2023 ASSESSMENT METHODOLOGY

RESIDENTIAL LAND

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

edmonton.ca/assessment

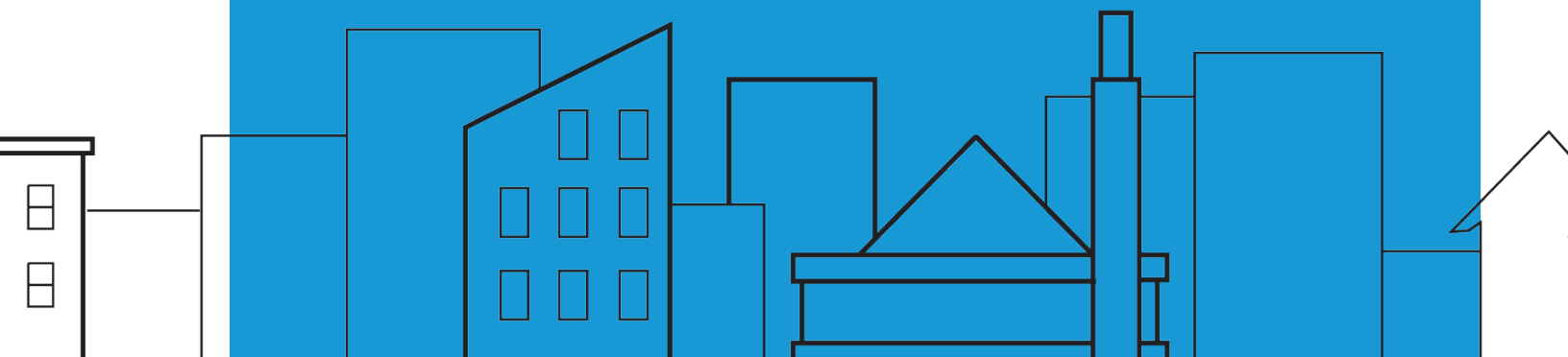


Table of Contents

Scope

This guide is an aid in explaining how residential land properties are valued for assessment purposes. The guide is intended as a tool and complements the assessor's judgment in the valuation process. Valuation Date refers to the legislated date of July 1, 2022.

Introduction

Property assessments in the City of Edmonton are prepared in accordance with the requirements of the Municipal Government Act, R.S.A. 2000, c. M-26, (hereinafter "MGA") and the Matters Relating to Assessment and Taxation Regulation, 2018, Alta Reg 203/17, (hereinafter "*MRAT*"). The MRAT 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 MRAT regulation.

Property assessments represent:

- an estimate of the value;
- of the fee simple estate in the property;
- as the property existed on December 31, 2022;
- reflecting typical market conditions;
- as if the property had been sold on July 1, 2022;
- on the open market;
- 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.

The legislation requires the City of Edmonton to assess the fee simple estate.

> "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 *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 properties
- common property characteristics are identified for the properties in each group
- a uniform valuation model is created for each property group

> 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
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, this includes: rights to be valued, effective date of valuation, and any limiting conditions.
Data Collection	Mass appraisal requires a 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 Model

A valuation model creates an equation of variables, factors and coefficients that explains the relationship between estimated market value and property characteristics. An assessed value is then calculated by applying the appropriate valuation model to individual properties within a property type.

s31 (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 Information prescribed ... does not include coefficients

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

Valuation Model

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

Property Groups

Residential
Residential properties are the lands and improvements, which are intended or developed to be self-contained dwelling units having one or more rooms accommodating sitting, sleeping, sanitary facilities, and a full kitchen.

Residential Land
Residential Land is vacant land zoned for future low density residential uses. This inventory can also include RF5/RF6 zoned vacant parcels with no multi-residential development potential.

Approaches to Value

The approaches to determine market value are the direct comparison, income, and cost approaches.

Direct Comparison 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.

Direct Comparison Approach

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

The income and cost approaches were not used in the valuation of this property group, as these approaches are more applicable to income producing properties or in limited markets, respectively. The majority of these properties in this inventory are owner occupied with only a portion of the inventory traded based on the property's ability to generate income.

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 and third party information.

The City of Edmonton reviews sales occurring from July 1, 2017 to June 30, 2022 in valuing 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. The City of Edmonton uses the date the legal title transfer was registered at the Land Titles Office as the sale date of a property.

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.6.123 **zone**: 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*

Residential land use zones vary in part due to density.

> s.6.24 density: 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*

A residential zone summary is in the Appendix.

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 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 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 RF1 zoning, that property will have an effective zoning of RF1 even though the actual zoning is DC1.

- **Some vacant parcels in RF5/RF6 zoning have legal and/or physical constraints** like caveat on title, lot size, and frontage. These constraints may prohibit development as multi-residential properties containing 4 or more units. In these cases, residential effective zoning will be applied considering their practical development potential. A typical example includes land subdivisions for individually-titled semi-detached houses in RF5/RF6 zoning.

- **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 land or building must conform with the land use bylaw then in effect.
>
> ***MGA**, s.643(2)*

Variables

The definitions of variables and related factors affecting value within the valuation models are itemized in the following sections:

- Location
- Positive site influences
- Negative site influences
- Lot characteristics
- Adjustments

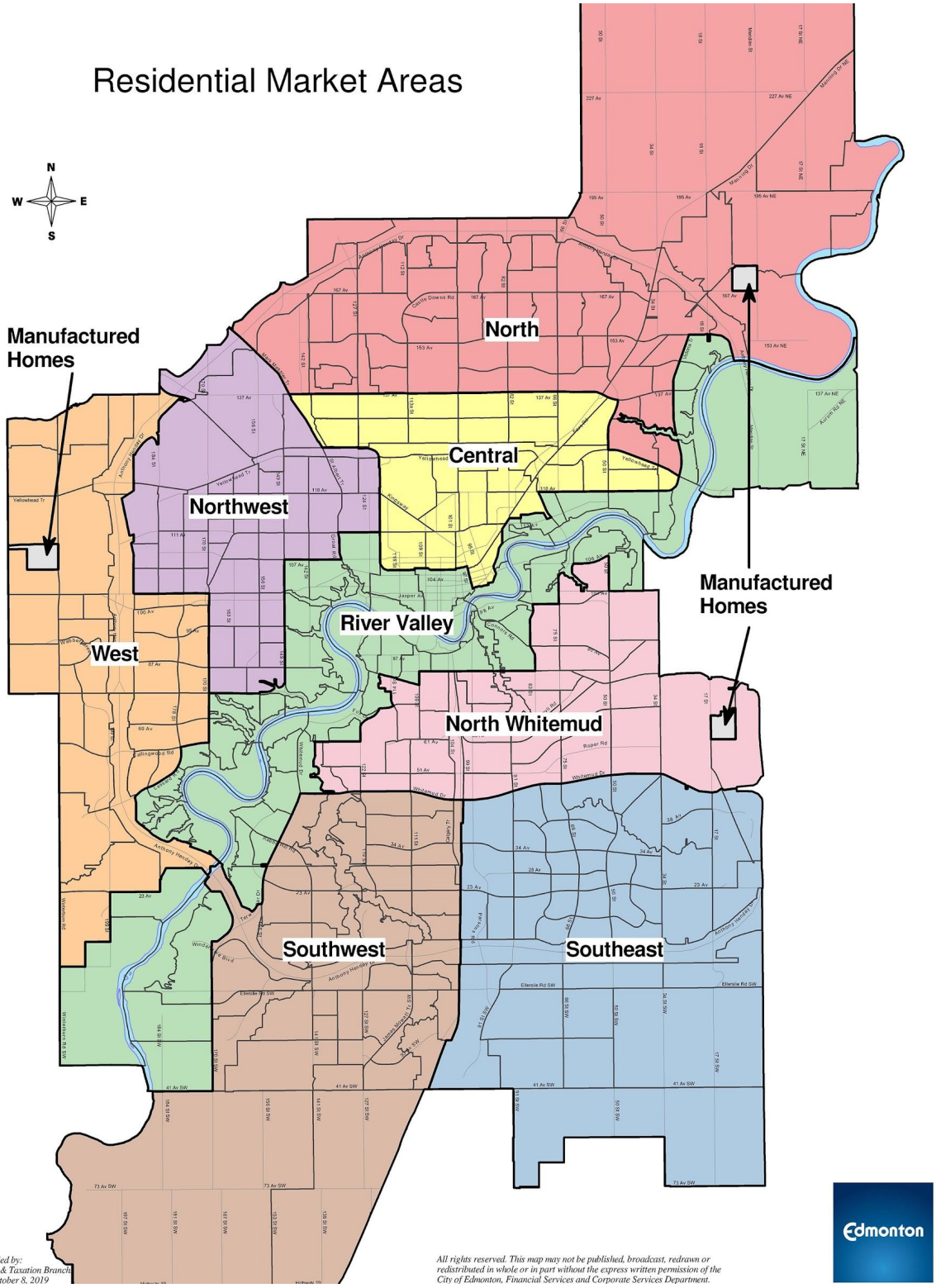
Location	
Market area	Neighbourhood
Study area	

Location references not only a particular parcel of land, but also describes larger geographic areas. The following location characteristics are listed in alphabetical order:

Market area
A market area is a geographic grouping of neighbourhoods or study areas; major arterial roads and natural boundaries within the municipal corporate limits typically define the boundaries. Eight residential land market areas are defined in Edmonton. These market areas are:

- North
- West
- Northwest
- Central
- River Valley
- North Whitemud
- Southwest
- Southeast

The boundaries of these market areas are identified on the following page. A valuation model was created for each market area (excluding manufactured home park lands- for this inventory refer to the *2023 Multi-Residential Manufactured Home Park Land* assessment methodology guide).



Neighbourhood
A Neighbourhood is a geographical area defined by the City of Edmonton. Maps identifying these neighbourhood boundaries are accessible on the City website, http://maps.edmonton.ca/map.aspx (choose "Neighbourhood" in the "I'm looking for" drop-down menu).

Study area
Within the market areas, there are sub-groups or sub-sectors of properties within neighbourhoods that show different market trends from the rest of the neighbourhood they are located in. These properties are assigned to study areas to more accurately analyze and value the market trends in these locations.

- **Neighbourhood study areas**
  Maps identifying these study areas are accessible on the City website, "https://www.edmonton.ca/residential_neighbourhoods/property_tax_assessment/reference-materials.aspx . See the document, *2023 Residential Neighbourhood – Study Areas*

- **Rural Residential study areas**
  The market areas also contain groups of rural residential properties identified by their assigned effective zoning code ('RR'). These properties, typically with larger acreage sized lots, exist in recognized subdivisions with servicing that may differ from the rest of the surrounding neighbourhoods. Maps identifying these study areas are accessible on the City website, https://www.edmonton.ca/residential_neighbourhoods/property_tax_assessment/reference-materials.aspx . See the document, *2023 Rural Residential – Study Areas*.

Positive site influences		
Golf course influence	Greenbelt influence	Lake influence
Noise attenuation barrier	Park influence	Ravine influence
River valley influence		

The impact of a positive site influence may vary by other Variables. The following positive site influences affecting assessment value are as listed (alphabetically):

Golf course influence
A property is located in close proximity to a golf course.

- **Abutting**
  Property backs directly onto a golf course or is separated from it only by a park, green space or walking trail.

- **Across from, major**
  Property is separated from a golf course by a road or lane with traffic counts equal to or less than 5,000. The separation by the road or lane could also include a park, green space or walking trail.

- **Across from, minor**
  Property is separated from a golf course by a road with traffic counts greater than 5,000. The separation by the road could also include a park, green space or walking trail.

Greenbelt influence
A property is next to a strip of publicly accessible green space.

This green space runs between residential properties, is between eight and 30 metres (26 and 98 feet) wide, includes public utility corridors and may have a walking trail. The greenbelt influence does not include areas used for overhead transmission lines, parks, lakes, ravines, walkways or the river valley.

For widths below eight metres, refer to the Walkway influence definition. For widths over 30 metres, refer to the Park influence definition.

Lake influence
A property is in close proximity to a lake or stormwater facility.

- **Abutting**
  Property backs directly onto a lake or stormwater facility.
- **Abutting, minor**
  Property backs onto a lake or stormwater facility but is separated from it by a park, green space or walking trail.
- **Across from**
  Property is separated from a lake or stormwater facility by a road or lane with traffic counts less than 15,000. The separation by a road or lane could also include a park, green space or walking trail.

Noise attenuation barrier
Noise attenuation barriers are structures designed to protect from noise pollution. They are located in proximity to noise sources like commercial, industrial, institutional, LRT, multi-residential, utility, railway or traffic.

Barriers include earthen berms, concrete wall structures and corrugated steel wall structures or their combination with a minimum combined height of six feet. Noise attenuation barriers do not include wooden screen fences typically erected by either the City or property owners.

- **Minor**
  The barrier is between six and 10 feet high and is located on the property line.
- **Moderate**
  The barrier is between six and 10 feet high when measured from the side that faces the noise source. Or, the barrier is between 10 and 20 feet high and is located on the property line.
- **Major**
  The barrier is between 10 and 20 feet high when measured from the side that faces the noise source. Or, the barrier is more than 20 feet high and is located on the property line.
- **Extreme**
  The barrier is more than 20 feet high when measured from the side that faces the noise source.

Park influence
A property is in close proximity to a park.

Parks include any developed or undeveloped green space, neighbourhood parks, cul-de-sac islands and flat, wooded areas. They may or may not have walking trails. Parks exclude greenbelts, lakes, ravines, walkways, the river valley and any areas used for overhead transmission lines.

- **Abutting, major**
  Property has a common boundary with a park. The park is more than 0.75 hectares (1.85 acres) in total size and is at least 30 metres (98 feet) wide when measured from the property line.
- **Across from, major**
  Property is separated from a park by a road or lane with traffic counts less than 15,000. The park is more than 0.75 hectares (1.85 acres) in total size and is at least 30 metres (98 feet) wide.
- **Abutting, minor**
  Property has a common boundary with a park. The park ranges between 0.25 hectares (0.62 acres) and 0.75 hectares (1.85 acres) in total size and is at least 30 metres (98 feet) wide.

  Or, property has a common boundary with a major park. However, the portion of the park that abuts the property is less than 30 metres (98 ft) wide when measured from the property line.
- **Across from, minor**
  Property is separated from a park by a road or lane with traffic counts less than 15,000. The park ranges between 0.25 hectares (0.62 acres) and 0.75 hectares (1.85 acres) in total size and is at least 30 metres (98 ft) wide.

  Or, property is across a road or lane from a major park where the portion of the park is less than 30 metres (98 ft) wide.
- **Abutting, recreational**
  Property has a common boundary with a park or green spaces used for recreational purposes: playgrounds, soccer or football fields, baseball diamonds, outdoor hockey rinks or open fields within 91 metres (300 feet) of a school.
- **Across from, recreational**
  Property is separated from a park or green space by a road or lane with traffic counts less than 15,000. The park or green space is used for recreational purposes: playgrounds, soccer or football fields, baseball diamonds, outdoor hockey rinks or open fields within 91 metres (300 feet) of a school.

Ravine influence
A property is in close proximity to a ravine (land included in the City of Edmonton's North Saskatchewan River Valley and Ravine System Protection Overlay).

- **Abutting**
  Property backs directly onto a portion of a ravine or is separated from it by parks, green spaces or walking trails. The ravine influence is “abutting” when the portion of the ravine is more than 50 metres (164 feet) wide.
- **Abutting, minor**
  Property backs directly onto a portion of a ravine or is separated from it only by parks, green

spaces or walking trails. The ravine influence is “abutting, minor” when the portion of the ravine is less than 50 metres (164 feet) wide.

- **Across from, major**
  Property is separated from a ravine by a road or lane with traffic counts equal to or less than 5,000. The separation by the road or lane may also include parks, green spaces and walking trails.
- **Across from, minor**
  Property is separated from a ravine by a road with traffic counts greater than 5,000. The separation by the road 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 of Edmonton's North Saskatchewan River Valley and Ravine System Protection Overlay).

- **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 property is located within the river valley (for example, in neighbourhoods like Rossdale, 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, major**
  Property is separated from the boundaries of the river valley by a road or lane with traffic counts equal to or less than 5,000. This separation may also include parks, green spaces, wooded areas, walking trails and golf courses.

  Where property is located within the river valley (for example, in neighbourhoods like Rossdale, Riverdale and Cloverdale), it receives a major river valley influence factor if it is separated from the bank of the North Saskatchewan River by the road or lane. This separation may also include parks, green spaces, wooded areas, walking trails and golf courses.
- **Across from, minor**
  Property is separated from the boundaries of the river valley by a road with traffic counts greater than 5,000. This separation may also include parks, green spaces, wooded areas, walking trails and golf courses.

  Where property is located within the river valley (for example, in neighbourhoods like Rossdale, Riverdale and Cloverdale), it receives a minor river valley influence factor if it is separated from the bank of the North Saskatchewan River by the road. This separation may also include parks, green spaces, wooded areas, walking trails and golf courses.

Negative site influences		
Cemetery influence	Commercial influence	Industrial influence
Institutional influence	LRT influence	Multi-residential influence
Railway influence	Traffic influence	Utilities influence
Walkway influence		

The impact of a negative site influence may vary by other Variables. The following negative site influences affecting assessment value are as listed (alphabetically):

Cemetery influence
A property is abutting or directly across from a cemetery.

Commercial influence
A property is in close proximity to a commercial property.
Commercial properties considered for this influence must

- abut a property; or
- be located directly across a road or lane; or
- be located directly across and within 50 metres of a property and separated by utility right of ways, parks, lakes or other green spaces.

The number and type of commercial properties in close proximity will determine the influence as follows.

- **Minor**
  Property is in close proximity to one commercial property like a neighbourhood office building, corner store, gas station, shop or convenience store.
- **Moderate**
  Property is in close proximity to:
  - two small commercial properties like a neighbourhood corner store, gas station, shop or convenience store, or
  - one large commercial property like a neighbourhood strip mall, hotel or fast food facility.
- **Major**
  Property is in close proximity to:
  - three or more commercial properties that create minor influence,
  - two or more commercial properties that create moderate influence, or
  - one commercial property like a mall, box centre or bar.

Industrial influence
A property is in close proximity to an industrial property.

Industrial properties considered for this influence must
- abut a property; or
- be located directly across a road or lane; or
- be located directly across and within 50 metres of a property and separated by utility right of ways, parks, lakes or other green spaces.

The number and type of industrial properties in close proximity will determine the influence as follows:
- **Minor**
  Property is in close proximity to:
  - one developed industrial property, or
  - vacant industrial land.
- **Moderate**
  Property is in close proximity to two developed industrial properties.
- **Major**
  Property is in close proximity to:
  - one industrial property that emits a large amount of pollution or smell (for example, the Gold Bar Wastewater Treatment Plant), or
  - three or more developed industrial properties.

Institutional influence
A property is in close proximity to an institutional facility.
Institutional properties considered for this influence must
- abut a property; or
- be located directly across a road or lane with traffic counts less than 15,000; or
- be located directly across and within 50 metres of a property and separated by utility right of ways, parks, lakes or other green spaces.

The number and type of institutional properties in close proximity will determine the influence as follows:
- **Minor**
  Property is in close proximity to one institutional property like a church, elementary school, ski hill, community hall or community recreation facility.
- **Moderate**
  Property is in close proximity to:
  - two institutional properties that create minor influence, or
  - one institutional property like a high school, junior high school, outdoor community pool or stand-alone police station.
- **Major**
  Property is in close proximity to:
  - three or more institutional properties that create minor influence,
  - two or more institutional properties that create moderate influence, or

- one major institutional property (for example, a large sports or recreation facility like Commonwealth Stadium, Telus Field, or Terwillegar Recreation Centre, a post-secondary institution, hospital or other emergency facility).

LRT influence
A property is in close proximity to the Edmonton Light Rail Transit (LRT) system.

- **Abutting**
  Property backs directly onto an LRT right of way or is separated from it only by parks, green spaces, walking trails or walkways.
- **Across from**
  Property is separated from an LRT right of way by a road or lane. The separation by a road or lane could also include a park, green space and walking trail.

Multi-residential influence
A property is in close proximity to a multi-residential property (apartments, rental rowhouse complexes, or non-rental rowhouse complexes built prior to 1985).
Multi-residential properties considered for this influence must

- abut a property; or
- be located directly across a road or lane with traffic counts less than 15,000; or
- be located directly across and within 50 metres of a property and separated by utility right of ways, parks, lakes or other green spaces; and
- not be individually titled when it comes to single-family triplexes, fourplexes and row houses.

The total unit count from the multi-residential property and any other multi-residential properties contiguous to it (or separated only by small gaps of land like lanes, greenbelts or walkways) will determine the influence as follows:

- **Minor**
  Property is in close proximity to multi-residential properties with a total unit count of four to 30.
- **Moderate**
  Property is in close proximity to multi-residential properties with a total unit count of 31 to 75.
- **Major**
  Property is in close proximity to multi-residential properties with a total unit count of more than 75.

Railway influence
A property is in close proximity to a railway (excluding light rail or streetcars).

- **Minor**
  Property backs directly onto or is directly across from a rail right of way with single or multiple rail lines. Property also could be separated from the rail right of way by a road or lane.
- **Moderate**
  Property directly backs onto or is directly across from a railway yard or switching station. Property also could be separated from the railway yard or switching station by a road or lane.

Traffic influence
A property is adjacent to a traffic source. We assign these factors according to the 2019 City traffic count data
[https://www.edmonton.ca/transportation/traffic_reports/traffic-reports-flow-maps.aspx].

- **Minor**
  Property is adjacent to a road with a recorded traffic flow of 1,500-5,000 vehicles per day.
- **Moderate**
  Property is adjacent to a road with the recorded traffic flow of 5,001-15,000 vehicles per day.
- **Major**
  Property is adjacent to a road with the recorded traffic flow of 15,001-50,000 vehicles per day (for example, 50th Street, 170th Street or 97th Street).
- **Extreme**
  Property is adjacent to a road with the recorded traffic flow of more than 50,000 vehicles per day (for example, Whitemud Drive or Yellowhead Trail)
- **Anthony Henday Drive**
  Property is adjacent to the Anthony Henday Drive ring road.

Utility influence
A property is in close proximity to utilities.

- **Minor**
  Property receives a minor utility influence factor if it is adjacent to underground utilities (like high pressure pipelines) generally located within a green belt.

  Municipal utility services such as low-voltage power lines, subtransmission power lines, gas lines, telecommunications lines and municipal water, sanitary and storm sewer lines are not included in this category.
- **Moderate**
  Property receives a moderate utility influence factor if it is adjacent to overhead transmission lines greater than 200 kilovolts, generally located within a green belt or if it's adjacent to telecommunication transmission towers.

  Municipal utility services such as low-voltage power lines, subtransmission power lines, gas lines, telecommunications lines and municipal water, sanitary and storm sewer lines are not included in this category.
- **Substation, minor**
  Property receives a substation, minor utility influence factor if it is adjacent to a utility substation other than a high-voltage overhead transmission line substation. These substations include municipal utility services such as low-voltage power substations, gas substations, telecommunications substations and municipal water, sanitary and storm sewer substations
- **Substation, major**
  Property receives a substation, major utility influence factor if it is adjacent to an high-voltage overhead transmission line substation.

Walkway influence

A property shares a border with a walkway that connects a residential area—either directly or as part of a trail system—to commercial or institutional areas or roadways with traffic counts greater than 15,000.

Walkways are less than eight metres (26.2 feet) wide and located between two residential properties.

For widths over eight metres, refer to the Greenbelt influence definition.

Lot Characteristics		
Corner lot	Lot shape	Lot size
Walkout grading		

The impact of a lot characteristic may vary by other variables. The following lot characteristics affecting assessment value are as listed (alphabetically):

Corner lot
The lot is located at the intersection of two public roadways, other than lanes.

For a detailed definition, see the Edmonton Zoning Bylaw 12800 (part 1, section 6.1).

Lot shape
The lot is of an irregular or pie shape.

- **Pie**
  The front width of the lot is significantly smaller than the back width, which results in an overall "pie" shape.
- **Irregular**
  The shape of the lot is substantially different from a rectangular-, pie- or otherwise regularly shaped residential lot. It could be, for example, a triangular lot, L-shaped lot or a lot with a "panhandle."

Lot size
Lot size is the total size of land.

The calculation of this area is done by the City's Global Information System (software for analyzing geographical data) and based on the legal description of the property.

Walkout grading
The lot displays substantial grade differences from the front to the back of the lot that could allow for the development of a walkout basement.

Adjustments		
Adverse topography	Contamination	Encumbrance
Lot area with applied adjustment	Lot instability	Servicing

Adjustments may be made for the following:

Adverse topography
Adverse topography indicates a property has certain topographical constraints that are not typical for the area and negatively affect the overall suitability of land for residential development.

These constraints may include, but are not limited to, significant slopes or wetland subsoil conditions resulting from sloughs, ponds and natural drainage onto the property.

- **Minor**
  The adverse topography does not significantly impede developmental potential of the affected area. The area still provides some benefit to the owner, such as use or enjoyment of the land.
- **Moderate**
  The adverse topography has a potential to significantly impede developmental potential of the affected area. However, the area still provides some benefit to the owner, such as use or enjoyment of the land.
- **Major**
  The adverse topography significantly impedes developmental potential of the affected area. The area provides no reasonable benefit to the owner.

Note: The Adverse topography adjustment is not applied to properties located in close proximity to or within the boundaries of the North Saskatchewan River Valley or in close proximity to a ravine (land included in the City of Edmonton's North Saskatchewan River Valley and Ravine System Protection Overlay).

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

Encumbrance
A property has a registered encumbrance on title that runs with the land, such as an easement or restrictive covenant. This encumbrance and the area of the lot that it affects are atypical for similar properties in the area.

Encumbrance does not include municipal utility services—such as low-voltage power, gas, telecommunication, water, sanitary sewer and storm sewer lines—that typically serve the property.

- **Minor**
  The encumbrance does not significantly impede developmental potential of the affected area. The area still provides some benefit to the owner, such as use or enjoyment of the land.
- **Moderate**
  The encumbrance has the potential to significantly impede developmental potential of the affected area. However, the area still provides some benefit to the owner, such as use or enjoyment of the land.

- **Major**
  The encumbrance significantly impedes developmental potential of the affected area. The area provides no reasonable benefit to the owner.

Lot area with applied adjustment
A property received an assessment adjustment to a portion of the total lot size due to the negative impacts of encumbrance, adverse topography or irregular shape.

Lot instability
Lot instability is land movement, sinking, or erosion that has diminished the bearing capacity of the ground. The lot instability attribute is applied to residential properties that abut land included in the North Saskatchewan River Valley and Ravine System Protection Overlay when there is evidence of lot instability. When multiple properties are affected by lot instability, a step-down of levels may be applied to each property. Professional lot rehabilitation may affect the level of lot instability that is applied to a property. King's Bench decisions regarding lot instability will also be considered. The levels of lot instability are as follows:

- **Minor**
  A property has experienced movement sinking or erosion, which:
  (a) is apparent and more than incidental in scope but does not immediately threaten improvements or the use of the property; and
  (b) has resulted in ongoing monitoring by a geotechnical professional to ensure continued stability; or
  (c) the land title includes a registered caveat acknowledging owner risk of lot instability and may include the required participation in preventative lot failure programs or homeowners association.
- **Moderate**
  A property meets the criteria for the Minor level, plus it has experienced movement, sinking, or erosion which:
  (a) impairs or precludes use of a portion of the property; and
  (b) has resulted in ongoing monitoring by geotechnical professional and/or Safety Codes Officers; or
  (c) The assessed improvements are beginning to show some signs of weakening structural integrity as a result of lot instability.
- **Major**
  A property meets the criteria for the Moderate level, plus it has experienced severe movement, sinking, or erosion which:
  (a) has rendered a substantial portion of the property unusable or hazardous or in need of professional rehabilitation work; and
  (b) has subjected the property to ongoing geotechnical monitoring regarding the continued use of the property and /or a Safety Codes Act order requires monitoring, or
  (c) The structural integrity of the dwelling has been weakened as a result of lot instability.
- **Extreme**
  A property meets the criteria for the Major level, plus it has experienced extreme movement, sinking or erosion, which:
  (a) has rendered all or a vast majority of the property unusable or hazardous or in need of professional rehabilitation work; or
  (b) the dwelling is unsafe for continued occupancy - there is clear evidence that the structural integrity of the dwelling has been severely compromised, or
  (c) has an order to vacate the dwelling until professional lot rehabilitation has occurred, or
  (d) the existing dwelling is required to be removed as a result of lot instability.

Servicing
The Servicing variables below do not apply to Rural Residential lots.

- **Water supply service**
  Water supply 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.
    - **Present**
      A property has water supply services.
    - **Absent**
      A property does not have water supply services.
- **Sanitary sewer service**
  Sanitary sewer refers to a system of sewers designed to collect and convey household and industrial wastewater from urban areas to Edmonton's Gold Bar Wastewater Treatment Plant. Property is considered serviced if a branch (stub) line from the City of Edmonton or EPCOR main line to the property line exists.
    - **Present**
      A property is connected to Edmonton's sanitary sewer system.
    - **Absent**
      A property is not connected to Edmonton's sanitary sewer system.
- **Storm sewer service**
  Storm sewer refers to a system of sewers designed to collect, store and convey runoff from urban areas to a receiving body of water. Property is considered serviced if it's located next to a road with storm water sewer.
    - **Present**
      A property is considered to be connected to Edmonton's storm sewer system.
    - **Absent**
      A property is not connected to Edmonton's storm sewer system.
- **Access to paved public roads**
  Paved public roads are part of the public road access infrastructure and must be adjacent to the property.
    - **Present**
      A paved public road is adjacent to the property.
    - **Absent**
      A paved public road is not adjacent to the property.

  Access to paved public roads doesn't include paved back lanes and alleys.
- **Access to sidewalks, curbs or gutters**
  Sidewalks, curbs and gutters are part of the City's public road and sidewalk access infrastructure and must be adjacent to the property.
    - **Present**
      Sidewalks, curbs and gutters are adjacent to the property.
    - **Absent**
      Sidewalks, curbs and gutters are not adjacent to the property.

- **Street lighting**
  Street lighting is part of the City's public road and sidewalk access infrastructure and must be adjacent to the property.
    - **Present**
      Street lighting is adjacent to the property.
    - **Absent**
      Street lighting is not adjacent to the property.

Sample Assessment Detail Report

On the sample shown below, the factors and variables used to calculate each individual property assessment are displayed in the Factors Used to Calculate section of each property's Assessment Detail Report.

202x Property Assessment Detail Report
Assessment and Taxation

Account **99999999**

page 1 of 1

Report Date	February 12, 202x
202x Assessed Value	**$226,000**
Date of Issue	February 12, 202x
Property Address	9999 SAMPLE AVENUE SW
Legal Description	Plan: 9999999 Block: 99 Lot: 99
Zoning	RMD - Residential Mixed Dwelling Zone
Effective Zoning	RF4 - Semi-Detached Redevelopment District
Neighbourhood	Cavanagh
Assessment Class	RESIDENTIAL
Property Use	100 % Undeveloped residential land
Taxable Status	January 1 - December 31, 2021; FULLY TAXABLE
Unit of Measurement	METRIC (metres, square metres)

Factors Used to Calculate Your 202x Assessed Value

	MARKET VALUE APPROACH	DIRECT COMPARISON
LAND		
Variable	**Factor**	**Type**
Neighbourhood	CAVANAGH	Site
Zoning	RMD	Site
Lot size	429	Site
Ravine influence	ABUTTING	Site
Water supply service	PRESENT	Site
Sanitary sewer service	PRESENT	Site
Storm sewer service	PRESENT	Site
Access to paved public roads	PRESENT	Site
Access to sidewalks, curbs or gutters	PRESENT	Site
Street lighting	ABSENT	Site
	Land Value	**226,234**

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 such as paired data analysis, grouped data analysis, and secondary data analysis, statistical analysis, including 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)

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 comparable transactions, an appraiser may attribute greater accuracy and give more weight to the value indications obtained from these transactions, particularly if the magnitude of the adjustments is approximately the same.

(AIC, 2010, p. 13.16)

References

City of Edmonton. (2018). *Zoning Bylaw No. 12800.* Retrieved from City of Edmonton: 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.

International Association of Assessing Officers [IAAO]. (1997). *Glossary for Property Appraisal and Assessment.* Chicago IL.

Province of Alberta. *Matters Relating to Assessment and Taxation Regulation, 2018.* Retrieved from Service Alberta, King's Printer: https://www.alberta.ca/alberta-kings-printer.aspx

Province of Alberta. *Municipal Government Act.* Edmonton, AB: King's Printer.

Appraisal Institute of Canada (1995). *Basics of Real Estate Appraising Fourth Edition*. Winnipeg, Canada.

Appraisal Institute of Canada (2005). *The Appraisal of Real Estate Second Canadian Edition*. Vancouver, Canada.

Appraisal Institute of Canada (2010). *The Appraisal of Real Estate Third Canadian Edition*. Vancouver, Canada.

Appendix

Zone Chart: Residential

Residential Zonings	
RF1	**Single Detached Residential Zone (s.110)** is to provide for single detached housing while allowing other forms of small scale housing
RSL	**Residential Small Lot Zone (s.115)** is to provide for smaller lot single detached housing with attached garages
RF2	**Low Density Infill Zone (s.120)** is to retain single detached housing, while allowing infill on narrow lots, uses include duplex housing
RPL	**Planned Lot Residential Zone (s.130)** is to provide for small lot single detached housing, serviced by both a public roadway and a lane
RLD	**Residential Low Density Zone (s.135)** s to facilitate a range of ground-oriented housing forms that use land and infrastructure more efficiently than typical low-density development
RF3	**Small Scale Infill Development Zone (s.140)** is to provide for single detached housing and semi-detached housing while allowing small-scale conversion and infill redevelopment to buildings containing up to four dwellings
RF4	**Semi-Detached Residential Zone (s.150)** is to provide a zone primarily for Semi-detached Housing and Duplex Housing
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

Residential Zonings	
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
RMH	**Mobile Home Zone (s.250)** is to provide for Mobile Homes developed within a Mobile Home Park or Mobile Home Subdivision**.**

*For zonings not listed above, please see zoning Bylaw 12800.

Measure Conversion Chart

Imperial to Metric – Length
1 inch (in) = **2.54** centimetres (cm)
1 foot (ft) = **0.3048** metres (m)

Imperial Conversions
1 acre (ac) = **43,560** square feet (sqft)
1 square mile = **640** acres (ac)
1 section = **640** acres (ac)

Imperial to Metric – Area
1 square foot (sqft) = **0.09290** square metre (m^2)
1 acre (ac) = **4,046.86** square metre (m^2)
1 acre (ac) = **0.40469** hectares (ha)

Metric Conversions
1 square kilometer (sq km) = **100** hectares (ha)
1 hectare (ha) = **10,000** square metres (m^2)