

2016

ASSESSMENT METHODOLOGY

MULTI-RESIDENTIAL HIGH-RISE APARTMENT

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

Revised on May 4, 2016. See page 20 for details.

edmonton.ca/assessment

Edmonton

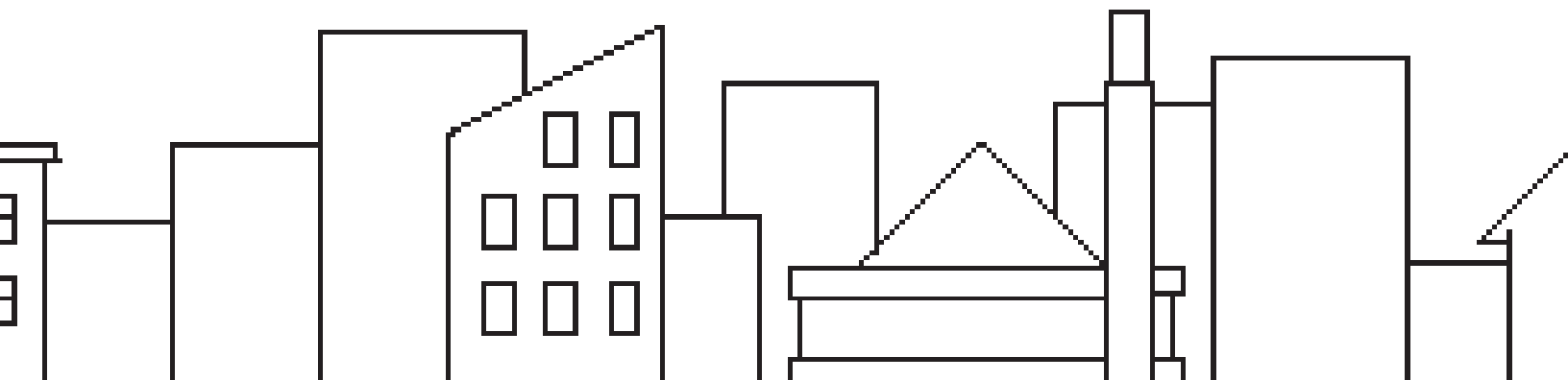



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Scope

This guide is an aid in explaining how 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

The Alberta assessment and taxation system is based on the laws outlined in the *Municipal Government Act*, RSA 2000, cM-26 [MGA], and all associated regulations, including, for example *Matters Relating to Assessment and Taxation Regulation*, Alta Reg 220/04 [MRAT].

The MGA requires the assessment of property be prepared using mass appraisal. Properties are valued based on a valuation date of July 1, 2015 and the property's condition of December 31, 2015. [Many of these terms are defined in the legislation](#)



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(n) “**regulated property**” means

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

MRAT s.1(1)(n)

s.6(1) the **valuation standard** for the land and improvements is market value unless subsection (2)... applies

MRAT s.6(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.2 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.2

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.3 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.3

s.1(k) “**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(k)

While there are many forms of ownership, the legislation requires the City of Edmonton to assess the fee simple estate. The fee simple estate is unencumbered by any other interest or estate, and subject only to the limitations of government.

fee simple – in land ownership, complete interest in a property subject only to governmental powers

Glossary for Property Appraisal and Assessment, p. 56

In summary, a property assessment is:

- an estimate of the property's market value on July 1, 2015
- prepared using mass appraisal
- an estimate of the value of the fee simple estate in the property
- a reflection of the property's condition on December 31, 2015
- prepared assuming typical market conditions on the open market by a willing seller to a willing buyer

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



27.1(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.27.1(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
Definition and Purpose	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
Data Collection	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
Market Analysis	Mass appraisal is predicated on highest and best use	Market analysis includes the analysis of highest and best use
Valuation Model	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
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

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.27.1(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.27.1 (a), (b) and (d)

s.27.3(1) ...information that is required to be provided...does not include coefficients

MRAT, s.27.3(1)

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. This approach is often used when sufficient sales or market data is available; 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. This approach 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: is the purpose or activity a property is designed, arranged, developed or intended for, or is occupied or maintained as

Zoning Bylaw No. 12800, 2014, s. 6.1(108)

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 High-Rise Apartment sub-group.

High-Rise Apartment is defined as a building that has five or more stories above grade and with five or more dwelling units.

For this property group, the assessment is determined using the income approach. It is the most appropriate method of valuation for Multi Residential: High-Rise Apartment properties in the City of Edmonton.

Income Approach (Multi Residential)

The income approach is used in valuation, as it best reflects the typical actions of buyers and sellers when purchasing income-producing properties. Ample financial information provided by owners reinforces this decision.

Two models are created to work in tandem. One calculates a Potential Gross Income (PGI) using rental information, and the second calculates a Gross Income Multiplier (GIM) using sale information and the PGI model.

Income Approach Definitions

To provide a clear understanding of the terms used in the income approach, the following definitions are supplied:

Typical Market Rent is the rent currently prevailing in the market for properties comparable to the subject property. Actual market rents are used to determine typical market rent. The assessor is not bound by the contractual rent between the landlord and tenant, but must determine rental income on the basis of what is typically paid in the market at the time of valuation.

Potential Gross Income (PGI) is the typical market rent that would be collected if the property was fully occupied at the date of valuation. Income data from property owners is analyzed to determine the typical PGI valuation model.



Parking and Laundry Income are added to the model-predicted PGI. The typical parking and laundry rates were established through an analysis of market survey rent returns and financial statements from property owners. Laundry income is assessed at the typical value of \$12 per suite per month. Below is breakdown of the rates per parking stall per month. The rates were applied to the actual number of covered and heated/underground parking stalls.

Parking:

- **High Rise Uncovered (Surface) Parking:** Parking located on ground level or higher that is not covered or has no protection from outside elements.
- **High Rise Covered:** Parking located on ground level or higher that is covered and provides some protection from outside elements, but is not fully enclosed and not heated.
- **High Rise Heated Parking:** Fully enclosed parking in an aboveground or underground structure that provides much more protection than covered parking. Though typically heated, these parkades protect against the elements to such a degree that even when unheated they provide more warmth than parking outside.

Uncovered		Covered		Heated/Underground	
Market Area	Rent (\$)	Market Area	Rent (\$)	Market Area	Rent (\$)
2, 3, 4, 5, 6, 7, 8, 8A, 10, 11	\$20	2, 4, 5, 7, 8, 8A, 10, 11	\$30	2, 4, 5, 7, 8, 8A, 10, 11	\$40
1A, 1B, 1C	\$35	1A, 1B, 1C	\$35	3	\$45
				1A, 1B, 1C	\$50

Typical Vacancy is the rate allowance for vacant space in the subject property. It is determined for each market area by analyzing reported vacancies from the owner's annual financial statements. Typical vacancy assumes current market conditions and typical management. This is stabilized at 2% for all high-rise properties assessed under the Multi Residential group.

Gross Income Multiplier (GIM) expresses the relationship between property value and PGI. It is derived from dividing the market analysis of sales.



Theoretically, a GIM is a product of the factors that determine how much an investor will pay now for future income. An investor will consider the degree of risk involved; the estimated/potential income stream; the expected time the investment will be profitable; and the percentage attributable to operating expenses. These factors are directly related to the type, location, condition, and other attributes of the property.

Income Approach (GIM)

Two valuation models results PGI and GIM are combined to determine value.



The valuation model is applied to the entire High-rise property group to calculate an assessed value for each property.

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, 2012 to June 30, 2015 for valuation of High-Rise Apartment property. 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.

Zoning

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



*s.6.1(111) **zone:** is a specific group of listed use classes and development regulations which regulate the use and development of land within specific geographic areas of the City*

Zoning Bylaw No. 12800, 2014, s. 6.1(111)

Residential land use zones vary in part due to density.



*s.6.1(23) **density:** is the number of dwellings on a site expressed as dwellings per hectare when referring to residential related development*

Zoning Bylaw No. 12800, 2014, s. 6.1(23)

A multi residential zone summary is in the appendix.

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 use of the property. The effective zoning may differ from the actual zoning when the current use differs from the Zoning Bylaw (e.g., a legal nonconforming use).



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 non-conforming use or non-conforming building, the development permit continues in effect in spite of the coming into force of the bylaw

MGA, s. 643(111)

Sample Assessment Detail Report



Assessment Detail Report ANNUAL REALTY ASSESSMENT DETAILS 2016

Tax Roll Account 9999999 Taxation year 2016 Date of mailing 04-JAN-2016 Date of request 04-JAN-2016 11:31
Property Address 10010 SAMPLE AVENUE NW Property Assessment \$20,029,500

Property Details

Unit Of Measure METRIC

Legal Plan: 9999AA Lot: 9 / Plan: 9999AA Lot: 8 / Plan: 9999AA Lot: 7 / Plan: 9999AA Lot: 6
Neighborhood 5480 - STRATHCONA
Effective Zoning RA9 - High Rise Apartment District
Actual Zoning RA9 - High Rise Apartment District
Lot Size 3,075.820 M2 .308 Ha Site Coverage Percent 357 %
Tax Class / Land Use / Taxable Status
OTHER RESIDENTIAL
100 % 133 - HI-RISE APARTMENT
01-JAN-2016 To 31-DEC-2016 100 % FULLY TAXABLE

Property Characteristics

Property Inspection History

04-JUN-2015 PICTOMETRY INSPECTION

Site Attributes

Traffic Influence	MAJOR	RFI Mail List	MULTI RES
Other Parking	ENCLOSED NON HEATED	Total Parking Stalls	108
Suite with River Vw	22		

Building Details

No.	Market Building Class	%Comp	Condition	Yr Built	Eff Yr Built	Gross Area	Net Area
1	APARTMENT	100	AVERAGE	1969	1969	10,968.920	10,968.920
	Dwelling Count	1	Sauna		Y		
	Building Type	HIGH RISE	Res Gross Bldg Area		9512		
	Gross Area for Multi	9512	Encl. Parking Area		1456		
	1 Bedroom Suite	70	2 Bedroom Suite		16		
	2 Bedroom Suite + Den	14	Total Res Units		100		
	Balcony Count	126	Balcony Type		OPEN		
	Uncoverd Prk Stalls	54	Undergmd Prk Stalls		54		
	Elevators Y/N	Y	Swimming Pool		INTERIOR		
	Floors Above-STORIES	15	Dishwasher		Y		

see pg. 2 for Income Approach Summary

If you have any questions concerning this information, please return to the website (<https://assessmentinfo.edmonton.ca>) and click on FAQ (Frequently Asked Questions) located at the top right hand corner of the webpage.

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Income Approach Summary

1	Building Type	HIGH RISE
2	Market Area	3
3	Effective Year Built	1969
4	# of Stories	15
5	River Suites	22
6	Condition	AVERAGE
7	Balcony	YES
8	Elevator	YES
9	Commercial	NO
11	1 Bedroom	70
13	2 Bedroom	16
14	2 Bedroom + Den	14
18	Suite Total	100
19	Residential Gross Bldg Area	9512
20	Average Suite Size	95
21	High Rise Uncovered Parking	54
23	High/Low Rise Heated Parking	54
24	PGI (Potential Gross Income)	1,558,997
25	Vacancy	0.02
26	EPGI (Effective PGI)	1,527,817
27	GIM (Gross Income Multiplier)	13.11
28	2016 Multi Assessment	20,029,500
29	Multi Assessment/Suite	200295

Property Assessment 20,029,500

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Variables

Below is the list of variables that affect the assessment value for 2016.

Potential Gross Income		Gross Income Multiplier
Average Suite Size	Balcony	Building Type
Building Type	Condition	Market Area (Location)
Effective Year Built	Market Area (Location)	Effective Year Built
River View Suites	Suite Mix	

Average Suite Size: The total gross building area (square metres) divided by the number of suites in the building.

Balcony: Indicates whether or not the majority of the suites have balconies.

Building Type: Multi Residential properties are classed into the following building types; Low-Rise, High-Rise, Row-House, Four-Plex

- Low-Rise apartment is defined as a building that has one to four stories above grade, and five or more self-contained suites.
- High-Rise apartment is defined as a building that has five or more stories above grade and five or more self-contained suites.
- Row-House is defined as one of a series of houses, often of similar or identical design, situated side by side and joined by common walls. These developments have 5 or more suites with each unit having its own outside entrance.
- Four-Plex is defined as a building containing four self-contained suites.

Condition: Property condition has been rated using the following categories:

Fair

- below average maintenance;
- discernible deterioration of building components more rapidly than expected for building era;
- deferred maintenance requiring rehabilitation, replacement, or major repairs;
- reduced utility with signs of structural decay.

Average

- normal deterioration for property era;
- moderate maintenance;
- minor repairs or rehabilitation of some components required;
- within established norm for the era;
- somewhat less attractive.

Good

- above average maintenance;
- well maintained with high desirability;
- may have slight deterioration in minor components;
- often components are new or as good as new;
- attractive, high utility, and superior condition.

Effective Year Built: Apparent age of a structure with respect to its utility, condition and marketability. It is the adjusted year built taking into account any subsequent new construction, modernization, renovations or replacements. The effective year built may or may not differ from the actual year built depending on its current utility and condition. The following items are considered when adjusting the effective year built of a property assessed under the Multi Residential group:

- Roof
- Windows & doors
- Exterior siding & balconies
- Walls (insulation, vapor barrier, etc.)
- Structural (studs or concrete)
- Foundation
- Electrical
- Plumbing
- HVAC/Mechanical (boilers, hot water tanks, AC, etc.)
- Kitchen cabinets
- Other kitchen components (backsplash, counter tops, sink & faucet)
- Bathroom cabinet, counter, sink
- Sink/bath faucets
- Other bathroom components (toilet, backsplash, shower tiles)
- In-suite flooring, walls, doors, ceiling
- Common area flooring, walls, doors, ceilings

Market Area (Location): A geographic area, typically encompassing a group of neighbourhoods, within which the properties are more or less equally subject to a set of one or more economic forces that largely determine the value of the properties in question. The purpose of a market area is for market analysis. These borders are similar to the CMHC zones.

River View Suites: The number of units having a view of the river valley.

Suite Mix: The number of Bachelor/Studio units, 1 bedroom, 1 bedroom + den, 2 bedroom, 2 bedroom + den, 3 bedroom, 4 bedroom and Penthouse (top floor) units. Bachelor/studio units are those that lack the separating walls found in 1 bedroom units and up, and a den is similar to another bedroom yet lacks a closet and solid door.

Definitions

Commercial Component: Any commercial space type within a multi-residential property that is assessed using a commercial model. For more information on commercial valuation details, please reference the Retail and Retail Plaza methodology guides.

Foreclosure: Foreclosure is a legal process by which a lien on a property is enforced. Foreclosure results in the mortgagee becoming titleholder to, or forcing the sale of, the mortgaged property when the mortgagor defaults on the mortgage and does not redeem it.

Gross Building Area (GBA): Total floor area of a building, excluding unenclosed areas, measured from the exterior of the walls; includes both superstructure floor area and substructure of basement area.

Judicial Sale: (1) A sale made at the direction of a court, by an officer duly appointed and commissioned to sell, as distinguished from a sale by an owner in virtue of his right of property. (2) A court action that enforces a judgment lien by selling property to pay a debt.

Standardize: To adjust, for appraisal purposes, reported data such as income and expenses, to remove the effects of non-real-estate factors such as abnormally good or bad management. Another common term for this adjustment process is normalization.

Unit of Comparison: A property as a whole, or some measure of the size of the property (for example, number of suites, number of rooms, or gross building area) used to determine a price per unit.

Provincial Quality Standards

For High-Rise Apartment properties, the City of Edmonton used the income approach to calculate the 2016 assessments. 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. This 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 results indicated that our assessments meet Provincial Quality Standards as set out in *MRAT*.

References

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Appendix

Measure Conversion Chart

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

Zone Chart: Multi Residential

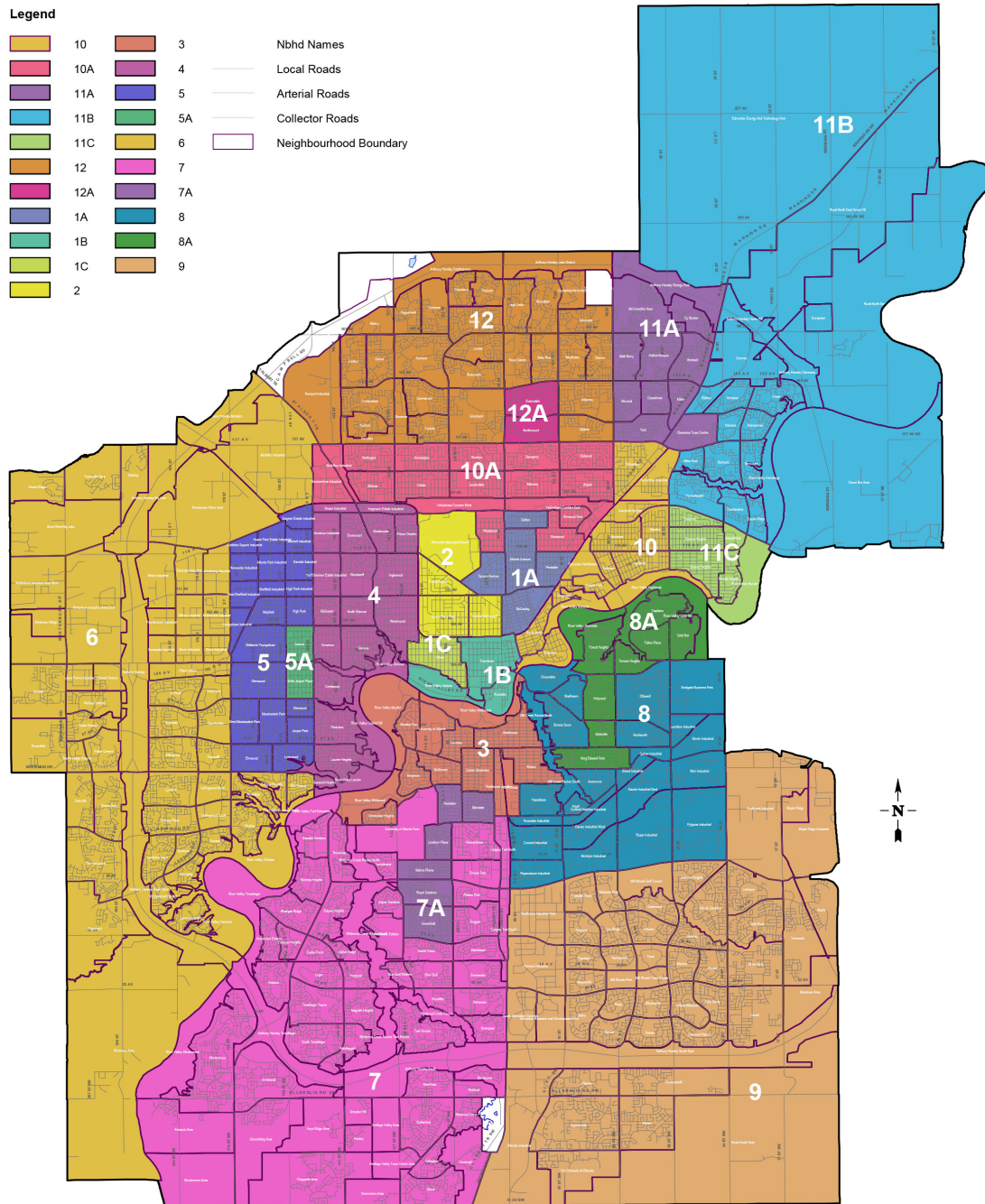
Residential	
RMD	Residential Mixed Dwelling Zone (s.155) is to provide for a range of dwelling types and densities including single detached, semi-detached and row housing
RF5	Row Housing Zone (s.160) s to provide for relatively low to medium density housing, generally referred to as Row Housing
UCRH	Urban Character Row Housing Zone (s.165) is to provide for medium density Row Housing in a manner that is characteristic of urban settings and can include more intensive development
RF6	Medium Density Multiple Family Zone (s.170) is to provide for medium density housing, where some units may not be at Grade
RA7	Low Rise Apartment Zone (s.210) provides for low rise apartment buildings
RA8	Medium Rise Apartment Zone (s.220) provides for medium rise apartment buildings
RA9	High Rise Apartment Zone (s.230) provides for high rise apartment buildings
RR	Rural Residential Zone (s.240) 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
RMU	Residential Mixed Use Zone (s.910.10) is to provide for primarily medium to high density residential mixed-use developments, with limited commercial, institutional, office and service Uses distributed on-site
RMH	Mobile Home Zone (s.250) is to provide for Mobile Homes developed within a Mobile Home Park or Mobile Home Subdivision.

For additional zone details, refer to the Zoning Bylaw.

Map

Edmonton

2016 Multi Residential Market Areas



Map compiled by: The Applications Team
Assessment and Taxation, City of Edmonton.
Effective: January 2016

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Revision History

May 4, 2016 – Replaced Assessment Detail report on page 12 to a sample of a high-rise apartment property and the map on page 19 to include neighborhood names.