Calgary ASSESSMENT

# Residential Valuation Summary – 2018

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## Property Assessment

Property assessment is a value placed on your property for taxation purposes. Property assessments are prepared by The City of Calgary (The City) in accordance with the requirements of *the Municipal Government Act* (MGA), R.S.A. 2000, c. M-26 and the *Matters Relating to Assessment and Taxation Regulation* (MRAT), A.R. 203/2017. Under the MGA, The City must prepare assessments on an annual basis.

The City prepares assessments according to market values. Market value is defined in the MGA s.1(1)n as *"the amount that a property as defined in section 284(1)(r), might be expected to realize if it is sold on the open market by a willing seller to a willing buyer*". The market value-based valuation standard of preparing assessments are considered the most fair and equitable because similar properties are assessed in a similar manner, resulting in the owners of those similar properties paying a similar amount of property tax.

### Mass Appraisal

An appraisal is an estimate of value. All properties in Alberta are assessed according to a method called mass appraisal, and the market value of residential properties is calculated using mass appraisal. The mass appraisal process of valuing individual properties involves stratifying properties into groups of comparable properties. It identifies common property attributes within the groups and calibrates a uniform valuation model for each group using market information that incorporates those property attributes.

### Approach to Value

The following three approaches can be used to determine the market value-based assessment of a property:

- ***Direct sales comparison approach***. Market value is determined by comparing sales prices of similar properties to the property being assessed.
- ***Income approach***. This approach estimates a property's value based upon its potential income generation. This involves developing typical market rents, vacancies, expenses and capitalization rates to place a value on a group of similar properties.
- ***Cost approach***. This approach determines market value by looking at the replacement cost of a property, less market depreciation for improvements plus the market value for the land.

## Residential Property Assessment

In the case of single residential properties, the mass appraisal valuation approach used is the direct sales approach using a statistical tool called multiple regression analysis. Recording and analyzing sales that have occurred within a geographic area is the best approach to use in estimating the market value for single residential properties, especially due to readily available sales data. The income approach and cost approach were not used at all in the market area.

Multiple regression models include the following steps:

I. **Sales analysis and valuation.** Sales data for residential properties are obtained from the Land Titles Office (LTO) and the Calgary Real Estate Board's Multiple Listing Service (MLS). The City uses the LTO's registration date as the sale date for all transactions to ensure consistency.

All sales are analyzed to ensure that every sale used in the modeling process is valid. This is one of the most important steps in the modeling process since the use of invalid sales increases the likelihood of inaccurate model results. A valid sale is defined as a sale where:

- The buyer and seller are unrelated and typically motivated.
- Both parties are well informed and/or well advised, and acting in what they consider their best interest.
- A reasonable time is allowed for exposure in the open market.
- Payment is made in terms of cash or in terms of financial arrangements comparable thereto.
- The price paid represents the normal consideration for the property sold with typical financing and no special or creative sales concessions granted by anyone associated with the sale.

The above would usually exclude, but not be limited to, court-ordered transfers, sales between family members, sales that involve a nominal consideration, foreclosures, sales resulting from divorce or other duress, estate sales, expropriation, gifts, and sales between related companies and/or parties.

Occasionally, even if a sale is deemed valid it may have unique characteristics that cause it to be excluded from the mass appraisal process. A first time sale (FTS) is the initial sale of a newly-built property by a builder or developer. For numerous reasons, FTSs are usually excluded from the analyses conducted each year by The City, although not in every circumstance. The reasons for exclusion include: atypical and inconsistent timelines, atypical incentives and financing, and whether or not GST has been properly included in the sale price. In isolation, any of these issues could receive an adjustment to the 'net' sale price paid for a property and be a valid inclusion to the valuation process. The complication is that often properties will be subject to a combination of these issues. To further hinder any potential analysis, the details and dates of a purchase contract for a FTS are almost never accessible. Because of the large volume of sales that occur within Calgary each year, a proper analysis of FTSs is not realistically feasible. Rather than incorporating a flawed analysis into its assessment process, The City relies instead on more typical sales of property that occur after the initial sale.

There are only a few specific situations where a FTS might be used for analysis. The first would be in a new community where the properties have not started to resell. In this case the FTSs are the only transactions available to determine market value. Another situation would be where the new improvement has been sold using the typical MLS selling process, such as an in-fill or other redevelopment scenario. In that case there are certain circumstances that need to be met to ensure the sale is not incorporating a flaw into the assessment process. These circumstances include: the selling process occurs after construction is almost completely finished, the property is exposed widely on the open market (such as on the Calgary Real Estate Board listing website), it is sold by a realtor (or a realtor is advising the buyer), the property is registered with the Land Titles within a reasonable time frame of the negotiations concluding, and there are no atypical incentives or financing in the transaction.

Portfolio sales may also be excluded from the mass appraisal process. These sales are defined as transactions where two or more separate titles are sold together as one transaction. They may be excluded because is often impossible to accurately apportion the value between the two or more properties. One exception to this general rule is a condominium sale where a titled parking stall or titled storage unit is sold with a living unit.

Sales with unique property characteristics are sometimes excluded due to their one-of-a-kind nature as they may skew the results of the model. For instance, a house sitting on five acres of land may skew the model as typical houses have only a fraction of that area. Also, there may be too few sales of a certain property type for multivariate regression analysis to be meaningful. Generally, if there are less than five sales with specific characteristics, these sales are excluded from analysis. For instance, if there are only two sales of properties that back onto a particular park, those two sales may be excluded as the model may not be able to determine an accurate coefficient for properties backing onto that park.

Outliers are also removed from the analysis. Generally, outliers are sales that do not make sense or are unique in nature. For instance, if five similar houses on a street sold for $400,000 and one similar house on the street sold for $100,000 with no reasonable explanation, that $100,000 sale would be deemed an outlier and excluded. In order to do this, though, there must be a clear trend showing in the sales analysis.

II. **Review data attributes for consistency.** Properties, especially those that sold, are reviewed regularly to ensure The City's assessment database is correct. This is done by field inspections, interviews, permits (surveys), customer inquiries, and listings and sales data on MLS. Physical characteristics are validated by reviewing MLS listings for properties either up for sale or sold in the assessment time period. Additional validation occurs through assessor or assessment data officer site inspections or through property owner input. In some cases, building plans are reviewed to resolve any questions that occur.

III. **Determine changes in market conditions.** Property values can appreciate or depreciate over time due to changes in market conditions. Market conditions shift over time in response to changes in various economic factors. Thus, it is important to adjust sales to the market conditions of the valuation date. The Assessment business unit analyzes changes in market conditions monthly using a multiple regression model as well as variables representing all other significant market characteristics to determine a time adjustment. By including a time component in the model, the market adjustment can be isolated from individual property characteristics or location. The market adjustment is then applied against the sale price to create a time-adjusted sale price.

**IV.** **Determine which attributes contribute to the value reflected in the sales**. All valid sales are analyzed using multiple regression analysis. The model calibration (i.e. the actual adjustments for each property characteristic in the model) is obtained from analysis of the sales sample. The regression model is based on sales and property characteristic data found in the assessor's records.

## Residential Valuation Model

According to the *Matters Relating to Assessment and Taxation Regulation (MRAT)* S.27.1.c, a *"valuation model means the representation of the relationship between the property characteristics and their value in the real estate marketplace using a mass appraisal process"*. Multiple regression analysis was used to develop the residential property models under the direct sales comparison approach to value. The formula used in the multiple regression analysis is a standard linear formula:

**Assessed Value** = constant **+ (**variable$^1$ x coefficient$^1$**) + (**variable$^2$ x coefficient$^2$**) +...+ (**variable$^x$ x coefficient$^x$**) ± adjustments**

### Constant

This is the starting point that minimizes all errors in all the variables in the regression. All properties assessed within this mass appraisal model market area have a constant that is considered in all assessment calculations. The value of the constant is therefore considered a coefficient in that it represents a quantifiable relationship to the assessed value of a property. MRAT states in 27.3(2) that, "despite subsection (1), information that is required to be provided under section 299 or 300 of the Act [MGA] does not include coefficients".

### Variable

According to MRAT S.27.1.d, a variable is "*a quantitative or qualitative representation of a property characteristic used in a valuation model*". A 1,000 square foot living area above grade is a quantitative representation of the living area above grade property characteristic. An attached garage is a qualitative representation of the garage type characteristic. A minimal level of renovation is a qualitative representation of the renovation property characteristic.

### Coefficient

A coefficient is defined by MRAT 27.1 as "*a number that represents the quantified relationship of each variable to the assessed value of a property when derived through a mass appraisal process*". MRAT 27.3(2) states that "*Despite subsection (1), information that is required to be provided under section 299 or 300 of the Act [Municipal Government Act] does not include coefficients"*.

### Adjustments

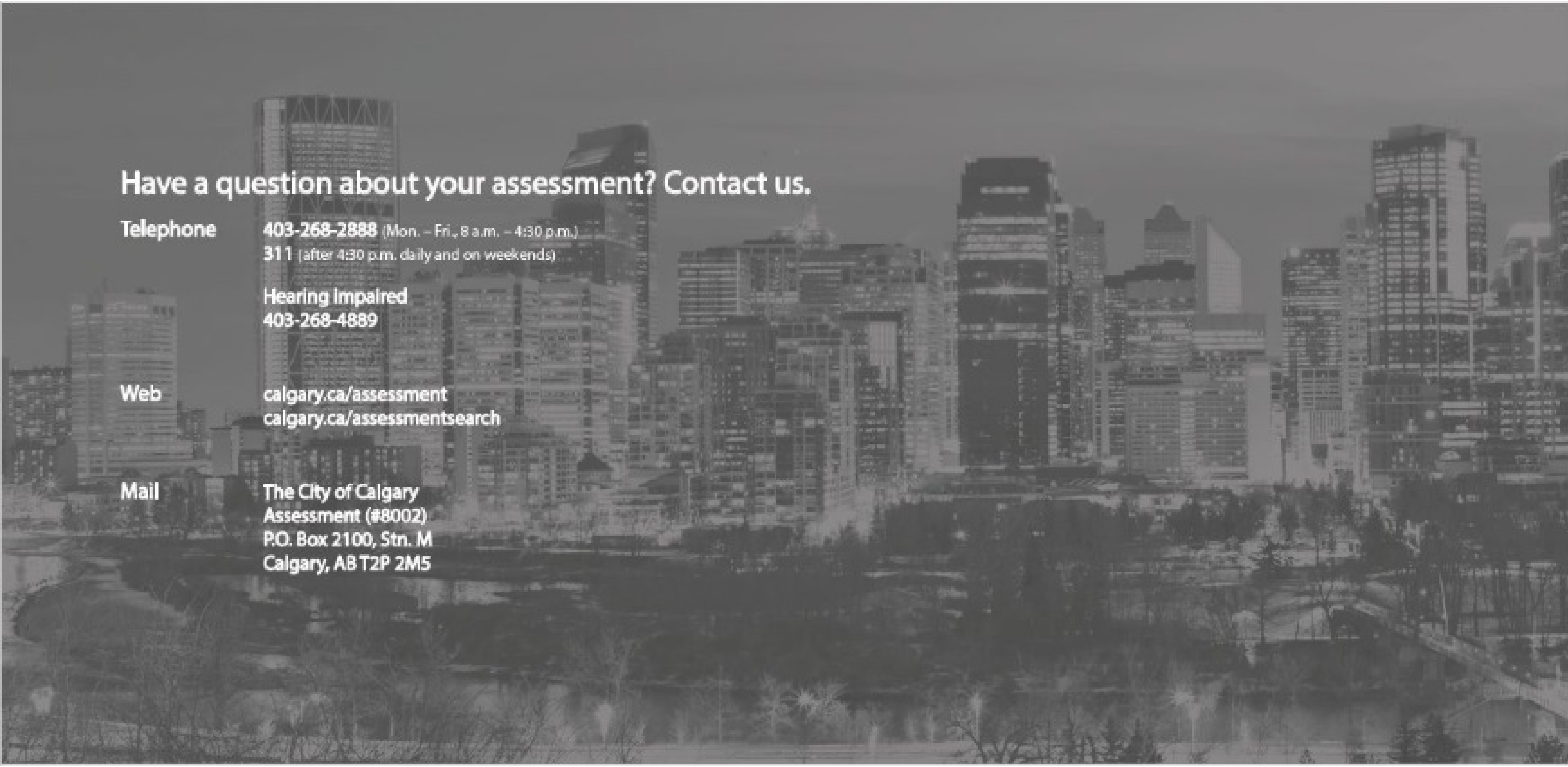
These can be positive or negative market value adjustments that are made outside of the value of the variables used in the valuation model that affect the assessment of a specific property or group of properties.

The legislation and regulation does not include coefficients because the process used to prepare a value for a property is not as relevant to an assessed person as the end result – a fair and equitable market value assessment. While coefficients are used in the process of preparing the market value of a property, they are developed using the same type of information that is released to each assessed person under Section 299 and 300 obligations. As such, the Assessment business unit provides anyone who wishes to confirm the fairness and/or equity of an assessment all the information they require through the Section 299 and 300 disclosures. This information includes the summaries of assessments and sales of properties in the market area that are available on The City's Assessment website (calgary.ca/assessment) and Assessment Search website (assessmentsearch.calgary.ca).

## Additional Assessment Information

If you had requested other additional assessment information to show how the assessor prepared the assessment of the subject property and this information is not contained within this report or any other attachments in response to your request, please contact us at 403-268-2888.

Note: This information is provided for property assessment interpretation purposes only. While The City of Calgary provides this information in good faith, it does not warrant, covenant, or guarantee the completeness and accuracy of the information. The City does not assume responsibility nor accept any liability arising from any use other than assessment interpretation. The information is maintained on a regular basis and reflects the contents of the Assessment database at the time it is provided. This information is proprietary and may not be reproduced without consent from The City of Calgary.



## Have a question about your assessment? Contact us.

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**311** (after 4:30 p.m. daily and on weekends)

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