

SECTION E
COMMERCIAL/INDUSTRIAL
VALUATION METHODOLOGY

COMMERCIAL/INDUSTRIAL METHODOLOGY

The purpose of the mass appraisal is to determine an opinion of the market value of all the commercial properties in the City for 10/1/2012. In the appraisal of real estate, there are three recognized approaches to value. These are: Cost Approach, Sales Approach, and Income Approach.

Cost Approach Methodology

The cost approach is based on the theory that an informed buyer would not pay more for a property than the cost to build a reasonable substitute. The cost approach is therefore based on a comparison of the subject property to the cost to produce a new subject property or a substitute property. Items considered in this estimate are the age, condition and utility of the property.

In applying the cost approach the appraiser will first value the land of the subject based on comparable land sales, sales land residuals or income land residuals. Secondly, the appraiser will estimate the cost to construct the existing structure, along with any site improvements, and then deduct any accrued depreciation from the cost. The land value is added to the cost value to derive an indication of market value by the cost approach.

The appraiser breaks the real estate into its physical components (building improvements, site improvements, land) and analyzes value based on the assemblage of the components. This approach is most useful in the valuation of real estate with new or relatively new improvements.

The replacement cost new of the building improvement is estimated, usually from a National Cost Service.

Accrued depreciation from all causes is deducted from the cost new. Accrued depreciation in the cost approach has three sources:

- **Physical deterioration** - loss in value from wear and tear on the improvements over time;
- **Functional obsolescence** - loss in value from design deficiencies or superadequacies that limit current utility; and,
- **External obsolescence** - loss in value from sources outside the property, including location and economic factors.

Site improvements: Utility improvements to the site such as well, septic, public water and sewer hook-up are included in the building rate-pricing schedule. All lots are valued based upon unimproved commercial lot sales, and residual sales or income analysis.

The component value contributions are estimated separately and then summarized into a value indication, as follows:

Replacement Cost New of Improvements
Less Accrued Depreciation
Equals Value Contribution of Improvements and Site Improvements
Plus Land Value Contribution of Site
Equals Indicated Value by Cost Approach

Sales Approach Methodology

The sales comparison approach is the process of comparing the subject property to other comparable properties, which have sold within a reasonable period, adjusting the sale prices of those comparable properties to compensate for differences, and weighing the value indications developed to arrive at an opinion of market value for the subject property.

The sales comparison approach reflects the actions and reactions of typical buyers and sellers in the marketplace. A comparative analysis process is completed to determine and define similarities and differences of properties and transactions that can affect value. These elements may include property rights appraised, financing terms, market conditions, size, location and physical features.

Units of comparison are common reference points in the market for different types of real estate, and are derived by dividing a sale price by a property characteristic. Examples include:

Sale Price Per

- Gross Square Foot of Building, including land
- Leasable Square Foot of Building, including land
- Dwelling Unit (Multi-Family Sites and/or Improvements)
- Acre of Land (Usually over 1.0 Acre [43,560 sq.ft.])

Elements of comparison are characteristics of a series of sales that may or may not require adjustment. The hierarchy for considering elements of comparison is:

1. Property Rights Exchanged
2. Market Conditions (Time)
3. Location
4. Physical Characteristics

Income Approach Methodology

This approach is based on set of procedures that derives a value by analyzing and determining an income flow from the market, and then capitalizing this stream of income into a value. Income producing property is typically purchased as an investment. Therefore, the premise is the higher the earnings the higher the value. An investor who purchases income producing real estate is trading present day dollars for the expectation of receiving future dollars.

Market information is analyzed to estimate current market rent for the space in a subject property. Existing leases and rent levels are considered and compared with market rent levels. Potential gross income (PGI) is estimated. Vacancy and credit loss is estimated and deducted based on the market conditions of a certain type of property. Effective gross income (EGI) is the result of deducting vacancy and credit loss from PGI, and adding any ancillary income (parking revenue, laundry revenue, etc.) or expense reimbursements.

Market extracted operating expense are then deducted from the (EGI), which generates a final net operating income (NOI) for each property based on current market conditions for the fee simple interest.

Reconciliation Methodology

The final step of the appraisal process is the reconciliation. The appraiser considers the strengths and weaknesses of each applicable approach and reconciles the values indicated by these approaches to determine a final value opinion. In this determination, the appraiser weighs the relative importance, applicability, and defensibility of each of the three approaches and relies strongly on the approach that is most appropriate to the nature of the appraisal.

COMMERCIAL/INDUSTRIAL MODELING

Cost Approach Modeling

The Vision Government Solutions cost tables were utilized, supported by National Cost Surveys, to develop a replacement cost for a building. Once the cost of the building was developed, depreciation from normal wear and tear and from functional and economic obsolescence was deducted. The remaining value is considered the Replacement Cost Less Depreciation (RCLD). The market indicated land value and any other outbuilding values are added to give you a final value.

Sales Approach Modeling

This cost value is compared to market sale prices of similar properties to ensure that the property is appraised at market value for October 1, 2012. After an extensive examination of all commercial sales, the qualified sales that occurred between 10/1/2011 & 9/30/2012 were utilized for the revaluation analysis. These sales were analyzed based on time, style, location, lot size, building size, utility and year built. All sales were considered, but the sales occurring closer to the valuation date were given more weight.

Following is a summary of each of the final Median and COD's for each commercial class of the appraised values to the market sales. Refer to Section K for details regarding the sales.

<u>Class</u>	<u>Count</u>	<u>Median</u>	<u>COD</u>
Commercial	14	.99	8.37%
Industrial	9	.98	7.71%
Apartment	2	.98	3.57%

Income Approach Modeling

Market Rent Analysis: The first step in analyzing properties income potential is to establish market rent for land and improvements. To establish a basis for market rent, rentals of comparable properties in the City for all property types have been considered. Market rent is the rental income that a property would most probably command in an open market; indicated by current rents paid and asked for comparable space as of the date of the appraisal. Market rent may differ from contract rent,

which is rent paid because of a specific agreement. Market rent is applicable when the property rights appraised are fee simple. To estimate the property's market rent, rental data from comparable properties are required to be gathered and analyzed.

Income and expense statements were mailed out to all commercial property owners throughout the City. Market rental data was gathered from local real estate appraisers and property managers. This data was examined, qualified and analyzed to develop market rent schedules and vacancy/expense ratios for each property type (i.e. retail, office, industrial, etc.). National real estate publications were also reviewed to further support the market rents that were established. The rates determined are for properties that are considered to be of average quality and location. Further adjustments are applied for utility, location, building condition and specific vacancy conditions. Individual quality adjustments were also applied to each property to account for higher or lower utility of the property.

Operating Expenses: This data is extracted from the income and expense reports and includes the following items: property insurance, property management, utilities, building maintenance and repairs, service contracts, grounds maintenance and snow/trash removal, etc. Reserves for replacement of short-lived building components are also considered as an expense. The real estate taxes are not included in the operating expenses and are considered in the cap rate development as a tax factor. This data is analyzed to determine market extracted expense ratios for each type of commercial property.

Once all these factors have been considered, a final net operating income (NOI) is established for each property based on current market conditions for the fee simple interest. Below is a sample explanation of an average market rent adjusted for a good location and a good utility to determine a market rent for a higher quality property in a good location.

<u>Property Use</u>	<u>Average Size</u>	<u>Average Rent</u>	<u>Loc Adj.</u>	<u>Utility Adj.</u>	<u>Market Rent</u>
Office Class B	6,000 SF	\$27.00 SF	1.05	1.15	\$32.60 SF

Direct Capitalization Method: Capitalization is the process of converting a net income stream into an indication of value. The selection of a capitalization rate (Ro) can be developed by several methods. Direct Capitalization is a method used to convert an estimate of a single year's income expectancy into an indication of value in one direct step, either by dividing the income estimate by an appropriate rate or by multiplying the income estimate by an appropriate factor. Extraction of a capitalization rate (Ro) from market surveys and by the Band of Investment technique are the most commonly accepted methods. They will be utilized to determine a direct capitalization rate for each commercial property type. Another method to develop a capitalization rate is through extracting it from comparable sales. This process was also considered when good market data was available.

When estimating value for property assessment purposes using this approach, the real estate taxes are deducted from the operating expenses, leaving a net operating income before property taxes. The impact of property taxes is accounted for by adding an effective tax rate to the overall capitalization rate. The effective tax rate is calculated by multiplying the assessment ratio of the jurisdiction times the tax rate or projected tax rate applicable to the revaluation year. The result is known as a tax-loaded capitalization rate.

Market Survey of Capitalization Rates: An analysis of market surveys were completed to determine capitalization rates for the various commercial property types in the neighborhood as of 10/1/2012.

Band of Investment Technique: This is a technique in which the capitalization rates attributable components of a capital investment are weighted and combined to derive a weighted average rate that is attributable to the total investment. The two components are the mortgage position and the equity position. The variables considered are the mortgage interest rate, amortization period, holding period, loan to value ratio and the equity yield rate. See Section I for Band of Investment Calculations by type of property.

Once the capitalization rate is developed, the NOI is divided by this rate to determine a value by the income approach.

Final Reconciliation

Reconciliation spreadsheets by property type were developed and analyzed. When possible, all approaches to value were reconciled within a range of 0.88 to 1.12 and the cost model was used as the final value estimate. The income approach model was deleted during the reconciliation process when not appropriate to the valuation of a given parcel or property type.

COMMERCIAL LAND VALUATION MODEL

Similar to the methodology outlined in SECTION C for residential land, the Commercial/Industrial land sales, land residuals and income residuals were analyzed by area to derive typical land value ranges. Street Index (NBHD) was created and has specific land curves and some of them also have adjustment factors. See the table below for the related land curve. Also, reference Section H for the land curve parameter reports.

NBHD	LAND CURVE NUMBER	Nbhd ADJUSTMENT
100	26	1.00
200	19	1.00
250	18	1.00
300	20	1.00
400	21	1.00
500	23	1.00
600	7	.85
700	7	1.17
800	24	1.00
900	7	1.25
950	25	1.00
975	27	1.00
1000	17	1.00

COMMERCIAL LAND PRICING INSTRUCTIONS

See SECTION H for a list of available Land Use codes. To maintain consistency in pricing, the following guidelines have been followed:

Land Line Information

Site: Land necessary to support the existing commercial improvements will be valued as site. The base rate will be adjusted for location with street index (nbhd) factors. A site index adjustment will be applied to increase the site value for properties that have a high utility value.

Commercial Excess: If the parcel has excess land or additional land than is not needed to support the improvements a site index adjustment will be applied, which will reduce the value of the site.

Refer to the site index report in Section H for details.