TOWN OF HUDSON

Office of the Assessor

Jim Michaud
Assistant Assessor, CAE
email: jmichaud@hudsonnh.gov www.hudsonnh.gov

12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6009 · Fax: 603-594-1160

ASSESSING 101

New Hampshire manages to pay for its local government without a general income nor general sales tax. By default, that leaves the property tax as the major source of revenue for New Hampshire municipalities, typically 70% and more of municipal revenue. Historically rejecting other “broad based” taxes, New Hampshire relies most heavily on the locally administered property tax and property assessment function to fund local services and public education. The role of property taxes in New Hampshire is substantial. Given our municipal reliance on it, it is imperative that both those involved in funding resources for property assessment purposes, as well as those in the professional property assessment community, get it right.

The Appraisal Process

The appraisal process, no matter if its done for local assessment purposes or for financial lending purposes, is an orderly process which involves defining a problem; planning the work necessary to solve the problem; acquiring, classifying, and analyzing the necessary data involved; and interpreting the analysis into an estimate of value. There are three (3) generally recognized approaches’ to value within the appraisal industry, as follows.

(1) “The cost approach is based on the principle of substitution, that a rational, informed purchaser would pay no more for a property than the cost of building an acceptable substitute with like utility.” International Association of Assessing Officers, Property Appraisal and Assessment Administration, 1990, (Chicago; IAAO), p. 638.

In the cost approach, the potential buyer is assumed to consider purchasing a substitute property with the same utility as the property being appraised. The informed, rational buyer will pay no more for a property than the cost of producing a substitute property with the same utility as the subject property. Cost of production to the buyer includes all direct and indirect construction costs, including builder’s profit and overhead.

The necessary steps in the Cost Approach are as follows:

A. Estimate the value of the site as if vacant and available to be put to its highest and best use.

B. Estimate the reproduction or replacement cost new of the improvements.

C. Estimate all of the elements of accrued depreciation, which may include curable or incurable physical deterioration, curable or incurable functional obsolescence, or economic obsolescence.

D. Subtract the total accrued depreciation from the cost new of the improvements. This results in an estimate of the depreciated cost new of the improvements.

E. Add the total present worth of all improvements to the estimated site value.

The Cost Approach is most appropriate for new, or fairly new, buildings where the improvements represent the highest and best use of the site. A significant use of the Cost Approach is in the valuation of public buildings or certain types of special-use properties for which rental or sales data is limited. The principal difficulties in this approach arise in estimating viable construction cost figures, and also in estimating accrued physical, functional, and economic depreciation or obsolescence, particularly in older properties.

2. "The income approach uses capitalization to convert the anticipated benefits of the ownership of property into an estimate of value." International Association of Assessing Officers, Property Appraisal and Assessment Administration, 1990, (Chicago; IAAO), p. 647.

Like the Cost Approach the Income Approach utilizes the principle of substitution. It also uses the theory of anticipation. It is assumed that an investor is interested in an income flow of a certain size, certainty and timing and that the investor has little preference as to the source of this income flow. The investment in real estate can easily be substituted for investments in other alternative income producing vehicles.

For residential property the Income Approach consists of extracting a Gross Rent Multiplier (GRM) from the market. This is achieved by dividing the sale price of a home that was rented by its monthly gross rent. Following this economic rent for the subject is derived from the market and this is multiplied by the GRM to estimate the market value.

For commercial property the Income Approach consists of dividing Net Operating Income (NOI) by a capitalization rate. NOI is the Gross Potential Income (GPI) of a property less normal operating expenses and adjustments for anticipated vacancy and bad debt. A capitalization rate can be obtained by dividing the actual NOI by the sales price of comparable properties. An alternative method of estimating a capitalization rate is a mortgage equity technique, which uses mortgage rates and expected rates of return on investor's equity.

The Income Approach is not normally applicable to the valuation of vacant land.

3. The sales approach is defined as "one of the three approaches to value that estimates a property's value by comparing the subject property to other similar properties that have sold." International Association of Assessing Officers, Property Appraisal and Assessment Administration, 1990, (Chicago; IAAO), p. 82.

The Sales Approach is also based upon the principle of substitution that an informed purchaser would pay no more for a property than the cost to him/her of acquiring an existing property with the same utility.

The essential process of the Sales Approach is to convert actual, verified sale prices of competitive properties to a defined value estimate. The objective is to discover what competitive properties have sold for recently in the local market. Through an adjustment process, an indication of what the comparable properties would have sold for had they possessed all of the basic and pertinent physical and economic characteristics of the subject property. Indications of such adjusted sales prices are developed for several comparable sales. These indications should fall into a pattern clustering around, or trending toward, a figure, which provides an indication of the most probable selling price for the subject property under specified market conditions, as of the date of the appraisal.

Reconciliation - The final step in the appraisal process is to consider and analyze the relevance of the approaches to value in relation to the subject property and the reliability, quality and quantity of the data used in the approaches to value. The final value estimate is then based on the approach that is the most relevant and uses the most reliable and highest quality and quantity of data.

Market Value Influences

The most often repeated quote about real estate relates the three most important factors, "location, location, and location." While humorous, it underlines a significant truth about the nature of property value: it is often factors outside of the property boundaries that establish value.

Most real estate consumers understand the importance of location. A house that is located steps from the ocean likely has more value than a similar one miles away from the waters edge. A retail building on a busy street likely has more value than one located on a quiet, dead end street. An apartment building close to schools or commuting routes likely has more value than one located far away from these amenities. The stately home located in an area of other similar property likely has more value than a similar one located next to the municipal landfill.

At its very heart, the property tax is a tax on value. Revaluations use mass appraisal that must recognize all factors that influence the value of property, both in a negative and positive direction. Each of these factors may be different in different locations. For this reason, the mass appraisal is indexed to local conditions and uses locally obtained and adjusted information to determine values.

The mass appraisal must recognize all value influences: regional; local; neighborhood; and, property. By understanding these factors, accurate market value estimates can be made. Ignoring any of these factors could lead to inaccurate values, and establish a disproportionate system of taxation. Fairness requires that all factors be considered in valuation.

Mass Appraisal

As defined by the International Association of Assessing Officers (IAAO), mass appraisal is "the process of valuing a group of properties as of a given date, using standard methods, employing common data, and allowing for statistical testing." Mass appraisal utilizes many of the same concepts as single appraisal property appraising, such as supply and demand, highest and best use, and the principles of substitution and anticipation. In addition, in light of the necessity to estimate values for multiple properties, mass appraisal also emphasizes data management, statistical valuation models, and statistical quality control.

Components of a Mass Appraisal

Mass Appraisal System

Data Management System

Valuation System

Performance analysis system Administrative/Support System

Appeals System

A mass appraisal system generally relies on four primary sub-systems that include:

1. Data management system;
2. Sales analysis system;
3. Valuation system, and
4. Administration system.

Each sub-system is briefly described below:

Data Management: The data management system is the core of the mass appraisal system and should be carefully designed and implemented. Fundamentally, the data management system is responsible for the data entry and subsequent editing, as well as the organization, storage and security oversight of the data. Essential to the data management system is quality control, as the reliability of the data will have a direct and profound impact on the quality of the resulting output and values.

Sales Analysis: The sales analysis system is responsible for the collection of sale data, sale screening, various statistical studies and sales reporting. The following statistical techniques are utilized to calibrate and fine-tune the data assumptions:

> "Ratio": Refers to the relationship between the appraised or assessed values and market values as determined by a review of sales. The ratio studies, which are the primary product of this function, typically provide the most meaningful measures of appraisal performance and provide the basis for establishing corrective actions (re-appraisals), adjusting valuations to the market, and in administrative planning and scheduling. The requirement, as established by the New Hampshire Assessing Standards Board (ASB), is to maintain a Median Ratio between 90% and 110% of market value. (A ratio of 100% is preferred, indicating the assessed value is identical to the market value.)
>
> "COD": or "Coefficient of Dispersion", is another important tool utilized in mass appraisal, and refers to the average percentage deviation from the median ratio. As a measure of central tendency, the COD represents the degree to which the data being analyzed clusters around a central data point, such as the median ratio. The requirement, as established by the ASB, is a COD no greater than 20% (a lower COD is preferable to a higher COD).
>
> "PRD": or "Price Related Differential", is calculated by dividing the mean ratio by the weighted mean ratio. A PRD greater than 1.03 indicates assessment regressivity (when high-value properties are assessed lower, or disproportionate to, than low value properties). A PRD lower than 0.98 indicates assessment progressivity (when high-value properties are assessed higher, or disproportionate to, low-value properties). The requirement, as

established by the ASB, is a PRD no greater than 1.03, and no lower than 0.98.

Valuation System: The valuation system comprises the statistical application of the three approaches to value (identified in the preceding section). For instance, utilization of the Sales Comparison Approach would include statistical techniques such as a multiple regression analysis. The Cost Approach would utilize computerized cost and depreciation tables, and reconciliation of these computerized cost-generated values with market-derived sales information. The Income Approach can utilize computer-generated income multipliers and overall capitalization rates. The Valuation System is also utilized to extract adjustments and/or factors that are utilized in the development of values.

Administrative System: The administrative system includes core (often automated) functions as development of the property record cards and assessment roll or property tax base, the preparation of the tax notices, and retention of the appeals and other miscellaneous property files.

Mass Appraisal Process

Definition of the appraisal problem

Data Collection

Market Analysis

Supply & Demand data

Specific

- Site
- Off Site Improvements

General

- Economic
- Social
- Environmental
- Governmental

Comparative

- Cost
- Sales
- Income /Expense

Highest & best use analysis

Specification & calibration of the valuation model

Model testing, quality control, &reconciliation of values

Revaluations

The constitution and statutes of the State of New Hampshire require that property subject to a tax based on value be revalued at least every five years. *Mass appraisals* are conducted to complete a revaluation of all taxable property within a municipality in order to meet the legal requirement. A mass appraisal is the process of valuing all property by using standard methods and conducting various surveys. In this process, the appraiser(s) collect data characteristics or elements on every individual property; assign values to these elements in the form of value tables, correlating the value of these individual elements into a market value estimate for each property.

Market value predictions in a mass appraisal are specific property value estimates. Success is not a specific exact number for all properties, but rather is a range of values around a measure of central tendency. In New Hampshire, acceptable ratios that determine success in a revaluation is a median assessment/sale price ratio between .90 and 1.10.

Types of Revaluation

There are four general types of revaluation activities:

- Full revaluation with a complete measure, listing and valuation of all taxable and nontaxable properties in a municipality with or without use of, or access to, existing or prior appraisal data;

- Partial revaluation with a specified portion of a municipality or any individual properties using either a full data collection effort completed with or without use of, or access to, existing or prior appraisal data or less than a complete data collection effort; or,

- Cyclical revaluation is a measure and list of all municipal properties within a three to five year time period. Property assessments will be updated during the last year of measuring and listing property data, including the verification of all municipal market sales. This is the fastest growing revaluation work in New Hampshire and IS considered a Full revaluation once the entire process is complete.

- A statistical update analyzing market sales throughout the entire municipality to identify and implement needed value changes to the affected areas or classes of property.

These can vary widely in cost and time required for completion.

There is a natural schedule for the completion of revaluations. These are target dates that are usually carefully defined in the revaluation contract. The most important of these dates are the date of valuation (April 1 of the tax year), and the date that a report of total valuation is due to the state. The report of total value is known as the MS-1, and is due on September 1.

Because of the filing deadlines, revaluations rarely extend beyond the early fall of the tax year period. Most successful revaluations include public relations efforts and notices of new values to taxpayers about their new values.

Why Revalue?

Besides the constitutional and statutory requirements, there are many beneficial aspects to completing a revaluation. The nature of the value of real estate is that values change, and the reality is it rarely changes in value at the same rate, or for the same reasons. Basic fairness in property taxation requires that everyone pays based on the value of their property, and the revaluation resets all property to market value. Also, this being a human activity, it is prone to errors. A revaluation provides the opportunity to correct these errors. There may also be valuable property that has not been included, such as thru the completion of un-permitted work. The collection of these additional features of property increases the accuracy of the total value of a municipality and will reduce the tax burden on all taxpayers

. State- Assessment Review Process

The state is required to review and report each municipality's assessments once within every five years. The Town of Hudson is scheduled for its assessment review process for the 2012 year. State law mandates that these reports reflect the degree to which assessments of a municipality achieve substantial compliance with applicable statutes and rules when considering the following:

A. The level of assessments and uniformity of assessments are within acceptable ranges as recommended by the state.

B. Assessment practices substantially comply with applicable statutes and rules.

C. Exemption and credit procedures substantially comply with applicable statutes and rules.

D. Assessments are based on reasonably accurate data.

E. Assessments of various types of properties are reasonably proportional to other types of properties within the municipality.

In carrying out this responsibility, the state relies on the guidelines established by the assessing standards board in the above five areas. Starting in 2003, approximately ¼ of the municipalities in New Hampshire were scheduled for assessment review. In each of the ensuing three years another ¼ of New Hampshire municipalities were scheduled for reviews, so that all municipalities were reviewed by the end of 2006. Further reviews have been done for the subsequent five years, Hudson has successfully finished it's 3^{rd} assessment review cycle in the 2012 property tax year, the 4^{th} is scheduled for 2017. The state mandates this process, but does not, to date, provide any funding for it.

While the data on this document is believed to be correct, NO WARRANTY IS GIVEN OR IMPLIED AS TO ITS ACCURACY. Do not make any decisions to buy or sell real estate and/or file tax abatements etc based solely on the data presented within this document. Verify all pertinent data prior to making any final decisions