	UNIT PRICING	YES
OP	Open Porch	NO	NULL	NULL	NO	SFYI PRICING	YES
OQS	1/4 Story	YES	1	0.2	YES	UNIT PRICING	YES
PA	Attached Patio/Stoop	NO	NULL	NULL	NO	SFYI PRICING	YES
PIER	PIER Foundation	NO	0.01	1	NO	UNIT PRICING	YES
PR	Patio with Roof (Canopy)	NO	NULL	NULL	NO	SFYI PRICING	YES
SA	Special Addition/Storage	NO	NULL	NULL	NO	SFYI PRICING	YES
SLAB	SLAB Foundation	NO	0	1	NO	UNIT PRICING	YES
SP	Screened Porch	NO	NULL	NULL	NO	SFYI PRICING	YES
SW	Swimming Pool	NO	NULL	NULL	NO	SFYI PRICING	YES
TC	Tennis Court	NO	NULL	1	NO	SFYI PRICING	NO
TQS	3/4 Story	YES	1	0.7	YES	UNIT PRICING	YES
UK	Unknown	NO	NULL	1	NO	UNIT PRICING	YES
US04	Upper Story 04%	YES	1	0.04	YES	UNIT PRICING	YES
US07	Upper Story 07%	YES	1	0.07	YES	UNIT PRICING	YES
US11	Upper Story 11%	YES	1	0.11	YES	UNIT PRICING	YES
US15	Upper Story 15%	YES	1	0.15	YES	UNIT PRICING	YES
US20	Upper Story 20%	YES	1	0.2	YES	UNIT PRICING	YES
US30	Upper Story 30%	YES	1	0.3	YES	UNIT PRICING	YES
US40	Upper Story 40%	YES	1	0.4	YES	UNIT PRICING	YES
US50	Upper Story 50%	YES	1	0.5	YES	UNIT PRICING	YES
US60	Upper Story 60%	YES	1	0.6	YES	UNIT PRICING	YES
US70	Upper Story 70%	YES	1	0.7	YES	UNIT PRICING	YES
US80	Upper Story 80%	YES	1	0.8	YES	UNIT PRICING	YES
US90	Upper Story 90%	YES	1	0.9	YES	UNIT PRICING	YES
UT	Utility Building	NO	NULL	1	NO	SFYI PRICING	NO

COMMERCIAL BUILDING CLASS (TABLE)

Building Group Code	*Building Group Description*	*Table Field*	*Factor*
1	Office	A	1.3
1	Office	B	1.2
1	Office	C	1
1	Office	D	0.95
1	Office	S	0.9
10	Farm Buildings	A	1.3
10	Farm Buildings	B	1.2
10	Farm Buildings	C	1
10	Farm Buildings	D	0.95
10	Farm Buildings	S	0.9
2	Commercial	A	1.3
2	Commercial	B	1.2
2	Commercial	C	1
2	Commercial	D	0.95
2	Commercial	S	0.9
3	Institution	A	1.3
3	Institution	B	1.2
3	Institution	C	1
3	Institution	D	0.95
3	Institution	S	0.9
4	Apartments	A	1.3
4	Apartments	B	1.2
4	Apartments	C	1
4	Apartments	D	0.95
4	Apartments	S	0.9
5	Industrial	A	1.3
5	Industrial	B	1.2
5	Industrial	C	1
5	Industrial	D	0.95
5	Industrial	S	0.9
6	Retail	A	1.3
6	Retail	B	1.2
6	Retail	C	1
6	Retail	D	0.95
6	Retail	S	0.9
7	Government	A	1.3
7	Government	B	1.2
7	Government	C	1

7	Government	D	0.95
7	Government	S	0.9
8	Hotel/Motel	A	1.3
8	Hotel/Motel	B	1.2
8	Hotel/Motel	C	1
8	Hotel/Motel	D	0.95
8	Hotel/Motel	S	0.9
9	Warehouses	A	1.3
9	Warehouses	B	1.2
9	Warehouses	C	1
9	Warehouses	D	0.95
9	Warehouses	S	0.9
C	Commercial	A	1.3
C	Commercial	B	1.2
C	Commercial	C	1
C	Commercial	D	0.95
C	Commercial	S	0.9

COMMERCIAL COST MULTIPLIER (TABLE)

Codes	Full Description	Value Effect
A11	STEEL - 4+ STY APTS/CLUBS/HOTELS	1.07
A12	STEEL - COMMERCIAL DWELLINGS/APTS/MOTELS	1.02
A13	STEEL - STORES/COMMERCIALS	1.02
A14	STEEL - GARAGES/INDUSTRIALS/LOFTS/WAREHOUSES	1.01
A15	STEEL - OFFICES/MEDICAL/PUBLIC BUILDINGS	1.03
A16	STEEL - CHURCHES/THEATERS/AUDITORIUMS	1.04
A17	STEEL - SHEDS/FARM BUILDINGS	1.07
A18	STEEL - SCHOOLS/CLASSROOMS	1.08
B11	CONCRETE - 4+ STY APTS/CLUBS/HOTELS	1.0395
B12	CONCRETE - COMMERCIAL DWELLINGS/APTS/MOTELS	1.0197
B13	CONCRETE - STORES/COMMERCIALS	0.99
B14	CONCRETE - GARAGES/INDUSTRIALS/LOFTS/WAREHOUSES	1.0197
B15	CONCRETE - OFFICES/MEDICAL/PUBLIC BUILDINGS	0.99
B16	CONCRETE - CHURCHES/THEATERS/AUDITORIUMS	0.9999
B17	CONCRETE - SHEDS/FARM BUILDINGS	1.0296
B18	CONCRETE - SCHOOLS/CLASSROOMS	1.0692
C11	MASONRY - 4+ STY APTS/CLUBS/HOTELS	0.9696
C12	MASONRY - COMMERCIAL DWELLINGS/APTS/MOTELS	0.96
C13	MASONRY - STORES/COMMERCIALS	0.9792
C14	MASONRY - GARAGES/INDUSTRIALS/LOFTS/WAREHOUSES	0.9696
C15	MASONRY - OFFICES/MEDICAL/PUBLIC BUILDINGS	0.9888

C16	MASONRY - CHURCHES/THEATERS/AUDITORIUMS	0.9888
C17	MASONRY - SHEDS/FARM BUILDINGS	0.9984
C18	MASONRY - SCHOOLS/CLASSROOMS	0.96
D11	WOOD - 4+ STY APTS/CLUBS/HOTELS	0.9409
D12	WOOD - COMMERCIAL DWELLINGS/APTS/MOTELS	0.9797
D13	WOOD - STORES/COMMERCIALS	0.9797
D14	WOOD - GARAGES/INDUSTRIALS/LOFTS/WAREHOUSES	0.97
D15	WOOD - OFFICES/MEDICAL/PUBLIC BUILDINGS	0.97
D16	WOOD - CHURCHES/THEATERS/AUDITORIUMS	0.9797
D17	WOOD - SHEDS/FARM BUILDINGS	0.9603
D18	WOOD - SCHOOLS/CLASSROOMS	0.9506
S11	METAL - 4+ STY APTS/CLUBS/HOTELS	1.0197
S12	METAL - COMMERCIAL DWELLINGS/APTS/MOTELS	1.0296
S13	METAL - STORES/COMMERCIALS	1.0197
S14	METAL - GARAGES/INDUSTRIALS/LOFTS/WAREHOUSES	1.0098
S15	METAL - OFFICES/MEDICAL/PUBLIC BUILDINGS	1.0296
S16	METAL - CHURCHES/THEATERS/AUDITORIUMS	0.9999
S17	METAL - SHEDS/FARM BUILDINGS	0.99
S18	METAL - SCHOOLS/CLASSROOMS	1.0296

CONDO FLOOR LEVELS (TABLE)

Building Group	*Table*	*Table Field*	*Factor*
C	TABLEFLOORLEVEL	1	1
C	TABLEFLOORLEVEL	2	1.05
C	TABLEFLOORLEVEL	3	1.1
C	TABLEFLOORLEVEL	4	1.15
C	TABLEFLOORLEVEL	5	1.2
C	TABLEFLOORLEVEL	6	1.25
C	TABLEFLOORLEVEL	L	0.95

ALTERNATE TYPES (DESIGN FACTORS) (TABLE)

This would be used to capture design elements not captured in construction grade, building group base rate and/or other construction factors.

Code	*Full Description*	*Index*	*Finished?*		Code	Full Description	Index	Finished?
BS_M	Multiple Finished Basements	1	FINISHED		APT	APT	1	UNFINISHED
BSFN	Finished Basement	2	FINISHED		U100	UnFin Design Factor 1.00	2	UNFINISHED
D100	Design Factor 1.00	2	FINISHED		U105	UnFin Design Factor 1.05	2.05	UNFINISHED
D105	Design Factor 1.05	2.05	FINISHED		U110	UnFin Design Factor 1.10	2.1	UNFINISHED
D110	Design Factor 1.10	2.1	FINISHED		U120	UnFin Design Factor 1.20	2.2	UNFINISHED

D120	Design Factor 1.20	2.2	FINISHED		U135	UnFin Design Factor 1.35	2.35	UNFINISHED
D135	Design Factor 1.35	2.35	FINISHED		U140	UnFin Design Factor 1.40	2.4	UNFINISHED
D140	Design Factor 1.40	2.4	FINISHED		U150	UnFin Design Factor 1.50	2.5	UNFINISHED
D150	Design Factor 1.50	2.5	FINISHED		U200	UnFin Design Factor 2.00	3	UNFINISHED
D200	Design Factor 2.00	3	FINISHED		UF_M	Design Factor Multiple	1	UNFINISHED
DF_M	Design Factor Multiple Areas	1	FINISHED		UF01	UnFin Design Factor .01	1.01	UNFINISHED
DF01	Design Factor .01	1.01	FINISHED		UF02	UnFin Design Factor .02	1.02	UNFINISHED
DF02	Design Factor .02	1.02	FINISHED		UF03	UnFin Design Factor .03	1.03	UNFINISHED
DF03	Design Factor .03	1.03	FINISHED		UF04	UnFin Design Factor .04	1.04	UNFINISHED
DF04	Design Factor .04	1.04	FINISHED		UF05	UnFin Design Factor .05	1.05	UNFINISHED
DF05	Design Factor .05	1.05	FINISHED		UF06	UnFin Design Factor .06	1.06	UNFINISHED
DF06	Design Factor .06	1.06	FINISHED		UF07	UnFin Design Factor .07	1.07	UNFINISHED
DF07	Design Factor .07	1.07	FINISHED		UF08	UnFin Design Factor .08	1.08	UNFINISHED
DF08	Design Factor .08	1.08	FINISHED		UF09	UnFin Design Factor .09	1.09	UNFINISHED
DF09	Design Factor .09	1.09	FINISHED		UF10	UnFin Design Factor .10	1.1	UNFINISHED
DF10	Design Factor .10	1.1	FINISHED		UF11	UnFin Design Factor .11	1.11	UNFINISHED
DF11	Design Factor .11	1.11	FINISHED		UF12	UnFin Design Factor .12	1.12	UNFINISHED
DF12	Design Factor .12	1.12	FINISHED		UF13	UnFin Design Factor .13	1.13	UNFINISHED
DF13	Design Factor .13	1.13	FINISHED		UF14	UnFin Design Factor .14	1.14	UNFINISHED
DF14	Design Factor .14	1.14	FINISHED		UF15	UnFin Design Factor .15	1.15	UNFINISHED
DF15	Design Factor .15	1.15	FINISHED		UF16	UnFin Design Factor .16	1.16	UNFINISHED
DF16	Design Factor .16	1.16	FINISHED		UF17	UnFin Design Factor .17	1.17	UNFINISHED
DF17	Design Factor .17	1.17	FINISHED		UF18	UnFin Design Factor .18	1.18	UNFINISHED
DF18	Design Factor .18	1.18	FINISHED		UF19	UnFin Design Factor .19	1.19	UNFINISHED
DF19	Design Factor .19	1.19	FINISHED		UF20	UnFin Design Factor .20	1.2	UNFINISHED
DF20	Design Factor .20	1.2	FINISHED		UF21	UnFin Design Factor .21	1.21	UNFINISHED
DF21	Design Factor .21	1.21	FINISHED		UF22	UnFin Design Factor .22	1.22	UNFINISHED
DF22	Design Factor .22	1.22	FINISHED		UF23	UnFin Design Factor .23	1.23	UNFINISHED
DF23	Design Factor .23	1.23	FINISHED		UF24	UnFin Design Factor .24	1.24	UNFINISHED
DF24	Design Factor .24	1.24	FINISHED		UF25	UnFin Design Factor .25	1.25	UNFINISHED
DF25	Design Factor .25	1.25	FINISHED		UF26	UnFin Design Factor .26	1.26	UNFINISHED
DF26	Design Factor .26	1.26	FINISHED		UF27	UnFin Design Factor .27	1.27	UNFINISHED
DF27	Design Factor .27	1.27	FINISHED		UF28	UnFin Design Factor .28	1.28	UNFINISHED
DF28	Design Factor .28	1.28	FINISHED		UF29	UnFin Design Factor .29	1.29	UNFINISHED
DF29	Design Factor .29	1.29	FINISHED		UF30	UnFin Design Factor .30	1.3	UNFINISHED
DF30	Design Factor .30	1.3	FINISHED		UF31	UnFin Design Factor .31	1.31	UNFINISHED
DF31	Design Factor .31	1.31	FINISHED		UF32	UnFin Design Factor .32	1.32	UNFINISHED
DF32	Design Factor .32	1.32	FINISHED		UF33	UnFin Design Factor .33	1.33	UNFINISHED
DF33	Design Factor .33	1.33	FINISHED		UF34	UnFin Design Factor .34	1.34	UNFINISHED
DF34	Design Factor .34	1.34	FINISHED		UF35	UnFin Design Factor .35	1.35	UNFINISHED
DF35	Design Factor .35	1.35	FINISHED		UF36	UnFin Design Factor .36	1.36	UNFINISHED
DF36	Design Factor .36	1.36	FINISHED		UF37	UnFin Design Factor .37	1.37	UNFINISHED
DF37	Design Factor .37	1.37	FINISHED		UF38	UnFin Design Factor .38	1.38	UNFINISHED
DF38	Design Factor .38	1.38	FINISHED		UF39	UnFin Design Factor .39	1.39	UNFINISHED
DF39	Design Factor .39	1.39	FINISHED		UF40	UnFin Design Factor .40	1.4	UNFINISHED
DF40	Design Factor .40	1.4	FINISHED		UF41	UnFin Design Factor .41	1.41	UNFINISHED

DF41	Design Factor .41	1.41	FINISHED		UF42	UnFin Design Factor .42	1.42	UNFINISHED
DF42	Design Factor .42	1.42	FINISHED		UF43	UnFin Design Factor .43	1.43	UNFINISHED
DF43	Design Factor .43	1.43	FINISHED		UF44	UnFin Design Factor .44	1.44	UNFINISHED
DF44	Design Factor .44	1.44	FINISHED		UF45	UnFin Design Factor .45	1.45	UNFINISHED
DF45	Design Factor .45	1.45	FINISHED		UF46	UnFin Design Factor .46	1.46	UNFINISHED
DF46	Design Factor .46	1.46	FINISHED		UF47	UnFin Design Factor .47	1.47	UNFINISHED
DF47	Design Factor .47	1.47	FINISHED		UF48	UnFin Design Factor .48	1.48	UNFINISHED
DF48	Design Factor .48	1.48	FINISHED		UF49	UnFin Design Factor .49	1.49	UNFINISHED
DF49	Design Factor .49	1.49	FINISHED		UF50	UnFin Design Factor .50	1.5	UNFINISHED
DF50	Design Factor .50	1.5	FINISHED		UF51	UnFin Design Factor .51	1.51	UNFINISHED
DF51	Design Factor .51	1.51	FINISHED		UF52	UnFin Design Factor .52	1.52	UNFINISHED
DF52	Design Factor .52	1.52	FINISHED		UF53	UnFin Design Factor .53	1.53	UNFINISHED
DF53	Design Factor .53	1.53	FINISHED		UF54	UnFin Design Factor .54	1.54	UNFINISHED
DF54	Design Factor .54	1.54	FINISHED		UF55	UnFin Design Factor .55	1.55	UNFINISHED
DF55	Design Factor .55	1.55	FINISHED		UF56	UnFin Design Factor .56	1.56	UNFINISHED
DF56	Design Factor .56	1.56	FINISHED		UF57	UnFin Design Factor .57	1.57	UNFINISHED
DF57	Design Factor .57	1.57	FINISHED		UF58	UnFin Design Factor .58	1.58	UNFINISHED
DF58	Design Factor .58	1.58	FINISHED		UF59	UnFin Design Factor .59	1.59	UNFINISHED
DF59	Design Factor .59	1.59	FINISHED		UF60	UnFin Design Factor .60	1.6	UNFINISHED
DF60	Design Factor .60	1.6	FINISHED		UF61	UnFin Design Factor .61	1.61	UNFINISHED
DF61	Design Factor .61	1.61	FINISHED		UF62	UnFin Design Factor .62	1.62	UNFINISHED
DF62	Design Factor .62	1.62	FINISHED		UF63	UnFin Design Factor .63	1.63	UNFINISHED
DF63	Design Factor .63	1.63	FINISHED		UF64	UnFin Design Factor .64	1.64	UNFINISHED
DF64	Design Factor .64	1.64	FINISHED		UF65	UnFin Design Factor .65	1.65	UNFINISHED
DF65	Design Factor .65	1.65	FINISHED		UF66	UnFin Design Factor .66	1.66	UNFINISHED
DF66	Design Factor .66	1.66	FINISHED		UF67	UnFin Design Factor .67	1.67	UNFINISHED
DF67	Design Factor .67	1.67	FINISHED		UF68	UnFin Design Factor .68	1.68	UNFINISHED
DF68	Design Factor .68	1.68	FINISHED		UF69	UnFin Design Factor .69	1.69	UNFINISHED
DF69	Design Factor .69	1.69	FINISHED		UF70	UnFin Design Factor .70	1.7	UNFINISHED
DF70	Design Factor .70	1.7	FINISHED		UF71	UnFin Design Factor .71	1.71	UNFINISHED
DF71	Design Factor .71	1.71	FINISHED		UF72	UnFin Design Factor .72	1.72	UNFINISHED
DF72	Design Factor .72	1.72	FINISHED		UF73	UnFin Design Factor .73	1.73	UNFINISHED
DF73	Design Factor .73	1.73	FINISHED		UF74	UnFin Design Factor .74	1.74	UNFINISHED
DF74	Design Factor .74	1.74	FINISHED		UF75	UnFin Design Factor .75	1.75	UNFINISHED
DF75	Design Factor .75	1.75	FINISHED		UF76	UnFin Design Factor .76	1.76	UNFINISHED
DF76	Design Factor .76	1.76	FINISHED		UF77	UnFin Design Factor .77	1.77	UNFINISHED
DF77	Design Factor .77	1.77	FINISHED		UF78	UnFin Design Factor .78	1.78	UNFINISHED
DF78	Design Factor .78	1.78	FINISHED		UF79	UnFin Design Factor .79	1.79	UNFINISHED
DF79	Design Factor .79	1.79	FINISHED		UF80	UnFin Design Factor .80	1.8	UNFINISHED
DF80	Design Factor .80	1.8	FINISHED		UF81	UnFin Design Factor .81	1.81	UNFINISHED
DF81	Design Factor .81	1.81	FINISHED		UF82	UnFin Design Factor .82	1.82	UNFINISHED
DF82	Design Factor .82	1.82	FINISHED		UF83	UnFin Design Factor .83	1.83	UNFINISHED
DF83	Design Factor .83	1.83	FINISHED		UF84	UnFin Design Factor .84	1.84	UNFINISHED
DF84	Design Factor .84	1.84	FINISHED		UF85	UnFin Design Factor .85	1.85	UNFINISHED
DF85	Design Factor .85	1.85	FINISHED		UF86	UnFin Design Factor .86	1.86	UNFINISHED
DF86	Design Factor .86	1.86	FINISHED		UF87	UnFin Design Factor .87	1.87	UNFINISHED

DF87	Design Factor .87	1.87	FINISHED		UF88	UnFin Design Factor .88	1.88	UNFINISHED
DF88	Design Factor .88	1.88	FINISHED		UF89	UnFin Design Factor .89	1.89	UNFINISHED
DF89	Design Factor .89	1.89	FINISHED		UF90	UnFin Design Factor .90	1.9	UNFINISHED
DF90	Design Factor .90	1.9	FINISHED		UF91	UnFin Design Factor .91	1.91	UNFINISHED
DF91	Design Factor .91	1.91	FINISHED		UF92	UnFin Design Factor .92	1.92	UNFINISHED
DF92	Design Factor .92	1.92	FINISHED		UF93	UnFin Design Factor .93	1.93	UNFINISHED
DF93	Design Factor .93	1.93	FINISHED		UF94	UnFin Design Factor .94	1.94	UNFINISHED
DF94	Design Factor .94	1.94	FINISHED		UF95	UnFin Design Factor .95	1.95	UNFINISHED
DF95	Design Factor .95	1.95	FINISHED		UF96	UnFin Design Factor .96	1.96	UNFINISHED
DF96	Design Factor .96	1.96	FINISHED		UF97	UnFin Design Factor .97	1.97	UNFINISHED
DF97	Design Factor .97	1.97	FINISHED		UF98	UnFin Design Factor .98	1.98	UNFINISHED
DF98	Design Factor .98	1.98	FINISHED		UF99	UnFin Design Factor .99	1.99	UNFINISHED
DF99	Design Factor .99	1.99	FINISHED					

OTHER FEATURES PRICING (TABLE)

Building Category	1-Office	2-Commercial	3 - Institution	4 - Apartments
Size Adjustment Table	TBG-1 - TBG-1	TBG-2 - TBG-2	TBG-3 - TBG-3	TBG-4 - TBG-4
Size Adjustment Table Per Adj	PA-1 - PA-1	PA-2 - PA-2	PA-3 - PA-3	PA-4 - PA-4
Additional Bath	0	0	0	0
1/2 Bath	0	0	0	0
Additional 1/2 Bath Amount	0	0	0	0
Fireplaces Amount	0	0	0	3000
Additional Fireplaces	0	0	0	3000
Basement Garages	0	0	0	1200
Additional Basement Garages	0	0	0	1200
% AC Base	0	0	0	0
% AC/Unit	0	0	0	0
Percent Sprinkled Base	7000	7000	7500	7000
Percent Sprinkled Per Unit	1.5	1.5	1.5	1.5
Common Wall Base Amount	0	0	0	0
Std Height/Floor	12	12	12	10
Standard Height Adjustment Percent	2	2	2	2

Building Category	5 - Industrial	6 - Retail	7-Government	8 - Hotel/Motel
Size Adjustment Table	TBG-5 - TBG-5	TBG-6 - TBG-6	TBG-7 - TBG-7	TBG-8 - TBG-8
Size Adjustment Table Per Adj	PA-5 - PA-5	PA-6 - PA-6	PA-7 - PA-7	PA-8 - PA-8
Additional Bath	0	0	0	0
1/2 Bath	0	0	0	0

Additional 1/2 Bath Amount	0	0	0	0
Fireplaces Amount	0	0	0	3000
Additional Fireplaces	0	0	0	3000
Basement Garages	0	0	0	0
Additional Basement Garages	0	0	0	0
% AC Base	0	0	0	0
% AC/Unit	0	0	0	0
Percent Sprinkled Base	7000	7000	7000	7000
Percent Sprinkled Per Unit	1.5	1.5	1.5	1.5
Common Wall Base Amount	0	0	0	0
Std Height/Floor	14	12	12	10
Standard Height Adjustment Percent	2	2	2	2

Building Category	**9 - Warehouses**	**10 - Farm Bldgs**	**C-COMMERCIAL**	**M-Manufactured**	**R-RESIDENTIAL**
Size Adjustment Table	TBG-9 - TBG-9	TBG-10 - TBG-10	TBG-C - TBG-C	TBG-M - TBG-M	TBG-R - TBG-R
Size Adjustment Table Per Adjustment	PA-9 - PA-9	PA-10 - PA-10	PA-C - PA-C	PA-M - PA-M	PA-R - PA-R
Additional Bath	0	0	0	3800	5000
1/2 Bath	0	0	0	2000	3100
Additional 1/2 Bath Amount	0	0	0	1500	2500
Fireplaces Amount	0	0	0	3000	3800
Additional Fireplaces	0	0	0	3000	3800
Basement Garages	0	0	0	0	5000
Additional Basement Garages	0	0	0	0	3100
% AC Base	0	0	0	1100	1100
% AC/Unit	0	0	0	1.5	1.5
Percent Sprinkled Base	7000	1500	7000	0	0
Percent Sprinkled Per Unit	1.5	1.5	1.5	0	0
Common Wall Base Amount	0	0	25	0	25

Std Ht/Flr	14	10	12	0	0
Standard Height Adjustment Percent	2	2	2	0	1

Building Category	Size Adj Table	Size Adj Table Per Adj
30 - 30yr	TBG-30 - TBG-30	PA-30 - PA-30
35 - 35yr	TBG-35 - TBG-35	PA-35 - PA-35
40 - 40yr	TBG-40 - TBG-40	PA-40 - PA-40
45 - 45yr	TBG-45 - TBG-45	PA-45 - PA-45
50 - 50yr	TBG-50 - TBG-50	PA-50 - PA-50
ND - No Depreciation	TBG-ND - TBG-ND	PA-ND - PA-ND
20 - 20yr	TBG-20 - TBG-20	PA-20 - PA-20
25 - 25yr	TBG-25 - TBG-25	PA-25 - PA-25
60 - 60yr	TBG-60 - TBG-60	PA-60 - PA-60
55 - 55yr	TBG-55 - TBG-55	PA-55 - PA-55
70 - 70yr	TBG-70 - TBG-70	PA-70 - PA-70

DEPRECIATION TABLES

RESIDENTIAL (TABLE)

DESCRIPTION	*AGE*	*GD*	*AV*	*FR*	*PR*
Residential	0	3	3	3	3
Residential	1	3	4	4	4
Residential	2	4	4	5	6
Residential	3	4	5	6	7
Residential	4	5	6	7	8
Residential	5	5	7	8	9
Residential	6	6	7	9	11
Residential	7	6	8	10	12
Residential	8	7	9	11	13
Residential	9	7	9	11	15
Residential	10	8	10	12	16
Residential	11	8	11	13	17
Residential	12	9	11	14	19
Residential	13	9	12	15	20
Residential	14	9	13	15	21
Residential	15	10	14	16	22
Residential	16	10	14	17	24
Residential	17	11	15	18	25
Residential	18	11	16	19	26
Residential	19	12	16	19	27
Residential	20	12	17	20	28
Residential	21	13	17	21	29
Residential	22	13	18	22	30
Residential	23	13	18	23	31
Residential	24	14	19	23	32
Residential	25	14	19	24	33
Residential	26	15	20	25	33
Residential	27	15	21	26	34
Residential	28	16	21	27	35
Residential	29	16	22	27	36
Residential	30	16	22	28	37
Residential	31	17	23	29	38
Residential	32	17	23	30	39
Residential	33	18	24	30	40
Residential	34	18	24	31	41
Residential	35	18	25	31	42

MANUFACTURED (TABLE)

DESCRIPTION	*AGE*	*GD*	*AV*	*FR*	*PR*
Manufactured	0	4	4	4	4
Manufactured	1	4	4	4	4
Manufactured	2	6	6	6	6
Manufactured	3	7	8	8	8
Manufactured	4	9	9	10	10
Manufactured	5	11	11	11	12
Manufactured	6	12	13	13	14
Manufactured	7	13	14	15	16
Manufactured	8	15	16	16	18
Manufactured	9	16	17	18	20
Manufactured	10	17	19	20	22
Manufactured	11	19	20	21	24
Manufactured	12	20	22	23	26
Manufactured	13	21	23	24	28
Manufactured	14	22	25	26	30
Manufactured	15	23	26	27	31
Manufactured	16	24	27	28	33
Manufactured	17	25	28	30	35
Manufactured	18	26	29	31	36
Manufactured	19	27	30	32	38
Manufactured	20	28	31	34	40
Manufactured	21	29	33	35	41
Manufactured	22	30	34	36	43
Manufactured	23	30	35	37	44
Manufactured	24	31	36	38	45
Manufactured	25	32	37	40	47
Manufactured	26	33	38	41	48
Manufactured	27	33	39	42	49
Manufactured	28	34	40	43	51
Manufactured	29	35	40	44	52
Manufactured	30	35	41	45	53
Manufactured	31	36	42	46	54
Manufactured	32	37	43	47	55
Manufactured	33	37	44	48	56
Manufactured	34	38	45	49	58
Manufactured	35	38	46	49	59

Residential	36	19	26	32	43		Manufactured	36	39	46	50	60
Residential	37	19	26	33	43		Manufactured	37	40	47	51	60
Residential	38	20	27	33	44		Manufactured	38	40	48	52	61
Residential	39	20	27	34	45		Manufactured	39	41	49	53	62
Residential	40	21	28	34	46		Manufactured	40	41	49	54	63
Residential	41	21	28	35	47		Manufactured	41	42	50	54	64
Residential	42	21	29	36	48		Manufactured	42	42	51	55	65
Residential	43	22	29	36	48		Manufactured	43	43	51	56	66
Residential	44	22	30	37	49		Manufactured	44	43	52	57	66
Residential	45	22	31	37	50		Manufactured	45	43	53	57	67
Residential	46	23	31	38	51		Manufactured	46	44	53	58	68
Residential	47	23	32	39	52		Manufactured	47	44	54	59	69
Residential	48	24	32	39	53		Manufactured	48	45	54	59	69
Residential	49	24	33	40	53		Manufactured	49	45	55	60	70
Residential	50	24	33	40	54							
Residential	51	25	34	41	55							
Residential	52	25	34	41	56							
Residential	53	25	35	42	56							
Residential	54	26	35	43	57							
Residential	55	26	36	43	57							
Residential	56	26	36	44	58							
Residential	57	27	37	44	59							
Residential	58	27	37	45	59							
Residential	59	28	38	46	60							
Residential	60	28	38	46	60							
Residential	61	28	39	47	61							
Residential	62	29	39	47	61							
Residential	63	29	39	48	62							
Residential	64	29	40	48	63							
Residential	65	30	40	49	63							
Residential	66	30	41	50	64							
Residential	67	30	41	50	64							
Residential	68	31	42	51	65							
Residential	69	31	42	51	65							
Residential	70	31	42	51	65							
Residential	71	32	43	52	66							
Residential	72	32	44	53	67							
Residential	73	33	44	53	67							
Residential	74	33	44	54	68							

COMMERCIAL (TABLE)

DESCRIPTION	*AGE*	*AV*		*DESCRIPTION*	*AGE*	*AV*
Commercial	0	0		Commercial	36	70
Commercial	1	2		Commercial	37	70
Commercial	2	4		Commercial	38	70
Commercial	3	6		Commercial	39	70
Commercial	4	8		Commercial	40	70
Commercial	5	10		Commercial	41	70
Commercial	6	12		Commercial	42	70
Commercial	7	14		Commercial	43	70
Commercial	8	16		Commercial	44	70
Commercial	9	18		Commercial	45	70
Commercial	10	20		Commercial	46	70
Commercial	11	22		Commercial	47	70
Commercial	12	24		Commercial	48	70
Commercial	13	26		Commercial	49	70
Commercial	14	28		Commercial	50	70
Commercial	15	30		Commercial	51	70
Commercial	16	32		Commercial	52	70
Commercial	17	34		Commercial	53	70
Commercial	18	36		Commercial	54	70
Commercial	19	38		Commercial	55	70
Commercial	20	40		Commercial	56	70
Commercial	21	42		Commercial	57	70
Commercial	22	44		Commercial	58	70
Commercial	23	46		Commercial	59	70
Commercial	24	48		Commercial	60	70
Commercial	25	50		Commercial	61	70
Commercial	26	52		Commercial	62	70
Commercial	27	54		Commercial	63	70
Commercial	28	56		Commercial	64	70
Commercial	29	58		Commercial	65	70
Commercial	30	60		Commercial	66	70
Commercial	31	62		Commercial	67	70
Commercial	32	64		Commercial	68	70
Commercial	33	66		Commercial	69	70
Commercial	34	68		Commercial	70	70
Commercial	35	70				

PHYSICAL DEPRECIATION BASED ON EFFECTIVE YEAR BUILT (TABLE)

DESCRIPTION	AGE	AV	DESCRIPTION	AGE	AV	DESCRIPTION	AGE	AV	DESCRIPTION	AGE	AV
70yr	0	0	60yr	39	34	50yr	32	38	35yr	4	5
70yr	1	0	60yr	40	35	50yr	33	41	35yr	5	6
70yr	2	0	60yr	41	37	50yr	34	43	35yr	6	8
70yr	3	0	60yr	42	39	50yr	35	46	35yr	7	10
70yr	4	1	60yr	43	41	50yr	36	48	35yr	8	11
70yr	5	1	60yr	44	43	50yr	37	51	35yr	9	13
70yr	6	1	60yr	45	45	50yr	38	53	35yr	10	15
70yr	7	1	60yr	46	48	50yr	39	56	35yr	11	17
70yr	8	1	60yr	47	51	50yr	40	59	35yr	12	19
70yr	9	2	60yr	48	53	50yr	41	62	35yr	13	22
70yr	10	2	60yr	49	55	50yr	42	65	35yr	14	24
70yr	11	2	60yr	50	58	50yr	43	68	35yr	15	26
70yr	12	2	60yr	51	60	50yr	44	70	35yr	16	28
70yr	13	2	60yr	52	62	50yr	45	72	35yr	17	31
70yr	14	3	60yr	53	63	50yr	46	74	35yr	18	34
70yr	15	3	60yr	54	65	50yr	47	75	35yr	19	36
70yr	16	3	60yr	55	67	50yr	48	75	35yr	20	39
70yr	17	4	60yr	56	69	50yr	49	75	35yr	21	42
70yr	18	4	60yr	57	71	50yr	50	75	35yr	22	45
70yr	19	4	60yr	58	73	45yr	0	0	35yr	23	48
70yr	20	5	60yr	59	75	45yr	1	1	35yr	24	52
70yr	21	5	60yr	60	75	45yr	2	1	35yr	25	55
70yr	22	6	55yr	0	0	45yr	3	2	35yr	26	58
70yr	23	6	55yr	1	0	45yr	4	3	35yr	27	61
70yr	24	7	55yr	2	1	45yr	5	4	35yr	28	64
70yr	25	7	55yr	3	1	45yr	6	4	35yr	29	68
70yr	26	8	55yr	4	1	45yr	7	5	35yr	30	72
70yr	27	9	55yr	5	2	45yr	8	6	35yr	31	73
70yr	28	9	55yr	6	2	45yr	9	7	35yr	32	75
70yr	29	10	55yr	7	3	45yr	10	8	35yr	33	75
70yr	30	11	55yr	8	3	45yr	11	9	35yr	34	75
70yr	31	12	55yr	9	4	45yr	12	10	35yr	35	75
70yr	32	13	55yr	10	4	45yr	13	12	30yr	0	0
70yr	33	14	55yr	11	5	45yr	14	13	30yr	1	2
70yr	34	15	55yr	12	6	45yr	15	14	30yr	2	3
70yr	35	16	55yr	13	6	45yr	16	16	30yr	3	5
70yr	36	17	55yr	14	7	45yr	17	18	30yr	4	7
70yr	37	18	55yr	15	8	45yr	18	19	30yr	5	9
70yr	38	19	55yr	16	9	45yr	19	21	30yr	6	11
70yr	39	20	55yr	17	10	45yr	20	23	30yr	7	14
70yr	40	21	55yr	18	11	45yr	21	25	30yr	8	16
70yr	41	23	55yr	19	12	45yr	22	27	30yr	9	18
70yr	42	25	55yr	20	13	45yr	23	29	30yr	10	21
70yr	43	26	55yr	21	14	45yr	24	31	30yr	11	24
70yr	44	28	55yr	22	15	45yr	25	33	30yr	12	26
70yr	45	29	55yr	23	16	45yr	26	35	30yr	13	29

70yr	46	31	55yr	24	17	45yr	27	37	30yr	14	32
70yr	47	32	55yr	25	19	45yr	28	40	30yr	15	35
70yr	48	34	55yr	26	20	45yr	29	42	30yr	16	39
70yr	49	36	55yr	27	21	45yr	30	45	30yr	17	42
70yr	50	38	55yr	28	23	45yr	31	48	30yr	18	46
70yr	51	40	55yr	29	24	45yr	32	50	30yr	19	49
70yr	52	42	55yr	30	26	45yr	33	53	30yr	20	53
70yr	53	44	55yr	31	28	45yr	34	55	30yr	21	57
70yr	54	46	55yr	32	30	45yr	35	58	30yr	22	60
70yr	55	48	55yr	33	32	45yr	36	61	30yr	23	63
70yr	56	50	55yr	34	34	45yr	37	64	30yr	24	66
70yr	57	52	55yr	35	36	45yr	38	67	30yr	25	69
70yr	58	54	55yr	36	38	45yr	39	70	30yr	26	72
70yr	59	56	55yr	37	40	45yr	40	72	30yr	27	75
70yr	60	57	55yr	38	42	45yr	41	75	30yr	28	75
70yr	61	59	55yr	39	44	45yr	42	75	30yr	29	75
70yr	62	60	55yr	40	46	45yr	43	75	30yr	30	75
70yr	63	61	55yr	41	48	45yr	44	75	25yr	0	0
70yr	64	63	55yr	42	51	45yr	45	75	25yr	1	2
70yr	65	65	55yr	43	54	40yr	0	0	25yr	2	5
70yr	66	66	55yr	44	56	40yr	1	1	25yr	3	7
70yr	67	67	55yr	45	58	40yr	2	2	25yr	4	10
70yr	68	68	55yr	46	60	40yr	3	3	25yr	5	13
70yr	69	69	55yr	47	62	40yr	4	4	25yr	6	16
70yr	70	70	55yr	48	64	40yr	5	5	25yr	7	19
60yr	0	0	55yr	49	66	40yr	6	6	25yr	8	22
60yr	1	0	55yr	50	68	40yr	7	7	25yr	9	25
60yr	2	1	55yr	51	73	40yr	8	8	25yr	10	29
60yr	3	1	55yr	52	75	40yr	9	10	25yr	11	32
60yr	4	1	55yr	53	75	40yr	10	11	25yr	12	36
60yr	5	1	55yr	54	75	40yr	11	13	25yr	13	40
60yr	6	2	55yr	55	75	40yr	12	14	25yr	14	44
60yr	7	2	50yr	0	0	40yr	13	16	25yr	15	48
60yr	8	2	50yr	1	0	40yr	14	18	25yr	16	52
60yr	9	3	50yr	2	1	40yr	15	20	25yr	17	56
60yr	10	3	50yr	3	1	40yr	16	22	25yr	18	60
60yr	11	4	50yr	4	2	40yr	17	24	25yr	19	64
60yr	12	4	50yr	5	3	40yr	18	26	25yr	20	68
60yr	13	5	50yr	6	3	40yr	19	28	25yr	21	71
60yr	14	5	50yr	7	4	40yr	20	30	25yr	22	73
60yr	15	6	50yr	8	5	40yr	21	32	25yr	23	75
60yr	16	7	50yr	9	5	40yr	22	35	25yr	24	75
60yr	17	7	50yr	10	6	40yr	23	37	25yr	25	75
60yr	18	8	50yr	11	7	40yr	24	40	20yr	0	0
60yr	19	9	50yr	12	8	40yr	25	43	20yr	1	3
60yr	20	9	50yr	13	9	40yr	26	46	20yr	2	7
60yr	21	10	50yr	14	10	40yr	27	49	20yr	3	10
60yr	22	11	50yr	15	11	40yr	28	52	20yr	4	14
60yr	23	12	50yr	16	12	40yr	29	54	20yr	5	18
60yr	24	13	50yr	17	13	40yr	30	57	20yr	6	22

60yr	25	14	50yr	18	14	40yr	31	60	20yr	7	26
60yr	26	15	50yr	19	16	40yr	32	62	20yr	8	30
60yr	27	16	50yr	20	17	40yr	33	65	20yr	9	35
60yr	28	17	50yr	21	18	40yr	34	68	20yr	10	40
60yr	29	18	50yr	22	20	40yr	35	71	20yr	11	45
60yr	30	20	50yr	23	21	40yr	36	73	20yr	12	50
60yr	31	21	50yr	24	23	40yr	37	75	20yr	13	55
60yr	32	22	50yr	25	25	40yr	38	75	20yr	14	60
60yr	33	24	50yr	26	27	40yr	39	75	20yr	15	65
60yr	34	25	50yr	27	28	40yr	40	75	20yr	16	69
60yr	35	27	50yr	28	30	35yr	0	0	20yr	17	73
60yr	36	28	50yr	29	32	35yr	1	1	20yr	18	75
60yr	37	30	50yr	30	34	35yr	2	2	20yr	19	75
60yr	38	32	50yr	31	36	35yr	3	4	20yr	20	75

LAND SIZE ADJUSTMENT TABLE (SA 9) (TABLE)

Units	*Factor*	*Units*	*Factor*	*Units*	*Factor*	*Units*	*Factor*	*Units*	*Factor*	*Units*	*Factor*	*Units*	*Factor*
0.0100	0.2000	0.3800	1.4700	0.7200	1.2300	1.7500	0.9300	4.8000	0.6156	8.5000	0.4576	15.0000	0.3600
0.0500	0.2000	0.3900	1.4900	0.7300	1.2200	1.8000	0.9250	4.9000	0.6087	8.6000	0.4555	17.0000	0.3570
0.0600	0.2500	0.4000	1.5000	0.7400	1.2100	1.9000	0.9200	5.0000	0.6020	8.7000	0.4534	18.0000	0.3550
0.0700	0.2900	0.4100	1.5100	0.7500	1.2000	1.9500	0.9150	5.1000	0.5956	8.8000	0.4514	19.0000	0.3530
0.0800	0.3700	0.4200	1.5200	0.7600	1.1900	2.0000	0.9100	5.2000	0.5894	8.9000	0.4494	20.0000	0.3500
0.0900	0.4400	0.4300	1.5300	0.7700	1.1800	2.1000	0.9000	5.4000	0.5727	9.0000	0.4475	25.0000	0.3450
0.1000	0.5000	0.4400	1.5400	0.7800	1.1700	2.1500	0.8950	5.6000	0.5571	9.1000	0.4456	30.0000	0.3400
0.1100	0.5500	0.4500	1.5500	0.7900	1.1600	2.2000	0.8900	5.7000	0.5522	9.2000	0.4438	35.0000	0.3350
0.1200	0.5800	0.4600	1.5400	0.8000	1.1500	2.3000	0.8800	5.9000	0.5381	9.3000	0.4419	40.0000	0.3300
0.1300	0.6200	0.4700	1.5300	0.8100	1.1400	2.4000	0.8700	6.0000	0.5338	9.4000	0.4402	43.0000	0.3250
0.1400	0.6400	0.4800	1.5200	0.8200	1.1300	2.5000	0.8670	6.1000	0.5295	9.5000	0.4384	45.0000	0.3200
0.1500	0.6700	0.4900	1.5100	0.8400	1.1200	2.5500	0.8650	6.2000	0.5240	9.6000	0.4367	47.0000	0.3150
0.1600	0.6900	0.5000	1.5000	0.8600	1.1100	2.6000	0.8600	6.3000	0.5214	9.7000	0.4351	50.0000	0.3100
0.1700	0.7100	0.5100	1.4900	0.8700	1.1000	2.7000	0.8500	6.4000	0.5176	9.8000	0.4334	55.0000	0.3050
0.1800	0.7200	0.5200	1.4800	0.8800	1.0900	2.8000	0.8400	6.5000	0.5138	9.9000	0.4318	60.0000	0.3000
0.1900	0.7400	0.5300	1.4700	0.9000	1.0800	2.9000	0.8300	6.6000	0.5102	10.0000	0.4300	65.0000	0.2950
0.2000	0.7500	0.5400	1.4600	0.9100	1.0700	3.0000	0.8200	6.7000	0.5067	10.1000	0.4270	70.0000	0.2900
0.2100	0.8100	0.5500	1.4500	0.9200	1.0600	3.1000	0.8024	6.8000	0.5033	10.2000	0.4250	80.0000	0.2900
0.2200	0.9100	0.5600	1.4300	0.9300	1.0500	3.2000	0.7859	6.9000	0.5000	10.3000	0.4200	85.0000	0.2850
0.2300	1.0000	0.5700	1.4200	0.9400	1.0400	3.3000	0.7705	7.0000	0.4968	10.4000	0.4170	90+	0.2800
0.2400	1.0800	0.5800	1.4000	0.9600	1.0300	3.4000	0.7559	7.1000	0.4937	10.5000	0.4150		
0.2500	1.1600	0.5900	1.3900	0.9700	1.0200	3.5000	0.7421	7.2000	0.4906	10.6000	0.4100		
0.2600	1.2300	0.6000	1.3700	0.9900	1.0100	3.6000	0.7292	7.3000	0.4877	10.7000	0.4070		
0.2700	1.2600	0.6100	1.3600	1.0000	1.0000	3.7000	0.7169	7.4000	0.4848	10.8000	0.4050		
0.2800	1.2900	0.6200	1.3400	1.0500	0.9900	3.8000	0.7053	7.5000	0.4820	10.9000	0.4020		
0.2900	1.3100	0.6300	1.3300	1.1500	0.9850	3.9000	0.6942	7.6000	0.4793	11.0000	0.4000		
0.3000	1.3300	0.6400	1.3100	1.2000	0.9800	4.0000	0.6838	7.7000	0.4766	11.3000	0.3950		
0.3100	1.3500	0.6500	1.3000	1.3000	0.9700	4.1000	0.6738	7.8000	0.4740	11.6000	0.3900		
0.3200	1.3700	0.6600	1.2900	1.3500	0.9650	4.2000	0.6643	7.9000	0.4715	11.9000	0.3850		
0.3300	1.3900	0.6700	1.2800	1.4000	0.9600	4.3000	0.6552	8.0000	0.4691	12.0000	0.3800		
0.3400	1.4100	0.6800	1.2700	1.5000	0.9500	4.4000	0.6466	8.1000	0.4667	12.5000	0.3750		
0.3500	1.4300	0.6900	1.2600	1.5500	0.9450	4.5000	0.6383	8.2000	0.4643	13.0000	0.3700		
0.3600	1.4400	0.7000	1.2500	1.6000	0.9400	4.6000	0.6304	8.3000	0.4620	14.0000	0.3700		
0.3700	1.4600	0.7100	1.2400	1.7000	0.9350	4.7000	0.6229	8.4000	0.4598	14.5000	0.3650		

SPECIAL FEATURES/ YARD ITEMS (SFYI)

This section is used to indicate any Special Features about the building, or any Yard Items located on the parcel. (Note: another commonly used term for Yard Items is "Outbuildings"). This section generally contains the quantity and size of a Special Feature or Yard Item using an SFYI code, a quality code and the Condition of the item, the Year the item or feature was built or acquired, and an automatic size-adjusted unit price or user-optional override price. The depreciation source may be taken from a defined table, manually entered, or automatically tied to the building depreciation.

Additional factors that can affect the valuation are the Land Use Code, the Jurisdictional Factor, or the Neighborhood Code.

Within the AssessPro system, the appraiser may indicate whether an item is attached to the main building, detached, or attached to an adjacent item.

It is better to spend time accurately determining the data elements called for in the system. On the other hand, such items as boat houses, docks, pools, garages and other items of major value must be recorded to properly value the parcel. The appraiser has a clear idea of what is to be recorded in Orange County and what is not before beginning with this item.

ALL FIELDS MUST BE ENTERED

CODE: The appraiser inputs the appropriate SFYI code in this field.

QUANTITY: The appraiser inputs the appropriate number of a particular Special Feature or Yard Item.

UNITS: The total units by which the extra feature is valued must be entered here.

QUALITY: This field allows the appraiser to identify features or items that are either above or below the quality associated with the rest of the structure.

CONDITION: This field allows the appraiser to identify Special Features or Yard Items that are either above or below the condition associated with the rest of the structure.

YEAR: This field identifies the year built for the particular Special Feature or Yard Item.

SFYI CODES AND BASE PRICES (TABLE)

Code	Rate	Full Description	Table	Size	Curve	Min Factor	Max Factor
AA	98	Attached Addition	R - Residential	1	1	1	1
AG	39	Attached Garage	R - Residential	400	55	0.1	5
ATTU	9	Unfinished Attic	R - Residential	750	10	0.01	5
BG	39	Built-in Garage	1 - Office	400	55	0.1	5
C502	41	Utility Building	1 - Office	50	25	0.1	5
C503	11	Patio	1 - Office	100	25	0.1	5
C504	40	Open Porch	1 - Office	200	25	0.1	5
C505	51	Enclosed Porch	1 - Office	200	25	0.1	5
C506	50	Screen Porch	1 - Office	200	25	0.1	5
C507	58	Bank Canopy	1 - Office	900	25	0.1	5
C508	27	Canopy	1 - Office	400	25	0.1	5
C509	29	Deck	1 - Office	200	25	0.1	5
C510	20	Truck Well	1 - Office	450	25	0.1	5
C511	218	Atrium	1 - Office	800	25	0.1	5
C512	43	Loading Dock	1 - Office	800	25	0.1	5
C513	58	Covered Loading Dock	1 - Office	800	25	0.1	5
C514	39	Attached Garage	1 - Office	400	25	0.1	5
C515	55	Warehouse	ND - No Depreciation	0	0	1	1
CA	29	Carport	R - Residential	400	43	0.1	5
CLS	-	Commercial Lump Sum	1 - Office	1	1	1	1
CO	130	Commercial Structure	1 - Office	1	1	1	1
DK	29	Deck	R - Residential	200	25	0.1	5
EP	51	Enclosed Porch	R - Residential	200	25	0.1	5
FM	23	Farm Building (barns, stables, etc.)	R - Residential	1	1	1	1
GA	39	Detached Garage	R - Residential	400	55	0.1	5
GB	39	Garage in Basement	R - Residential	1	1	1	1
GP	52	Glazed (enclosed) Porch	R - Residential	200	25	0.1	5
GR	15	Greenhouse	R - Residential	1	1	1	1
LG	70	Living Quarter over Garage	R - Residential	400	51	0.1	5
LQ	70	Living Quarter Extensions	R - Residential	1	1	1	1
M999	1	Miscellaneous Item	R - Residential	1	1	1	1
MA	126	Main	R - Residential	1	1	1	1
MISC	-	Misc OBYI	R - Residential	1	1	1	1
NP	-	No Plumbing	R - Residential	1	1	1	1
OP	41	Open Porch	R - Residential	200	25	0.1	5
PA	11	Attached Patio	R - Residential	200	20	0.1	5

PR	19	Patio with Roof (Canopy)	R - Residential	200	23	0.1	5
RO	-	Residential Office accessory building	R - Residential	1	1	1	1
RS	38	Residential workshop accessory building	R - Residential	1	1	1	1
RST	38	Residential Storage building	R - Residential	50	33	0.1	5
SA	38	Special Addition	R - Residential	50	33	0.1	5
SP	51	Screened Porch	R - Residential	200	25	0.1	5
SW	28	Swimming Pool	R - Residential	1	1	1	1
TC	21	Tennis Court	R - Residential	1	1	1	1
UNKN	-	Unknown	R - Residential	1	1	1	1
UT	35	Utility Building	R - Residential	50	33	0.1	5
Y010	49	DETACHED GARAGE	R - Residential	400	55	0.1	5
Y015	70	FINISHED AREA OVER GARAGE/CARPORT	R - Residential	1	1	1	1
Y020	29	DETACHED CARPORT	R - Residential	1	1	1	1
Y025	38	STORAGE OVER DET GARAGE/CARPORT	R - Residential	50	33	0.1	5
Y030	38	ENCLOSED STORAGE BUILDING OR WORKSHOP	R - Residential	50	33	0.1	5
Y035	38	WORKSHOP-RESIDENTIAL	R - Residential	1	1	1	1
Y040	15	OPEN STORAGE SHED	R - Residential	1	1	1	1
Y050	10	LEAN TO STORAGE SHED	R - Residential	1	1	1	1
Y055	15	GREENHOUSE	R - Residential	1	1	1	1
Y060	42	DETACHED COVERED PORCH OR GAZEBO	R - Residential	200	25	0.1	5
Y070	29	DETACHED DECK	R - Residential	200	25	0.1	5
Y080	11	DETACHED PATIO OR CONCRETE APRON/SLAB	R - Residential	200	1	0.1	5
Y085	19	COVERED PATIO	R - Residential	200	1	0.1	5
Y090	250	OLD DWELLING-MINIMAL VALUE	R - Residential	1	1	1	1
Y095	-	SINGLE WIDE MOBILE HOME	R - Residential	1	1	0	0
Y096	-	DOUBLE WIDE MOBILE HOME	MH - MH	1	1	0.8	1.5
Y100	50	MOBILE HOME ADDITION	R - Residential	200	36	0.88	1.24
Y101	10	MOBILE HOME CANOPY	R - Residential	144	25	0.1	5
Y102	16	MOBILE HOME CARPORT	R - Residential	400	25	0.1	5
Y103	14	MOBILE HOME DECK	R - Residential	100	25	0.1	5
Y104	28	MOBILE HOME ENC PORCH	R - Residential	200	25	0.1	5
Y105	25	MOBILE HOME OPEN PORCH	R - Residential	200	25	0.1	5
Y106	8	MOBILE HOME PATIO	R - Residential	200	25	0.1	5

Y107	26	MOBILE HOME SCREEN PORCH	R - Residential	200	25	0.1	5
Y108	25	MOBILE HOME UT	R - Residential	144	25	0.1	5
Y109	8	MOBILE HOME STOOP	R - Residential	100	25	0.1	5
Y110	60	DETACHED OFFICE OR STUDIO	R - Residential	400	55	0.1	5
Y120	25,000	RESIDENTIAL ELEVATOR	R - Residential	1	1	1	1
Y125	4,400	Residential Elevator Stop	ND - No Depreciation	0	0	1	1
Y200	15	STABLE	R - Residential	1	1	1	1
Y210	15	BARN	R - Residential	1	1	1	1
Y220	15	GRAIN BIN	R - Residential	1	1	1	1
Y230	21	POULTRY HOUSE OR ANIMAL PRODUCTION BLDG	R - Residential	1	1	1	1
Y240	46,000	FARM SILO (DIAMETER X HEIGHT)	R - Residential	1	1	1	1
Y250	23	FARM BUILDING	R - Residential	1	1	1	1
Y300	21	TENNIS COURT	R - Residential	1	1	1	1
Y310	11	BALL COURT	R - Residential	1	1	1	1
Y320	28	RESIDENTIAL SWIMMING POOL/AVERAGE QUALITY	R - Residential	1	1	1	1
Y325	42	POOL ENCLOSURE	R - Residential	1500	55	0.1	5
Y330	43	RESIDENTIAL SWIMMING POOL/CUSTOM QUALITY	R - Residential	1	1	1	1
Y400	11,000	MANUFACTURED HOME SPACE FAIR	ND - No Depreciation	1	1	1	1
Y401	15,000	MANFACTURED HOME SPACE AVERAGE	ND - No Depreciation	0	1	1	1
Y402	22,000	MANFACTURED HOME SPACE GOOD	ND - No Depreciation	1	1	1	1
Y403	31,000	MANFACTURED HOME SPACE EXCELLENT	ND - No Depreciation	1	1	1	1
Y410	4,000	RECREATIONAL VEHICLE SPACE	ND - No Depreciation	1	1	1	1
Y420	200	UNSOLD CEMETERY LOT	ND - No Depreciation	1	1	1	1
Y425	3,800	UNSOLD CRYPTS	ND - No Depreciation	1	0	1	1
Y430	500	UNSOLD NICHES	ND - No Depreciation	1	0	1	1
Y500	4	ASPHALT PAVING	C - Commercial	1	25	0.1	5
Y505	6	CONCRETE PAVING	C - Commercial	1	25	0.1	5
Y510	21	COMMERCIAL WOOD OR METAL FENCING	C - Commercial	1	1	1	1

Y515	75	GAS CANOPY	C - Commercial	1	0	1	1
Y520	98	RAIL SIDING	C - Commercial	1	1	1	1
Y530	50	COMMERCIAL CANOPY	C - Commercial	1	1	1	1
Y540	43	COMMERICAL LOADING/SHIPPING DOCK	C - Commercial	1	1	1	1
Y550	98	RAIL SIDE PER LINEAR FOOT	C - Commercial	1	1	1	1
Y560	75,000	WATER OR FUEL STORAGE TANK	1 - Office	1	1	1	1
Y570	43	SMALL AIRCRAFT HANGAR	1 - Office	1	1	1	1
Y580	96	GUARD HOUSE	1 - Office	1	1	1	1
Y600	70	COMMERCIAL GARAGE	C - Commercial	1200	55	0.1	4
Y605	5,300	Outdoor Kitchen	R - Residential	1	1	1	1
Y610	3,800	OUTDOOR FIREPLACE	R - Residential	1	0	1	1
Y700	95	COMMERCIAL SWIMMING POOL	C - Commercial	1200	25	0.5	2.5
Y705	108,000	GOLF COURSE CLASS I	C - Commercial	18	1	1	1
Y710	155,000	GOLF COURSE CLASS II	C - Commercial	18	1	1	1
Y715	223,000	GOLF COURSE CLASS III	C - Commercial	18	1	1	1
Y716	337,000	GOLF COURSE CLASS IV	C - Commercial	18	1	1	1
Y720	55	BATH HOUSE OR RESTROOM FACILITY	C - Commercial	1	1	1	1
Y730	25	PICNIC OR RECREATIONAL SHELTER	R - Residential	1	55	0.1	5
Y735	15	MATERIAL SHELTER	C - Commercial	1	1	1	1
Y740	20	MATERIAL SHED	C - Commercial	1	1	1	1
Y800	76	OFFICE MEZZANINE	C - Commercial	1	0	1	1
Y805	31	STORAGE MEZZANINE	C - Commercial	0	0	1	1
Y810	81	HOTEL MEZZANINE	C - Commercial	0	0	1	1
Y815	48	DISPLAY MEZZANINE	C - Commercial	0	0	1	1
Y900	60,000	COMMERCIAL ELEVATOR	C - Commercial	0	0	1	1
Y905	10,000	COMMERCIAL ELEV STOPS	C - Commercial	0	0	1	1

SFYI QUALITY CODES (TABLE)

Code	Description	Rate	Code	Description	Rate	Code	Description	Rate
AA95	Grade AA+95	6.95	A+15	Grade A+15	1.75	C13	C13	0.97
AA90	Grade AA+90	6.65	A+10	Grade A+10	1.7	C16	C16	0.97
AA85	Grade AA+85	6.35	A+05	Grade A+05	1.65	D11	D11	0.97
AA80	Grade AA+80	6.05	A	Grade A	1.6	A15	A15	0.96
AA75	Grade AA+75	5.75	A-05	Grade A-05	1.55	A16	A16	0.96
AA70	Grade AA+70	5.45	A-10	Grade A-10	1.5	B13	B13	0.96
AA65	Grade AA+65	5.15	A-15	Grade A-15	1.45	S14	S14	0.96
AA60	Grade AA+60	4.85	B+10	Grade B+10	1.4	C15	C15	0.96
AA55	Grade AA+55	4.55	B+05	Grade B+05	1.35	C-05	Grade C-05	0.95
AA50	Grade AA+50	4.25	B	Grade B	1.3	A14	A14	0.95
AA45	Grade AA+45	3.95	B-05	Grade B-05	1.25	S17	S17	0.95
AA40	Grade AA+40	3.8	B-10	Grade B-10	1.2	C12	C12	0.95
AA35	Grade AA+35	3.65	B-15	Grade B-15	1.15	C14	C14	0.95
AA30	Grade AA+30	3.5	C+10	Grade C+10	1.1	C18	C18	0.95
AA25	Grade AA+25	3.35	C+05	Grade C+05	1.05	D12	D12	0.95
AA20	Grade AA+20	3.2	S11	S11	1.01	D13	D13	0.95
AA15	Grade AA+15	3.05	C	Grade C	1	D16	D16	0.95
AA10	Grade AA+10	2.9	B11	B11	1	D18	D18	0.95
AA05	Grade AA+05	2.75	B18	B18	1	D14	D14	0.94
AA	Grade AA	2.6	A11	A11	0.99	D15	D15	0.94
A+95	Grade A+95	2.55	S12	S12	0.99	D17	D17	0.94
A+90	Grade A+90	2.5	S18	S18	0.99	C-10	Grade C-10	0.9
A+85	Grade A+85	2.45	A18	A18	0.98	C-15	Grade C-15	0.85
A+80	Grade A+80	2.4	B12	B12	0.98	D+10	Grade D+10	0.8
A+75	Grade A+75	2.35	B14	B14	0.98	D+05	Grade D+05	0.75
A+70	Grade A+70	2.3	B15	B15	0.98	D	Grade D	0.7
A+65	Grade A+65	2.25	B17	B17	0.98	D-05	Grade D-05	0.65
A+60	Grade A+60	2.2	S13	S13	0.98	D-10	Grade D-10	0.6
A+55	Grade A+55	2.15	S15	S15	0.98	D-15	Grade D-15	0.55
A+50	Grade A+50	2.1	S16	S16	0.98	E+10	Grade E+10	0.5
A+45	Grade A+45	2.05	C17	C17	0.98	E+05	Grade E+05	0.45
A+40	Grade A+40	2	A12	A12	0.97	E	Grade E	0.4
A+35	Grade A+35	1.95	A13	A13	0.97	E-05	Grade E-05	0.35
A+30	Grade A+30	1.9	A17	A17	0.97	E-10	Grade E-10	0.3
A+25	Grade A+25	1.85	B16	B16	0.97	E-15	Grade E-15	0.25
A+20	Grade A+20	1.8	C11	C11	0.97			

CLASSIFICATION OF REAL AND TANGIBLE PERSONAL PROPERTY

General Overview:

There are several, long-standing, generally held theories to explain the distinction between real property and personal property.

1. Real property begins with the land and everything that is permanently attached to the land or affixed with the *intent* to make permanent. Generally, property that remains with the land or which is permanently affixed to the land, is real property.

   The term *real property* is also used to refer to the rights associated with the ownership of land. This is especially pertinent when considering the Bundle of Rights associated with the ownership of real property. Owners of condominium units traditionally benefit from an interest in severalty which gives them the right to access the amenities of their particular condominium project.

2. Personal property is everything not considered real property, and generally is considered to be temporary or moveable without causing damage to the real property. As a general rule, personal property is available and permitted to go with the person as opposed to remaining with the land.

Legal Distinctions:

1. **North Carolina G.S. 105-273. Definitions**.

   (13) Real property, real estate, or land. – Any of the following:

   a. The land itself.
   b. Buildings, structures, improvements, or permanent fixtures on land.
   c. All rights and privileges belonging to or in any way appertaining to the property.
   d. A manufactured home as defined in G.S. 143-143.9(6), unless it is considered tangible personal property for failure to meet all of the following requirements:
      1. It is a residential structure.
      2. It has a moving hitch, wheels, and axles removed.
      3. It is placed upon a permanent foundation either on land owned by the owner of the manufactured home or on land in which the owner of the manufactured home has a leasehold interest pursuant to a lease with a primary term of at least 20 years and the lease expressly provides for disposition of the manufactured home upon termination of the lease.

   (14) Tangible personal property. – All personal property that is not intangible and that is not permanently affixed.

(8) Intangible personal property. – Patents, copyrights, secret processes, formulae, goodwill, trademarks, trade brands, franchises, stocks, bonds, cash, bank deposits, notes, evidences of debt, leasehold interests in exempted real property, bills and accounts receivable, or other like property.

2. North Carolina G.S. 105-275. Property classified and excluded from the tax base.

(16) Non-business Property. – As used in this subdivision, the term "non-business property" means personal property that is used by the owner of the property for a purpose other than the production of income and is not used in connection with a business. The term includes household furnishings, clothing, pets, lawn tools, and lawn equipment. The term does not include motor vehicles, mobile homes, aircraft, watercraft, or engines for watercraft.

Other Considerations:

1. The distinction between real and personal for some items turn on the reason or purpose for their existence, and their use. The following are but a few examples:
    a. central air conditioning in residential properties; real property.
    b. window air conditioning units in residential properties; personal property.
    c. central air conditioning in commercial/industrial buildings for the comfort of the employees; real property.
    d. central air conditioning in commercial/industrial buildings required for the manufacturing process; personal property.

2. In some instances, an item of property may begin as personal property (such as when the lessee is responsible for the original installation of air conditioning, plumbing fixtures, finished flooring, lighting, and wall covering in a leased retail space), but becomes real property (upon the vacating of the lease). Once installed by the lessee, the items are carried on their books, but upon vacating the property, the items will most likely remain behind, in the same manner as it was installed as though it had always been a part of the real property.

CLASSIFICATION OF REAL AND TANGIBLE PERSONAL PROPERTY (TABLE)

Property Classification	Asset	Property Classification	Asset
Real	Air Conditioning – Building	Personal	Leasehold Improvements (List in Detail Annually)
Personal	Air Conditioning – Manufacturing/Product	Personal	Lifts – Other than Elevator
Personal	Air Conditioning – Window Units	Personal	Lighting – Portable, Movable, Special
Personal	Airplanes	Real	Lighting – Yard Lighting, Canned Lighting
Real	Alarm Systems (Fire) and Wiring –	Personal	Machinery & Equipment
Personal	Alarm Systems (Security) and Wiring	Personal	Medical Equipment
Personal	Asphalt Plants	Personal	Mezzanines – For Parts or Storage (Metal Racking)
Personal	ATM – All Equipment & Self-standing Booths	Personal	Milk Handling – Milking, Cooling, Piping, Storage
Real	Auto Exhaust Systems for Building	Personal	Millwork
Personal	Auto Exhaust Systems for Equipment	Real	Mineral Rights
Personal	Awnings	Personal	Mirrors (Other than Bathroom)
Personal	Balers (Paper, Cardboard, etc.)	Personal	Molds
Personal	Bank Teller Counters – Service Area & Related	Personal	Monitoring Systems – Building or Equipment
Personal	Bank Teller Lockers – Movable or Built-In	Personal	Newspaper Stands
Personal	Bar and Bar Equipment – Movable or Built-In	Personal	Night Depository
Personal	Billboards	Personal	Office Equipment – All
Personal	Boats & Motors – All	Personal	Office Supplies (List as Supplies)
Real	Boiler – For Service of Building	Personal	Oil Company Equipment – Pumps, Supplies, etc.
Personal	Boiler – Primarily for Process	Personal	Ovens – Processing/Manufacturing
Personal	Bookcases – Movable or Built-In	Personal	Overhead Conveyor System
Personal	Bowling Alley Lanes	Personal	Package & Labeling Equipment
Personal	Broadcasting Equipment	Personal	Paging Systems
Real	Bulk Barns	Personal	Paint Spray Booths
Personal	Cabinets (All Other)	Personal	Painting – No Added Value
Real	Cabinets (Medical Office and Laboratories)	Personal	Partitions
Personal	Cable TV Distribution Systems	Real	Paving
Personal	Cable TV Equipment & Wiring	Personal	Piping Systems – Process Piping
Personal	Cable TV Subscriber Connections	Personal	Playground Equipment – All
Personal	Camera Equipment	Personal	Pneumatic Tube Systems
Personal	Canopies – Fabric, Vinyl, Plastic	Personal	Portable Buildings/Storage Sheds
Real	Canopies – Generally	Personal	Power Generator Systems (Auxiliary, Emergency, etc.)
Real	Canopy Lighting	Personal	Power Transformers – Equipment
Personal	Car Wash – All Equipment, Filters, and Tanks	Personal	Public Address Systems (Intercom, Music, etc.)
Real	Carpet – Installed	Real	Railroad Sidings (Other than Railroad-owned)
Personal	Catwalks	Personal	Refrigeration Systems – Compressors, etc.
Personal	Cement Plants	Real	Repairs – Building
Personal	Chairs – All Types	Personal	Repairs – Equipment (50% Cost)
Personal	CIP Equipment	Personal	Restaurant Furniture (Incl. Attached Floor or Building)
Personal	Closed Circuit TV	Personal	Restaurant/Kitchen Equip – Vent Hoods, Sinks, etc. (Commercial)

Personal	Cold Storage – Equipment, Rooms, Partitions	Personal	Returnable Containers
Personal	Communication Co – State-Assessed	Personal	Roll-up Doors (Inside Wall)
Personal	Compressed Air or Gas Systems (Other than Building Heat)	Real	Roll-up Doors (Outside Wall)
Personal	Computer and Data Lines	Real	Roofing
Personal	Computer Room A/C	Personal	Room Dividers/Partitions – Movable or Built-In
Personal	Computer Room Raised Floor	Personal	Rooms – Self-Contained or Special Purpose (Walls, Ceiling, Floor)
Personal	Computer Scanning Equipment	Personal	Safes – Wall or Self-Standing
Personal	Concrete Plants	Personal	Sales/Use Tax
Personal	Construction and Grading Equipment	Personal	Satellite Dishes (All Wiring & Installation to TV & Equipment)
Personal	Control Systems – Building & Equipment	Real	Scale Houses (Unless Movable)
Personal	Conveyor & Material Handling Systems	Personal	Scales
Personal	Coolers – Walk-In or Self-Standing	Personal	Security Systems
Real	Cooling Towers – Primary Use for Building	Personal	Service Station Equipment – Pumps, Tanks, Lifts, and Related
Personal	Cooling Towers – Primary Use in Manufacturing	Real	Sewer Systems
Personal	Counters/Reception Desks – Movable or Built-In	Personal	Sheds (Storage)
Personal	Dairy Processing Plants – All Process Items, Bins, Tanks	Personal	Shelving – Movable or Built-In
Personal	Dance Floors	Personal	Signs – All Types Including Attached to Building
Personal	Data Processing Equipment – All Items	Real	Silos
Personal	Deli Equipment	Real	Sinks – Bathroom (Includes Medical & Dental Offices)
Personal	Desks – All	Personal	Sinks – Kitchen Area
Personal	Diagnostic Center Equipment – Movable or Built-In	Personal	Software – Custom & Modification Costs for Canned Software (Not
Personal	Display Cases – Movable or Built-In	Personal	Software – Purchased from Unrelated 3rd Party & Capitalized
Personal	Dock Levelers	Personal	Solar Equipment – Photovoltaic & Solar Thermal
Personal	Drapes & Curtains, Blinds, Etc.	Real	Solar Equipment – Used to Heat & Cool Building
Real	Drinking Fountains	Personal	Solar Farm – Electricity Generation
Personal	Drive-Thru Windows – All	Personal	Sound Systems & Projection Equipment
Personal	Drying Systems – Process or Product	Personal	Spare Parts – List as Supplies
Personal	Dumpsters	Personal	Speakers – Built-In or Freestanding
Personal	Dust Catchers, Control Systems, etc.	Personal	Spray Booths
Personal	Electronic Control Systems	Personal	Sprinkler System – Attached to Product Storage Racks
Real	Elevators	Real	Sprinkler System – Building/Fire Protection
Real	Escalators	Personal	Storage Buildings – Not on a Permanent Foundation
Personal	Farm Equipment – All	Personal	Supplies – Office & Other
Personal	Fencing – Inside	Real	Swimming Pool Filtration Equipment
Real	Fencing – Outside	Personal	Swimming Pool Heater Equipment
Personal	Flagpoles	Real	Swimming Pools
Personal	Flooring – Raised, Padded, Special Purpose	Personal	Tanks – All Above & Below Ground
Personal	Foundations for Machinery & Equipment	Personal	Taxable)
Personal	Freight Charges	Personal	Telephone Systems & Wiring – Private
Personal	Fuels – Not for Sale (List as Supplies)	Personal	Theatre Screens – Indoor

Personal	Furnaces – Steel Mill Process, etc.	Real	Theatre Screens – Outdoor
Personal	Furniture & Fixtures	Personal	Tooling, Dies, Molds
Real	Gazebos & Pergolas	Personal	Towers – Cell Towers & Mobile Communications Equip Owned by
Real	Golf Course & Improvements (Drainage/Irrigation)	Personal	Towers – Microwave, Equipment, Wiring, Foundation, Building & Fencing
Real	Grain Bins (Storage)	Personal	Towers – TV, Radio, CATV, Two-Way Radio, Wiring & FDN
Personal	Grain Bins/Feed Hoppers	Personal	Trailers – Designed to be Pulled Behind Vehicle
Real	Grease Traps	Personal	Trailers – Office or House Type
Personal	Greenhouse Benches, Heating System, etc.	Personal	Transportation Cost – All
Real	Greenhouses – Structure if Permanently Affixed	Real	Tunnels – Unless Part of Process System
Personal	Handrails – If Used for Dividing Areas or Decorative	Personal	Upgrades to Equipment
Personal	Heating Systems – Process	Personal	Vacuum System – Process
Personal	Hoppers – Metal Bin Type	Real	Vault
Personal	Hospital Systems, Equipment & Piping	Personal	Vault Door, Inner Gates, Vents & Equipment
Personal	Hot Air Balloons	Personal	Vending Machines
Personal	Hotel/Motel – Televisions & Wiring, Movable Furnishings	Personal	Vent Fans
Personal	Humidifiers – Process	Real	Ventilation Systems – General Building
Personal	Incinerators – Equipment and/or Movable	Personal	Ventilation Systems – Needed for Manufacturing, Process
Personal	Industrial Piping – Process	Personal	Video Tapes, Movies, Reel Movies
Personal	Installation Cost	Real	Wall Covering
Real	Irrigation Equipment – In-ground	Personal	Walls – Partitions, Movable & Room Dividers
Personal	Irrigation Equipment – Portable	Personal	Water Coolers – All
Personal	Kiln Heating System	Personal	Water Lines – For Process Above or Below Ground
Personal	Kilns – Metal Tunnel or Movable	Real	Water System – Residential or General Building
Personal	Laboratory Equipment	Personal	Water Tanks & System – For Process Equipment
Real	Lagoons/Settling Ponds	Real	Water Wells – If Used for Irrigation Only
Personal	Laundry Bins	Personal	Whirlpool, Jacuzzi, Hot Tubs
Personal	Law & Professional Libraries	Personal	Wiring – Power Wiring for Machinery & Equipment
Personal	Leased Equipment – Lessor or Lessee Possession		

LEASEHOLD IMPROVEMENTS

Leasehold improvements are modifications made to leased premises used for business purposes by the tenant or lessee. They are taxable in North Carolina as business personal property. It is the responsibility of the lessee (not the real property owner) to properly list these improvements with the Tax Department as of January 1 of each year.

Any modifications made to leased premises for the purpose of improving the tenants comfort, enhancing the tenants image, or promoting the tenant's business viability are considered leasehold improvements. There are two tests for determining whether a particular modification is a "leasehold improvement":

1. They are made by the tenant or at the tenant's request for the benefit of the tenant's business and not for the benefit of the structure or parcel in which the business is operated.
2. They can be removed without material injury to the premises.

The ownership or taxability of leasehold improvements may be further or otherwise defined by a lease agreement between the landlord and tenant.

The following are examples of real property taxable to the building/landowner and personal property/leasehold improvements taxable to the lessee.

Plumbing;	
Waste supply lines, waste and vent lines	Real
Electrical;	
Main electrical connections, breaker panels, transformers	Real
all meters for building, all wiring for electrical service	
Additional electrical connections, breaker panels, transformers	Personal - Leasehold
meters and wiring for equipment.	
Flooring;	
Floor and floor covering concrete slab floor or frame subfloor	Real
Tile, vinyl, carpet. Any flooring installed by tenant over the base floor of sub-floor	Personal- Leasehold
Lighting;	
Panel lighting, track lighting, lens covers, outdoor lighting, emergency and exit lights, when added by tenant	Personal -Leasehold
Doors;	
Rolling grille doors (security gates), fire doors	Personal - Leasehold
Locks and alarms;	Real

Interior Finishes;	
Beams, floor to ceiling walls	Real
Column enclosures, painting and staining, wall cover	Personal - Leasehold
moveable, freestanding partitions, mirrors affixed to walls	
built-in counters, fitting rooms	
Roof Top HVAC system	Real
Sprinkler system (building)	Real
Additional sprinklers for equipment	Personal - Leasehold
Smoke detector systems	Personal - Leasehold
Signs	Personal - Leasehold
All signs are considered personal even when permanently affixed to the ground.	
Store Fronts	Real
Construction allowances paid to tenant	Personal - Leasehold

*Note that architectural, engineering fees, freight, transportation and installation costs attributable to the design and construction of leasehold improvements are considered part of the improvements.

NORTH CAROLINA GENERAL STATUTES

§ 105-283. UNIFORM APPRAISAL STANDARDS

All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words "true value" shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land. (1939, c. 310, s. 500; 1953, c. 970, s. 5; 1955, c. 1100, s. 2; 1959, c. 682; 1967, c. 892, s. 7; 1969, c. 945, s. 1; 1971, c. 806, s. 1; 1973, c. 695, s. 11; 1977, 2nd Sess., c. 1297.)

§ 105-284. UNIFORM ASSESSMENT STANDARD

(a) Except as otherwise provided in this section, all property, real and personal, shall be assessed for taxation at its true value or use value as determined under G.S. 105-283 or G.S. 105-277.6, and taxes levied by all counties and municipalities shall be levied uniformly on assessments determined in accordance with this section. (b) The assessed value of public service company system property subject to appraisal by the Department of Revenue under G.S. 105-335(b)(1) shall be determined by applying to the allocation of such value to each county a percentage to be established by the Department of Revenue. The percentage to be applied shall be either: (1) The median ratio established in sales assessment ratio studies of real property conducted by the Department of Revenue in the county in the year the county conducts a reappraisal of real property and in the fourth and seventh years thereafter; or (2) A weighted average percentage based on the median ratio for real property established by the Department of Revenue as provided in subdivision (1) and a one hundred percent (100%) ratio for personal property. No percentage shall be applied in a year in which the median ratio for real property is ninety percent (90%) or greater. If the median ratio for real property in any county is below ninety percent (90%) and if the county assessor has provided information satisfactory to the Department of Revenue that the county follows accepted guidelines and practices in the assessment of business personal property, the weighted average percentage shall be applied to public service company property. In calculating the weighted average percentage, the Department shall use the assessed value figures for real and personal property reported by the county to the Local Government Commission for the preceding year. In any county which fails to demonstrate that it follows accepted guidelines and practices, the percentage to be applied shall be the median ratio for real property. The percentage

established in a year in which a sales assessment ratio study is conducted shall continue to be applied until another study is conducted by the Department of Revenue. (c) Notice of the median ratio and the percentage to be applied for each county shall be given by the Department of Revenue to the chairman of the board of commissioners not later than April 15 of the year for which it is to be effective. Notice shall also be given at the same time to the public service companies whose property values are subject to adjustment under this section. Either the county or an affected public service company may challenge the real property ratio, or the percentage established by the Department of Revenue by giving notice of exception within 30 days after the mailing of the Department's notice. Upon receipt of such notice of exception, the Department shall arrange a conference with the challenging party or parties to review the matter. Following the conference, the Department shall notify the challenging party or parties of its final determination in the matter. Either party may appeal the Department's determination to the Property Tax Commission by giving notice of appeal within 30 days after the mailing of the Department's decision. (d) Property that is in a development financing district and that is subject to an agreement entered into pursuant to G.S. 159-108 shall be assessed at its true value or at the minimum value set out in the agreement, whichever is greater.(1939, c. 310, s. 500; 1953, c. 970, s. 5; 1955, c. 1100, s. 2; 1959, c. 682; 1967, c. 892, s. 7; 1969, c. 945, s. 1; 1971, c. 806, s. 1; 1973, c. 695, s. 12; 1985, c. 601, s. 1; 1987 (Reg. Sess., 1988), c. 1052, s. 1; 2003-403, s. 20.)

§ 105-286. TIME FOR GENERAL REAPPRAISAL OF REAL PROPERTY

(a) Octennial Cycle. - Each county must reappraise all real property in accordance with the provisions of G.S. 105-283 and G.S. 105-317 as of January 1 of the year set out in the following schedule and every eighth year thereafter, unless the county is required to advance the date under subdivision (2) of this section or chooses to advance the date under subdivision (3) of this section.

(1) Schedule of Initial Reappraisals.

Division One - 1972: Avery, Camden, Cherokee, Cleveland, Cumberland, Guilford, Harnett, Haywood, Lee, Montgomery, Northampton, and Robeson.

Division Two - 1973: Caldwell, Carteret, Columbus, Currituck, Davidson, Gaston, Greene, Hyde, Lenoir, Madison, Orange, Pamlico, Pitt, Richmond, Swain, Transylvania, and Washington.

Division Three - 1974: Ashe, Buncombe, Chowan, Franklin, Henderson, Hoke, Jones, Pasquotank, Rowan, and Stokes.

Division Four - 1975: Alleghany, Bladen, Brunswick, Cabarrus, Catawba, Dare, Halifax, Macon, New Hanover, Surry, Tyrrell, and Yadkin.

Division Five - 1976: Bertie, Caswell, Forsyth, Iredell, Jackson, Lincoln, Onslow, Person, Perquimans, Rutherford, Union, Vance, Wake, Wilson, and Yancey.

Division Six - 1977: Alamance, Durham, Edgecombe, Gates, Martin, Mitchell, Nash, Polk, Randolph, Stanly, Warren, and Wilkes.

Division Seven - 1978: Alexander, Anson, Beaufort, Clay, Craven, Davie, Duplin, and Granville.

Division Eight - 1979: Burke, Chatham, Graham, Hertford, Johnston, McDowell, Mecklenburg, Moore, Pender, Rockingham, Sampson, Scotland, Watauga, and Wayne.

(2) Mandatory Advancement. - A county whose population is 75,000 or greater according to the most recent annual population estimates certified to the Secretary by the State Budget Officer must conduct a reappraisal of real property when the county's sales assessment ratio determined under G.S. 105-289(h) is less than .85 or greater than 1.15, as indicated on the notice the county receives under G.S. 105-284. A reappraisal required under this subdivision must become effective no later than January 1 of the earlier of the following years:

a. The third year following the year the county received the notice.

b. The eighth year following the year of the county's last reappraisal.

(3) Optional Advancement. - A county may conduct a reappraisal of real property earlier than required by subdivision (1) or (2) of this subsection if the board of county commissioners adopts a resolution providing for advancement of the reappraisal. The resolution must designate the effective date of the advanced reappraisal and may designate a new reappraisal cycle that is more frequent than the octennial cycle set in subdivision (1) of this subsection. The board of county commissioners must promptly forward a copy of the resolution adopted under this subdivision to the Department of Revenue. A more frequent reappraisal cycle designated in a resolution adopted under this subdivision continues in effect after a mandatory reappraisal required under subdivision (2) of this subsection unless the board of county commissioners adopts another resolution that designates a different date for the county's next reappraisal.

(b), (c) Repealed by Session Laws 2008-146, s. 1.1, effective July 1, 2009. (1939, c. 310, s. 300; 1941, c. 282, ss. 1, 11/2; 1943, c. 634, s. 1; 1945, c. 5; 1947, c. 50; 1949, c. 109; 1951, c. 847; 1953, c. 395; 1955, c. 1273; 1957, c. 1453, s. 1; 1959, c. 704, s. 1; 1971, c. 806, s. 1; 1973, c. 476, s. 193; 1987, c. 45, s. 1; 2008-146, s. 1.1.)

Article 19.

Administration of Real and Personal Property Appraisal.

§ 105-317. APPRAISAL OF REAL PROPERTY; ADOPTION OF SCHEDULES, STANDARDS AND RULES

(a) Whenever any real property is appraised it shall be the duty of the persons making appraisals: (1) In determining the true value of land, to consider as to each tract, parcel, or lot separately listed at least its advantages and disadvantages as to location; zoning; quality of soil; waterpower; water privileges; dedication as a nature preserve; conservation or preservation agreements; mineral, quarry, or other valuable deposits; fertility; adaptability for agricultural, timber-producing, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value except growing crops of a seasonal or annual nature. (2) In determining the true value of a building or other improvement, to consider at least its location; type of construction; age; replacement cost; cost; adaptability for residence, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value. (3) To appraise partially completed buildings in accordance with the degree of completion on January 1. (b) In preparation for each revaluation of real

property required by G.S. 105-286, it shall be the duty of the assessor to see that: (1) Uniform schedules of values, standards, and rules to be used in appraising real property at its true value and at its present-use value are prepared and are sufficiently detailed to enable those making appraisals to adhere to them in appraising real property. (2) Repealed by Session Laws 1981, c. 678, s. 1. (3) A separate property record be prepared for each tract, parcel, lot, or group of contiguous lots, which record shall show the information required for compliance with the provisions of G.S. 105-309 insofar as they deal with real property, as well as that required by this section. (The purpose of this subdivision is to require that individual property records be maintained in sufficient detail to enable property owners to ascertain the method, rules, and standards of value by which property is appraised.) (4) The property characteristics considered in appraising each lot, parcel, tract, building, structure and improvement, in accordance with the schedules of values, standards, and rules, be accurately recorded on the appropriate property record. (5) Upon the request of the owner, the board of equalization and review, or the board of county commissioners, any particular lot, parcel, tract, building, structure or improvement be actually visited and observed to verify the accuracy of property characteristics on record for that property. (6) Each lot, parcel, tract, building, structure and improvement be separately appraised by a competent appraiser, either one appointed under the provisions of G.S. 105-296 or one employed under the provisions of G.S. 105-299. (7) Notice is given in writing to the owner that he is entitled to have an actual visitation and observation of his property to verify the accuracy of property characteristics on record for that property.

(c) The values, standards, and rules required by subdivision (b)(1) shall be reviewed and approved by the board of county commissioners before January 1 of the year they are applied. The board of county commissioners may approve the schedules of values, standards, and rules to be used in appraising real property at its true value and at its present-use value either separately or simultaneously. Notice of the receipt and adoption by the board of county commissioners of either or both the true value and present-use value schedules, standards, and rules, and notice of a property owner's right to comment on and contest the schedules, standards, and rules shall be given as follows: (1) The assessor shall submit the proposed schedules, standards, and rules to the board of county commissioners not less than 21 days before the meeting at which they will be considered by the board. On the same day that they are submitted to the board for its consideration, the assessor shall file a copy of the proposed schedules, standards, and rules in his office where they shall remain available for public inspection. (2) Upon receipt of the proposed schedules, standards, and rules, the board of commissioners shall publish a statement in a newspaper having general circulation in the county stating: a. That the proposed schedules, standards, and rules to be used in appraising real property in the county have been submitted to the board of county commissioners and are available for public inspection in the assessor's office; and b. The time and place of a public hearing on the proposed schedules, standards, and rules that shall be held by the board of county commissioners at least seven days before adopting the final schedules, standards, and rules. (3) When the board of county commissioners approves the final schedules, standards, and rules, it shall issue an order adopting them. Notice of this order shall be published once a week for four successive weeks in a newspaper having general circulation in the county, with the last publication being not less than seven days before the last day for challenging the validity of the schedules, standards, and rules by appeal to the Property Tax Commission. The notice shall state: a. That the schedules, standards, and rules to be used in the next scheduled reappraisal of real property in the county have been adopted and are open to examination in the office of the assessor; and b. That a property owner who asserts that the schedules, standards, and rules are invalid may except to the order and appeal therefrom to the Property Tax Commission within 30 days of the

date when the notice of the order adopting the schedules, standards, and rules was first published. (d) Before the board of county commissioners adopts the schedules of values, standards, and rules, the assessor may collect data needed to apply the schedules, standards, and rules to each parcel in the county. (1939, c. 310, s. 501; 1959, c. 704, s. 4; 1967, c. 944; 1971, c. 806, s. 1; 1973, c. 476, s. 193; c. 695, s. 5; 1981, c. 224; c. 678, s. 1; 1985, c. 216, s. 2; c. 628, s. 4; 1987, c. 45, s. 1; c. 295, s. 1; 1997-226, s. 5.)

105-277.16. TAXATION OF LOW-INCOME HOUSING PROPERTY

A North Carolina low-income housing development to which the North Carolina Housing Finance Agency allocated a federal tax credit under section 42 of the Code is designated a special class of property under Article V, Section 2(2) of the North Carolina Constitution and must be appraised, assessed, and taxed in accordance with this section. The assessor must use the income approach as the method of valuation for property classified under this section and must take rent restrictions that apply to the property into consideration in determining the income attributable to the property. The assessor may not consider income tax credits received under section 42 of the Code or under G.S. 105-129.42 in determining the income attributable to the property.

105-278.2. BURIAL PROPERTY.

[Effective for taxes imposed for taxable years beginning before July 1, 2022]

(a) Real property set apart for burial purposes shall be exempted from taxation unless it is owned and held for purposes of (i) sale or rental or (ii) sale of burial rights therein. No application is required under G.S. 105-282.1 for property exempt under this subsection. A county cannot deny the exemption provided under this subsection to a taxpayer that lacks a survey or plat detailing the exempt property.

(b) Taxable real property set apart for human burial purposes is hereby designated a special class of property under authority of Article V, Section 2(2) of the North Carolina Constitution, and it shall be assessed for taxation taking into consideration the following:

(1) The effect on its value by division and development into burial plots;
(2) Whether it is irrevocably dedicated for human burial purposes by plat recorded with the Register of Deeds in the county in which the land is located; and
(3) Whether the owner is prohibited or restricted by law or otherwise from selling, mortgaging, leasing or encumbering the same.

(c) For purposes of this section, the term "real property" includes land, tombs, vaults, monuments, and mausoleums, and the term "burial" includes entombment. (1973, c. 695, s. 4; 1987, c. 724; 2018-113, s. 15.) § 105-278.2.

[Effective for taxes imposed for taxable years beginning on or after July 1, 2022]

(a) Commercial Property. – Real property set apart for burial purposes that is owned and held for purposes of (i) sale or rental or (ii) sale of burial rights therein is exempt from taxation. A single application is required under G.S. 105-282.1 for property exempt under this subsection.

(b) Other Property. – Real property set apart for burial purposes not owned and held for a purpose listed in subsection (a) of this section is exempt from taxation. No application is required under G.S. 105-282.1 for

property exempt under this subsection. A local government cannot deny the exemption provided under this subsection to a taxpayer that lacks a survey or plat detailing the exempt property.

(c) Terms. – For purposes of this section, the term "real property" includes land, tombs, vaults, monuments, and mausoleums, and the term "burial" includes entombment. (1973, c. 695, s. 4; 1987, c. 724; 2018-113, s. 15; 2021-180, s. 42.12(a).)

2024 UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE (USPAP)

As of the adoption of this Schedule of Values, the 2024 USPAP document was the most current version with an effective date of January 1st, 2024. USPAP is produced by the Appraisal Foundation, which is authorized by Congress as the source of Appraisal Standards and Appraiser Qualifications.

The Appraisal Foundation has developed a series of courses related to USPAP. The 15-hour and 7-hour courses being adopted as requirements for appraisal as well as assessor certification by the North Carolina Department of Revenue. For advanced level certification, it is required that appraisers take the 7-hour update within each 2-year cycle.

The purpose of the Uniform Standards of Professional Appraisal Practice is to promote and maintain a high level of public trust in appraisal practice by establishing requirements for appraisers. It is essential that appraisers develop and communicate their analyses, opinions, and conclusions to intended users of their services in a manner that is meaningful and not misleading.

USPAP impacts mass appraisals for tax purposes by ensuring that the appraisal process is consistent, accurate, and fair. Some specific ways USPAP influences these appraisals are:

Standards 5 and 6: These standards are crucial for mass appraisals, as they provide guidelines for developing and reporting mass appraisals. This ensures that appraisers use standardized procedures and statistical measures to appraise groups of properties.

Ethics and Competency: USPAP's Ethics Rule and Competency Rule require appraisers to act with integrity and possess the necessary skills and knowledge. This is essential for maintaining the credibility of mass appraisals.

Scope of Work: The Scope of Work Rule ensures that the appraisal process is appropriate for the intended use, which in the case of mass appraisals, involves assessing large numbers of properties for tax purposes.

Jurisdictional Exceptions: While USPAP provides a comprehensive framework, it allows for jurisdictional exceptions if specific laws or public policies in North Carolina require deviations.

These principles help maintain public trust in the appraisal process and ensure that property taxes are based on fair and equitable valuations.

The 2024 updates to the Uniform Standards of Professional Appraisal Practice (USPAP) include significant changes related to nondiscrimination. Here are some key updates:

Nondiscrimination Section in the Ethics Rule: The Ethics Rule now includes a clear Nondiscrimination section. This section explicitly prohibits appraisers from acting in a manner that violates or contributes to a violation of federal, state, or local antidiscrimination laws or regulations.

Clarification of Federal Laws: The new section references three key federal laws relevant to appraisal practice: the Fair Housing Act (FHAct), the Equal Credit Opportunity Act (ECOA), and the Civil Rights Act of 1866.

Concepts of Disparate Treatment and Disparate Impact: The updated Ethics Rule introduces the concepts of disparate treatment and disparate impact, which are essential for understanding fair housing and fair lending regulations.

Advisory Opinions: Two new Advisory Opinions, AO-39 and AO-40, have been added to provide additional context and guidance on issues related to fair housing and discrimination.

These changes aim to eliminate any ambiguity regarding discrimination and reinforce the ethical responsibilities of appraisers to ensure fair and unbiased appraisals.