

Special-Use Properties & Cost Approach

Mass Appraisal

Mass appraisal is a methodology for valuing individual properties which involves the following process:

- properties are stratified into groups of comparable properties
- common property attributes are identified for the properties in each group
- a uniform valuation model is calibrated for each group using market information incorporating the property attributes

Mass Appraisal and Single Property Appraisal

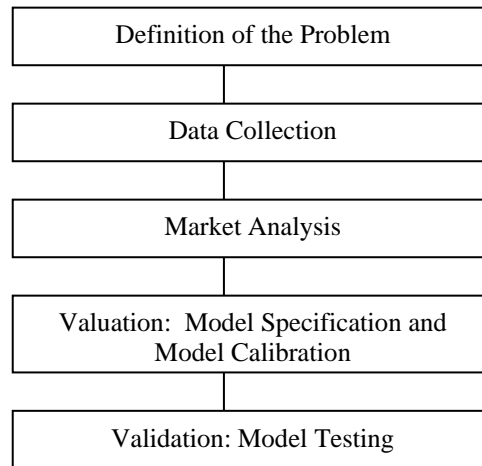
The appraisal process recommended by the Appraisal Institute of Canada is essentially the same for mass appraisals and single-property appraisals. Differences that exist mostly result from differences of scale. The following two quotations indicate how the International Association of Assessing Officers distinguishes between mass appraisal and single-property appraisal:

... “*single-property appraisal is the valuation of a particular property as of a given date: mass appraisal is the valuation of many properties as of a given date, using standard procedures and statistical testing.*”

... “*Also, mass appraisal requires standardized procedures across many properties. Thus, valuation models developed for mass appraisal purposes must represent supply and demand patterns for groups of properties rather than a single property.*”

The International Association of Assessing Officers, *Property Appraisal and Assessment Administration*, Chicago, Illinois, 1990, pg.88-89.

The appraisal process as followed for both mass appraisal and single-property appraisal consists of the following stages:



PROCESS	MASS APPRAISAL	SINGLE APPRAISAL
Definition and purpose	Mass appraisal is used to determine the base for property taxation in accordance with legislative requirements.	The client specifies the nature of the value to be estimated, including rights to be valued, effective date of valuation and any limiting conditions.
Data Collection	Mass appraisal requires a continuing program to maintain a current database of property attributes and market information.	The extent of data collection is specific to each assignment and depends on the nature of the client's requirements.
Market Analysis	Mass appraisal is predicated on highest and best use.	Market analysis includes the analysis of highest and best use.
Valuation Model Specification and Calibration	Valuation procedures are predicated on groups of comparable properties.	The subject property is the central focus of the valuation procedures. The analysis of comparable properties is restricted to a few properties – generally six or less.
Validation	The testing of acceptable analysis and objective criteria.	The reliability of the value estimate is more subjective. Acceptability can be judged by the depth of research and analysis of comparable sales.

Mass Appraisal Approaches

Cost Approach:

The Cost Approach involves adding the depreciated replacement cost of improvements to the estimated value of land (derived from direct sales).

The cost approach to value is applied to all commercial/industrial (special-use) properties that do not fit the direct sales or income approach assessment models. These are properties that may not actively trade in the market place due to their features or use. They are also properties that often do not have sufficient income and expense data available to effectively apply an income approach to derive a value.

Income Approach

The income approach considers the typical actions of buyers and sellers when purchasing income-producing properties. This approach estimates the value of a property by determining the present value of the projected income stream. The income approach was not employed to derive market estimates for any properties considered within the commercial/industrial (special-use) inventory.

Sales Comparison Approach

In the sales comparison approach, market value is estimated by comparing the subject property to similar properties that have recently sold, are listed for sale or under contract. A major premise of the sales comparison approach is that the market value of a property is directly related to the prices of comparable, competitive properties.

The International Association of Assessing Officers (IAAO) *Standard on Mass Appraisal of Real Property*, Chicago Illinois, 2002, sets out the recommended use of the cost approach for Special-purpose property. Section 4.6.6 of the IAAO standard states:

The cost approach tends to be most appropriate in the appraisal of special-purpose properties, due to the distinctive nature of such properties and the general absence of adequate sales or income data.

Mass appraisal requires that a uniform valuation method be applied to all properties within a group; therefore the cost approach was deemed the best method of establishing equitable valuation estimates for this property group.

Application of the Mass Appraisal Process

Characteristics of Special-Use Property Types

- Construction styles and layouts tend to limit the number of potential users
- Large sizes / small sizes
- Special and unique construction styles / design
- Uncommon improvements or machinery / equipment
- Limited market / sales potential
- Limited Rental potential
- Difficult to convert to other uses
- Typically owner-occupied

Replacement Versus Reproduction Cost New

Replacement Cost New

- Designed to replace the existing functions and capacity
- Take advantage of advances in design, layout and construction
- Reduced functional obsolescence

Reproduction Cost New

- Exact replica

Depreciation

- Loss in value from any cause

Attributes

Building attributes are those set out in the costing manuals used by the City such as: size, age, condition, and quality.

Land attributes are those found within City of Edmonton models to reflect market value including such items as size and location.

Commercial / Industrial (Special-Use) Assessment Model

$$\boxed{\text{Assessment}} = \boxed{2011 \text{ Replacement Cost New}} - \boxed{\text{All Forms of Depreciation}} + \boxed{\text{Land Value}}$$

Replacement Cost New Calculation (Calculated from a costing manual)

Provincial Assessment Manuals and the Marshall & Swift Costing Manual were used to determine the 2011 Replacement Cost,

Depreciation Calculation

- a. Normal physical depreciation applied.
Physical depreciation was applied using the depreciation rates in the Marshall & Swift Costing Manual.

Commercial Land Value

Sales Comparison Approach

The sales considered in the vacant *commercial* land model were gathered from January 2006 to July 2011. They were validated by conducting site inspections and interviews, by using four data collection sources (Alberta Data Services, Anderson Data Online, Bourgeois and Company, and The Network), by title transfers (change of ownership), and by sales validation questionnaires. Finally, value estimates were calculated using multiple regression analysis, which replicates the forces of supply and demand in the market place.

Attributes that may be used to Specify the 2012 Commercial Land Valuation:

Commercial Vacant Land

- Lot size
- Location (Corner, Interior, Major Road)
- Study Area (As shown in the study areas shown on the enclosed map)
- Servicing (including water, sanitary sewer, storm sewer, street lighting, sidewalk and curb gutter)
- Other adjustments to reflect unusual circumstances with the land including unusual shape, accessibility, contamination, easements affecting value, and whether a land is a remnant or utility lot.

Commercial Zones (Edmonton Zoning Bylaw # 12800)

- (CNC) Neighbourhood Convenience Commercial Zone
- (CSC) Shopping Centre Zone
- (CB1) Low Intensity Business Zone
- (CB2) General Business Zone
- (CB3) Commercial Mixed Business Zone
- (CHY) Highway Corridor Zone
- (CO) Commercial Office Zone

- (DC1) Direct Development Control Provision
- (DC2) Site Specific Development Control Provision

- (HA) Heritage Area Zone (D.T.)
- (EZ) Enterprise Zone (D.T.)
- (CCA) Core Commercial Arts Zone (D.T.)
- (MSC) Main Street Commercial Zone (D.T.)
- (CMU) Commercial Mixed use Zone (D.T.)

Land Use Codes for Vacant Commercial Land

- LUC 900 Undeveloped land
- LUC 530 Parking lot (paved)
- LUC 531 Parking lot (unpaved with net items)
- LUC 537 Parking lot (unpaved with no net items)

Raw Land

Land which has no services available is assessed at a lower rate than typical land. Land which has partial services is assessed at market value, with deductions applied for each service missing.

Remnant or Utility Lots

Assessed at 40% of the market value (where reductions are applied for both servicing and utility / remnant lots, only the greater of the two adjustments will be applied).

Industrial Land Value

Sales Comparison Approach

The sales considered in the *industrial* land model were gathered from January 2007 to July 2011. They were validated by conducting site inspections and interviews, by using four data collection sources (Bourgeois & Associates, Anderson Data Online, Alberta Data Services and The Network), by title transfers (change of ownership), and by sales validation questionnaires. Finally, value estimates were calculated using multiple regression analysis, which replicates the forces of supply and demand in the market place.

Attributes that may be used to Specify the 2012 Valuation:

Industrial Vacant Land

- Lot size
- Location (Corner, Interior, Major Road)
- Study/Market Area (As shown on the attached maps displaying study areas)
- Servicing (including water, sanitary sewer, storm sewer, street lighting, sidewalk and curb gutter)
- Other adjustments as required to reflect unusual circumstances with the land including unusual shape, accessibility, contamination, easements, remnant lot, restricted development, topography etc.

Application and Adjustments to the Industrial Land Model

Adjustments to the model may include servicing, remnant / utility lots, oversize, shape, easements, access / isolation.

Raw Land

Industrial land that is unserviced.

Services

Reductions to accounts missing services are dependent on the level of servicing available or missing. Some study areas have partial servicing or no servicing at all. No deductions will be given for lack of services to these study areas, as the model has already taken that into account by using sales that are unserviced.

Remnant or Utility lots

Assessed at 40% of the Market Value (where reductions are applied for both servicing and utility / remnant lots, only the greater of the two adjustments is applied).

Area in Use

Includes storage areas and site coverage (3:1 Floor Area Ratio of improvements).

AGI Lands

If services are available, AGI zoned land will have a minimum 12,140 m² (3 acres) assessed at Market Value.

AGI land less than 4047 m² (1 acre) is assessed at full market value.

Farmland

Corporate or private owned farmland vacant less than or equal to 10 hectares is assessed at the maximum Farmland (F/L) rate of \$786.90/ha.

Corporate or private owned farmland vacant greater than 10 hectares is assessed at the F/L rate of \$786.90/ha and adjusted for productivity.

**Industrial Land Assessment + Industrial Improvements Assessment +
Other Adjustments = Total Assessment**

Summary

The special-use properties are assessed using the cost approach to value and the resulting assessments were tested. The results indicated that our model predictions of value meet Provincial Quality Standards as set out in the *Matters Relating to Assessment and Taxation Regulation, AR 220/04*.

The assessment models, the process utilized, and the results are submitted annually to the Assessment Services Branch of the Department of Municipal Affairs for audit purposes. The audit is used to determine the accuracy of our predictions relative to the market place and is a direct reflection on the accuracy of our models.

The City of Edmonton has met all governing legislation, regulations and quality standards.