

# 2019

## ASSESSMENT METHODOLOGY

### MULTI-RESIDENTIAL LAND

A summary of the methods used by the City of Edmonton in determining the value of multi-residential land properties in Edmonton for assessment purposes.

[edmonton.ca/assessment](http://edmonton.ca/assessment)

*Revised: February 21, 2019 (see revision history)*

Edmonton



## Table of Contents

<b>Scope</b>	<b>2</b>
<b>Introduction</b>	<b>2</b>
<b>Mass Appraisal</b>	<b>4</b>
Valuation Models	5
Approaches to Value	6
<b>Property Groups</b>	<b>7</b>
Sub-Group	7
Direct Sales Approach	7
Time Adjustment	8
Zoning	9
Density	9
Height	9
Floor Area Ratio	10
Effective Zoning	11
<b>Variables</b>	<b>12</b>
<b>Adjustments</b>	<b>13</b>
Servicing	13
Other Adjustments	14
<b>Site Improvements</b>	<b>15</b>
<b>Land Use Definitions</b>	<b>15</b>
<b>Sample Assessment Detail Report</b>	<b>16</b>
<b>General Practices</b>	<b>17</b>
<b>Methods to Adjust Comparables</b>	<b>17</b>
Quantitative Adjustments	17
Qualitative Analysis	18
<b>Revision History</b>	<b>18</b>
<b>References</b>	<b>19</b>
<b>Appendix</b>	<b>20</b>
Maps	20
Measure Conversion Chart	27
Zone Summary	28

## Scope

This guide is an aid in explaining how multi-residential land properties are valued for assessment purposes. It sets out the valuation method and procedure to derive market values. The information presented in this guide is aimed at deriving values for a group of properties with similar property characteristics. In some circumstances, not every property's valuation parameters will be covered.

The guide is intended as a tool; it is not intended to replace the assessor's judgment in the valuation process.



This icon signifies when legislation is quoted.

## Introduction

Property assessments in the City of Edmonton are prepared in accordance with the requirements of the *Matters Relating to Assessment and Taxation Regulation*, 2018, Alta Reg 203/2017, (hereinafter "MRAT"). This regulation establishes the valuation standard to be used, defines the procedures to be applied, and proposes objectives for the quality to be achieved in the preparation of assessments. The legislation requires the municipality to prepare assessments that represent *market value* by application of the *mass appraisal process*. All assessments are expected to meet quality standards prescribed by the province in the regulation.

Property assessments represent:

- an estimate of the value
- of the fee simple estate in the property
- as it existed on December 31, 2018
- would have realized if it had been sold on July 1, 2018
- on the open market and under typical market conditions
- from a willing seller to a willing buyer

The assessment is a prediction of the value that would result when those specific, defined conditions are met.

*"Fee simple interest [is] absolute ownership unencumbered by any other interest or estate...leased fee interest [is] the ownership interest held by the lessor, which includes the right to the contract rent specified in the lease plus the reversionary right when the lease expires....leasehold interest [is] the interest held by the lessee (the tenant or renter) through a lease conveying the rights of use and occupancy for a stated term under certain conditions."*

Appraisal Institute of Canada, *The Appraisal of Real Estate Third Canadian Edition*, Vancouver, Canada, 2010, page 6.4.

Both *market value* and *property*, along with additional terms are defined in the *Municipal Government Act*, RSA 2000, c M-26 (hereinafter the “MGA”) and *MRAT* :



s.284(1)(r) “**property**” means

- (i) a parcel of land
- (ii) an improvement, or
- (iii) a parcel of land and the improvements to it

MGA .s.284(1)(r)

s.1(k) “**regulated property**” means

- (i) land in respect of which the valuation standard is agricultural use value,
- (ii) designated industrial property, or
- (iii) machinery and equipment

MRAT s.1(k)

s.9(1) the **valuation standard** for the land and improvements is market value unless subsection (2)... applies

MRAT s.9(1)

s.1(1)(n) “**market value**” means 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

MGA s.1(1)(n)

s.5 An assessment of property based on **market value**

- (a) must be prepared using mass appraisal,
- (b) must be an estimate of the value of the fee simple estate in the property, and
- (c) must reflect typical market conditions for properties similar to that property

MRAT s.5

s.289(2) Each assessment must reflect

- (a) the characteristics and physical condition of the property on **December 31** of the year prior to the year in which a tax is imposed

MGA s.289(2)(a)

s.6 Any assessment prepared in accordance with the Act must be an estimate of the value of a property on **July 1** of the assessment year

MRAT s.6

s.1(g) “**mass appraisal**” means the process of preparing assessments for a group of properties using standard methods and common data and allowing for statistical testing

MRAT s.1(g)

## Mass Appraisal

Mass appraisal is the legislated methodology used by the City of Edmonton for valuing individual properties, and involves the following process:

- properties are stratified into groups of comparable property
- common property characteristics are identified for the properties in each group
- a uniform valuation model is created for each property group

**property characteristic:** *A feature that helps to identify, tell apart, or describe recognizably, a distinguishing mark or trait*

[www.thefreedictionary.com](http://www.thefreedictionary.com)



31(c) **“valuation model”** means the representation of the relationship between property characteristics and their value in the real estate marketplace using a mass appraisal process

MRAT s.31(c)

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.”*

*Property Appraisal and Assessment Administration, pg.88-89.*

For both mass appraisal and single-property appraisal, the process consists of the following stages:

	Mass Appraisal	Single Appraisal
<b>Definition and Purpose</b>	Mass appraisal is used to determine the assessment 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
<b>Data Collection</b>	Mass appraisal requires a continuing program to maintain a current database of property characteristics and market information.	The extent of data collection is specific to each assignment and depends on the nature of the client's requirements
<b>Market Analysis</b>	Mass appraisal is predicated on highest and best use	Market analysis includes the analysis of highest and best use
<b>Valuation Model</b>	Valuation procedures are predicated on groups of comparable properties	Subject property is the focus of the valuation. The analysis of comparable properties is generally six or less
<b>Validation</b>	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

## Valuation Models

A valuation model creates an equation of variables, factors and coefficients that explains the relationship between estimated market value and property characteristics.



*s.31(a) “**coefficient**” means a number that represents the quantified relationship of each variable to the assessed value of a property when derived through a mass appraisal process*

*(b) “**factor**” means a property characteristic that contributes to a value of a property;*

*(d) “**variable**” means a quantitative or qualitative representation of a property characteristic used in a valuation model*

**MRAT, s.31 (a), (b) and (d)**

*s.33(3) Information prescribed...does not include coefficients*

**MRAT, s.33(3)**

## Valuation Model

- variables are created from property characteristics
- analysis of how variables affect market value
- factors and coefficients are determined
- the resulting valuation models are applied to property characteristics

Depending on the property type multiple regression analysis or other mass appraisal techniques are used to determine variables, factors and coefficients.

***“Multiple Regression Analysis (MRA): a statistical technique used to analyze data to predict market value (dependent variable) from known values of property characteristics (independent variables)”***

*Property Appraisal and Assessment Administration, p. 653*

An assessed value is calculated by applying the appropriate valuation model to individual properties within a group.

## Approaches to Value

The most common approaches to determine market value are the direct sales, income, and cost. Each emphasizes a particular kind of market evidence.

### Direct Sales Approach

Typical market value (or some other characteristic) is determined by referencing comparable sales and other market data. It is often used when sufficient sales or market data is available. It may also be referred to as the Sales Comparison Approach.

### Income Approach

This approach considers the typical actions of renters, buyers and sellers when purchasing income-producing properties. This approach estimates the typical market value of a property by determining the present value of the projected income stream. Often used to value rental or leased property.

### Cost Approach

Typical market value is calculated by adding the depreciated replacement cost of the improvements to the estimated value of land. It is often used for properties under construction or when there is limited market data available.

## Property Groups

The use of a property determines the property groupings and the valuation model applied.



**use:** means the purpose or activities for which a piece of land or its buildings are designed, arranged, developed or intended, or for which it is occupied or maintained.  
Zoning Bylaw No. 12800, 207, s.6.117

### Multi-Residential

Multi-Residential group consists of investment properties with four or more dwelling units, each having one or more rooms accommodating sitting, sleeping, sanitary facilities and most often has a kitchen. Excluded from this group are those still under construction and dormitories.

### Sub-Group

Some property groups have sub-groups based on property characteristics. This guide is for the Multi Residential Land sub-group.

**Multi-Residential Land** is a vacant parcel of land zoned for multi residential uses. Some parcels may have minor improvements such as paving or fencing.

### Direct Sales Approach

For this property group, the assessment is determined using the Direct Sales approach. It is the most appropriate method of valuation for multi-residential land in the City of Edmonton because it mirrors the actions of buyers and sellers in the marketplace and sufficient sales data exists in order to derive reliable market estimates.

Support for the Direct Sales approach comes from several reputable sources, for example:

*This approach is usually the preferred approach for estimating values for residential and other property types with adequate sales. (IAAO, 2013, sec. 4.3).*

*The Direct Comparison approach provides the most credible indication of value for owner-occupied commercial and industrial properties, i.e., properties that are not purchased primarily for their income-producing characteristics. These types of properties are amenable to direct comparison because similar properties are commonly bought and sold in the same market. (Appraisal Institute of Canada [AIC], 2010, p. 13.4).*

*Appraisers should rely on several sold properties as comparable sales. Three to five comparables are usually adequate, but a larger number improves confidence in the final estimate, increases the awareness of patterns of value, and stabilizes assessments over time. (UBC, 2009, p. 7.2).*



## Sales

The City of Edmonton validates all land title transactions (sales). The validation process can include site inspections, interviews with parties involved, a review of land title documents, corporate searches, third party information, and sale validation questionnaires.

The City of Edmonton reviews sales occurring from July 1, 2013 to June 30, 2018 for valuation of multi-residential land properties. Time adjustments are applied to sale prices to account for any market fluctuations occurring between the sale date and the legislated valuation date.

**Sale price reflects the condition of a property on the sale date and may not be equal to the assessment.**

## Time Adjustment

Time adjustment refers to the adjustment applied to the sale price of a property to account for the effects of price changes reflected in the market between the date of sale and the July 1, 2018 valuation date. The time adjustments are shown below.

2019 Time Adjustment Factors for Multi-Residential Land									
Months	TAF	Months	TAF	Months	TAF	Months	TAF	Months	TAF
Jul 13	1.1591	Jul 14	1.0788	Jul 15	1.0243	Jul 16	1.0121	Jul 17	1.0000
Aug 13	1.1522	Aug 14	1.0724	Aug 15	1.0233	Aug 16	1.0111	Aug 17	1.0000
Sep 13	1.1453	Sep 14	1.066	Sep 15	1.0223	Sep 16	1.0101	Sep 17	1.0000
Oct 13	1.1385	Oct 14	1.0586	Oct 15	1.0212	Oct 16	1.0091	Oct 17	1.0000
Nov 13	1.1317	Nov 14	1.0512	Nov 15	1.0202	Nov 16	1.0081	Nov 17	1.0000
Dec 13	1.1249	Dec 14	1.0439	Dec 15	1.0192	Dec 16	1.0071	Dec 17	1.0000
Jan 14	1.1182	Jan 15	1.0366	Jan 16	1.0182	Jan 17	1.006	Jan 18	1.0000
Feb 14	1.1116	Feb 15	1.0294	Feb 16	1.0172	Feb 17	1.005	Feb 18	1.0000
Mar 14	1.1049	Mar 15	1.0284	Mar 16	1.0162	Mar 17	1.004	Mar 18	1.0000
Apr 14	1.0983	Apr 15	1.0274	Apr 16	1.0151	Apr 17	1.003	Apr 18	1.0000
May 14	1.0918	May 15	1.0264	May 16	1.0141	May 17	1.002	May 18	1.0000
Jun 14	1.0853	Jun 15	1.0253	Jun 16	1.0131	Jun 17	1.001	Jun 18	1.0000

## Zoning

The rules and regulations for land development within Edmonton are contained in the Zoning Bylaw, No. 12800.



*s.6.123 **zone:** means a specific group of listed Uses and Development Regulations which regulate the Use and Development of land within specific geographic areas of the City...*

*Zoning Bylaw No. 12800, 2017, s. 6.123*

A multi-residential zone summary is located in the appendix.

Multi-residential land use zones vary with regard to allowable Density, Height, and Floor Area Ratio (FAR).

## Density



*s.6.24 **density:** means, when used in reference to Residential and Residential-Related development, the number of Dwellings on a Site expressed as Dwelling per hectare.*

*Zoning Bylaw No. 12800, 2017 s.6.24*

## Height



*s.6.53 **height:** means a vertical distance between 2 points.*

*Zoning Bylaw No. 12800, 2017 s.6.53*

### Floor Area Ratio

Floor area ratio (FAR) is the factor used to determine the total living area that is allowed to be built. The FAR is calculated as follows:

Floor Area Ratio (FAR) multiplied by total site area = **total allowable living area**

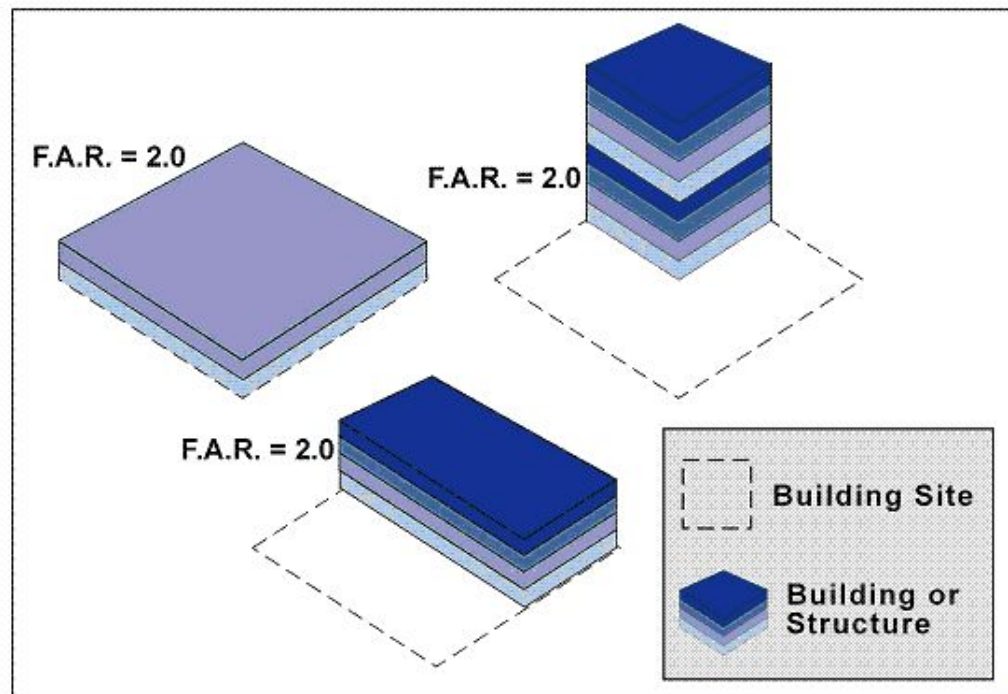


**s.6.39 floor area ratio:** means the numerical value of the Floor Area of the building or structure relative to the Site upon which it is located, excluding:

- A. Basement areas used exclusively for storage or service to the building, or as a Secondary Suite;
- B. Parking Areas below ground level;
- C. Walkways required by the Development Officer;
- D. Floor Areas devoted exclusively to mechanical or electrical equipment servicing the development, divided by the area of the Site; and
- E. indoor Common Amenity Area, divided by the area of the Site

*Zoning Bylaw No. 12800, 2017 s.6.39*

*Bylaw 15414  
May 25, 2010*



## Effective Zoning

Not all property conforms to the zoning use set out in the Zoning Bylaw. In these cases an effective zoning is applied to reflect the current legal use and/or development potential of the property. The effective zoning may differ from the actual zoning. The two most common scenarios where effective zoning may be applied are:

- **Actual zoning is Direct Control (DC) or other specialized zoning.** In these cases the most comparable multi-residential zoning will be applied as the effective zoning. For example, if a DC1 zoning provision allows for development most similar to those with an RA7 zoning, that property will have an effective zoning of RA7 even though the actual zoning is DC1.
- **Legal non-conforming use:** A legal non-conforming use is one that was lawfully in existence before a new zoning bylaw came into effect. Since the lawful use existed before the zoning was changed its legal non-conforming use may continue and an effective zone reflecting current use is applied.



*643(1) If a development permit has been issued on or before the day on which a land use bylaw or a land use amendment bylaw comes into force in a municipality and the bylaw would make the development in respect of which the permit was issued a nonconforming use or nonconforming building, the development permit continues in effect in spite of the coming into force of the bylaw*

*MGA, s. 643(1)*

In cases where a legal non-conforming use is discontinued for six (6) or more months, any future use must conform to the current Zoning Bylaw.



*643(2) A non-conforming use of land or a building may be continued but if that use is discontinued for a period of 6 consecutive months or more, any future use of the the land or building must conform with the land use bylaw then in effect.*

*MGA, s. 643(2)*

## Variables

Below is the list of variables that affect the assessment value for 2019.

Market area	Lot size
Study area	Ravine influence
River valley influence	Effective zoning

**Market area:** Market area is a geographic area defined using location boundaries. See map titled *2019 Multi-Residential Market Areas* in appendix.

**Lot size:** Lot size is the area of a specific parcel determined through a Geographic Information System (GIS) and Alberta Land Titles.

**Study area:** Study area is a sub-group or sub-sector of properties in neighbourhoods or a series of neighbourhoods that show different market trends. These properties are assigned to study areas to more accurately analyze and value the market trends in these locations.

The 2019 multi-residential land study areas are:

- Downtown
- 104AVE
- Keswick
- ICE Phase 2
- Armature
- Jasper Avenue West

Maps for each of these study areas are located in the appendix of this document.

**Ravine influence:** A property is in close proximity to a ravine (land included in the City's Ravine System Protection Overlay  
[[https://webdocs.edmonton.ca/zoningbylaw/ZoningBylaw/Part2/Overlays/811\\_North\\_Saskatchewan\\_River\\_Valley\\_and\\_Ravine\\_System\\_Protection\\_Overlay.htm](https://webdocs.edmonton.ca/zoningbylaw/ZoningBylaw/Part2/Overlays/811_North_Saskatchewan_River_Valley_and_Ravine_System_Protection_Overlay.htm)]).

- **Abutting:** Property backs directly onto a ravine or is separated from it only by parks, green spaces or walking trails.
- **Across from:** Property is separated from a ravine by a road or lane normally used by local traffic. The separation by the local road or lane may also include parks, green spaces and walking trails.

**River valley influence:** A property is in close proximity to or within the boundaries of the North Saskatchewan River Valley (land included in the City's protection overlay  
[[https://webdocs.edmonton.ca/zoningbylaw/ZoningBylaw/Part2/Overlays/811\\_North\\_Saskatchewan\\_River\\_Valley\\_and\\_Ravine\\_System\\_Protection\\_Overlay.htm](https://webdocs.edmonton.ca/zoningbylaw/ZoningBylaw/Part2/Overlays/811_North_Saskatchewan_River_Valley_and_Ravine_System_Protection_Overlay.htm)])

- **Abutting:** Property backs directly onto the boundary of the river valley or is separated from it only by parks, green spaces, wooded areas, walking trails or golf courses. Where a property is located within the river valley (for example, in neighbourhoods like Rosedale, Riverdale and Cloverdale), it receives an abutting river valley influence factor if it backs

directly onto the bank of the North Saskatchewan River or is separated from the bank by parks, green spaces, wooded areas, walking trails and golf courses.

- **Across from:** Property is separated from the boundaries of the river valley by a road or lane normally used by local traffic. This separation may also include parks, green spaces, wooded areas, walking trails and golf courses.

**Effective zoning:** Effective zoning is an internal coding applied to reflect the current use and/or development potential of a parcel. Effective zoning will generally reflect the actual zoning of a parcel, but may differ on properties with a legal non-conforming use, Direct Control zoning or in other limited circumstances. See the *Effective Zoning* section for more information. The effective zonings utilized in the multi-residential land group are as follows:

- RF5
- RF5g
- RF6
- RA7
- RA8
- RA9
- RMH
- RMU
- UW
- HA
- HDR

## Adjustments

Adjustments may be applied to properties with atypical influences on a site specific basis to recognize their effect on value. Adjustments include but are not limited to:

### Servicing

The following services have been analyzed for 2019 valuation purposes: street lighting, sanitary sewer, storm sewer, water, paving, sidewalk, and curb and gutter.

All properties are valued as fully serviced. If a property lacks a specific service, it is adjusted based on the values presented in the table below. If a property is entirely unserviced a total of -30% adjustment is applied to the account:

Services	Servicing Cost Adjustment
No street lighting	0.60%
No sanitary sewer	6.30%
No storm sewer service	11.40%
No water service	6.30%
No paving (to property line)	3.60%
No sidewalk, curb and gutter	1.80%

**Street lighting:** Street lighting is considered as part of the public road and walkway access infrastructure.

No: Our records show that street lighting does not exist as part of the public road and walkway access for the property.

**Sanitary sewer:** Sanitary sewers refer to the public infrastructure (either separate or combined with storm sewers) provided for a property to collect sanitary waste water.

No: Our records show that sanitary sewers do not exist to collect sanitary waste water from the property.

**Storm sewer:** Storm sewers refer to the public infrastructure (either separate or combined with sanitary sewers) provided for a property to collect storm water.

No: Our records show that storm sewers do not exist to collect storm water from the property.

**Water service:** Water service refers to the public water supply infrastructure available to a property. Property is considered serviced if a branch (stub) line from the City of Edmonton or EPCOR main line to the property line exists.

No: Our records show the property is without water supply services.

**Paving:** Paving of public roads is considered as part of the public roadway access infrastructure for a property.

No: Our records show that a paved road does not exist as part of the public roadway access for the property.

**Sidewalk, curb and gutter:** Sidewalks and/or curbs and gutters are part of the public road access infrastructure adjacent to a property, depending on the typical standards for a given street or subdivision.

No: Our records show that sidewalks, and/or curbs and gutters do not exist as part of the public road and walkway access for the property.

## Other Adjustments

The following adjustments were made to the below characteristics, with the exception of utility remnant lot:

- **Minor-** 5% negative adjustment
- **Moderate-** 10% negative adjustment
- **Major-** 15% negative adjustment
- **Extreme-** 20% negative adjustment

**Lot access:** Landlocked properties that do not have reasonable future accessibility to a city roadway.

**Easement:** An easement is a legal encumbrance registered against the title of land allowing the right to use and/or enter onto the real property of another without possessing it. Easements may include easements for access, locating utilities, or otherwise limiting or precluding the use of the area subject to the easement.

**Restrictive covenant:** An agreement that restricts the use or occupancy of all or part of a property and that may be registered on the title to a property and runs with the land.

**Shape influence:** An adjustment is only applied if the shape of a property hinders the developability of the property.

**Topography:** An adjustment is only applied if the topography of a property hinders the developability of the property.

**Utility remnant lot:** A remnant lot is a property that is too small or oddly shaped to easily support independent development.

**Contamination:** Contamination refers to property that has been affected by environmental contamination which includes adverse conditions resulting from the release of hazardous substances into the air, surface water, groundwater, or soil.

## Site Improvements

Some parcels may have site improvements such as paving or fencing. Typical market value is calculated by adding the depreciated replacement cost of the improvements to the estimated value of land.

**Fencing:** A multi-residential land property may be improved with fencing. Fencing on multi-residential land was valued using the Marshall & Swift Costing Manual.

**Pavement:** A multi-residential land property may be improved with hard surfacing, such as asphalt. Pavement on multi-residential land properties was valued using the Marshall & Swift Costing Manual.

## Land Use Definitions

**Land use (LUC):** Land use is an internal coding used to categorize the current use of a property. The amount of a property subject to any specific LUC will be expressed as a percentage of total assessed value. For 2019, the LUC does not affect the valuation of multi-residential land.

Multi-residential land may have the following LUCs:

LUC	Description		LUC	Description
530	Paved/fenced parking lot for non-residential use		531	Unpaved/unfenced parking lot for non-residential use
536	Paved/fenced parking lot/structure for multi-residential use		537	Unpaved/unfenced parking lot for multi-residential use
912	Undeveloped multi-residential land			

**Type:** Type specifies whether the variable applies to the account, unit, site, or building.

1. Account - An adjustment that is applied to the property on the account. The property on the account includes the parcel of land and the improvements.
2. Unit - An adjustment that is applied to a condominium unit.
3. Site - An adjustment that is applied to the land.
4. Building - An adjustment that is applied to the building.



## Sample Assessment Detail Report

### Property Assessment Detail Report Assessment and Taxation



Account **9999999**

Report Date	January 2, 2019
2019 Assessed Value	<b>\$11,168,500</b>
Date of Issue	January 2, 2019
Property Address	11111 111 STREET NW
Legal Description	Plan: 1925753 Block: 2 Lot: 33
Neighbourhood	Oliver
Assessment Class	OTHER RESIDENTIAL
Land Use	100% Undeveloped multi-residential land
Zoning	DC1 - Direct Development Control District
Effective Zoning	RA9 - High Rise Apartment District
Taxable Status	January 1 - December 31, 2019; FULLY TAXABLE
Unit of Measurement	IMPERIAL (feet, square feet)

page 1 of 1

### Factors Used to Calculate Your 2019 Assessed Value

		MARKET VALUE APPROACH	DIRECT SALES
LAND			
Variable	Factor	Type	
Lot size	101533	Site	
Market area	1C	Site	
Study area	104AVE	Site	
Effective zoning	RA9	Site	
		Land Value	<b>11,168,593</b>

Legal: This information is collected for property assessment purposes only. While the City of Edmonton provides this information in good faith, it does not warrant, covenant, or guarantee the completeness and accuracy of this 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 per the date on this document. This information is proprietary and may not be reproduced without consent from the City of Edmonton.

Visit [myproperty.edmonton.ca](http://myproperty.edmonton.ca) • email [assessment@edmonton.ca](mailto:assessment@edmonton.ca) • call 311 (780-442-5311)

## General Practices

**The most common unit of comparison for multi-residential land properties is value per square foot of lot size.**

**Averages:** As no two multi-residential land properties are identical, **averages can become misleading**; however, where differences are **minor** averages can be useful. Numerous sales must be considered and appropriately weighted to arrive at a reasonable estimate of value. According to mass appraisal theory, *Appraisers should rely on several sold properties as comparable sales. Three to five comparables are usually adequate, but a larger number improves confidence in the final estimate, increases the awareness of patterns of value, and stabilizes assessments over time.* (UBC, 2009, p. 7.2).

**Onus:** Proving the incorrectness of an assessment is the responsibility of the individual alleging it. This individual must provide sufficiently compelling evidence on which a change to the assessment can be based.

**Post facto sales:** A sale which occurs after the valuation date of July 1, 2018 may be considered for market trending only. Accordingly, the City of Edmonton does not use post facto sales for modeling.

## Methods to Adjust Comparables

There are two techniques for adjusting comparables: **quantitative** and **qualitative**.

### Quantitative Adjustments

Each characteristic of a property can be measured or quantified by a mathematical expression and adjusted for.

*Several techniques are available to quantify adjustments to the sale prices of comparable properties: data analysis techniques (including paired data analysis, grouped data analysis, and secondary data analysis, statistical analysis, graphic analysis... (AIC, 2010, p. 14.2).*

*In the direct comparison approach, the best comparables are those sales that require the least **absolute** adjustment.* (AIC, 1995, p. 245).

Quantitative adjustments involve adjusting a known value (sale price for example) by adding or subtracting an amount that a given characteristic adds to or subtracts from that value. A quantitative adjustment should be made for each characteristic that differs between the subject property and the comparable property.

Due to the legislative requirement to use mass appraisal, the City has used statistical analysis to determine annual assessments.

*“coefficient” means 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 s.31(a)*

The City is not required to disclose the coefficients. In the absence of quantitative adjustments, an alternative technique is qualitative analysis.

## Qualitative Analysis

Each comparable property is compared with the subject property on an overall basis. In a qualitative analysis, comparable properties are identified as inferior, similar, or superior overall to the subject property in order to bracket the probable value range of the subject property.

*When a sale property is considered to offer important market evidence but finding the means to make quantitative adjustments is lacking, the appraiser may turn to other major direct comparison techniques, **qualitative analysis**. (AIC, 2005, p. 19.10).*

*In reconciling value indications in the direct comparison approach, the appraiser evaluates the number and magnitude of adjustments and the importance of the individual elements of comparison in the market to judge the relative weight a particular comparable sale should have in the comparative analysis. (AIC, 2010, p. 13.16 ).*

*Qualitative analysis recognizes ... the difficulty in expressing adjustments with mathematical precision. (AIC, 2010, p. 14.6 ).*

*...reliable results can usually be obtained by bracketing the subject between comparables that are superior and inferior to it. (AIC, 2010, p. 14.7).*

*If one or two comparable properties require fewer total adjustments than the other comparables, an appraiser may attribute greater accuracy and give more weight to the value indications obtained from these comparables, particularly if the magnitude of the adjustments is approximately the same. (AIC, 2010, p. 13.16).*

## Revision History

February 21, 2019 - removed Provincial Quality Standards section

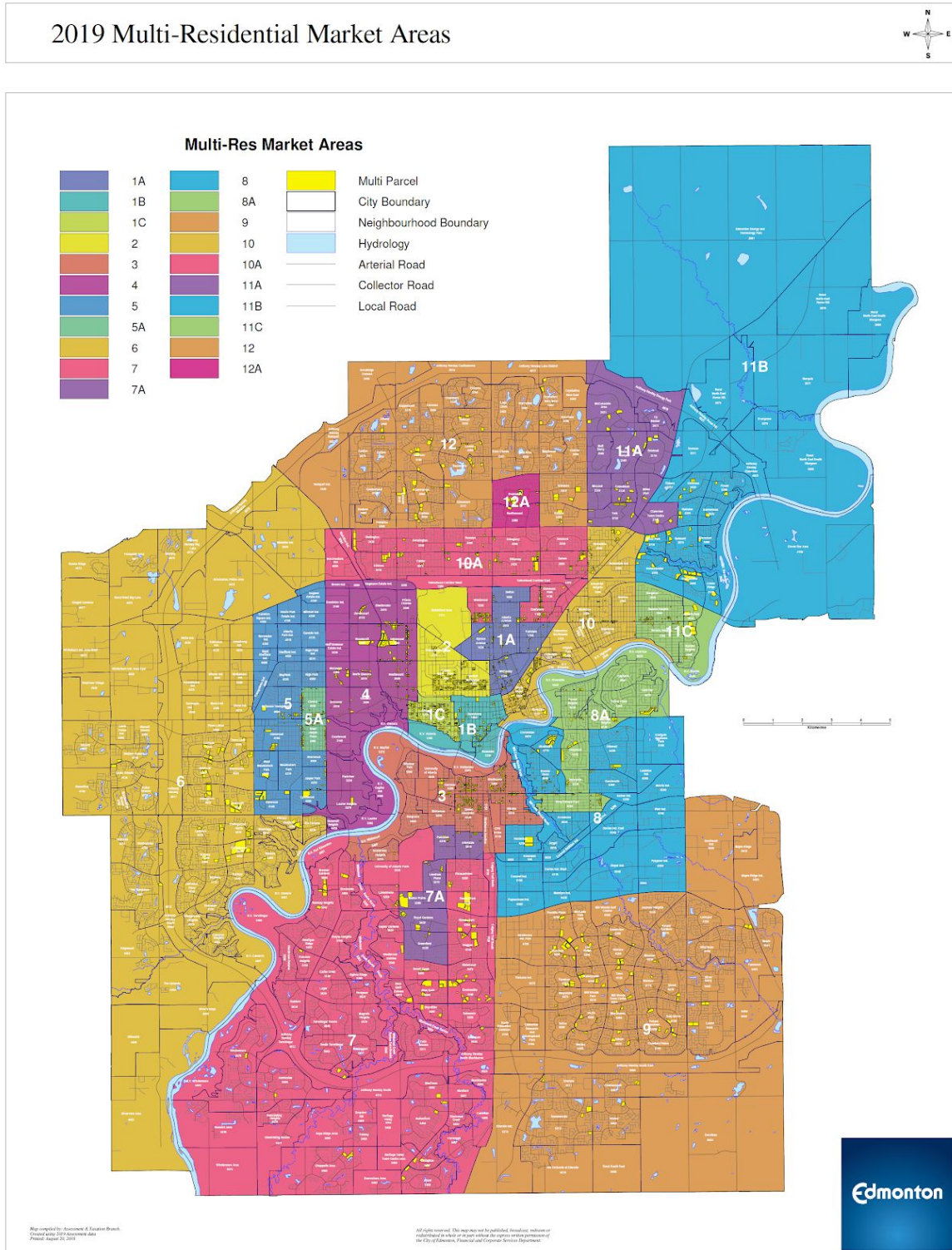
---

## References

- Appraisal Institute of Canada (1995). *The Appraisal of Real Estate Third Canadian Edition*. Vancouver, Canada.
- Appraisal Institute of Canada (2005). *The Appraisal of Real Estate Third Canadian Edition*. Vancouver, Canada.
- Appraisal Institute of Canada (2010). *The Appraisal of Real Estate Third Canadian Edition*. Vancouver, Canada.
- City of Edmonton. (2017). *Zoning Bylaw No. 12800*. Retrieved from City of Edmonton: [http://webdocs.edmonton.ca/InfraPlan/zoningbylaw/bylaw\\_12800.htm](http://webdocs.edmonton.ca/InfraPlan/zoningbylaw/bylaw_12800.htm)
- Eckert, J., Gloudemans, R., & Almy, R. (1990). *Property Appraisal and Assessment Administration*. Chicago, Illinois: International Association of Assessing Officers.
- Farlex. (2015). Retrieved from The Free Dictionary: [www.thefreedictionary.com](http://www.thefreedictionary.com)
- International Association of Assessing Officers (2013). *Standard on Mass Appraisal of Real Property*. Kansas City, the United States of America.
- Province of Alberta. (2018). *Matters Relating to Assessment and Taxation Regulation*. Edmonton, AB: Queen's Printer.
- Province of Alberta. (2018). *Municipal Government Act*. Edmonton, AB: Queen's Printer.
- University of British Columbia, Sauder School of Business (2009). *Advanced Computer Assisted Mass Appraisal*. Vancouver, Canada.

## Appendix

### Maps



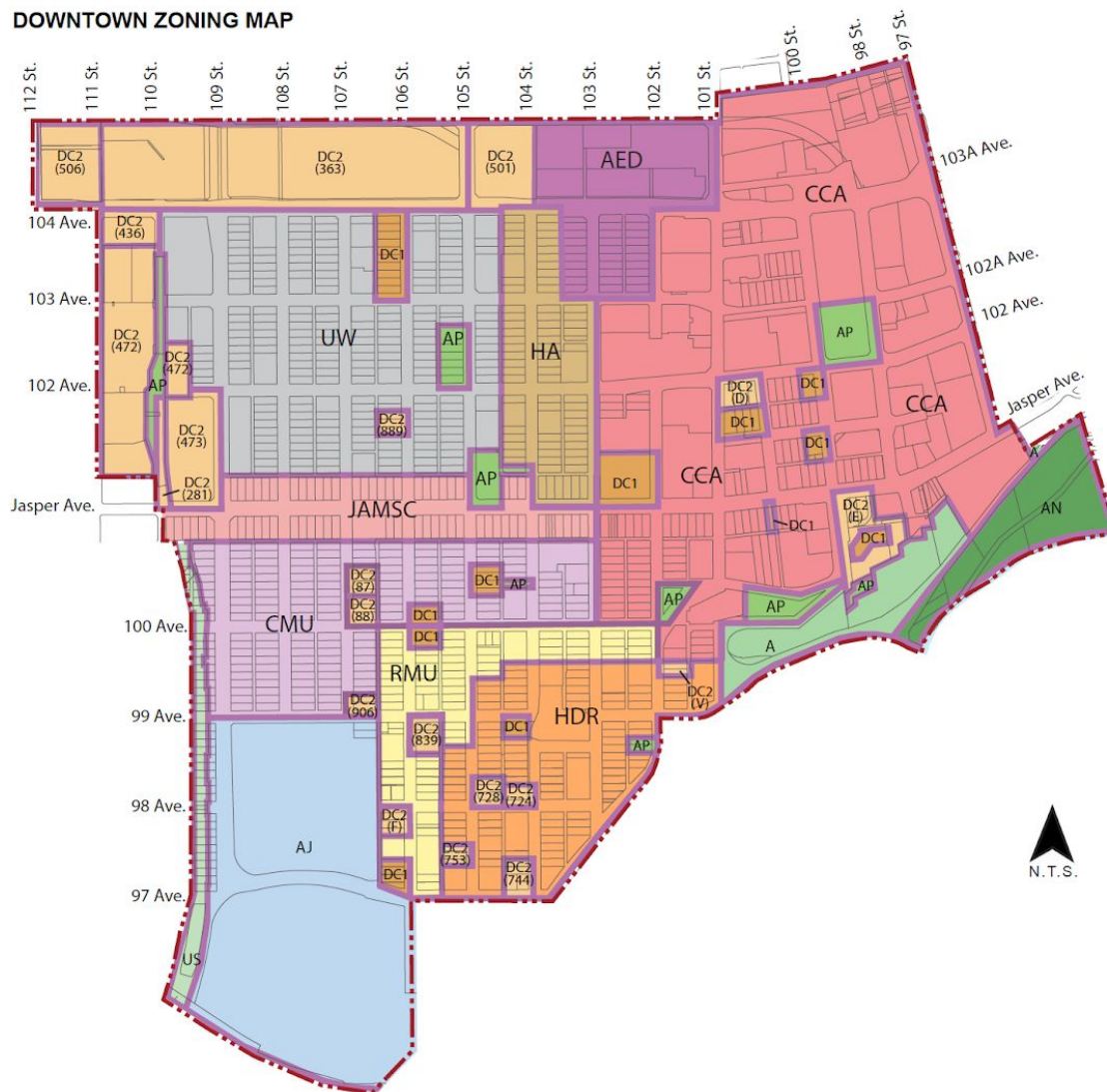


## Study Area - Downtown

### Special Area, Downtown

Appendix 1 to Section 910 of Bylaw 12800 as amended by Bylaw 15202 and subsequent appropriate Bylaws.

#### DOWNTOWN ZONING MAP



## Legend

### Special Area Zones

- AED Arena Entertainment District
- CCA Core Commercial Arts
- CMU Commercial Mixed Use
- HA Heritage Area
- HDR High Density Residential
- JAMSC Jasper Avenue Main Street Commercial
- RMU Residential Mixed Use
- UW Urban Warehouse

### Standard Zones

- US Urban Services
- A Metropolitan Recreation
- AJ Alternative Jurisdiction
- AN River Valley Active Node
- AP Public Parks

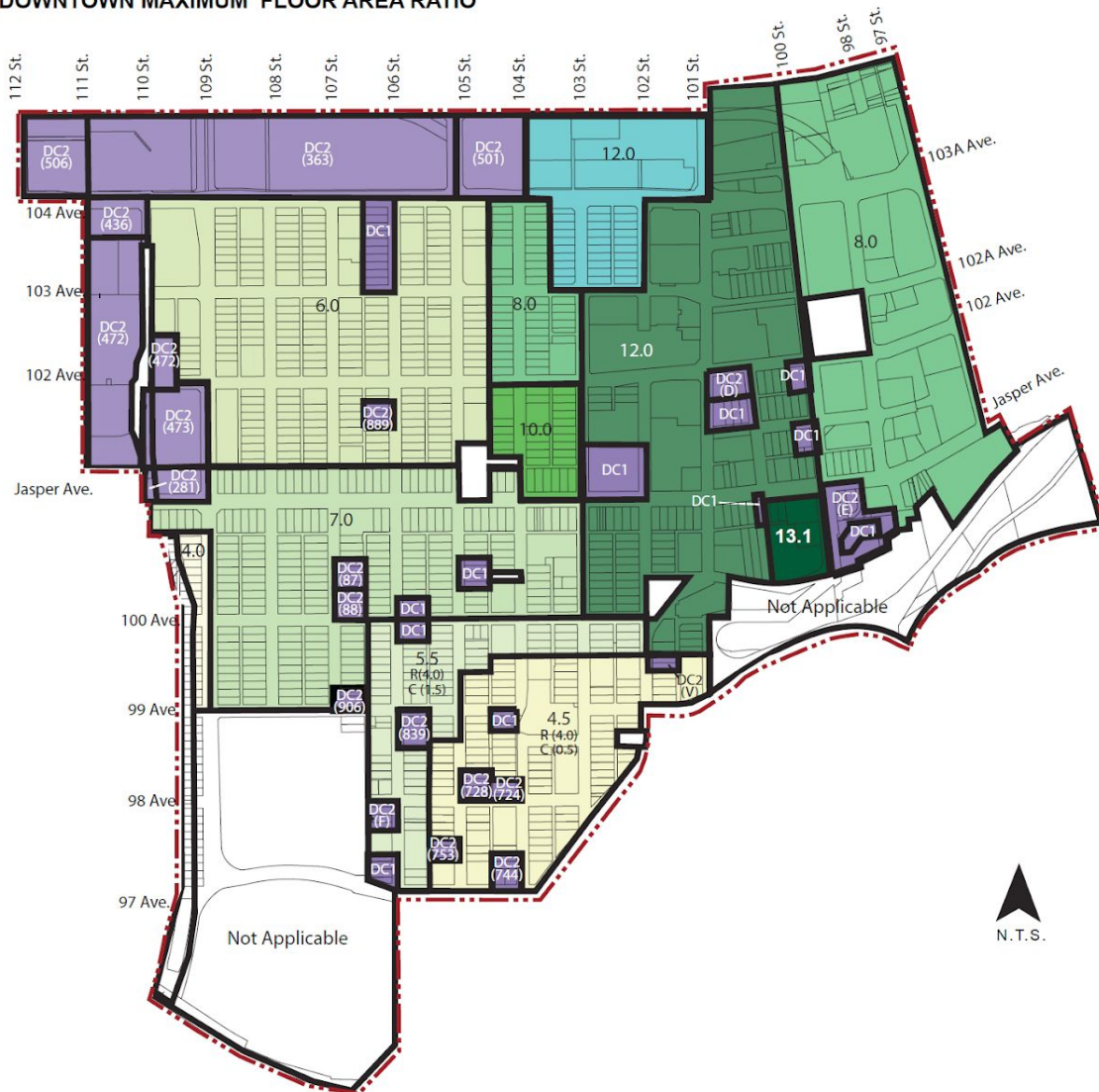
### Direct Control Provisions

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

### Special Area, Downtown

Appendix 2 to Section 910 of Bylaw 12800 as amended by Bylaw 15202 and subsequent appropriate Bylaws.

### DOWNTOWN MAXIMUM FLOOR AREA RATIO



### Legend

- DC1 & DC2 (Direct Development Control Provisions)  
FAR individually approved/established by City Council
- Not Applicable

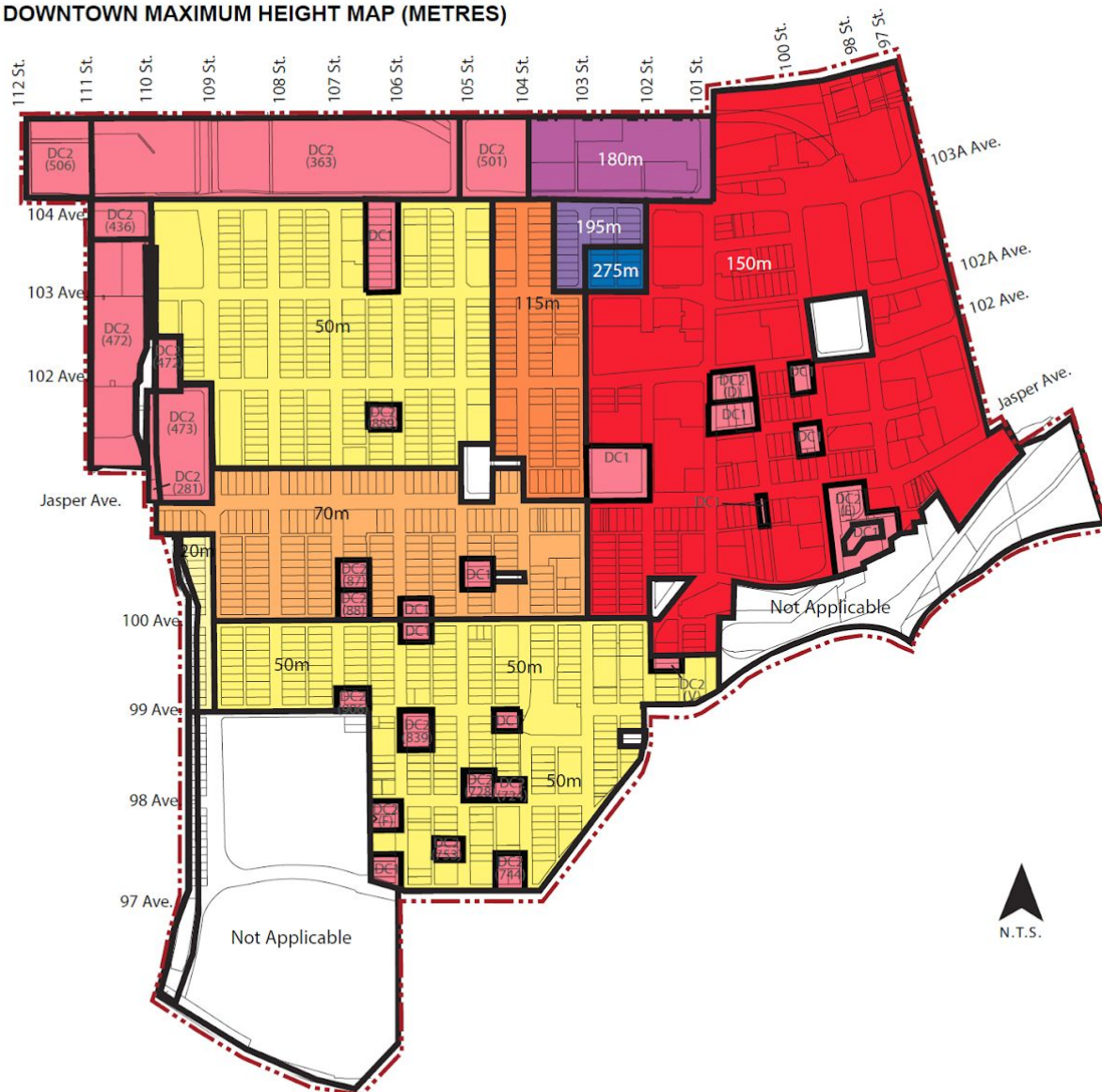
Total FAR → 8.0  
R (6.0) ← Residential FAR  
C (2.0) ← Commercial FAR

NB: Maximum F.A.R. shown does not include additional F.A.R. for specific uses or discretion, where granted by the Development Officer.

### Special Area, Downtown

Appendix 3 to Section 910 of Bylaw 12800 as amended by Bylaw 15202 and subsequent appropriate Bylaws.

### DOWNTOWN MAXIMUM HEIGHT MAP (METRES)



### Legend

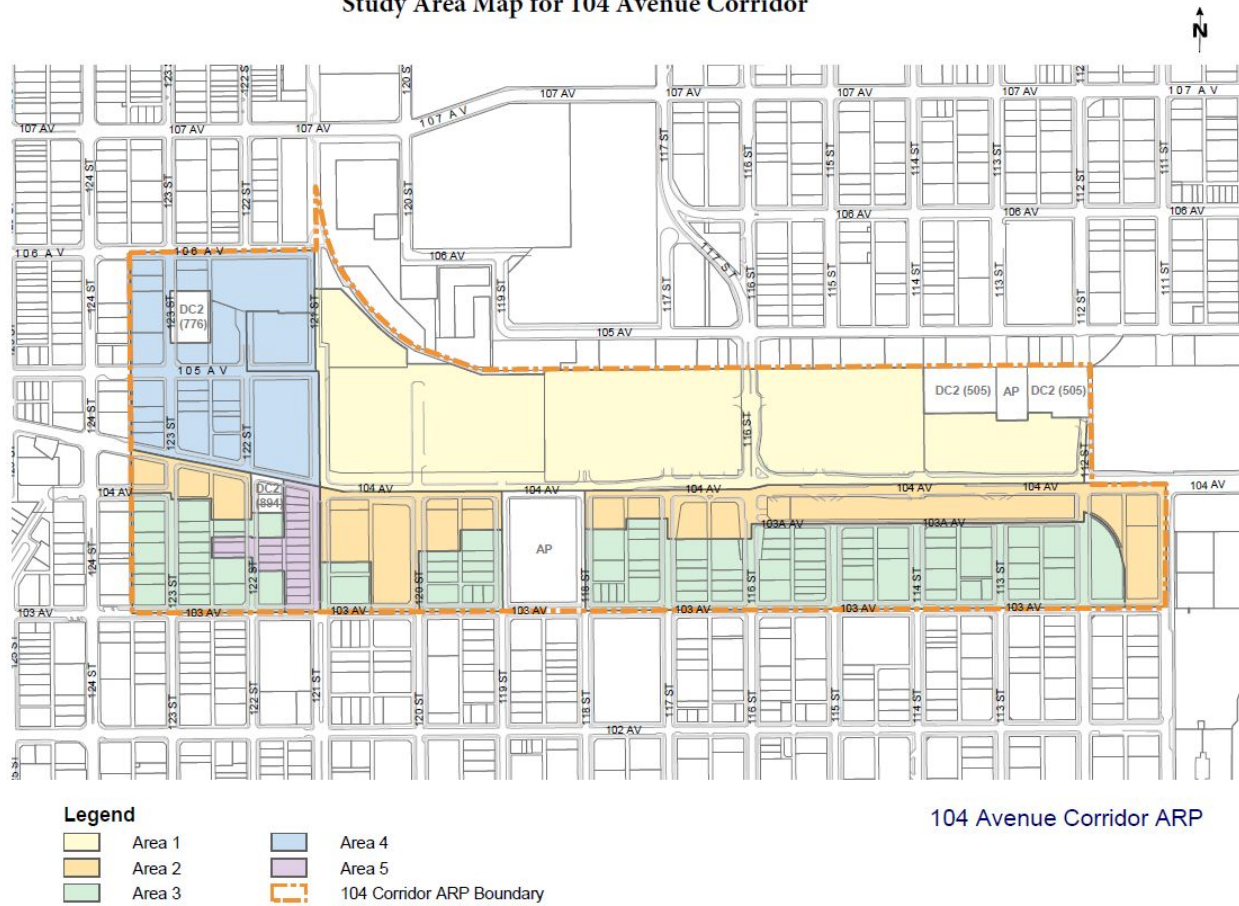
- DC1 & DC2 (Direct Development Control Provisions)  
Heights individually approved/established by City Council and remain unaltered
- Not Applicable

NB: Maximum height shown does not include discretionary height, where granted by the Development Officer.



## Study Area - 104AVE

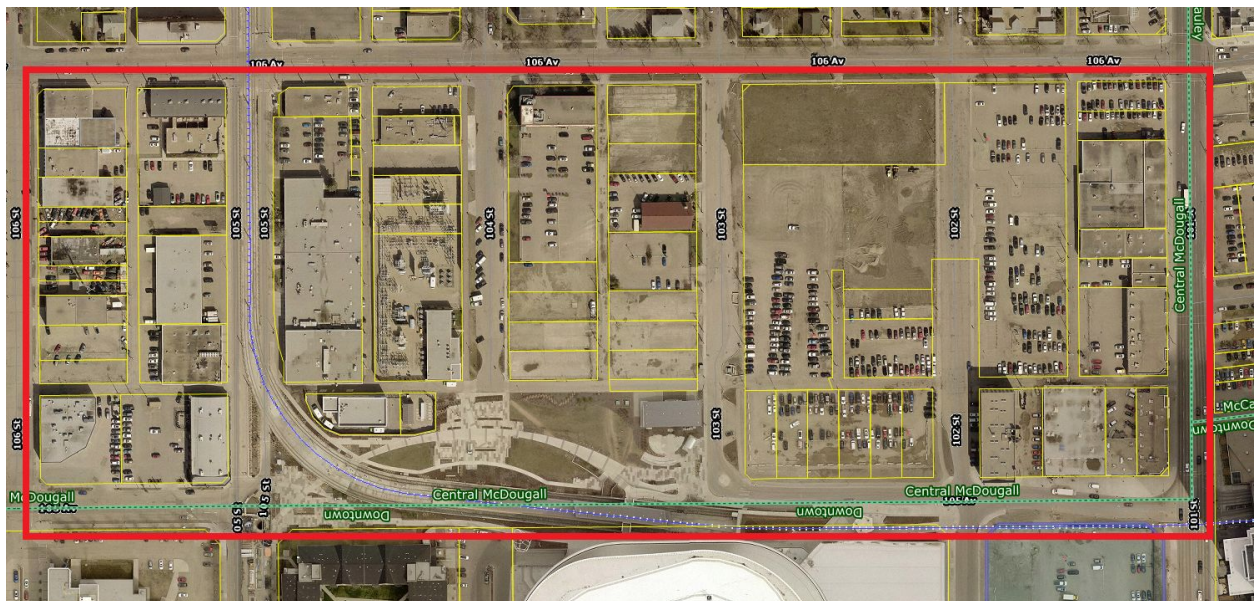
Study Area Map for 104 Avenue Corridor



## Study Area - Keswick



## Study Area - ICE Phase 2

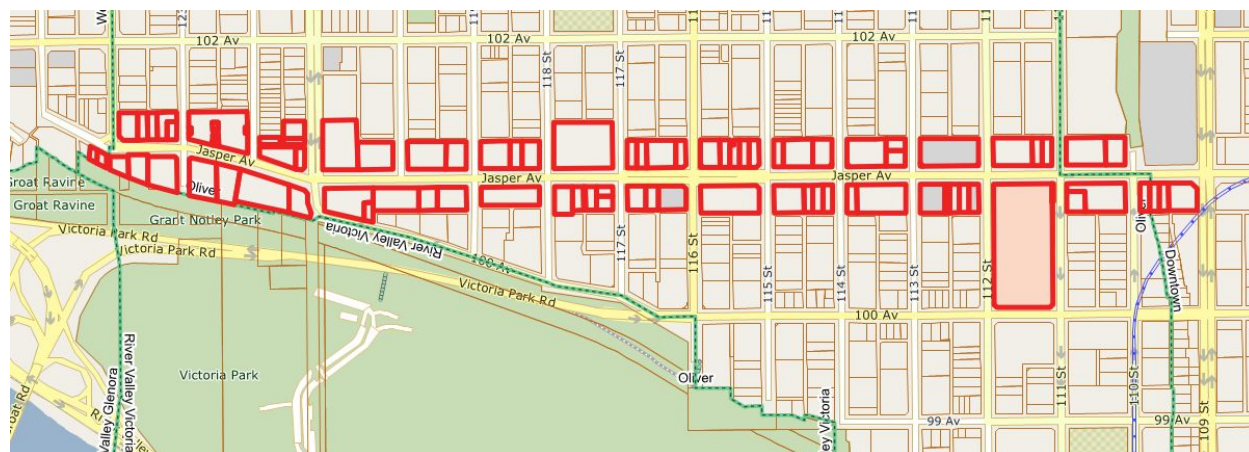




## Study Area - Armature



## Study Area - Jasper Avenue West



## Measure Conversion Chart

Imperial to Metric – Length	Imperial to Metric – Area
<b>1 inch (in) = 2.54 centimetres (cm)</b>	<b>1 square foot (sqft) = 0.09290 square metre (m<sup>2</sup>)</b>
<b>1 foot (ft) = 0.3048 metres (m)</b>	<b>1 acre (ac) = 4,046.86 square metre (m<sup>2</sup>)</b>
<b>Imperial Conversions</b>	<b>1 acre (ac) = 0.40469 hectares (ha)</b>
<b>1 acre (ac) = 43,560 square feet (sqft)</b>	<b>Metric Conversions</b>
<b>1 square mile = 640 acres (ac)</b>	<b>1 square kilometer (sq km) = 100 hectares (ha)</b>
<b>1 section = 640 acres (ac)</b>	<b>1 hectare (ha) = 10,000 square metres (m<sup>2</sup>)</b>

## Zone Summary

Residential	
<b>RMD</b>	<b>Residential Mixed Dwelling Zone (s.155)</b> is to provide for a range of dwelling types and densities including single detached, semi-detached and row housing
<b>RF5</b>	<b>Row Housing Zone (s.160)</b> is to provide for relatively low to medium density housing, generally referred to as Row Housing
<b>UCRH</b>	<b>Urban Character Row Housing Zone (s.165)</b> is to provide for medium density Row Housing in a manner that is characteristic of urban settings and can include more intensive development
<b>RF6</b>	<b>Medium Density Multiple Family Zone (s.170)</b> is to provide for medium density housing, where some units may not be at Grade
<b>RA7</b>	<b>Low Rise Apartment Zone (s.210)</b> provides for low rise apartment buildings
<b>RA8</b>	<b>Medium Rise Apartment Zone (s.220)</b> provides for medium rise apartment buildings
<b>RA9</b>	<b>High Rise Apartment Zone (s.230)</b> provides for high rise apartment buildings
<b>RR</b>	<b>Rural Residential Zone (s.240)</b> is to provide for single detached residential development of a permanent nature in a rural setting, generally without the provision of the full range of urban utility services
<b>RMU</b>	<b>Residential Mixed Use Zone (s.910.10)</b> is to provide for primarily medium to high density residential mixed-use developments, with limited commercial, institutional, office and service Uses distributed on-site
<b>RMH</b>	<b>Mobile Home Zone (s.250)</b> is to provide for Mobile Homes developed within a Mobile Home Park or Mobile Home Subdivision.

Urban Services	
<b>AJ</b>	<b>Alternative Jurisdiction Zone (s.560)</b>

Direct Control Provisions	
DC1	<p><b>Direct Development Control (s.710)</b> is to provide for detailed, sensitive control of the use, development, siting and design of buildings and disturbance of land where this is necessary to establish, preserve or enhance:</p> <ul style="list-style-type: none"> <li>a. areas of unique character or special environmental concern</li> <li>b. areas or sites of special historical, cultural, paleontological, archaeological, prehistorical, natural, scientific or aesthetic interest</li> </ul>
DC2	<p><b>Site Specific Development Control (s.720)</b> is to provide for direct control over a specific proposed development where any other Zone would be inappropriate or inadequate.</p>

**Special Areas** are areas with special or unique attributes, which cannot be satisfactorily addressed through conventional land use zoning.

Special Area: Downtown	
HA	<p><b>Heritage Area Zone (s.910.7)</b> is to establish a special heritage character Zone, in which the existing concentration of historical resources shall be preserved, rehabilitated and reused, and to ensure new developments are pedestrian friendly and compatible</p>
HDR	<p><b>High Density Residential Zone (s.910.8)</b> is to accommodate high density housing with minor local commercial uses in a predominantly residential environment and to support the concept of a livable urban village with a strong sense of identity and place</p>
RMU	<p><b>Residential Mixed Use Zone (s.910.10)</b> is to provide for primarily medium to high density residential mixed-use developments, with limited commercial, institutional, office and service Uses distributed on-site in a manner sensitive to the street environment and adjacent residential areas</p>
UW	<p><b>Urban Warehouse Zone (s.910.11)</b> is to develop a unique mixed-use business commercial, educational and residential neighbourhood, accommodating a diversity of uses</p>

For additional zone details, refer to the Zoning Bylaw.