# VANCE COUNTY

# REAL PROPERTY

# APPRAISAL MANUAL

# 2016


COUNTY OF VANCE, NORTH CAROLINA

122 YOUNG ST, SUITE E

HENDERSON, NC 27536



PEARSON'S APPRAISAL SERVICE, INC.

POST OFFICE BOX 36404

RICHMOND, VA 23836

# TABLE OF CONTENTS

# SECTION

# 1

# INTRODUCTION

## INTRODUCTION

The following Manual has been prepared by Pearson Appraisal Services, Inc. for Vance County, North Carolina to be used in the appraisal of real property as required by the Machinery Act of North Carolina for the 2016 octennial revaluation.

This manual is in preparation for the octennial revaluation scheduled by the Machinery Act of North Carolina to be completed by January 1, 2016. It has been prepared to illustrate to property owners the methods and standards by which their property was valued, as a guide for the appraisers in estimating true value, and a reference for the Tax Supervisor's office for those years prior to the next scheduled revaluation.

A careful investigation of local construction, labor costs, and material has been made and the manual has been tested against both new and existing constructions to prove its accuracy.

This Manual has been prepared to conform to professional appraisals, principles, and practices, and it is designed so that all property in Vance County, North Carolina, as far as practicable, is appraised at its true market value as of January 1, 2016 in a uniform manner.

## FOREWARD

The ownership of land has always been one of the principal objectives of humanity. The desire for a home of one's own is a deep-rooted characteristic of American culture. To many people, property ownership represents financial stability and a sense of belonging to the community.

In the United States, property ownership is often referred to as a "Bundle of Rights". These rights are held to include possession, control, enjoyment, and disposition of the real estate. However, the Federal, state and local governments, subject to certain powers, or rights, holds the individual's ownership rights. These limitations on ownership of real estate are for the general welfare of the community and include taxation, police power, eminent domain, and escheat.

This publication will concern itself with only the right of the government to taxation.

Taxation is a charge, by the government, on real estate to raise funds to meet the public needs of a community. In general, taxes are levied by various taxing bodies such as states, cities, villages, counties, or school districts, to raise revenue needed for the performance of various public functions, such as maintaining roads, schools, parks, police departments, county hospitals, and mental institutions. The tax on real estate is one of the most important sources of this Revenue. Although this tax is encountered in most, if not all, states, laws regarding levy, assessment, and collection of the tax vary considerably.

In North Carolina laws and procedural requirements are set forth in The Machinery Act of North Carolina. Real Property must be revalued at a minimum of eight years but may be revalued less than eight years.

### 1O5-283. UNIFORM ASSESSMENT STANDARD

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. 105-277.6, and taxes levied by all counties and municipalities shall be levied uniformly on assessments determined in accordance with this section.

Therefore, The Machinery Act should be considered, as incorporated into, and a part of this manual.

Various constitutional provisions, as well as the Machinery Act, require that taxation of property be equal and uniform, so that taxpayers owning tracts of substantially equal value will pay substantially the same amount of taxes. It therefore becomes imperative that standard guidelines and Procedures for assessment be developed.

It is the purpose of this Vance County Real Property Appraisal Manual, to set forth those guidelines and procedures. It is intended to be used for a twofold purpose: (1) by the County Tax Assessor and/or his or her staff in the appraisal of real property in the County: and (2) to enable the taxpayers to determine and understand the methods, rules, and standards by which their property is appraised.

## SCOPE OF MANUAL

This manual, together with the schedules of values reflected herein, is to serve as the basis for appraisal of all types of all real property in Vance County, during the current revaluation. The different types of property anticipated to be appraised herewith include, but not limited to, the following

Vacant lots, Residential, Commercial, Rural, etc.

Vacant Land (Acreage Tracts): Commercial, Industrial, Agricultural, Forestland, and other vacant tracts.

Improved Land: All Types.

Residential Improvements: All Types.

Farm Buildings and Improvements: All Types.

Commercial Improvements:

Multi-Family Residential Buildings, Motels, Hotels, Retail Building Improvements, Office Buildings, Banks, Stores, Service Establishment Facilities, and all other improvements generally associated with commercial uses.

Industrial Properties:

Manufacturing Plants, Storage and Warehousing Facilities, and all other improvements including yard improvements generally associated with industrial uses.

# PRINCIPALS OF REAL PROPERTY APPRAISAL

## APPRAISING

Appraising is the establishment and use of systematized facts, principals, and methods, derived from experimentation, observation and study of the real estate market to achieve an estimate of value. The accuracy or quality of that estimate is entirely dependent upon the appraisers' ability to exercise good reasoning and sound judgment in the use of these principals and methods.

## VALUE

Value is an abstract word with many acceptable definitions. In a broad sense, value may be defined as the relationship between a covenant owner and the desire of a potential purchaser. It is the power of a good or service to command other goods or services in exchange. In terms of appraisal, value may be described as the present worth of future benefits arising from the ownership of real property.

For a property to have value in the real estate market, it must have four characteristics:

1. Utility: The capacity to satisfy human needs and desires.
2. Scarcity: A demand that is greater than the supply.
3. Effective demand: The need or desire for possession or owner-ship backed up by the financial means to satisfy that need. (Note: When the word demand is used in economics, effective demand is usually assumed.)
4. Transferability: The transfer of rights of ownership from one person to another with relative ease.

## KINDS OF VALUE

A given piece of real estate may have many different values at the same time, some of which are listed below.

| | |
|---|---|
| market value | salvage value |
| insured value | book value |
| assessed value | depreciated value |
| mortgage value | condemnation value |

**FOR ASSESSMENT**

The goal of an appraiser is market value. The market value of real estate is the highest price, in terms of money, which a property will bring in a competitive and open market, allowing a reasonable time to find a purchaser, who buys the property with knowledge of all the uses to which it is adapted and for which it is capable of being used.

Included in this definition are the following key points:

1. Market value is the highest price a property will bring-not the average price or the lowest price.

2. Payment must be made in cash or its equivalent.

3. Both buyer and seller must act without undue pressure.

4. A reasonable length of time must be allowed for the property to be exposed in the open market.

5. Both buyer and seller must be well informed or well advised.

6. The potential use of the property as well as its present use must be recognized.

## MARKET VALUE VERSUS MARKET PRICE

Market value is an estimated price based on an analysis of comparable sales and other pertinent market data. Market price, on the other hand, is what a property actually sells for-its selling price. Theoretically, the ideal market price would be the same as the market value; however, there are circumstances under which a property may be sold at below or above market value, such as when a seller is forced to sell quickly or when a sale is arranged between relatives. Thus, a market price can be taken as accurate evidence of market value only after considering the relationship of the buyer and the seller, the terms and conditions of the market, and the effect of the passage of time since the sale was made.

## MARKET VALUE VERSUS COST

It is also important to distinguish between market value and cost. One of the most common errors made in valuing property is the assumption that cost represents market value. Cost and market value may be equal, and often are, when the improvements on a property are new and represent the highest and best use of the land.

However, more often, cost does not equal market value. For example, two homes are identical in every respect except that one is located on a street with heavy traffic and the other is on a quiet, residential street. The value of the former may be less than the latter, although the improvement cost of each may be exactly the same. Another example would be a situation in which the demand for homes greatly exceeds the available supply to such an extent that buyers actually pay more than the improvement cost of such homes in order to secure housing without long delay. In this instance, market value could easily exceed cost.

## VALUE IN USE VERSUS VALUE IN EXCHANGE

We have defined market value as justifiable price -which buyers, in general will pay in the market. The question arises then as to the value of property that by nature of its special and highly unique design is useful to the present owner but relatively less useful to buyers in the market. One can readily see that such a property's utility value may differ greatly from its potential sales price. It is even possible that no market for such a property exists. Such a property is said to have value in use that refers to the actual value of a commodity to a specific person, as opposed to value in ex-change, which aligns itself with market value, referring to the dollar-value of a commodity to buyers in general.

## BASIC VALUE PRINCIPLES

Whether an appraisal specifically mentions them or not, there are always a number of economic principles at work which affect the value of real estate. The more important of these principles are defined below.

Highest and Best Use. The highest and best use for a property is that use which will produce the highest net return to the land for a given period of time within the limits of those uses which are economically feasible, probable and legally permissible.

In appraising a residential location, the determination of highest and best use may not involve just the income available in money. Amenities or owner satisfaction, such as an unusual view of the mountains, may be a key factor, and highest and best use today is not necessarily the highest and best use tomorrow. The highest and best use of the land often lies in a succession of uses. A declining single-family residential neighborhood may be ripe for multi-family, commercial or industrial development. Whether it is or not depends upon the relationship of present or anticipated future demand with existing supply.

In estimating value, the appraiser is obligated to reasonably anticipate the future benefits, as well as the present benefits derived from ownership and to evaluate the property in light of the quality, quantity, and duration of these benefits. It should be noted here that the benefits referred to are likely benefits based on actual data as opposed to highly speculative or potential benefits, which are unlikely to occur.

Substitution. This appraisal principle states that the maximum value of a property tends to be set by the cost of purchasing an equally desirable and valuable substitute property, assuming that no costly delay is encountered in making the substitution. For example, if there were two similar houses for sale in an area, the one with the lowest asking price would normally be purchased first.

Supply and Demand. This principle states that the value of a property will increase if the supply decreases and the demand either increases or remains constant--and vice versa. For example, the last lot to be sold in a residential area where the demand for homes is high would probably be worth more than the first lot that was sold in the area.

Conformity. This principle holds that a stable and uniform value is real-use of land conforms to existing neighborhood standards. There is a reasonable degree of conformity along social and economic lines. In residential areas of single-family houses, for example, buildings should be similar in construction, quality, size, and age to other buildings in the neighborhood, and they should house families of similar social arid economic status.

Anticipation. This principle holds that value can increase or decrease in anticipation of some future benefit or detriment affecting the property. For example, the value of a house may be affected if there are rumors that the block on which the house is located may be converted to commercial use in the near future.

Increasing and Decreasing Returns. This principle holds that improvements to land and structures will eventually reach a point at which they will have no effect on property values. If money spent on such improvements produces an increase in income or value, the law of increasing returns is applicable. But at the point where additional improvements will not produce a proportionate increase in income or value, the law of decreasing returns applies.

Contribution. This principle holds that the value of any component of a property consists of what its addition contributes to the value of the whole or what its absence detracts from that value. For example, the cost of installing an air conditioning system and remodeling an older office building may be greater than is justified by the rental increase that may result from the improvement to the property.

Competition. This principle holds that excess profits attract competition and that competition often destroys profits. For example, the success of a retail store may attract investors to open similar stores in the area. This tends to mean less profit for all stores concerned unless the purchasing power in the area increases substantially.

The Principle of Change. The impact of change on the manifests itself d the life cycle of a neighborhood characterized by three stages of evolution; the development and growth evidenced by improving values; the leveling off stage evidenced by static values; and finally the stage of infiltration and decay evidenced by declining values.

# APPRAISAL METHODS

## THE THREE APPROACHES TO VALUE

In order to arrive at an accurate estimate of value, three basic approaches, or techniques, are traditionally used by appraisers: the market data approach, the cost approach, and the income approach. Each method serves as a check against the others and narrows the range within which the final estimate of value will fall.

**The Market Data, or Sales Comparison, Approach to Value** In the market data approach, an estimate of value is obtained by comparing the subject property (the property under appraisal) with recent sales of generally comparable properties (properties similar to the subject). Since no two parcels of real estate are exactly alike, each such property must be compared to the subject property and the sales prices adjusted for any dissimilar features. After careful analysis of the differences between comparable properties and the Subject property, the appraiser assigns either a dollar or a percentage value to these differences.

The principal factors for which adjustments must be made fall into four basic categories:

1. Date of sale: An adjustment must be made if economic changes occur between the date of sale of the comparable property and the date of the appraisal.

2. Location: An adjustment may be necessary to compensate for location differences. For example, similar properties might differ in price from neighborhood to neighborhood, or even in more desirable locations within the same neighborhood.

3. Physical features: Physical features which may cause adjustments include age, size of lot, landscaping, type and quality of construction, number of rooms, square feet of living space, interior and exterior condition, presence or absence of a garage, fireplace, air conditioner, and so forth.

4. Terms and conditions of sale: This consideration becomes important if a sale is not financed by a present standard financing procedure.

The market data approach is considered essential in almost every appraisal of real estate. It is considered the most reliable of the three approaches in appraising residential property, where the amenities (the intangible benefits) are so difficult to measure.

**The Cost Approach to Value** - The cost approach is based on the principle of substitution, which states that the maximum value of a property 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.

The cost approach consists of five steps:

1. Estimate the value of the land as if it were vacant and available to be put to its highest and best use.

2. Estimate the current cost of constructing the building(s) and site improvements.

3. Estimate the amount of accrued depreciation resulting from physical deterioration, functional obsolescence, and/or economic obsolescence.

4. Deduct accrued depreciation from the estimated construction cost of new building(s) and site improvements.

5. Add the estimated land value to the depreciated cost of the building(s) and site improvements to arrive at the total property value. Land value (step 1) is estimated by using the market data approach: that is, the location, conditions and improvements of the subject Site are compared to those of similar sites, and adjustments are made for significant differences.

There are two ways to look at the construction cost of a building for appraisal purposes (step 2): reproduction cost and replacement cost. Reproduction cost is the dollar amount required to construct an exact duplicate of material and construction practices of the subject building at current prices. Replacement cost would be the construction cost at current prices of the subject building using present day materials and construction practices that produces a very similar although not exact duplicate and serves the same purpose or function as the original. Replacement cost is most often used in assessing, since it eliminates obsolete materials and takes advantage of current construction techniques. Either the reproduction or the replacement cost of a building is usually estimated by measuring the number of square feet or cubic feet contained in the structure and multiplying by the current cost per square or cubic foot to construct a similar building. From the reproduction or replacement cost so produced, the appraiser deducts depreciation, which is the loss of value from any cause.

**The Income Approach to Value** - The income approach measures the present worth of the future benefits of a property by the capitalization of the net income stream over the estimated remaining economic life of the property. The approach involves making an estimate of the effective gross income" of a property, derived by deducting the appropriate vacant and collection losses from its estimated gross market rent, as evidenced by the present market yield of comparable properties. From this figure deducted applicable operating expenses are deducted, the cost of taxes and insurance, and reserve allowances for replacements resulting in an estimate of net income, which may then be capitalized into an indication of value.

This approach obviously has its basic application in the appraisals of proper-ties 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 appraisers' ability to relate to the changing economic environment and to analyze income yields in terms of their relative quality and durability.

Reconciliation - If the three approaches are applied to the same property, they will normally produce three separate indications of value.

Reconciliation is the art of analyzing and effectively weighing the findings from the three approaches. Reconciliation was formerly called correlation by the appraisers.

Although each approach may serve as an independent guide to value, whenever possible, all three approaches should be used as a check on the final estimate of value. The process of reconciliation is more complicated than simply taking the average of the three value estimates. An average implies that the data and logic applied in each of the approaches are equally valid and reliable and should therefore be given equal weight. In fact, however, certain approaches are more valid and reliable with some kinds of properties than with others. For example, in appraising a home, the income approach is rarely used, and the cost approach is of limited value unless the home is relatively new; therefore, the market data approach is usually given greatest weight in valuing single-family residences. In the appraisal of income or investment property, the income approach would normally be given the greatest weight. In the appraisal of churches, libraries, museums, schools, and other special-use properties where there is seldom an income and few sales, if any, the cost approach would usually be assigned the greatest weight. From this analysis, or reconciliation, a single estimate of market value is produced.

# APPLYING THE APPRAISAL METHODS

## APPLYING THE COST APPROACH

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

### Estimating Cost

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 improvement. Among these are material, labor, all subcontracts, contractors' overhead and profit, architectural and engineering fees, consultation fees, survey and permit fees, legal fees, taxes, insurance, and the cost of interim financing.

There are various methods that may be employed to estimate cost. 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, contractors' 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 estimating 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 linear foot of footings, and cost per foot of floor covering.

The unit prices can then be multiplied by the respective quantities of each as they are found in the composition of the subject building 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 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 reoccur repeatedly in a number of buildings.

The Model Method is still a further extension in that unit-in-place costs 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 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.

## APPLYING THE MARKET DATA APPROACH

An indication of the value of a property can be derived from analyzing the selling prices of comparable properties. The use of this technique often referred to as the "comparison approach" or "comparable sales approach" involves the selection of a sufficient number of valid comparable sales and the adjustment of each sale to the subject property to account for variations in time, location, and site and structural characteristics.

### Selecting Valid Comparables

Since market value has been defined as the price which an informed and intelligent buyer, fully aware of the existence of competing properties and not being compelled to act is justified in paying for a particular property, it follows that if market value is to be derived from analyzing comparable sales, that the sales must represent valid "arm's length" transactions. Due consideration must be given to the conditions and circumstances of each sale before selecting the sales for analysis. Some examples of sales, which do not normally reflect valid market conditions, are as follows:

Sales in connection with foreclosures, bankruptcies, condemnations and other legal action.

Sales to or by federal, state, county and local governmental agencies.

Sales to or by religious, charitable or benevolent tax exempt agencies.

Sales involving family transfers, or "love and affection".

Sales involving intra-corporate affiliations.

Sales involving the retention of life interests.

Sales involving cemetery lots.

Sales involving mineral or timber rights, and access or drainage rights.

Sales involving the transfer of part interests.

Sales made at public or private auction.

In addition to selecting valid market transactions, it is equally important to select properties that are truly comparable to the property under appraisal. For instance, sales involving both real property and personal property or chattels may not be used unless the sale can, with reliable

facts, be adjusted to reflect only the real property transaction, nor can sales of non-operating or deficient industrial plants be validly compared with operating or non-deficient plants. The comparables and subject properties must exhibit the same use, and the site and structural characteristics must exhibit an acceptable degree of comparability.

Processing Comparable Sales

All comparables must he adjusted to the subject property to account for variations in time and location. The other major elements of comparison will differ depending upon the type of property under appraisal. In selecting these elements, the appraiser must give prime consideration to the same factors that influence the prospective buyers of particular types of properties.

The typical homebuyer is interested in the property's capacity to provide himself and his family a place to live. He's primarily concerned with the living area, utility area, and number of rooms, number of baths, age, structural quality and condition, and the modern kitchen and recreational conveniences of the house. He is equally concerned with the location and neighborhood, including the proximity to and the quality of schools, public transportation, and recreational and shopping facilities.

In addition to the residential amenities, the buyer of agricultural property is primarily interested in the productive capacity of the land, the accessibility to the market place, and the condition and utility value of the farm buildings and structures on the land.

The typical buyer of commercial property including warehousing and certain light industrial plants is primarily concerned with its capacity to produce rent. He will be especially interested in the age, design and structural quality and condition of the improvements, the parking facilities, and the location relative to transportation, labor markets, material source, material market and trade centers.

In applying the market data approach to commercial/industrial property, the appraiser will generally find it difficult to locate a sufficient number of comparable sales, especially of properties that are truly comparable in their entirety. He will, therefore, generally find it necessary to select smaller units of comparison such as price per square foot, per unit, per room, etc. In doing so he must exercise great care in selecting a unit of comparison that represents a logical common denominator for the properties being compared. A unit of comparison that is commonly used and proven to be fairly effective is the Gross Rent Multiplier, generally referred to as G.R.M., which is derived by dividing the gross annual income into the sales price. Using such units of comparison enables the appraiser to compare two properties that are similar in use and structural features, but differ significantly in size and other characteristics.

Having selected the major factors of comparison, it remains for the appraiser to adjust each of the factors to the subject property. In comparing the site he must make adjustments for significant variations in size, shape, topography and land improvements. In comparing the structures, he must make similar adjustments for size, quality, design, condition, and significant

structural and mechanical components. The adjusted selling prices of the comparable properties will establish a range in value in that the value of the subject property will fall. Further analysis of the factors should enable the appraiser to narrow the range down to the value level that is most applicable to the subject property.

Developed and applied properly, these pricing techniques will assist the appraiser in arriving at valid and accurate estimates of cost as of a given time. That cost generally represents the upper limit of value of a structure. The difference between its cost new and its present 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 cost new.

**Depreciation**

Simply stated, depreciation can be defined as "a loss in value from all causes. As applied to real estate, it represents the loss in value between its present value and the sum of the cost new as of a given time. The causes for the loss may be divided into three broad classifications: Physical Deterioration, Functional Obsolescence, and Economic Obsolescence.

Physical Deterioration pertains to the wearing out of the various improvement components, through the action of the elements, weather 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 over-adequacies in design, style, composition, or arrangement inherent to the structure itself, which tend to lessen its usefulness as related to present day desires. Like physical deterioration, the condition may be considered either curable or incurable. Some of the more common examples of functional obsolescence are excessive wall and ceiling heights, excessive structural construction surplus capacity, ineffective layouts, and inadequate building services.

Economic Obsolescence is a condition caused by factors extraneous to the property itself, such as changes in population characteristics and economic trends, encroachment of inharmonious property uses, excessive taxes, and governmental restrictions. 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 his ability to exercise sound judgment in equating his observations to the proper monetary allowance to be deducted from the cost new. There are several acceptable guidelines that may be employed:

Physical deterioration, functional, and economic obsolescence can be observed by comparing the physical condition, functional deficiencies and the economic status of the subject property as of a given time with actual or hypothetical comparable, new and properly planned structure.

Curable physical deterioration and functional obsolescence can be measured 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.

Economical obsolescence generally being an incurable and immeasurable by standards of restoration will best be measured by extrapolating its observed loss from the market place.

Physical, functional and economic obsolescence may also be measured by capitalizing the estimated loss in rental due to the deficiency.

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

## APPLYING THE INCOME APPROACH

Since 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. What is 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 Principles of Capitalization

Capitalization is the mathematical process for converting the net income produced by property into an indication of value. The process evolves out of the principles of perpetuity and termination. Perpetuity affirms that the net income produced by land will continue for an infinite period of time. Termination affirms that the net income produced by a building (assuming normal repairs and maintenance) will stop after a certain number of years... this in effect is to say that all buildings at some time in the future will cease to have economic value.

If the income flow produced by a building will terminate in the future, it is reasonable to suggest that the investor in buildings is entitled to the return of his investment as well as a return on his

investment. In the capitalization process, this recovery of the investment is referred to as recapture. Theoretically, the recovered capital would be used to replace the present structure when it ceases to have value. In actual practice, however, the investor usually uses the return capital for debt service or for reinvestment in other projects.

Several methods of capitalization are currently employed by appraisers. All the methods recognize that the investor is entitled to both a return on and the recapture of his investment.

## Exploring the Rental Market

The starting point for the appraiser is an investigation of current market 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 market rent being the rent which property is normally expected to bring in the open market, as opposed to contract rent or the rent which the property is actually realizing at the time of the appraisal due to lease terms established some time 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 market 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 is an essential phase in the valuation of commercial properties. The appraiser is primarily concerned with the potential earning power of a property. His objective is to estimate its expected net income. Income and Expense Statements of past years are valuable only to the extent which they serve this end. The statements must not only be complete and accurate, but must also stand the test of market validity. Consideration of the following factors should assist the appraiser in evaluating the data in order to arrive at an accurate and realistic estimate of net income.

## Questions Relating to Income Data

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.

Was the income attributable to the subject property as it physically existed at the time of listing, or did the property 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 the proper rent.

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

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

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?

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?

Is the income attributable directly to the real estate and conventional amenities. Is some of the income derived from furniture 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.

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 market rent. The information required pertains to the business operation using the property. Proper analysis of the annual operating statement of the business including gross sales or receipts can provide an accurate estimate of market rent.

**Analysis of Expense Data**

The appraiser must consider only those expenses which are applicable to the cost of ownership. Any portion of the expenses incurred either directly or indirectly by the tenant need not be considered. Reimbursed expenses can only be considered when the amount of reimbursement is included as income. 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, a proper allowance must be made by the appraiser. 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 1 to 10% of the gross income.

General expenses includes 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 legitimate deductions.

Miscellaneous expenses is the "catch-all" category for incidentals. This item should reflect a very nominal percentage of the income. If the expenses reported seem to be excessive, the

appraiser must examine the figures carefully in order to determine if they are legitimate expenses and, if so, to allocate them to their proper category.

Cleaning expenses are legitimate charges. They 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 out-side firms working on a "contract" basis. Cleaning expenses vary considerably and are particularly significant in operations such as offices and hotels. "Rule of the 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 fireman's wages, 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 wages and uniforms of elevator attendants and the cost of repairs and services, are legitimate deductions. Repairs and services are generally handled through service contracts and can 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 are, 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 nil. 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 expenses for these items or include a proper allowance in the building capitalization rate to cover these 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 not deducted as an expense item. Careful consideration must be given to the allowance used in the building capitalization rate as the cost of repairs and maintenance for commercial buildings will vary considerably depending on age, condition, the general quality of construction, and labor costs.

Note that custodian charges such as wages of janitors, watchmen, doormen, porters, etc., must always be analyzed to determine if they are consistent with current wages. Consideration has to be given to the living quarters occupied by such employees. The economic rent attributable to the space should be included in the income estimate. The costs incurred in providing this space and other renumerations should be deducted as an expense item.

Fixed expenses include those items which show no or very little variation from year to year. It is practical to treat these items individually.

Insurance. As was the case of some other expense items, the amount reported for insurance in any given year may not be indicative of the actual annual expense. Many owners obtain the more economical 3-year coverage plans and expense the entire premium in one year. Furthermore, many owners obtain "blanket" coverage for more than one building and fail to make the proper allocations of cost. It is generally more effective for the appraiser to establish his own guide lines. He must be careful to include only items applicable to real estate. Fire extended coverage and owner's liability are the main insurance expense items. Separate coverage's on different components of the building, such as elevators and plate glass, are also legitimate expenses. This factor is usually built into the building capitalization rate; however, in some instances, it will be necessary to adjust the rate to reflect unusual conditions related to specific properties.

Real Estate Taxes. In making appraisals for tax purposes, the appraiser will find it more convenient to exclude the actual amount reported for real estate taxes. Since future taxes will be based upon his appraised value, he can readily provide for this expense item by including it in his capitalization rate.

Other Taxes. Expenses reported in this category, such as income taxes, corporate taxes and franchise taxes, usually do not pertain to the real estate and should, therefore, be disregarded.

Depreciation. The appraiser provides for this expense by the recapture rate which he includes in his building capitalization rate. The amount reported for depreciation is a "bookkeeping figure" which the owner uses for Internal Revenue Purposes and should not be considered in the income approach. In newer properties, this figure may provide an accurate indication of the original cost.

Interest. Interest on borrowed capital is not a legitimate expense. All property is appraised as if it were "free and clear." It makes no difference to the appraiser whose money is used for purchasing the property. If a portion of the investment is borrowed capital, the owner of the fee (the property) is entitled only to a return on that portion of the property he owns, while the return on the balance of the investment is assigned to the holder of the mortgage. Interest paid for borrowed capital is not a deductible expense since interest on the total investment, as normal return, is considered in the capitalization rate.

Land Rent. Land rent is paid in lieu of purchasing the land and is generally not considered an expense item in the capitalization process. It is, however a significant item in that it may have a direct bearing upon the market value of a property. Land leases have the tendency to influence

value of property upward or downward depending upon whether or not they are favorable or unfavorable to a prospective buyer. It is, therefore, advisable to obtain the amount and terms of all leases whenever possible.

It is evident at this point that there are some expense items listed above which the appraiser should disregard. The question may come up, then, why ask for the information if we do not intend to use it? The answer is that expense forms should be designed to accommodate property owners and/or accountants. Their records include these categories, and if space is not provided to enter these items on the form, they have the tendency to either lump all of them under "Miscellaneous" or to include them in other categories, making it very difficult for the appraiser to abstract the legitimate deductions.

**Developing Capitalization Rates**

It is virtually impossible and certainly not practical to obtain a complete economic history on every commercial property we appraise. On many properties, however, we do obtain detailed economic information through the use of Income and Expense forms. We 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 in our listing operation. Therefore, in order to insure a good appraisal, a number of the operating expenses necessary to maintain that gross income are best provided for by including percentage allowances in our land and building capitalization rates. These are of course, in addition to the Interest and Recapture Rates.

A capitalization rate established for use in appraising for Ad Valorem Taxes will generally consist of the following factors:

1. Recapture... or the annual rate of return of the depreciable items of a real estate investment.

2. Interest Rate.. or the annual rate of return on a real estate investment.

3. Tax, Insurance, and Maintenance Rates... or the annual rate of return on the total real estate investment required to pay the annual cost of each of these expenses.

4. Contingency Rate... or the annual rate of return on the total real estate investment required to pay the annual cost of unusual and unanticipated expenses.

RECAPTURE RATE The straight Line method of recapture is the simplest method and the one which seems to most reflect the action of the investors in general. It calls for the return of capital in equal increments or percentage allowances spread over the estimated remaining economic life of the building.

Examples:

| | | |
|---|---|---|
| 50 | years remaining; | 100/50 = 2.0% per year |
| 40 | years remaining; | 100/40 = 2.5% per year |
| 25 | years remaining; | 100/25 = 4.0% per year |

INTEREST RATE There are several methods currently employed by appraisers to determine the acceptable normal rate of return expected by investors. The Band of Investment Method and the Direct Comparison Method are considered below. Repeating these procedures on an adequate representative sampling should provide the appraiser with a pattern from which he would be able to select the most appropriate indicated rate of interest.

In the Band of Investment Method, it is necessary to first determine the rate of return local investors require on their equity (cash outlay). It is then necessary to contact lenders and obtain the current interest rates for money and the amount of equity required, and then to multiply the percentages of equity and mortgage by the investors' and lenders' rates. The sum of these products will indicate the actual rate of return.

Equity Rate 12% - Mortgage Rate 8%
Amount of Equity.....20% x 12% = 2.4%
+Amount of Mortgage .. 80% x 8% = 6.4%
=Indicated Rate of Return = 8.8%

Equity Rate 15% - Mortgage Rate 8%
Amount of Equity.... .....25% x 15% = 3.75%
+Amount of Mortgage .. 75% x 8% = 6.00%
=Indicated Rate of Return = 9.75%

In the Direct Comparison Method, the appraiser abstracts the rate of return directly from actual market data; for it. can be reasonably assumed that in-formed investors fully aware of the existence of comparable properties will invest in those properties which are able to produce the required and desirable net return.

Following are the steps involved in determining the normal rate of return by the Direct Comparison Method.

1. Collect sales data on valid open market transactions involving properties for which the appraiser is able to accurately estimate both tile net income and the land or building value.

2. Allocate the proper amounts of the total sales price to land and buildings.

3. Estimate the remaining economic life of the building and compute the amount of return required annually for the recapture of the investment to the building.

4. Determine the net income before recapture.

5. Deduct the amount required for recapture from the net income. The residue amount represents the actual amount of interest.

6. Divide the actual amount of interest by the sales price to convert it into a percentage rate of return.

Example A:

1. Sale Price = $165,000.00

2. Amount allocated to land $64,000.00; to building = $101,000.00

3. Remaining Life = 20 years
   Annual Rate of Recapture = 100% / 20 years = 5%
   Amount required annually = $101,000.00 x 5% = $5,050.00 per year

4. Net Income before Recapture = $20,345.00

5. Less Recapture -5,050.00
   Interest $15,295.00

6. Indicated Rate of Return = $15,295.00 / $165,000.00 = 9.27%

Example B:

1. Sale Price = $135,000.00
2. Amount allocated to land = $50,000.00; to building = $85,000.00

3. Remaining Life = 25 years
   Annual Rate of Recapture = 100% - 25 years = 4%
   Amount required annually = $85,0(50.00 x 4% = $3,400.00 per year

4. Net Income before Recapture = $16,000.00

5. Less Recapture -3,400.00
   Interest = $12,600.00

6. Indicated Rate of Return = $12,600 / $135,000.00 = 9.33%

TAX RATE. To make the proper provisions for real estate taxes, the appraiser must anticipate two factors:

1. The tax rate for assessed valuation; and

2. The percentage of the appraised value to be used for assessment purposes.

The annual rate required to pay the cost of taxes can then be calculated by multiplying the tax rate in dollars per $100.00 assessment (equivalent to a percentage) by the percentage level of assessment.

Examples:

| | A | B | C |
|---|---|---|---|
| Tax Rate per $100.00 Assessment:….. | 5.00 | 4.40 | 8.00 |
| x Percentage Level of Assessment … . | 33-1/3% | 33-1/3% | 33-1/3% |
| =Required | 1.67% | 1.47% | 2.67% |

MAINTENANCE AND INSURANCE RATES It is essential that these figures reflect local conditions. The actual local cost may be extracted from income and expense data collected for from available technical publications.

CONTINGENCY RATE The percentage allowance for contingencies should be established at the local level. The element provides the appraiser some flexibility in:

A. Arriving at a proper market value based on the individual project requirements.

B. Providing some consideration for unusual expenses that may occur on properties appraised without the benefit of a detailed operating statement.

TOTAL LAND RATE Since the income produced by land will theoretically continue for an infinite period of time, it is not necessary to recapture the investment to land. The capitalization rate applicable to land is therefore, the sum of the Interest Rate and the Tax Rate.

TOTAL BUILDING RATE A building is a depreciable item. Since the income produced by a building will terminate in a given number of years, it is necessary to recapture the investment in the buildings. The capitalization rate applicable to buildings is, therefore, the sum of the Interest Rate, the Recapture Rate, the Tax Rate, the Maintenance Rate, the Insurance Rate, and the Contingency Rate.

Since it's the appraiser's job to interpret the local real estate market, it's quite obvious that the capitalization rates he uses must also reflect the actions of local investors.

**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, as we have seen, lies in the action in the market which indicated 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**

In Direct Capitalization the appraiser determines a single "over-all" capitalization rate. This is done by analyzing actual market sales of similar types of properties. He develops the net income for each property and divides the net income by the sales price to arrive at an over-all rate of return. The net income of the subject property is then divided by the appropriate overall rate to provide an indication of value.

The big disadvantage of this method is that it does not provide for using separate rates for land and buildings. It therefore calls for a highly subjective judgment on the part of the appraiser in applying an over-all rate to properties having different land-to-building ratios.

The statement that Mortgage-Equity Capitalization is a sophisticated form of direct capitalization may perhaps be an over-simplification, but is never-the-less true. The major difference in the two approaches is in the development of the over all rate.

In this method, equity yields and mortgage terms are considered influencing factors in construction of the lease 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.

The Straight Line and Sinking Fund methods are both actually forms of Direct Capitalization with one using Straight Line recapture and the other using Sinking Fund recapture, 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 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 regular savings accounts, 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 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 back to the owner at the termination of the lease. This re-version 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.

**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 building 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 over-all capitalization rate (which provides for the return on the total investment to land and buildings plus the recapture of the investment to the building) to arrive at an indicated value for the property.

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 that provides 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.

The following are examples of the application of the residual techniques to a property yielding an annual net income of $10,000.00. The remaining life of the building is estimated to be 25 years, and the indicated normal rate of return to be 8%.

PROPERTY RESIDUAL TECHNIQUE

Analysis of market data involving the sales of comparable properties indicates that investors will invest for a total net return amounting to 11% of the investment.

Net Income.....= $10,000.00
Property Value = Net Income / Capitalization

Rate = $10,000.00 / 11%.....= $90,900.00

BUILDING RESIDUAL TECHNIQUE (Straight-Line Recapture)

Land Value = $20,000.00
Recapture Rate = 100% / 25 years = 4%
Land Capitalization Rate = 8% (interest rate)
Building Capitalization Rate = 8% (interest rate)
Plus 4% (recapture rate) = 12%

Net Income..... $10,000.00
Amount of net income imputable to land
($20,000.00 x 8%) .....= -1,600.00
Residual Income Imputable to Building ..... = $ 8,400.00

Building Value = Net Income / Capitalization
Rate = $8,400.00 / 12%..... = $70,000.00
Land Value.....= 20,000.00
Property Value.....= $90,000.00

LAND RESIDUAL TECHNIQUE (Straight-Line Recapture)

Building Value = $70,000.00
Recapture Rate = 100% / 25 years = 4%
Land Capitalization Rate = 8% (interest rate)
Building Capitalization Rate = 8% (interest rate) + 4% (recap rate) = 12%

Net Income.....= $10,000.00
Amount of net income imputable to building
($70,000.00 x 12%).....= -8,400.00
Residual Income Imputable to Land..... = $ 1,600.00

Land Value = Net Income / Capitalization
Rate = $1,600.00 / 8%..... = $20,000.00
Building Value..... = 70,000.00
Property Value.....= $90,000.00

## GROSS RENT MULTIPLIER (GRM) METHOD

When certain specific types of income properties are rented in any significant number in the market, there is a strong tendency for the ratio between sales prices and gross incomes to be fairly consistent. The Gross Rent Multiplier, commonly referred to as GRM, is a factor reflecting this relationship between the gross annual income and value. Once the GRM has been determined for a specific type property, it can then be applied against the gross income of other similar properties to indicate their economic value.

The GRM approach is often under appreciated, though the appraiser, as with any income approach, must still give consideration to age of building, size, location and land to building ratios. Many adjustments that would normally involve judgment estimates have been resolved by the free action of the rental market. For example, if one property has some advantage, such as location or accessibility over another property, this difference would probably be reflected in the rental.

The GRM may be applied to either the gross income or to the effective gross income (EGRM), depending on the circumstances and available data in the local market. This approach is frequently applicable to apartment, retail and certain types of industrial properties, where a relatively consistent net-to-gross in-come operating ratio exists.

# MASS APPRAISAL PSYCHOLOGY

## MASS APPRAISAL PSYCHOLOGY

In preceding sections, we have outlined the fundamental concepts, principles, and valuation techniques underlying the Appraisal Process. It's now our goal to attack the problem at hand... the revaluation of property within a total taxing jurisdiction, be it an entire state, county, or any subdivision thereof and to structure a systematic mass appraisal program to effect the appraisal of said properties in such a way as to yield valid, accurate, and equitable property valuations at a reasonable cost dictated by budgetary limitations, and within a time span totally compatible with assessing administration 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 market place;
>
> ... 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 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 each other property, and what's more, these valid, accurate, and equitable valuations must be generated as economically and efficiently as possible.

## PRINICIPLES OF UNIF0RM ASSESSMENT

In order to insure that all property within this county is valued in a uniform and fair manner, the guidelines presented within this manual will need to be followed as closely as possible. There is no "all encompassing' set of rules and regulations that can be developed so as to insure a totally accurate estimate of value in each and every appraisal. The appraiser's experience and expertise in applying the guidelines within this manual, as well as his personal judgment, will add to the overall quality and accuracy of the work.

Replacement cost of dwellings and outbuildings is basically the starting point of most scientific appraisals. General construction specifications vary widely with quality of materials and workmanship. The guidelines in this manual are designed to enable the appraiser to distinguish between variations in replacement costs. The majority of homes fall within the area of average workmanship and materials. However, some buildings fall either above or below this average construction and the guidelines within this manual cover these conditions.

Land appraisals are typically the most difficult of all appraisal operations. The method of land appraisal contained in this manual is based on market sales data and the comparison process. Included in the manual are depth factor charts, residential pricing examples, and rural land pricing charts. These guidelines, when applied properly, will insure a fair and uniform valuation of property.

The prime 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 political unit.

The common denominator or the basis for equalization is market value... that price which an informed and intelligent person, fully aware of the existence of competing properties and not being compelled to act, is justified in paying for a particular property.

The job of the appraiser is to arrive at a reasonable estimate of that justified price. To accomplish this, he must coordinate his approaches to the valuation of the various classes of property so that they are related one to another in such a way as to reflect the motives of the prospective purchasers of each type of property.

A prospective purchaser of a residential property is primarily interested in its capacity to render service to himself and his family as a place to live. Its location, size, quality, design, age, condition, desirability and usefulness are the primary factors to be considered in making his selection. He will rely heavily upon his powers of observation and his inherent intelligence, knowing what he can afford and simply comparing what is available. One property will eventually stand out to be more appealing than another. So it is likewise the job of appraisers for tax purposes, to evaluate the relative degree of appeal of one property to another.

The prospective purchaser of agricultural property will be motivated somewhat differently; he will be primarily interested in the productive capabilities of the land. It is reasonable to assume that he will be familiar, at least in a general way; with the productive capacity of the farm he proposes to buy. One might expect that the prudent investor will have compared one farm's

capabilities against another. Accordingly, the appraiser for local tax equalization purposes must rely heavily upon prices being paid for comparable farmland in the community.

The prospective purchaser of commercial property is primarily interested in the potential net return and tax shelter the property will provide. That price which he is justified in paying for the property is a measure of his prospects for a net return from his investment. Real estate as an investment, then, must not only competes with other real estate but also with stocks, bonds, annuities, and other similar investment areas. The commercial appraiser then must explore the rental market and compare the income producing capabilities of one property to another.

The prospective purchaser of industrial property is primarily interested in the overall utility value, which the property has for him. Of course, in evaluating the overall utility, he must give individual consideration to the land and each improvement thereon. Industrial buildings are generally of special purpose design, and as such, 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; if the operation becomes obsolete, the building likewise becomes obsolete. The upper limit of its value is its replacement cost new, and its present day value is some measure of its present day usefulness in relation to the purpose for which it was originally designed.

Any effective approach to valuations for tax purposes must be patterned in such a way as to reflect the "modus operandi" of buyers in the market place. 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 residential appraiser must rely heavily upon the market-data approach. The farm appraiser must likewise rely primarily upon the market-data approach to value, but in addition to analyzing the selling prices of comparable properties, it may also be necessary to effectively analyze the farm's productive potential.

Rural dwellings are similar to urban dwellings in that their primary purpose is to provide a family with a home; as such, the appraiser should value them in the same manner as he values any other residence. His approach to farm buildings, however, must be somewhat different. Here, his primary objective is to arrive at that value which their presence adds to the productivity of the land... their degree of utility or usefulness. In determining the reproductive capabilities of the land, he will find it necessary to divide the land into various soil classifications utilizing all soil and land maps available through agriculture extension services, and the state university. He must similarly give equal consideration to all other factors affecting the value of the property, such as its location relative to the market place, its relative accessibility, the shape and size of the fields, the extent and condition of the fences, drainage, water supply, etc.

The commercial appraiser will find that since commercial property is not bought and sold as frequently as is residential property, the sales market may not be as readily established. He must rely heavily on the income approach to value... determining the net economic rent, which the property is capable of yielding, and the amount of investment required to affect that net return at a rate commensurate with that normally expected by investors. 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 reflects different circumstances and conditions. Nor will he be able to rely upon the income approach, again, because of the absence of comparable investments, but also because of the inability to accurately determine the contribution of each unit of production to the overall income produced. He must, therefore, rely heavily on the cost approach to value... determining the upper limit or replacement cost new of each improvement and the subsequent loss of value resulting overall from physical, functional and economic factors.

The fact that there are different approaches to value, some of which being 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 an informed and intelligent person, 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 various approaches to value, although valid in themselves, must nevertheless be coordinated one to the other in such a way as to produce values that 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 systematic and 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 entire political unit. It is only by doing this that equalization between properties and between classes of properties can be ultimately affected.

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 achieve an estimate of value.

# OUTLINE OF THE APPRAISAL PROCESS

The key to an accurate appraisal lies in the methodical collection of data. The appraisal process is an orderly set of procedures used to collect and analyze all data in order to arrive at an ultimate value conclusion. Such data is divided into two basic classes:

1. Specific data, covering details of the subject property, as well as comparative data relating to costs, sales, and income and expenses of properties similar to and competitive with the subject property.

2. General data, covering the nation, region, state, city, and neighborhood. Of particular importance is the neighborhood, where an appraiser finds the physical, economic, social, and political influences that directly affect the value and potential of the subject property.

The flow chart on the following page outlines the steps an appraiser takes in carrying out an appraisal assignment. The numbers in the following list correspond to the numbers on the flow chart.

1. State the problem: The kind of value to be estimated must be specified and the valuation approach most valid and reliable for the kind of property under appraisal must be selected.

2. List the data needed and their sources: Based on the approach the appraiser will be using, the types of data needed and the sources to be consulted are listed.

3. Gather, record, and verify the general data: Detailed information concerning the economic, political, and social conditions and comments on the effect of this data on the subject property must be obtained.

4. Gather, record, and verify the specific data on the subject property: Specific data include information about the subject site and improvements.

5. Gather, record, and verify the data for the valuation approach used: Depending upon the approach used, comparative information relating to sales, income and expenses, and construction costs of comparable properties must be collected. As with steps 3 and 4, all data should be verified, usually by checking the same information against two different sources. In the case of sales data, one source should be a person directly involved in the transaction.

6. Analyze and interpret the data: All information collected must be reviewed to be sure that all relevant facts have been considered and handled properly and that no errors have been made in calculations.

7. Reconcile data for final value estimate: The appraiser finally makes a definite statement of conclusions reached. This is stated in terms of a value estimate of the property.

| | |
|---|---|
| 1 | STATE THE PROBLEM |

| | |
|---|---|
| 2 | LIST THE DATA NEEDED AND THE SOURCES |

| | |
|---|---|
| 3 | GATHER,RECORD,AND VERIFY THE GENERAL DATA NATION, REGION, CITY,NEIGRBORHOOD |

| | |
|---|---|
| 4 | GATHER,RECORD,AND VERIFY THE SPECIFIC DATA SUBJECT, SITE, IMPROVEMENTS |

| | |
|---|---|
| 5 | GATHER,RECORD,AND VERIFY THE DATA FOR EACH APPROACH |

| 5a MARKET DATA APPROACH | 5b COST APPROACH | 5c INCOME APPROACH |
|---|---|---|
| SALES DATA | COST DATA | INCOME & EXPENSE DATA |

| | |
|---|---|
| 6 | ANALYZE AND INTERPRET THE DATA |

| | |
|---|---|
| 7 | CORRELATE DATA FOR FINAL VALUE ESTIMATE |

## DATA INVENTORY

Basic to the appraisal process is the collecting and recording of pertinent data. The data will consist of general supporting data referring to the data required to develop the elements essential to the valuation process, neighborhood data referring to information regarding a delineated neighborhood units, and specific property data referring to the data compiled for each parcel of property to process 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 that 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. The axiom "too much data is better than insufficient data" does not apply. What does apply is the proper amount of data, no more or no less, which is necessary to provide the database required generating the desired output.

General Supporting Data - The appraisal staff will primarily be 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 enough to develop and/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, and name of builder, source of information, structural characteristics, and other information pertinent to analysis.

Cost information may be recorded on the same form used to record specific property data.

The principle sources for obtaining cost data are builders and developers, and it is generally advisable to collect cost data in conjunction with new construction.

Sales data must be sufficient enough 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 sale, selling price, assessed value (land and total) as of the date of sale, source of information, i.e. buyer, seller, agent, or other, and a reliable judgment as to whether or not the sale is representative of a true arm's length transaction.

Sales data should be recorded on the same form used to record specific property data, and verified during the property data collection phase.

The principle source for obtaining sales data is from the County Records. Other sources may include developers, Realtors, lending institutions, and individual property owners during the data collection phase of the operation.

Income and expense data must be sufficient enough 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 terms.

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 three year period.

The general data should be documented in conjunction with the development of capitalization procedural guidelines. The specific data, being that it is often considered confidential and not subject to public access, may 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 principle sources for obtaining the 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 data collection phase of the operation.

Neighborhood data - At 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 and social trends, and housing

characteristics such as structural quality, age, and condition. The neighborhood delineation should be outlined on a map and each assigned an arbitrary Neighborhood Identification Code which, when combined with the parcel identification numbering 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 determine 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 neighborhood identification code, 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 desirability.

All neighborhood data should be recorded on a specially designed form during the delineation phase.

Specific property data must be comprehensive enough to provide the data base needed to process each parcel of property to an indication of value, to generate the tax roll and related tax accounting output, to generate other specified output, and to provide the assessing officials with a permanent record to facilitate maintenance functions arid to administer taxpayer assistance and grievance 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 data collection of information and to facilitate data processing. In addition to the property data items noted above, space should be considered for a building sketch, land and building computations, summarizations, 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 that can be checked and/or circled.

The specific property data may be compiled from existing assessing records, field inspections or combination of both IE: 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 site characteristics may be obtained, by making a physical inspection of each property.

In computing lot sizes from the tax maps on to the property record cards, the person performing the tasks must be specially trained in the use of standardized lot sizing techniques and tables, which are necessary to adjust irregular shaped lots and abnormal depths to account for variations from pre-determined norms. In regard to acreage, the total acreage may be transferred, but the acreage breakdowns required effecting the valuation of agricultural, commercial, and industrial properties frequently must be obtained by personal observation and aerial photographs if available.

Qualified data collectors will conduct field inspections. During this phase of the operation, the data collector must visit each property, which is accessible. In the course of his inspection, he must...

identify himself.

record or verify the property address.

verify or record the property classification.

inspect the exterior of the building, as well as all other improvements on the property, and collect or verify the story height, and the dimensions and/or size each.

verify and/or record the sketch of the principle building (s), consisting of a plan 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 quality factor and condition of the improvements.

review the property record card for completeness and accuracy.

After the field inspection is completed, the property record cards will be submitted to clerical personnel to review the records for completeness, and make any necessary changes.

Complete and accurate data are essential to the program. Definite standardized data collection and recording procedures must be developed and 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.

During the analytical phase, it will be necessary to analyze 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 remains to analyze 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.

Of the three approaches, the cost approach is the one that tends to lend itself best to property valuations for tax purposes. The two principle reasons for this are that appraisals for Ad Valorem taxes generally require separate land value estimates, and secondly, the cost approach is the one approach which can reasonably be applied to all classes of property rather than to only those having a sufficient number of comparable sales, or to those typically producing an income. The use, however, of one approach to the exclusion of the others is contrary to the appraisal process. The approach to be taken, then, is an integrated one, starting with the cost approach, but incorporating the market data and income approaches whenever feasible and appropriate.

Any one, or all three, of the approaches, if applied properly, should lead to an indication of market value; of primary concern is to apply the approaches on an equitable basis. This will require the coordinated effort of a number of individual appraisers, each appraiser acting as a member of a team, with the team effort directed toward a valid, accurate and equitable appraisal of each property within the political unit.

Once the final values have been established for each property, it still remains to evaluate the entire program in terms of its primary objectives. Do the values approximate a satisfactory level of market value and what's more important are the values equalized? Satisfactory answers to these questions can best be obtained through a statistical analysis of recent sales in an appraisal-to-sale ratio study.

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

The techniques and procedures set forth herein, if applied skillfully, should yield accurate and equitable property valuations, and should provide you with 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 giving the taxpayer an opportunity to question the value placed upon his property and to produce evidence that the value is inaccurate or inequitable can best do this. 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 as well as any other resources available to you to affect the highest degree of accuracy and equity possible.

# DATA COLLECTION

## GENERAL AND LOCAL DATA

Since this manual deals with the appraisal of an entire County rather than *a* single parcel of property, the sheer volume of general and local data needed prohibits inclusion with the manual. However, the use of this information is a vital part of the appraisal program, and all such information and material should be considered as incorporated into and a part of this manual.

A partial listing of the information and material used in this appraisal program is as follows:

County tax maps and property records

Zoning maps and Ordinances

Maps and records of land use planning

Utility districts

School districts

Fire districts

Population reports and trends

Economy and employment reports

GIS

Government statistics

Soil surveys

## SPECIFIC PROPERTY DATA

The instructions on the following pages are designed to serve as a guide for data collection. The information recorded on the property card is extremely important and great care must be used in recording or verifying information accurately and completely.

Although this work is not the complete appraisal, it is, nevertheless, a vital part of the appraisal for each individual piece of property. This work represents the foundation of the appraisal, and a job that isn't started properly cannot end properly. Each property should be approached as an individual problem and given undivided attention.

## STANDARD DATA COLLECTION

### Exterior Features

Attached garages, porches, etc. are to be included with the sketch of the main building. Appropriate construction, story height, and other information should be indicated.

### Yard Improvements

Detached garages and other auxiliary improvements along with related information should be entered in the yard improvements field.

### Quality Factor and Design Factor

Determine the final Quality Factor, and Design Factor if needed, taking into consideration exterior features you have observed and the overall QUALITY OF CONSTRUCTION.

### Depreciation

Estimate and post the difference between the replacement cost and the present value of the improvements. The primary judgments involved in estimating depreciation are condition and desirability.

Though condition, as previously established, can be physically viewed, desirability can only be observed in local market activity. All factors or characteristics that can be interpreted as benefits or liabilities (location, market demand, etc.) should be given careful consideration.

### Additional Dwellings

If a lot has two houses, process the second house on a separate card, which will be identified in the upper right hand corner as a 2 of 2 cards. Also, insert on the face of the card, the owner's name, parcel number, map number and any other necessary data for proper identification.