

SECTION 3

DEVELOPMENT OF VALUES

Description of Basic Valuation Theory and Mass Appraisal:

Basic Valuation Theory:

- 1) The appraiser's first task is to identify what property is being appraised. This includes not only the physical aspects of the property, but the property rights as well.
- 2) There are six basic property rights associated with the private ownership of property, these include: 1) the right to use, 2) the right to sell, 3) the right to lease or rent, 4) the right to enter or leave the property, 5) the right to give away, and 6) the right to refuse to do any of these. These, and other rights, are known as the full "bundle of rights", which is understood to be attached to an ownership with "fee simple" title which has been described in the preceding section.
- 3) The New Hampshire Supreme Court has ruled that for the purpose of property taxation, the appraised property rights are assumed to be "fee simple".⁴ (NH Supreme Court, "Kennard v. Manchester, 68 N.H. 61, 36A, 553 (1894)
- 4) The next step is to identify the "highest and best use" of the property. Refer to the preceding discussion, as well as the discussion on highest and best use in the preceding "Assumptions and Limiting Conditions" section.
- 5) Once the highest and best and use has been determined, the appraiser begins the process of data collection, studies the market and accompanying economic forces (such as "supply and demand") that pertain to the highest and best use, and assembles the relevant data and statistics for incorporation into the analysis.
- 6) Strategies for data collection will vary with the type of data being sought, and may not be the same for every property "use". Overall, the comparative data, which may include descriptions and/or confirmations of physical attributes (such as total size, number of bedrooms, presence of a finished attic or basement, etc.) cost, income and expense, and details of sale or transfer information are collected, if applicable.

- 7) At this point, neighborhood boundaries can be established in order to “stratify” the properties and the property-specific factual information collected in the field, and the statistical information pertaining to the market/economic forces that impact an area in a meaningful and cohesive way.
- 8) This market-derived information, such as sale information, improvement costs and depreciation is then entered into the CAMA software, and forms the basis for the database “tables” that enable the CAMA software to generate specific property values.
- 9) There are primarily three “approaches” or analytical techniques utilized to develop an opinion of value, and these techniques are incorporated into the CAMA software.

(A) The first valuation technique is referred to as the “Sales Comparison Approach”, and is based on the premise that the appraiser can utilize sale prices of similar properties as evidence of value. In other words, assuming similar market conditions (supply and demand) a similar property would sell for a similar price. However, because no two properties are ever exactly alike, and market conditions can change, a systematic series of “adjustments” are made to the sale property in order to bring it into conformity with the appraised property. In the context of mass appraisal performed for assessment purposes, the “appraised” property begins with a “generic” property description that is utilized to establish a “baseline” for comparing similar properties. An example would be, a “single-family residential ranch-style home, approximately 2,000 square feet, three-bedrooms, two-baths, and of average quality construction and average condition.” The sales are then compared and adjusted in order to isolate the various market factors and baseline parameters that are then applied to the specific properties being assessed. Overall, the Sales Comparison Approach is based upon the principle of “substitution”, which assumes that when several similar properties are available the property with the lowest price will attract the greatest demand.

(B) The “Cost Approach” is based on the concept that the likely value of an existing property is the value of the underlying land plus the replacement cost of the depreciated improvements. Typically, a Cost Approach would not be utilized for an appraisal of vacant land. The replacement cost of the improvement is typically derived from published cost tables, or derived directly from localized information, and should be updated as required

by market conditions. Importantly, the assessor typically evaluates the existing improvement on the basis of its “utility” and function, rather than attempting to duplicate or exactly “reproduce” the assessed property. Similar to the Sales Comparison Approach, the Cost Approach is also based upon the principle of “substitution”.

(C) The “Income Approach” is based upon the principle of “anticipation” which recognizes that value is created by the owner’s expectation of future benefits. Typically, these benefits are anticipated in the form of income, and/or in the anticipated increase in the property’s value over time. This technique requires that the appraiser estimate the potential gross market income for the property at its highest and best use, subtract all appropriate expenses to derive the net operating income. The net operating income is then divided by a “capitalization” rate, or the market-derived rate investors would expect on alternative investments that share the same degree of risk as the appraised property. A simplified income approach is structured as follows:

Annual Potential Gross Income	
5 apartments @ \$1,500/month =	\$90,000
Annual Vacancy Rate = 2% annually =	<u>(\$1,800)</u>
Annual Effective Gross Income =	\$89,820
Annual Expenses =	<u>(\$34,500)</u>
Net Operating Income =	\$55,320
Capitalization Rate = 8%	
Property Value = \$55,320 / 8% =	\$691,500

- 10) Completion of all three of the preceding independent approaches to value is preferable, since each independent approach provides a useful “test of reasonableness”, and more such tests are preferable to fewer such tests. However, it is not always possible to complete a specific approach due to the unavailability of meaningful data. Finally, the different values reached by independent techniques are “reconciled” by evaluating both the quality of the information utilized in each approach, and a final opinion of value is selected.

Mass Appraisal:

11) Mass appraisal utilizes many of the same concepts outlined above. However, in light of the necessity to attach values to multiple properties, as opposed to a single property, mass appraisal emphasizes data management, statistical valuation models and statistical quality control. In regard to the statistical modeling required, typically the utilization of an automated valuation model (AVM), also referred to as Computer Assisted Mass Appraisal (CAMA) software is required. The CAMA or AVM is a mathematically based computer software program that produces an estimate of market value based on market analysis of location, market conditions, and real estate characteristics from information that was previously and separately collected. The distinguishing feature of CAMA or AVM software is that it is a market appraisal produced through mathematical modeling. Importantly, as in most if not all data processing systems, the credibility of the results is highly correlated with the quality of the input data utilized, and the skills of the assessor or analyst utilizing the CAMA or AVM software.

12) A mass appraisal system generally relies upon five primary “subsystems” that include: 1) a data management system, 2) a sales analysis system, 3) a valuation system, and 4) an administration system 5) Property owner review. Each subsystem is briefly described below:

(A) 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.

(B) The Sales Analysis subsystem 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 State of New Hampshire’s Assessing Standards Board, 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 statistical 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 State of New Hampshire’s Assessing Standards Board, 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 by the weighted mean. A PRD greater than 1.03 indicates assessment regressivity; when high-value properties are assessed lower, or disproportionate to, low value properties. A PRD lower than 0.98 indicates assessment progressivity; when high-value properties are assessed higher than, or disproportionate to, low-value properties. The requirement, as established by the State of New Hampshire’s Assessing Standards Board, is a PRD no greater than 1.03, and no lower than 0.98. Overall, a PRD equal to 1.0 is preferred.

(C) The Valuation System generally 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.

(D) The Administrative System includes such 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.

(E) Property Owner Review It is recommended and encouraged that property owners obtain a copy of their property record card for review. The owner should review the lot size/land area, exterior buildings, exterior measurements, style description, and construction detail elements for accuracy. If discrepancies are found the assessing office should be contacted so that an inspection of the property may be scheduled to correct any errors. Current and accurate property information is vital to determining the proper assessment of the property.

Period of Time Associated with Sales/Data Collection: Commercial/Industrial sale data utilized for the purpose of completing this analysis spanned a period from January 1, 2017 to October 10, 2021. The residential sales used herein were dated from April 1, 2020 to June 30, 2021. All sales occurred within the City of Concord, N.H. Only sales confirmed to be qualified “arms-length”, or market-oriented transactions were utilized in the analysis.

Data Collection and Sales Verification Procedures:

The Merrimack County Registry of Deeds provides the Municipality’s Assessing Department with access to all recorded property transfers within hours of the date of transfer. Each individual sale is then analyzed by city assessing staff to determine if the transfer was a “qualified” sale; i.e., arm’s-length and market oriented. The qualification procedure attempted a direct interview with either the buyer, seller, or broker/representative familiar with the circumstances surrounding the negotiated transfer of the property. Upon final qualification, an attempt was made to inspect the property (interior also, when allowed/granted), and the property record cards were updated to

correct any inaccuracies. The multiple list service (MLS) and other online data sources are also reviewed and the property record cards updated to correct any inaccuracies.

Number of Sales Utilized in Analysis:

As previously described, as of the date of this report, there are 1,620 total commercial, industrial, apartment, utilities, and TIF District parcels situated in the Municipality. The breakdown of all commercial/industrial/apartment, utilities and TIF District properties within the Municipality by “use type” is as follows:

Commercial/Industrial/Apartments	1,313
Vacant (or minimally improved)	185
Utilities	55
TIF District Properties	67
Total	1,620

The breakdown of all qualified property transfers within the City of Concord by “use type” follows:

Commercial Improved	68
Industrial Improved	32
Apartment Properties	6
Commercial Vacant (or minimally improved)	7
Industrial Vacant (or minimally improved)	0
Total	113

As of the date of this report, there are 12,039 total residential parcels situated in the City of Concord. The breakdown of all residential properties within the Municipality by “use type” is as follows:

Residential Improved	8,342
Residential Vacant (or minimally improved)	380
Manufactured Housing	1,038
Residential Condominium	2,279
Total	12,039

The breakdown of all qualified residential property transfers within the Municipality by “use type” follows:

Residential Improved	449
Residential Vacant (or minimally improved)	11
Manufactured Housing	74
Multi-Family	83
Residential Condominiums	209
Total	826

Description of Data Calibration Methods:

The sale data is verified for accuracy by submitting each one of these sale properties to a thorough physical (measure and list) and market analysis by confirming a transaction was “arm’s length”, with no unusual circumstances that might have influenced the negotiated sale price, including interior inspection whenever possible. Once verified, and the preliminary benchmarks were established, field reviews were conducted in order to refine the base tables, and verify the alignment of properties and the tables by “use” type and location, for example. The preliminary values were further “validated” by the statistical testing of the sale data made possible by the CAMA software. The CAMA software groups and sorts the data by various elements of consideration such as: improvement type (base rates determined by CAMA modeling), age, size, and neighborhood, and various “ratios” are developed that reveal discrepancies in the underlying valuation model. Changes are made to the various tables when discrepancies are indicated in the valuation model.

Significance of Adjustments and Factors:

“Adjustments” and “factors” are mathematical changes to basic data (for example, a “base” table) to facilitate comparisons and understanding. This process assumes a “causal” relationship among the various factors for which the adjustments are made.

Examples of factors and/or adjustments can include such important elements of consideration as view, water frontage, or water access amenities. Importantly, a “feature” can be a positive influence on property value, or a negative influence on property value. The specific adjustments or factors applied to properties with amenities, such as listed above, are typically derived from a detailed sales analysis. Once the appropriate sales are identified and confirmed or qualified, several techniques are utilized to extract, or isolate, the specific factor the appraiser is trying to identify.

One such technique is known as a “matched-pair” comparison analysis; wherein sales of properties that retain these features are compared to sales of properties that do not retain these features; and the specific contributory value or factor attributable to the feature is isolated. Another technique, known as “extraction”, subtracts the depreciated value of the improvements from the total sale price, to arrive at the underlying value of the specific land component being analyzed.

The adjustment for positive property attributes range from adding an additional 2% to 100% of the base value. The adjustment for negative property attributes range from a reduction of 2% to 95% depending upon severity.

Adjustments to Value for COVID-19

In January 2020 news services were reporting on a new respiratory disease caused by a novel coronavirus named COVID-19; COVID -19 had not been seen in humans before. On March 11, 2020 the World Health Organization declared COVID-19 a pandemic. On March 13, 2020, the President declared a national emergency due to the outbreak. On March 13, 2020, Governor Sununu declared a state of emergency to support the State’s response to the outbreak of the virus. That same day the Governor issued a stay at home order beginning at March 27, 2020.

Certain businesses were unable to be open to customers and in some instances, they were closed completely until an unknown date. The uncertainty of not knowing how long the virus would impact the health and well-being of not just individuals but the global, national, state, and local economies would have caused investors of some types of properties to account for a higher risk due to these unknowns.

I believe that some type of reduction in value was prudent to account for the higher risk in certain properties such as retail, hotels, motels, theaters, dine in restaurants, personal service businesses such as cosmetology, massage, dentist, bowling and taxable medical facilities. Because March was the timeframe that official declarations were made regarding the pandemic I used one month of the year to calculate an 8% ($1/12 = .0834$ or 8%) adjustment due to COVID-19. If the property was entirely closed the full 8% reduction was given to the building. The reduction was applied as a special condition in the depreciation and noted as CV for COVID-19. Since some properties are mixed use and the entire building was not impacted such as those buildings with retail on the first level and apartments on the upper levels the full adjustment was not applied to the assessment. Each property thought to have been impacted was looked at individually and if the entire building was closed due to emergency orders the full 8% was given, if only half the building was impacted 4% was given, etc.

Some drive through restaurants such as fast food and coffee locations were given 4% because a large portion of their business is drive thru and they were still able to function. Business such as gas stations/convenience, drug stores, home improvement stores, grocery stores, dollar stores, big-box retailers such as Walmart, Target, housing and general office buildings/space did not receive any adjustment due to COVID-19 as they were deemed essential businesses and did not close.

Beginning in May 2020 and throughout the summer and early fall businesses were given permission to reopen with various restrictions such as the number of people allowed in the building, the required wearing of face masks, outdoor dining, etc. As the year went on and into the spring of 2021 many of these restrictions continued to be lifted and or removed. By March of 2021 vaccines had become available and eligible segments of the population were receiving the vaccines. The general feeling in the population was one of optimism and eliminating the virus.

Because of the loosening of restrictions, increased occupancy levels, and the availability of the vaccines the adjustments given to the 2020 assessments were removed for April 1, 2021. A few segments of commercial property however continued to feel the repercussions of the pandemic and did not experience a return to business as prior to the pandemic. Specifically, movie theatres and conference centers continued to feel the impacts of COVID-19 into 2021.

Movie theatres reopened for a short time in mid-2020 at a reduced capacity with required mask wearing but then closed again in late October due to the lack of blockbuster film releases. The Canad Cinemas located in Concord did not reopen until May 21, 2021. Given the uncertainty of film releases and the continuation of reduced theatre patrons because of occupancy reductions and concern of theatre patrons the adjustment given for April 1, 2020 was not removed but increased from 8% to 25% for April 1, 2021.

Hotels with conference centers also did not see the return of conference travelers during 2020 or early 2021. Many business or industry sector conferences turned to on-line formats or were cancelled completely. Four properties in the City of Concord NH were identified as having large or significant portion of the building used predominately for conferences. The four properties are 96 Pleasant Street; the Centennial Inn/Granite Restaurant & Bar, 172 N Main Street; the Holiday Inn, and two properties at 40 Commercial Street; the Grappone Conference Center. The COVID-19 adjustment was increased from 8% to 25% recognizing that the conference sector of the economy was less than pre-pandemic levels as of April 1, 2021.