

An aerial photograph of the Edmonton city skyline, featuring various high-rise buildings and a mix of urban development. The image is overlaid with a white geometric pattern of triangles and lines. Several triangular areas are filled with solid colors: a large red triangle at the top left, a smaller red triangle to its right, a green triangle on the right side, and a larger green triangle on the left side containing the year '2016'. The bottom right corner of the image is dominated by a large blue triangle that contains the report's title.

2016

ANNUAL GROWTH  
MONITORING REPORT  
**“OUR GROWING CITY”**

Edmonton



# OUR SHARED VISION

Edmonton is a city that continues to attract, house and employ people. The city continues to grow at a fast pace, and there is a need to maintain its vibrancy and quality of life.

The City of Edmonton and our partners strive to strike a balance between preserving ecologically sensitive land, supporting the revitalization of downtown, densifying mature areas, and accommodating new development in a sustainable manner.

Each year the City endeavours to deliver infrastructure and services that are most important to Edmontonians while managing the opportunities and challenges of an ever-changing city. Our annual Growth Monitoring Report tracks how we are doing.

The City's vision is outlined in The Way Ahead, which contains key directional plans to shape the way we grow our city, green our environment, live in our community, move people and goods efficiently, prosper locally

and globally, and finance our needs responsibly and strategically. Edmonton's vision provides the platform for building the kind of communities that deliver choice, diversity, resiliency, sustainability, and innovation.

Several key initiatives demonstrate how the City's vision guides Edmonton's growth. Transit Oriented Development, West Rosedale, Blatchford, and Downtown redevelopment are helping our central neighbourhoods and areas along Edmonton's expanding LRT routes grow **"upward."** Ongoing efforts to enable infill opportunities in our mature and established neighbourhoods help the city grow **"inward,"** and the construction of new neighbourhoods in developing areas enables our city to grow **"outward."**

Together, we are building the Edmonton we are proud of: resilient, innovative, strong and sustainable. Together, we will create and invest in our shared future.

## Key Findings From the Chief Planner



It is with great pleasure that I present the third edition (2016) of the Annual Growth Monitoring Report. In November 2012, Council approved the Growth Coordination Strategy which provides a framework to identify and manage the expected growth of our city. One of the key elements directed by the Strategy is the preparation of an annual Growth Monitoring Report. This report contains information on key demographic, residential and non-residential growth trends across the city.

The Growth Monitoring Report is a source of intelligence on residential and non-residential land supply in Edmonton. This year's report builds on the analysis of previous years and introduces non-residential figures. It also provides more details on infill development in the city.

What this report tells us overall, is that Edmonton remains strong. We continue to grow and thrive in population, in commerce, and in development. With this growth there are challenges. We strive to balance the financial pressure of meeting the infrastructure and service needs of a growing population. We strive to balance the need for green and open spaces, revitalize our core, densify mature areas and accommodate new development. How we reach for this balance is determined by The Way Ahead, the City's Strategic Plan. Within that vision are a number of key initiatives that help us grow Up, In and Out.

This report tells us in what areas we are doing well, and where we need to continue to focus our efforts. While we have made significant progress, there is still work to do.

Neighbourhoods in the developing areas of the City had the largest population gains with an estimated increase of nearly 25,000 people. Mature neighbourhoods gained an estimated 2,200 while the established neighbourhoods had a population loss of an estimated 400.

We are still working to meet the 25% development goal in core and mature neighbourhoods, in part due to vigorous growth in developing neighbourhoods. Of new unit development, 81% occurred in developing neighbourhoods. In 2015 there was a significant shift towards multi family unit types. Forty percent (40%) of new units were apartment units and 33% were other housing types such as secondary suites, semi-detached homes and row housing.

The core neighbourhoods continue to have the highest average density of our City. Five of the top ten neighbourhoods with the highest dwelling unit density are located there. Throughout 2015, we saw great strides in revitalization of the core. We see the effects of this now, and will continue to do so into the future.

In 2015, 99 industrial building permits were issued in the city with a construction value of \$234 million. Total permits issued for non-residential increased by 4%. Our economy and strong employment rate continued to draw people to Edmonton, most of whom were between the ages of 24-30.

We know Edmonton will continue to grow and change; to accommodate this growth we need to understand it. This report provides the insight and context we need to plan and build a strong future. Bound together by a common vision we continue to build an Edmonton that is resilient, innovative and livable.

# TABLE OF CONTENTS

<b>1.0</b>	Monitoring Growth and Change	05
<b>2.0</b>	Edmonton's Place in the Region	09
<b>3.0</b>	Edmonton's Demographic Update	15
<b>4.0</b>	Diverse Development to Meet a Diverse Population	25
<b>5.0</b>	Development Patterns and Trends	39
<b>6.0</b>	Non-Residential Growth and Development	61
<b>7.0</b>	Integrated Infrastructure Management Planning	71
<b>8.0</b>	Development Hot Spots	77
<b>9.0</b>	Information Portal	87

## APPENDICES

<b>A</b>	References	98
<b>B</b>	Definitions	100
<b>C</b>	Zoning Summary	102
<b>D</b>	Methodology Notes	106
<b>E</b>	Edmonton Zoning Trends 2004 – 2015	108





# MONITORING GROWTH AND CHANGE

In November 2012, Council approved the Growth Coordination Strategy. The Strategy provides a framework to identify and manage future public obligations and to accommodate expected growth through monitoring, reporting, coordination, and communication. One of the key elements directed by the Strategy was the preparation of an annual Growth Monitoring Report.

Following direction from the Growth Coordination Strategy, this Report contains information on Edmonton's neighbourhoods, which are divided into four geographic areas based on the Way We Grow (see the Neighbourhood Classification Map):

- ▶ Core areas (downtown and adjacent neighbourhoods)
- ▶ Mature areas (neighbourhoods outside the core, generally completed prior to 1970)
- ▶ Established areas (completed neighbourhoods, generally within the Anthony Henday Transportation Corridor)
- ▶ Developing areas (currently developing and planned neighbourhoods where lot registration is not yet complete)

This is the third annual Growth Monitoring Report. This document reports on the year 2015. It contains information on key demographic, residential and non-residential growth trends across the city. It builds on growth related measures we track year long. It should be noted that this report provides the reader with snapshots in time on varying attributes of Urban Growth.

To help inform the report's development, a Growth Coordination Committee comprised of diverse stakeholders provided input on its content and presentation style. The purpose of their feedback was to understand what types of data and information users require, and how this might best be communicated to meet the needs of multiple audiences.

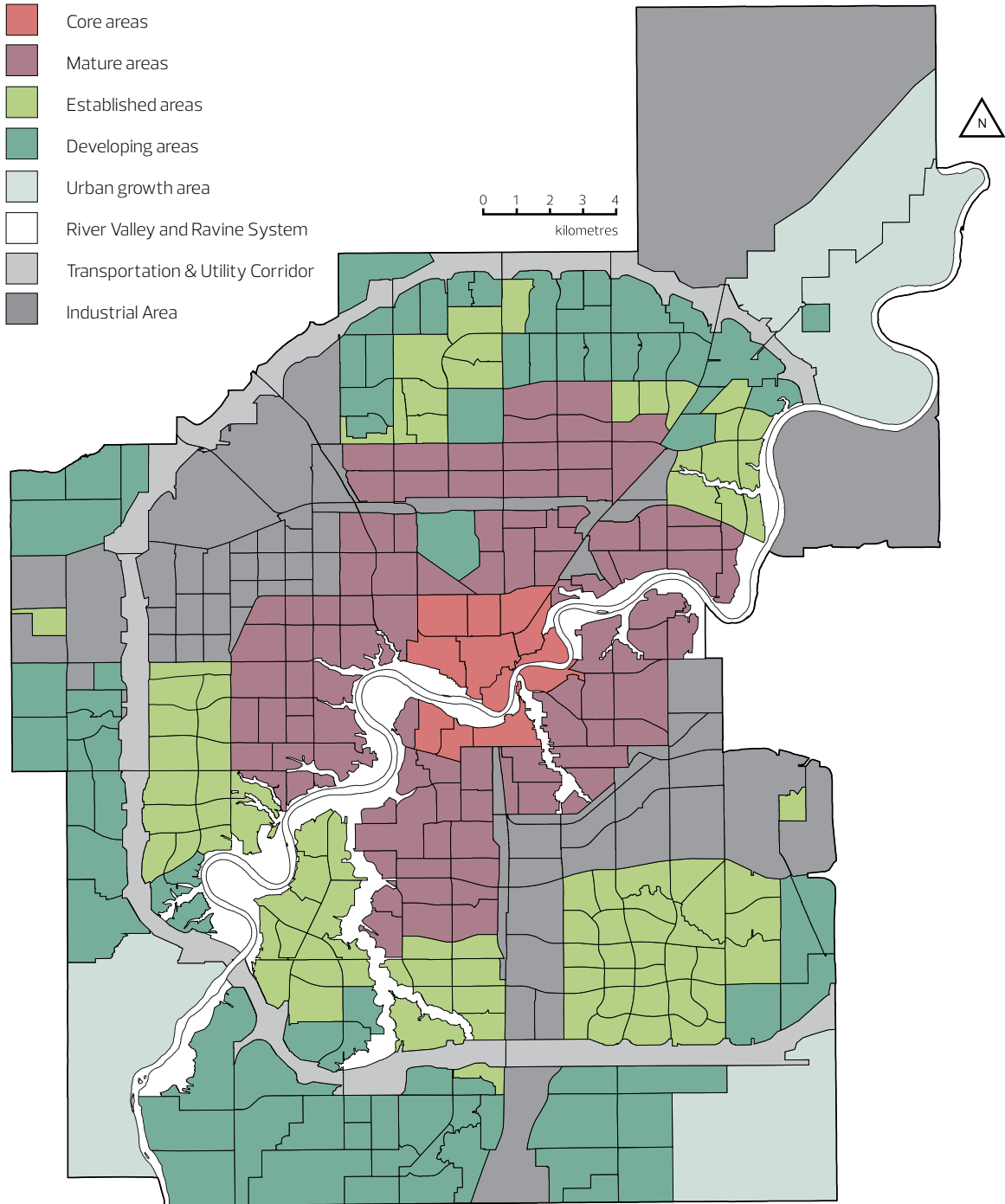
The Committee identified the importance of an integrated communications approach for the release, timing, distribution, and cross-referencing of the city's growth related information in a variety of formats. As such, this report will be complemented by an information framework that makes data and analysis available over the course of the year via ongoing publications and summary reports, newsletter updates, a streamlined website, better links, and the continual release of open source data. Future annual reports and the communication of key information will continuously improve to adapt to stakeholder needs over time.

## How does this report work?

This report is a summary snapshot of city growth, supported by detailed reports, open data sets, and complementary links. Using a layered approach, this report is structured as a "portal" into the diverse and detailed information that the City of Edmonton collects, maintains, analyzes, and shares about its physical development and population growth trends. Through this report, readers are linked to increasing levels of information to match their own analytical needs.



# MAP 1.1 NEIGHBOURHOOD CLASSIFICATION



Neighbourhood Classifications in this report are as per "The Way We Grow" Municipal Development Plan (2008) unless otherwise noted. Minor variances may occur due to land use and existing bylaws



# EDMONTON'S PLACE IN THE REGION

“COLLABORATION IS THE ONLY WAY WE WILL GET AT THE HEART OF THIS ISSUE [HOW DEVELOPMENT IS PLANNED AND PAID FOR] FOR THE BENEFIT OF ALL EDMONTONIANS.”

Mayor Don Iveson, 2016,  
on “Calculating the Real Costs of Our Growth”  
[www.doniveson.ca](http://www.doniveson.ca)

Edmonton is growing, and keeping pace with this growth remains a challenge. Edmonton is the urban centre of a resource-rich economic region and a gateway to global trade, where goods for a global market are produced and distributed.

The city is the heart of the Capital Region, which includes Edmonton, St. Albert, Spruce Grove, Stony Plain, Leduc City, and the surrounding Counties of Leduc, Parkland, Strathcona, Sturgeon and Lamont. Edmonton provides a wide range of services, employment, and housing choices to the entire region.

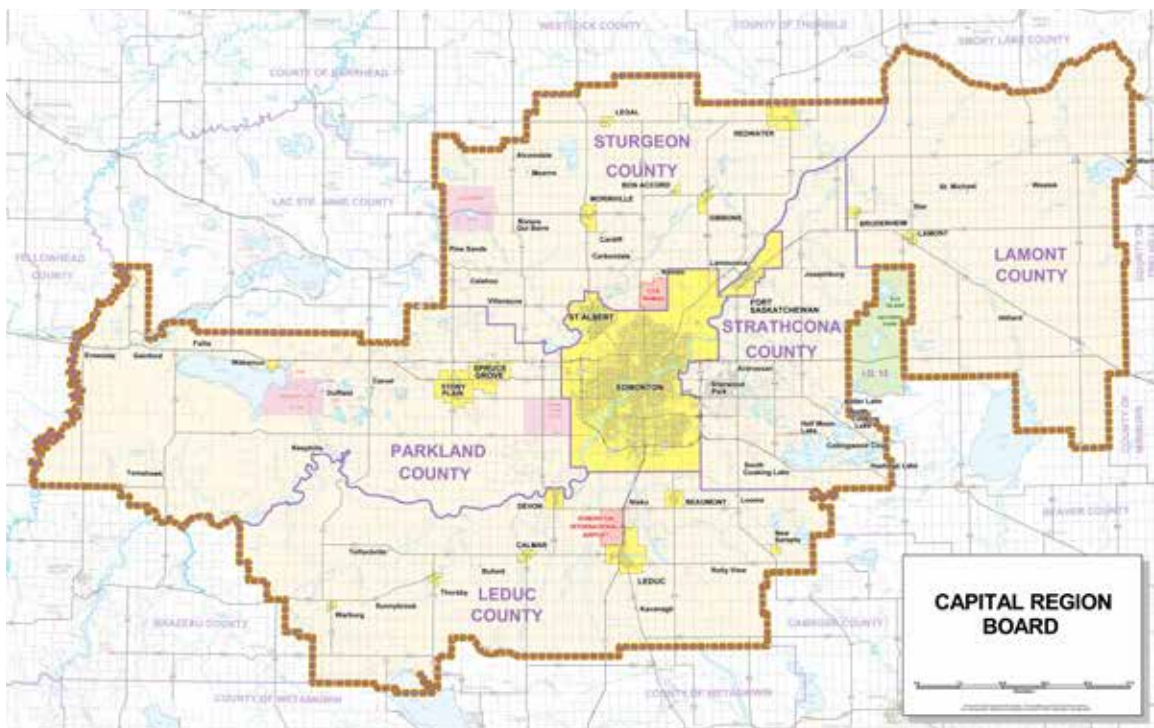
The Capital Region's population is expected to reach approximately 2 million by 2044.<sup>1</sup> Based on this anticipated increase, it is estimated that Edmonton will require 150,000 new housings units by 2040. Edmonton is a centre for employment accounting for approximately 485,000 jobs in the Capital Region. Projections to 2044 expect that the city will, maintain and grow its share of jobs within the region based on current and future efforts to expand its employment base across all sectors.

<sup>1</sup>Source: Capital Region Board

Edmonton has consistently maintained a majority of housing starts within the Capital Region. In 2015, 78% of the region's total housing starts occurred within the City, up sharply from the ten year average of 67%. Over this same period the city's regional share of single-detached and multi-family (semi-detached, row housing and apartments) has averaged 60% and 75% respectively. With several smaller communities surrounding Edmonton, the city must provide complementary housing options to those available within the region. Ensuring that growth is both coordinated and efficient is integral to providing cost effective housing.

Over the last decade, Edmonton's population has increased by 165,535 people, to 877,926 in 2014, with 70% of the region's population now living in Edmonton. These growth pressures have been reflected in an active housing market, with 91,508 housing starts between 2005 and 2015 (inclusive). In 2015, there was a drop in single family housing starts (16.8% drop from prior year) while multiples housing starts experienced a 61.5%. In total, the Edmonton Metropolitan Area experienced a 22.9% increase in housing starts in 2015. Please see Appendix D for more information on Canadian Mortgage and Housing Corporation or go to [www.cmhc-schl.gc.ca/en/index.cfm](http://www.cmhc-schl.gc.ca/en/index.cfm)

## MAP 2.1



CITY OF EDMONTON CHIEF ECONOMIST<sup>1</sup>

# Edmonton's Economic Outlook – Modest Growth as Oil Prices Gradually Recover

Continuing low prices during 2015 and early 2016 are impacting selected sectors in Edmonton and the Capital Region. None the less both economies continue to perform well when compared to both Alberta and the rest of Canada. Growth will continue in 2016 albeit at a slower pace than seen in recent years. Strong momentum in the construction sector combined with a solid base of employment in health care and education will offset energy related weakness in the hospitality, logistics and manufacturing sectors.

Looking forward, as oil prices gradually recover, economic prospects for Edmonton will improve quickly with population and employment growth rising above levels expected for both Alberta and Canada. In spite of very strong in-migration over the past several years Edmonton's outstanding record of job growth kept the unemployment rate below the national average. As of April 2016 Edmonton's unemployment rate was 7.0% versus 7.1% for Canada.

In the longer term, economic growth should moderate due to an aging population. However a relatively young demographic will mean the easing in growth will be much more modest than that forecasted for many other metropolitan areas. Moving towards 2025 growth is expected to average 1.9%.

Edmonton's solid labour market conditions supported continued in-migration and sustained population growth as well as new household formation. Even with the ongoing arrival of migrants over the past several years an increase in the stock of multifamily housing drove the rental vacancy rate up from 1.7% in 2014 to 4.2% in 2015

The Economic Outlook Report and related documents are available at [www.edmonton.ca/business\\_economy/economic\\_data/economic-outlook.aspx](http://www.edmonton.ca/business_economy/economic_data/economic-outlook.aspx).

Lower sales of both new and existing houses and a rising stock of unsold homes lead to a modest decline in house prices. Consequently housing costs continue to be very favorable compared to other markets such as Toronto and Vancouver. Edmonton's housing affordability remains one of the best among Canada's leading metropolitan areas.

Inflation as measured by the Consumer Price Index (CPI) remained low in 2015 and into early 2016 as lower gasoline, electricity and home heating prices offset higher food and clothing cost. As of April 2016 Edmonton's year over year rate of inflation was a 1.7% compared to 1.7% for Canada. Edmonton's CPI should hold at the 2% range during 2016 as energy related costs rise. Both operating and capital cost inflation for the City should be very moderate as a slowing energy sector reduces demand for labour, materials and equipment.

After very strong population growth from 2012 to 2014, Edmonton's population is expected to grow at 1.9% over the next decade. While this population growth will help to address labour shortages it will place a continuing demand on the city for increased services and infrastructure investments. Growing population requires services such as public transit, police services and affordable housing.

	% Average Annual Growth	
	2016 to 2020	2016 to 2025
<b>City of Edmonton</b>		
Real GDP	2.7	2.7
Population	1.9	1.9
Employment	1.8	1.8
Housing Starts (Units)	9,000	9,600
<b>Edmonton CMA</b>		
Real GDP	2.3	2.6
Population	2.4	2.4
Employment	1.3	1.9
Housing Starts (Units)	11,500	12,200

# A Market Perspective: The Urban Development Institute Edmonton Region

2015 proved to be an interesting year with dynamic changes in provincial and federal governments, oil price declines and a softening of the Alberta economy. Despite these changes, the land development industry continued to perform well in Edmonton.

With continued job growth and affordability, Edmonton maintained its competitive housing advantage within the province. After an exceptional couple of years, migration moderated. A decline in single family starts was offset by multi-family units which experienced a major increase this year with projects announced downtown, in infill areas, and in new communities.

Now more than ever, the cost of doing business is pertinent to keeping a tight bottom line and maintaining affordability in the region. Uncertainty in the economy promotes the opportunity to find innovative ways to reduce both construction and regulatory costs. Our ability to control costs will direct our success in the years ahead.

Looking ahead, ensuring Edmonton is a wonderful place to live, work and play is a top priority for the Urban Development Industry. We must continue our efforts, together with city leaders, aimed at making Edmonton both welcoming and affordable. Edmonton's development industry supports growth by imagining and building diverse communities with a range of housing types. Our relationship with the City of Edmonton has continued to provide opportunity for collaboration and innovation.

*The Urban Development Institute-Edmonton Region (UDI-ER) is a non-profit association representing the land development industry. Our members are development companies and professionals involved in the industry, such as planners, surveyors, architects, landscape architects, engineers, contractors, lawyers, financial managers, municipalities, and utility companies.*

*Recognizing that the development of land is an essential function of our economy, UDI-ER's activities and objectives focus on Building Communities Together through promoting wise, efficient and productive urban growth.*

For more information, please contact the Urban Development Institute, at [www.udiedmonton.ca](http://www.udiedmonton.ca)

## A Market Perspective: IDEA (The Infill Development in Edmonton Association)

The Infill Development in Edmonton Association (IDEA) was created in 2013 to promote and advocate for high quality infill in Edmonton. IDEA focuses on proactive advocacy, providing education and resources, and works to connect organizations, experts, businesses and individuals to encourage high quality and vibrant infill development.

We have witnessed a buyers market emerge over this past year with the drop in oil prices and uncertainty in the economic markets. However, quality residential and commercial infill properties located in great locations still remain in high demand with little downward movement on pricing. We are expecting market conditions to stabilize towards the end of 2016 and improve moderately in 2017.

The data provided in the 2016 Growth Monitoring Report provides great insight into the migratory and development patterns occurring in the City of Edmonton. We are attracting a young and diverse population to this city from all corners of the world. As seen in the data, most of them are moving to the edges of the city where affordability and choice are available to them. Armed with this information, we need to continue to work hard to provide Edmontonians with diverse and affordable housing choices and mixed use commercial developments in the core, mature and established neighbourhoods. Major redevelopment projects like Blatchford, Rossdale and The Quarters, while significant and impactful, will only be able to accommodate less than 10% of our projected population growth over the next 30 years.

IDEA envisions an Edmonton full of healthy communities made vibrant and walkable through our collaborative planning and development decisions. A revitalization of our mature neighbourhoods, hand in hand with densification, will result in a resilient city which can maximize the impact of its infrastructure investments. Environmental sustainability in our architecture and design, combined with a priority on planning for diversity in lifestyles, ages, and abilities, will equip our communities with the flexibility the future will require.

For more information on IDEA, go to [www.infilledmonton.com](http://www.infilledmonton.com)



3

# EDMONTON'S DEMOGRAPHIC UPDATE

Edmonton's population has grown very rapidly in recent years. Between 2001 and 2015 the Edmonton Census Metropolitan Area (CMA) had a much higher growth rate (2.5%) than all the ten largest CMA's except Calgary (2.8%). The City of Edmonton experienced a 2.3% rate between 2001 and 2014 with population increasing by just over 220,500.

This very high growth rate was due mainly to high levels of net migration. As a consequence Edmonton has the youngest age profile of Canada's larger CMAs.

Over the same period, Alberta's population increased by 1.138 million with Edmonton CMA increasing by 401,000 or 35% of Alberta. The majority, (56%) of Alberta's growth was through net migration with Edmonton CMA receiving nearly 224,000 or 35% of Alberta's net migration. Edmonton CMA received a further net 40,000 people who moved from elsewhere in Alberta. Migration to Alberta is strongly influenced by employment opportunities. The Figure 3.1 shows employment growth rates for Canada's ten largest CMA's over the years 2001 to 2015 and this has a very close relationship with population growth (see Figure 3.2).

## WHAT IS THE CENSUS METROPOLITAN AREA?

The Census Metropolitan Area (CMA) is a collection of municipalities as defined by Statistics Canada. It includes thirty five census subdivisions centered around Edmonton. Edmonton's CMA is the largest in Canada, covering almost 9,500 km, and has the sixth largest population in Canada.

For more information, please go to [www.statcan.gc.ca](http://www.statcan.gc.ca)

The City of Edmonton household growth is also high over this period at 2.3% (nearly 93,000), and has led to strong demand for housing and additional municipal infrastructure and services. Demographic data for net migration and natural increase is more available at the level of the census metropolitan area (CMA) rather than the municipal level and will be used for much of this discussion.

Cities' and regions' population changes in response to natural increase (births minus deaths) and net migration (in-migration minus out-migration). Edmonton has had periods of very rapid growth when both natural increase and net migration levels were high. This happened through the 1950s, the 1960s and from the mid-2000s until today. Natural increase has been at high levels for the past decade helped by Edmonton's young age profile. However, it is net migration that has been the largest contributor to the sharply higher levels of population increase in recent years.

## MIGRATION

Net migration for Edmonton is comprised of three components: international, interprovincial and intraprovincial. International net migration over the last 13 years has ranged from 20% to 81% of total net migration. International net migration has increased five-fold since the early 2000s, rising from nearly 3,500 annually between 2002 and 2004 to 17,385 annually between 2012 and 2015. Similarly, interprovincial net migration has increased from 3,300 annually to just over 13,500 in the same period.

FIGURE 3.1 EMPLOYMENT GROWTH RATE, 2001–2015

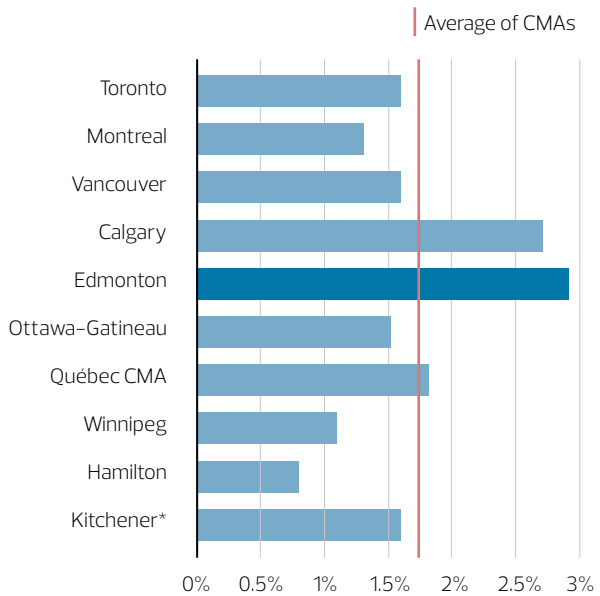
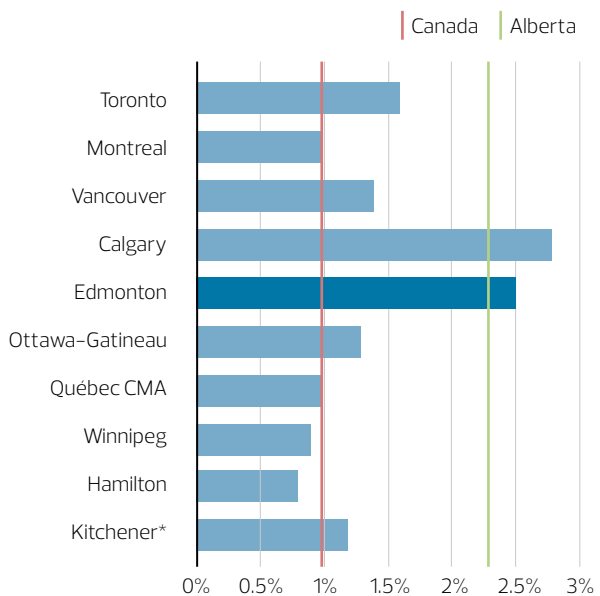


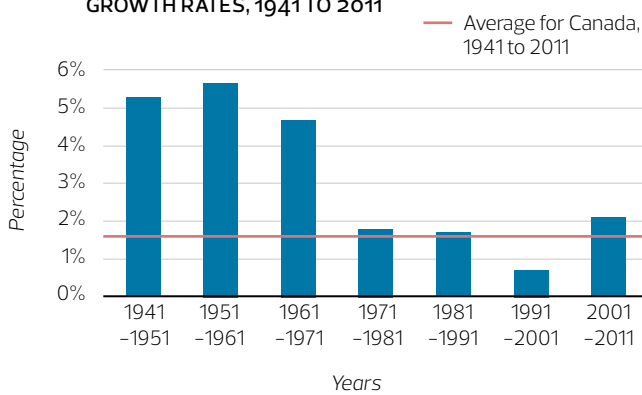
FIGURE 3.2 POPULATION GROWTH RATE, 2001–2015



\*Kitchener, Cambridge, Waterloo \*CMA = Census Metropolitan Area

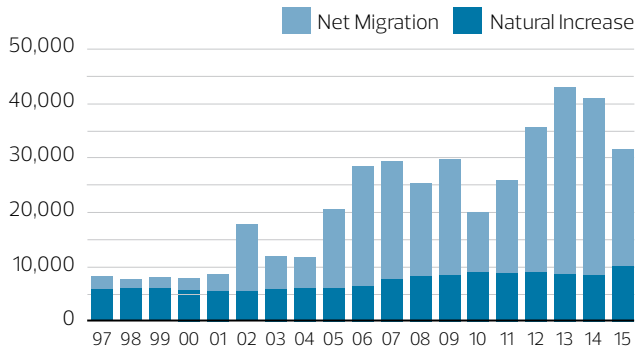


**FIGURE 3.3 CITY OF EDMONTON POPULATION GROWTH RATES, 1941 TO 2011**



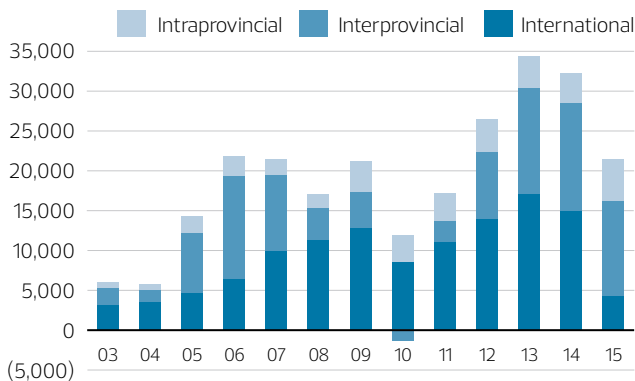
International immigration to the City of Edmonton has changed substantially in recent years. Until 2005, 27% of all immigrants were from Europe while in the years 2006 to 2011, the percentage of immigrants from Europe fell to 9%. The share of immigrants from Asia increased from 53% in the years to 2005 to 65% in the years 2006 to 2011. The share of immigrants from Africa increased from 9% to 15% over the two time periods.

**FIGURE 3.4 EDMONTON CMA NET MIGRATION AND NATURAL INCREASE**



Intraprovincial net migration levels have been more constant. Migration is heavily influenced by changes in economic conditions between sending and receiving areas. Interprovincial and intraprovincial migration levels show less change from previous years. Total net migration is down 34% to mid-year 2015 from the year prior.

**FIGURE 3.5 EDMONTON CMA NET MIGRATION BY COMPONENT**



The age profile of immigrants (people who previously lived outside of Canada) is young with 40% aged between 20 and 34. The age profile of net internal migrants (people already residents in Canada who move to and away from Edmonton) is slightly younger with 45% aged between 20 and 34. Younger people are attracted to move to Edmonton because of the high employment growth over the last fifteen years (see Figure 3.1). The high number of people in the young adult group arriving to Edmonton has prompted high demand for housing and other services. This age group is also in the years of high fertility and will contribute to population gains through increased births.

# FIGURE 3.6 EDMONTON IMMIGRANTS TOTAL LANDING: 46,075 PERSONS

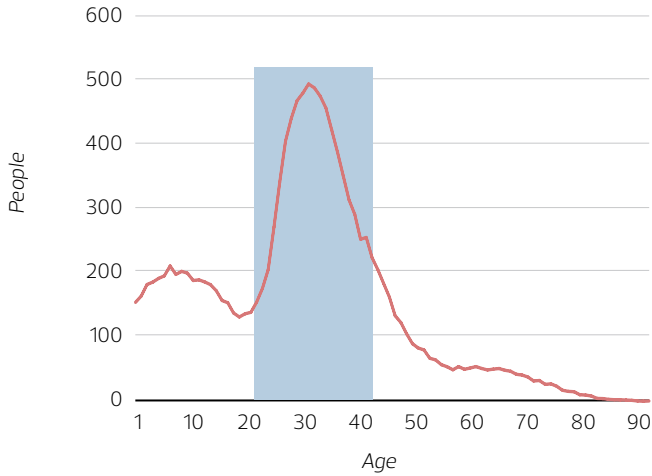
JANUARY 2006 TO MAY 2011

Source: 2011 National Households Survey  
City of Edmonton geography



Immigration arrows do not represent specific geographies or neighbourhoods within the City of Edmonton, but of the City of Edmonton as a whole.  
For more information on Immigration at a neighbourhood level, please see the 2011 Census Atlas at [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis).

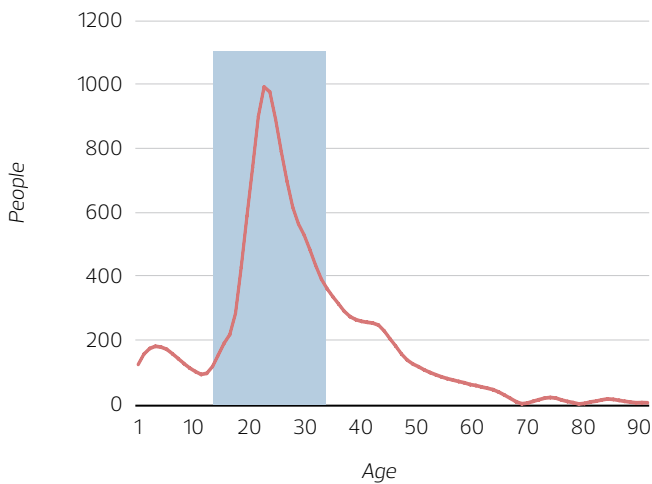
**FIGURE 3.7 AGE OF IMMIGRANTS, EDMONTON CMA, 2013 TO 2015**



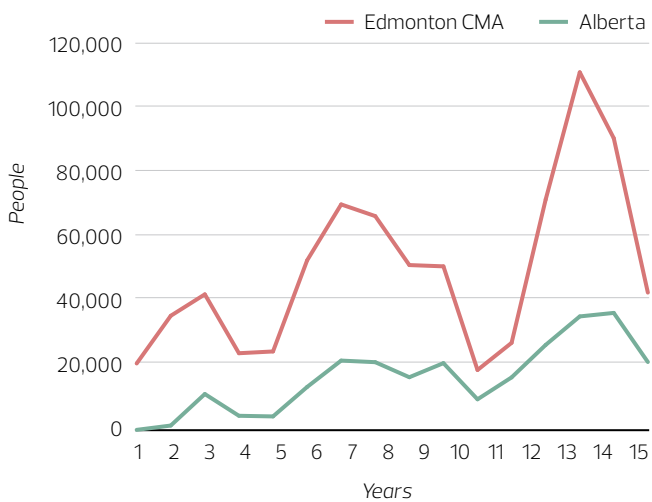
Demographic projections for the Edmonton area indicate continuing high population growth with accompanying demand for housing and services. For approximately the last ten years, net migration has contributed by far the largest share of population growth. Net migration is variable though and changes quickly in response to economic conditions.

Net migration numbers are released first at the provincial level and then at the CMA level. The data for Alberta and Edmonton CMA shows that net migration is down sharply in 2015.

**FIGURE 3.8 INTERPROVINCIAL AND INTRAPROVINCIAL NET MIGRATION BY AGE, EDMONTON CMA, 2013 TO 2015**



**FIGURE 3.9 NET MIGRATION, 2010-2015**











**POPULATION ESTIMATES**

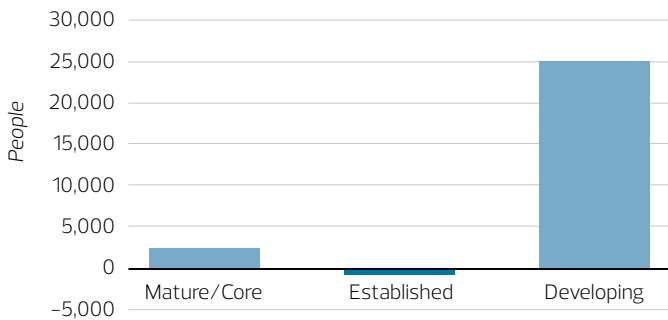
Projections of population often incorporate different economic growth assumptions and these have a large impact on net migration. Projections by the Capital Region Board expect Edmonton's population to increase by between 484,000 (low scenario) to 593,000 (high scenario) between 2014 and 2044 indicating continuing high demand for municipal and private sector services.<sup>1</sup>

Alberta's interprovincial migration continues to weaken in the last quarter of 2015, turning negative for the first time since the fourth quarter of 2009. Although Alberta is facing negative net interprovincial migration, the province continues to be very attractive to immigrants. Also, Alberta's natural increase remains positive with an increase of 7,509 people in during the fourth quarter.

Natural increase is an important driver of Alberta's population growth, but has been of lesser importance for Edmonton over the last eleven years when net migration has contributed the major share of growth. Keeping in mind that Alberta's interprovincial migration turned negative in the last quarter of 2015, we can expect a slowing of population growth in 2016. The release of the 2016 municipal census and the first releases of the 2016 federal census will give us better insights into the impact the economic downturn is having on Edmonton's population growth.

In the meantime, estimates of population change by City sector in 2015 were prepared. Population change by city sector (see Map 3.1), was estimated using the 2014 City of Edmonton census and adjusting sector populations by accounting for net newly-constructed dwelling units that would have been available in 2015 (see Map 3.2). Further adjustments were made to account for a large increase in the vacancy rate of rental dwelling units monitored by CMHC (Canada Mortgage and Housing Corporation). Neighbourhoods in the developing sector had nearly all the population gains with an estimated increase of nearly 25,000. Mature sector neighborhoods gained an estimated 2,200 while the established sector had a population loss of an estimated 400.

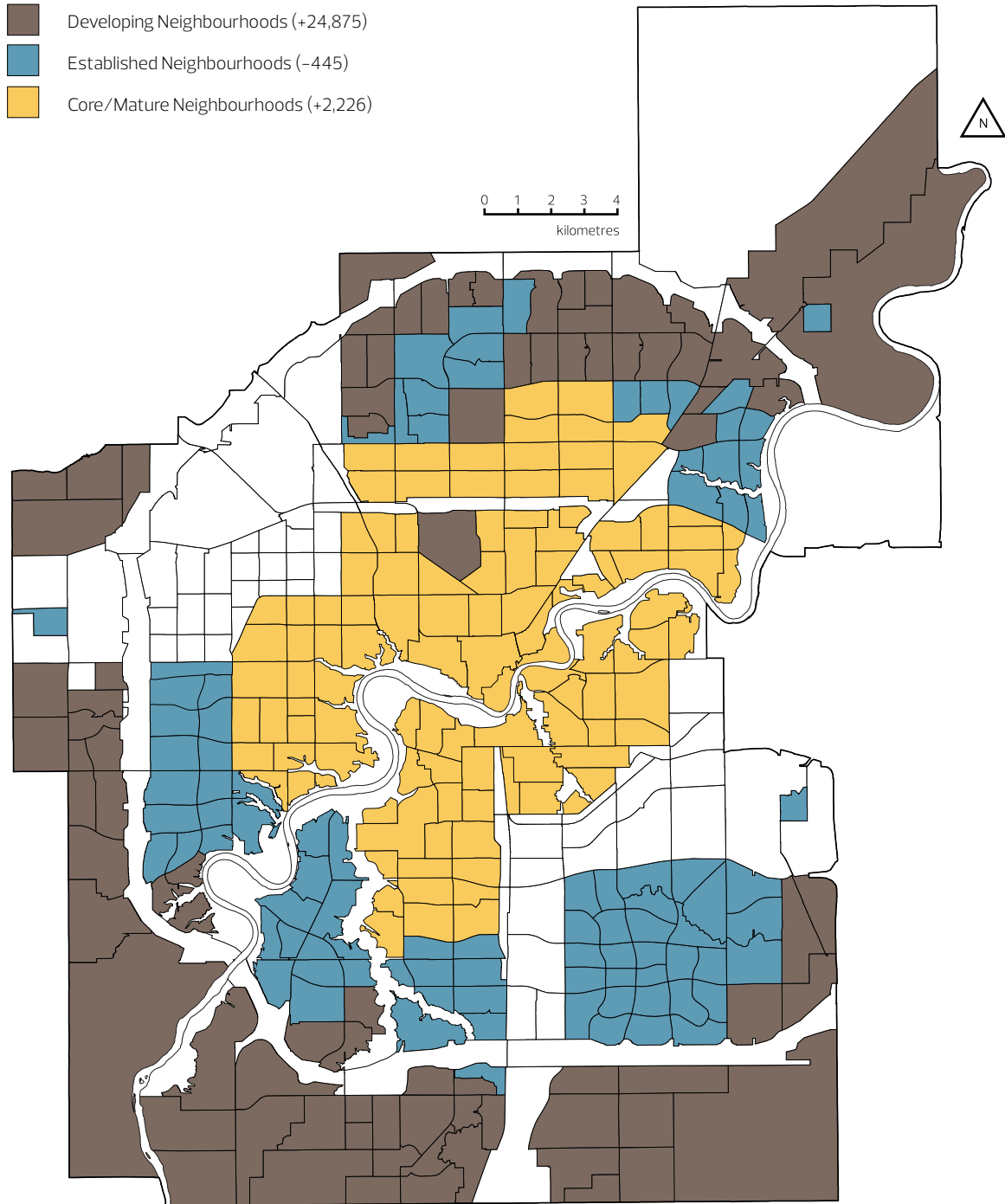
**FIGURE 3.11 ESTIMATED POPULATION CHANGE BY CITY SECTOR, 2015<sup>1</sup>**



For more information on CMHC and Vacancy rates: [www.cmhc-schl.gc.ca/en/corp/about/](http://www.cmhc-schl.gc.ca/en/corp/about/)

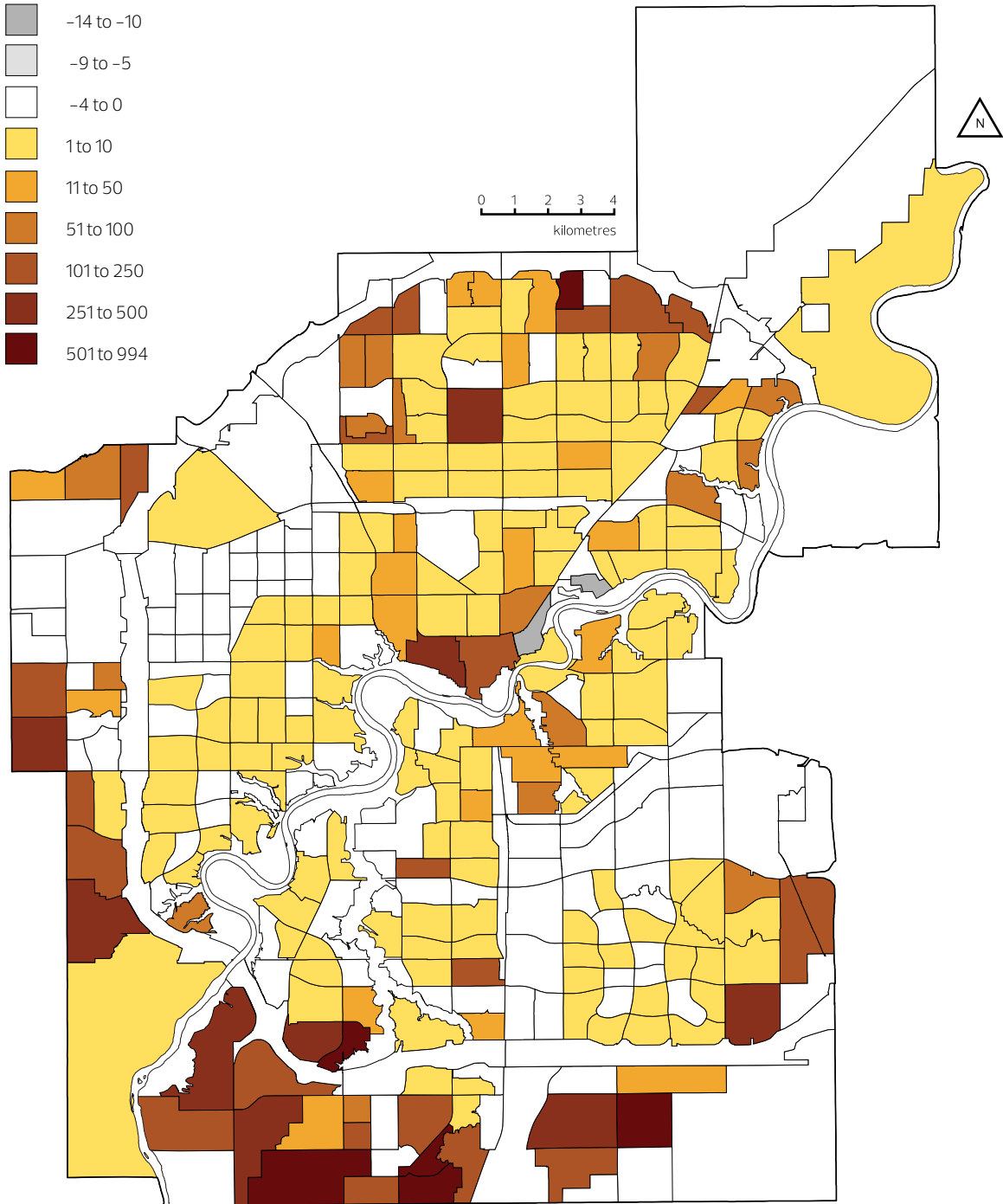
<sup>1</sup>Census Information Source: Statistics Canada

# MAP 3.1 POPULATION CHANGE BY SECTOR (2015)



For details on methodology, please refer to p.21 of this report.

# MAP 3.2 DWELLING UNIT CHANGE 2014-2015



Source: City Of Edmonton, 2015 Building Permit Data. [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis)

4

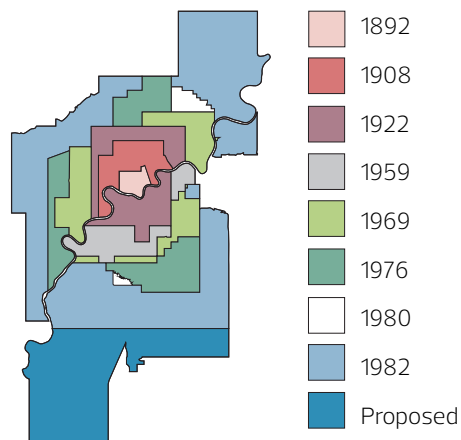
# DIVERSE DEVELOPMENT TO MEET A DIVERSE POPULATION

Edmonton's development is diverse, with residential, commercial, industrial, institutional, and recreational land uses throughout the city. Combined, Edmonton's different land uses and development patterns support a diversity of buildings, landscapes and amenities that create a vibrant city, providing a range of opportunities and services for people. Development patterns shift and change as the city grows; this section provides an overview of Edmonton's growth with respect to its land use patterns and land use supply.

Edmonton's history is characterized by periods of rapid growth. The city expanded its boundaries several times since its incorporation to accommodate waves of newcomers lured by the oil industry. After World War II and the 1947 discovery of oil in Leduc, Edmonton experienced a growth spurt lasting 20 years when Edmonton's compound growth rate hovered around 5% to 6%. The city's boundaries doubled to accommodate the demand for residential land.

The most recent municipal boundary change was in 1982, this change was followed by the low growth years of the 1990s when the compound population growth was a less than 1%. Since 2009, Edmonton has experienced rapid expansion at a compound growth rate of 2.3%.

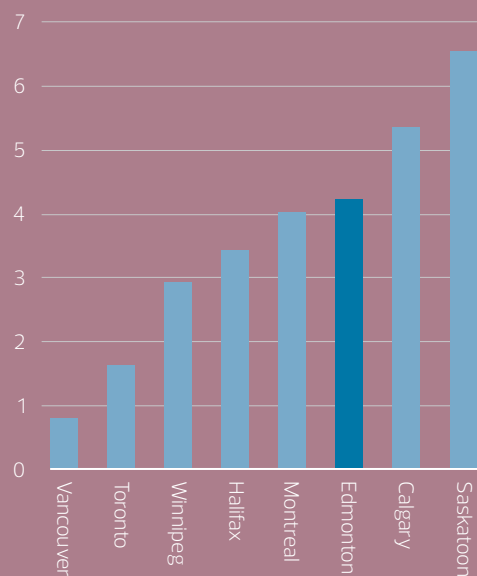
MAP 4.1 EDMONTON'S BOUNDARY HISTORY



# Apartment Vacancy Rates

Edmonton's 2015 apartment vacancy rate was 4.2% – close to that of Calgary and Montreal. Apartment vacancies increased in 2009 at the time of the financial crash in the developed economies. In 2015, the apartment vacancy rate in Edmonton is close to this 2009 total.

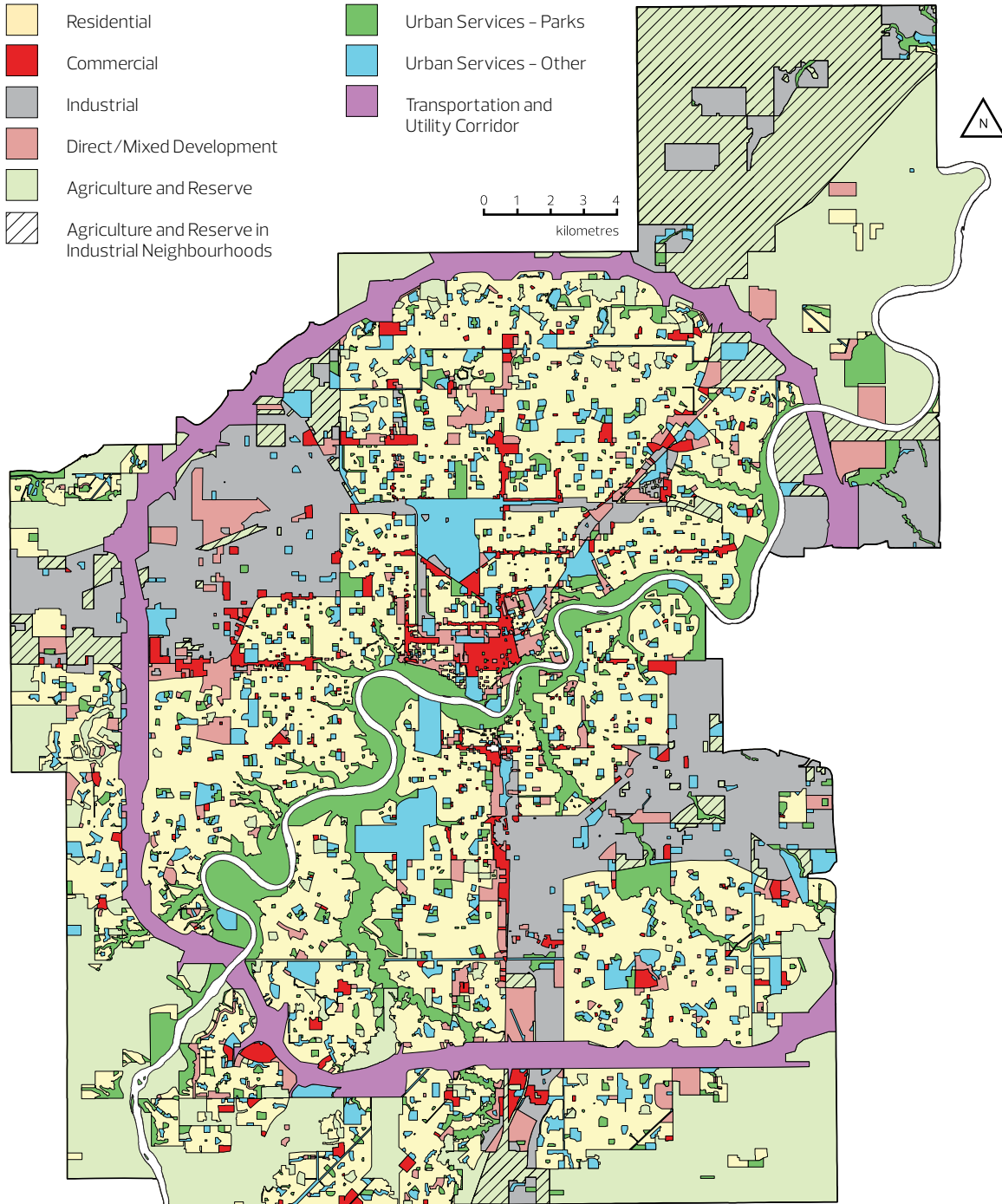
FIGURE 4.1 2015 APARTMENT VACANCY RATE CANADIAN CITIES



Fall figures as per the Canadian Mortgage and Housing Corporation (CMHC)  
[www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)



# MAP 4.2 GENERAL ZONING CATEGORY





# How big is a hectare?

A hectare is about 2.47 acres. The grass surface within the running track of Commonwealth Stadium is approximately one hectare. Edmonton has approximately 180 hectares of zoned vacant land, the size of nearly four West Edmonton Malls

Edmonton supports a diversity of land uses: residential, commercial, industrial, institutional and recreational. Through the zoning process the city shapes the different types of uses and built form for any given land parcel, as well as the amount of area committed to those uses. The process ensures that Edmonton is a vibrant city with opportunities for employment, housing and recreation (see the General Zoning Category map for an illustration of citywide zoning).<sup>1</sup>

Development patterns change as the city evolves and different land uses are established in different areas. In order to ensure sustainable development patterns, the city strives to maintain a balance between different zones.

As of February 2016, zoned land is currently 32.3% residential, 2.5% commercial, 12.3% industrial, 6.8% institutional, and 9.7% parks and open space. Special "direct control" zones account for 4.3% of land uses, transportation/utility corridor (TUC) 6.5%, and agricultural 25.5%.<sup>2</sup> Direct control zones are used to define unique regulations or accommodate mixed uses, so Edmonton's actual land use breakdown may under represent areas where specialty zoning is more common, such as the downtown.

In 2015 the proportion of agriculture and reserve land dropped from 27% (18,790 hectares) to 25.5% (17860 hectares). For the past decade Edmonton has been converting an average of 1,000 hectares of agriculture and reserve zoned land into urban zones each year. The decade long pattern of a 2:1 ratio of residential to business employment (industrial/commercial) land area continues.

<sup>1</sup>For more information, refer to the Appendix or see Edmonton's Zoning Bylaw 12800 ([www.edmonton.ca/zoningbylaw](http://www.edmonton.ca/zoningbylaw))

<sup>2</sup>For more information see Edmonton Zoning trends 2004–2015 in the Appendix and in Open Data ([data.edmonton.ca](http://data.edmonton.ca))

## THE SEQUENCE OF NEIGHBOURHOOD PLANNING AND DEVELOPMENT

The Way We Grow, Edmonton's Municipal Development Plan, provides strategic direction to shape the land use and built form of the city. The Municipal Development Plan applies to the whole city, is updated on a 10-year cycle, and is based on a 30-year planning horizon.

**The Municipal Development Plan (MDP)** states City Council's position and expectations on various land use matters and is the source for many of the City's major policy, guideline and program initiatives (e.g. the Growth Coordination Strategy).

**Area Structure Plans (ASP)** apply to generally 600 (or more) hectares of land. Area Structure Plans provide a high-level development concept identifying the general location and configuration of residential, commercial, institutional, public open space and utilities, and the alignment of major transportation infrastructure including LRT, highways, and arterial and collector roadways. Area Structure Plans also outline a scheme to service and stage the development of the Plan area. In preparing an Area Structure Plan, the City collaborates with the development industry and others (e.g. schools, utilities) to ensure the development concept and servicing scheme comply with the City's applicable policies and standards and appropriately addresses the constraints and opportunities present in the Plan area. It is at this stage that the City evaluates, understands, and begins to identify the infrastructure and service needs attributable.

An **Area Redevelopment Plan (ARP)** is used for the purpose of facilitating development in a specific geographic area. They differ from ASPs in that they apply to areas that have already been developed. They are used to guide how an existing built-up area or neighbourhood should develop in the future.

A **Neighbourhood Structure Plan (NSP)** is a required land use concept plan that must be prepared by a developer for any large undeveloped parcel of land generally one quarter section (160 acres) in size or larger that will support approximately 4,000 to 7,000 people. It is a statutory plan requiring City Council approval.

**Zoning** is applied to land in compliance with the Area and Neighbourhood Structure development concepts and assigns the development opportunities and regulations for built form on the affected lands. Land use zones identify permitted and discretionary uses; site coverage, building heights, forms and density; landscaping, site layout and parking requirements.

**Subdivision** divides land into smaller parcels in accordance with the land use zone in place for the "parent" parcel, and establishes the configuration and orientation of lots and the pattern and alignment of the abutting road network. It is at the subdivision stage that the City identifies specific requirements (including infrastructure) necessary to support the future development of the lots created by the subdivision.





**Servicing Agreements** are a condition of subdivision approval and are concluded between a land developer and the City. Agreements specify the location and standard of the municipal improvements (sewer, water, roads, etc.) required to support a subdivision. Once a servicing agreement is in place the lots created by a subdivision can be registered, serviced and sold to builders to construct housing and commercial buildings, etc.

**Development Permits** allow for the operation of a particular land use as specified under the land use zone in place for the affected land.

**Building Permits** are the end product of a review by the City to ensure a particular development meets the requirements of the Edmonton Zoning Bylaw, the Alberta Building Code and other City regulations. Building permits are divided into residential and non-residential according to the development activities they allow. Over the past five years the number of permits and combined total construction values have generally grown steadily, although non-residential construction values tend to be more variable as individual projects can have significant financial impact.

In 2015, the City issued 13,599 residential permits (14,175 were issued in 2014) and 2092 non-residential permits (2,007 were issued in 2014). The value of residential construction in the city was \$3.19 billion in 2015 (almost \$3 billion dollars in 2014). This represents a 17% increase from residential construction values in 2014. The value for non-residential construction in 2015 was approximately \$1.61 billion (\$1.6 billion in 2014). Of the non-residential permits, over 99% of the total construction value was for commercial uses (less than 1% was miscellaneous). In 2015, 63% of the total construction value was for commercial uses, 8% for industrial, 27% for institutional, and 2% for miscellaneous. In 2015, both residential and non-residential construction values were above the five-year averages indicating continued growth city wide.

### INDUSTRIAL LANDS

Industrial land is located in 73 neighbourhoods across the city, and three main sectors: the northeast, northwest, and south/southeast.

More information on Industrial Lands can be found in Section 6.0 of this report.





FIGURE 4.2 ESTIMATED CONSTRUCTION VALUES IN BILLIONS (\$)

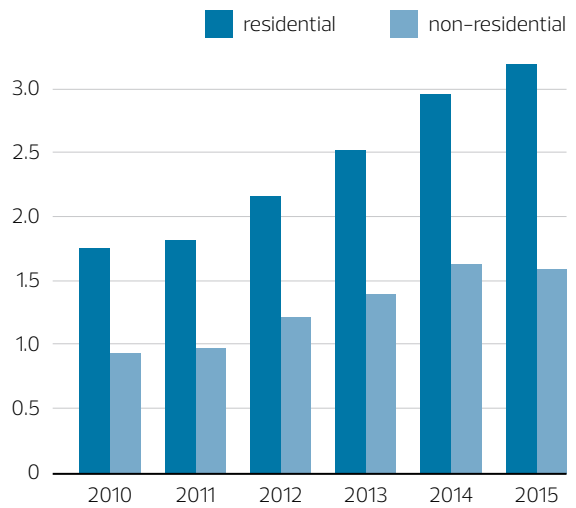
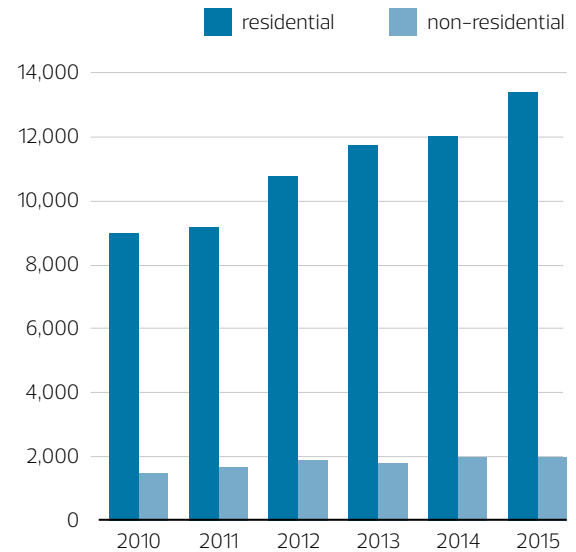


FIGURE 4.3 TOTAL NUMBER OF BUILDING PERMITS (2010-2015)



## RESIDENTIAL DEVELOPMENT PATTERNS

Over the last 40 years, Edmonton has maintained the majority of residential growth within the region as measured by housing starts. The proportion has varied, from a high of 94% of the regional share in 1982 to a low of 53% in 1996, and an average share of approximately 70%. Within the Region, Edmonton tends to account for the most multi-family growth, with an average 82% share. In 2015, Edmonton's housing starts accounted for 78% of all housing starts within the region.<sup>4</sup> Within Edmonton, the developing neighbourhoods account for the majority of residential development and in 2015, developing neighbourhoods accounted for 82% of all residential growth.

Before significant housing development can occur in developing neighbourhoods, they must receive statutory approval through an Area Structure Plan (ASP) and a Neighbourhood Structure Plan (NSP). These plans provide a framework for land use decisions, as well as an estimate of neighbourhood density and the total number of housing units.

In 2015, four Neighbourhood Structure Plans were approved; Decoteau, Horse Hill#2, Riverview#1 and Riverview#3. Developing neighbourhoods have been collapsed into North, West and South sectors for analysis (see table "Neighbourhood Completion Status").

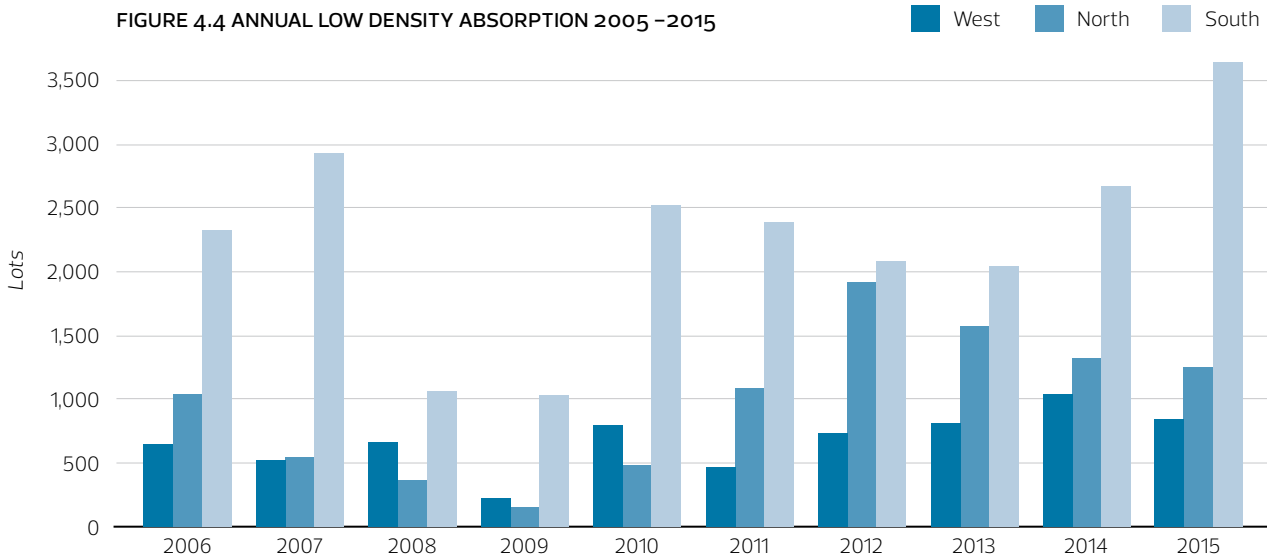
<sup>4</sup>Regional housing starts are tracked by the Canadian Mortgage and Housing Corporation, and a full table showing Edmonton's share "Edmonton Region Housing Starts: 1970-2015" is available online at [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis)

A total of 105 neighbourhoods (planned and developing) are in approved Area Structure Plans. 84 neighbourhoods have approved Neighbourhood Structure Plans. A total of 62 neighbourhoods are currently available for residential construction. As of December 2015 there were:

- ▶ 41 neighbourhoods under development
- ▶ 21 neighbourhoods at the planned stage (no approved NSP)
- ▶ 43 neighbourhoods with 95-100% of the low density residential completed.

Of the 41 developing neighbourhoods:

- ▶ 6 neighbourhoods had no development started, 6 neighbourhoods were less than 25% complete, 25 neighbourhoods between 25-74% complete, and 4 neighbourhoods were 75-94% complete.



North includes absorption in North, Northeast and Northwest quadrants of the City  
 West includes absorption in the West quadrant of the City  
 South includes absorption in the Southeast and Southwest quadrants of the City

Plans provide an estimate of the total lot supply available in developing neighbourhoods, and as lots are registered the remaining supply is calculated. As of December 2015, the potential lot supply available in developing neighbourhoods for single and semi-detached housing was 100,360 lots. Once 95% of these low-density lots available in a neighbourhood have been registered, a neighbourhood is considered "complete." Neighbourhoods may not reach full completion due to obstacles with servicing or land ownership, so 95% is used as a proxy.

Tracking lot registrations provides a record of past development and indicates how economic activity, demand and affordability affect the rate at which lots were absorbed from supply.

Typically, low-density lots are absorbed faster than higher density lots. However, in recent years, medium-density lots have been developed at the same rate as low-density units, so that low-density lot completion has begun to approximate full residential completion of a neighbourhood.

Past development trends and future projections are calculated through servicing records for low-density residential lots. Once a water main is charged and ready to be connected to a new home the lot is considered "serviced." Functioning water service is required for fire protection prior to the construction of the first showhome in a new neighbourhood, so servicing projections can be used to represent the start of new construction areas. The number of low-density residential lots serviced in Edmonton's developing neighbourhoods in 2015 was 4,297.

For more information, go to [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis)

# MAP 4.3 CITY SECTORS

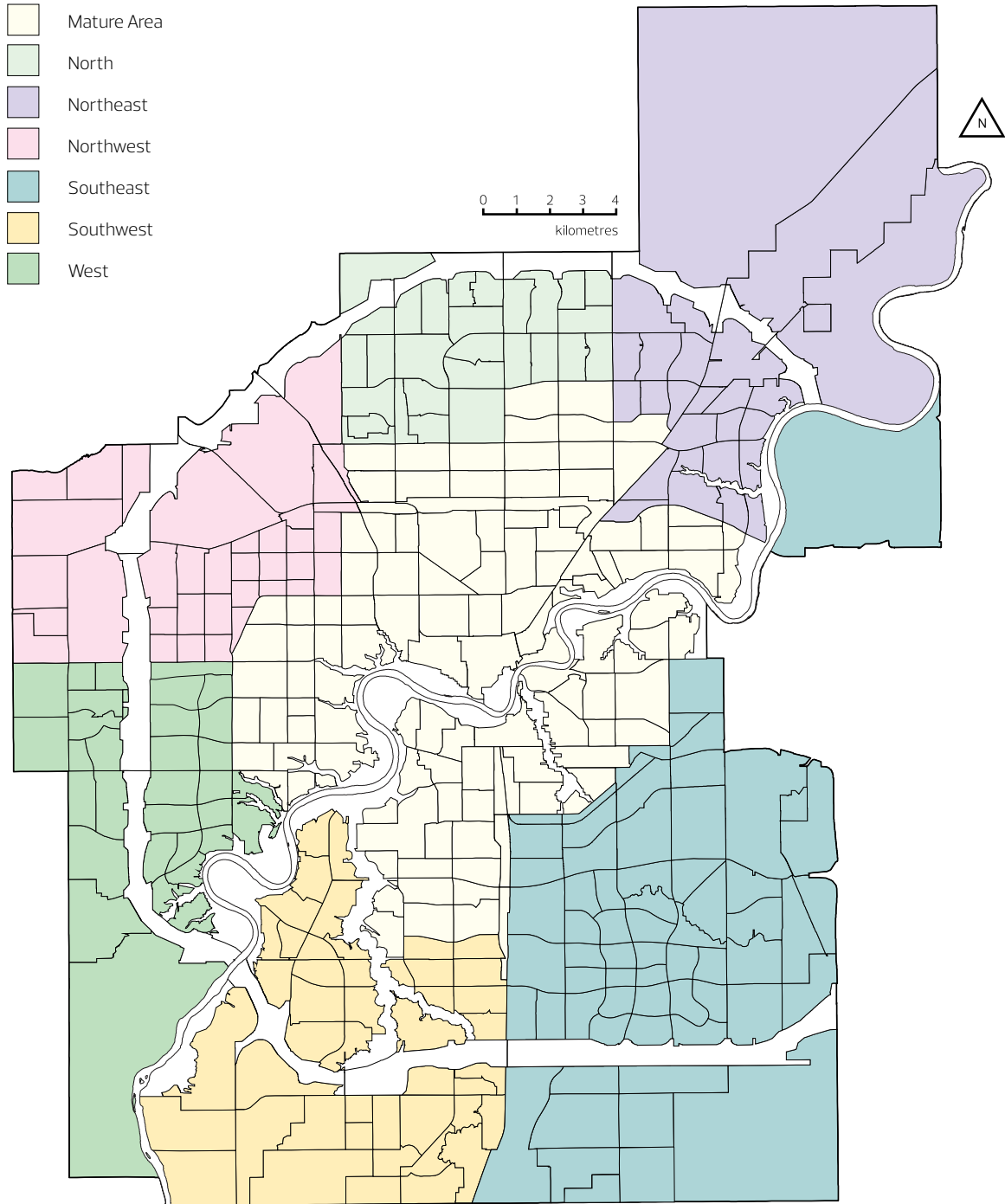




FIGURE 4.5 2015 TOTAL LOW DENSITY RESIDENTIAL LOT SUPPLY BY SUBSECTOR

<i>Subsector</i>	<i>Developing</i>	<i>Planned</i>	<i>95% Complete</i>	<i>Potential Lot Supply</i>
<b>North</b>	4,782	0	172	4,954
<b>Northeast</b>	7,656	12,441	0	20,097
<b>Northwest</b>	2,630	3,439	0	6,069
<b>Southeast</b>	7,869	23,888	0	31,757
<b>Southwest</b>	12,719	3,660	0	16,379
<b>West</b>	12,429	8,665	10	21,104
<b>City wide</b>	48,085	52,093	182	100,360

FIGURE 4.6 SERVICING LEVELS 2006–2015

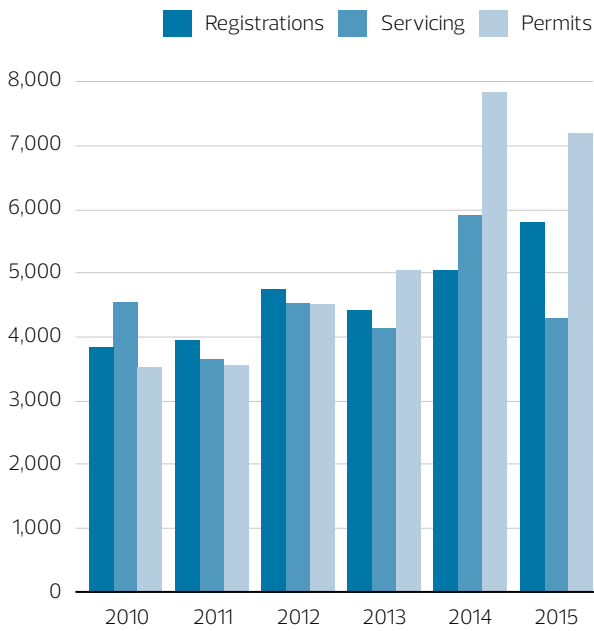
<i>City Sector</i>	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>North</b>	31%	25%	17%	10%	17%	15%	21%	17%	34%	19%	32%
<b>West</b>	12%	21%	25%	7%	43%	20%	13%	22%	20%	25%	13%
<b>South</b>	58%	53%	59%	82%	39%	65%	65%	61%	46%	56%	55%
<b>Total Lots</b>	5,922	2,700	4,945	3,128	595	4,576	3,568	4,539	4,430	5,889	4,297







**FIGURE 4.7 RESIDENTIAL (SINGLE AND SEMI) LAND DEVELOPMENT TRENDS**



Registrations, servicing, permits and housing starts are related, but different, snapshots of the development timeline. Registration documents the creation of legal lots and generally comes first. Servicing is required to complete infrastructure, and may be required with lot registration. Permits are issued to allow for construction activity, while housing starts\* measure the actual start of construction.

Averaged over many years, all measures should indicate approximately the same amount of activity, while monthly or yearly figures illustrate the balance of land at different stages of the development process.

\* Housing starts are tracked by the Canadian Mortgage and Housing Corporation and reported city wide, while other measures are monitored by the City by neighbourhood. As a result, the "housing starts" statistics are not shown on this graph. For information, a CMHC-based housing starts summary chart is available in the Appendix and in Open Data ([data.edmonton.ca](http://data.edmonton.ca))



# DEVELOPMENT PATTERNS AND TRENDS: UP, IN, AND OUT

Edmonton is growing and changing in many ways. Our neighbourhoods range from one to 100+ years old and have different population characteristics, different housing characteristics and different patterns of development.

This section builds on Section 4 by reviewing physical development patterns in terms of housing form and density, and by summarizing trends in recent development.

## WHAT IS A RESIDENTIAL UNIT?

For the purpose of this analysis, a residential unit means a single-family dwelling where one or more people maintain a household. Simply put, "unit" is referring to a person(s) physical home or dwelling. Units include single detached dwellings (stand alone homes), mobile homes, semi-detached dwellings, row houses, apartment style homes, and other multi-family dwellings.



## Development Patterns (as per the 2014 Municipal Census)

Different types of residential neighbourhoods have different residential patterns, as indicated by unit density and housing type. Density is calculated by dividing the number of residential dwelling units in an area by the size of the area identified for residential uses (dwelling units per net residential hectare: du/nrha). For this analysis, dwelling units are provided by Municipal Census. Focusing on units within a residential area emphasizes density in building type and also allows for neighbourhood comparisons, as potential differences in non-residential uses, such as parks, roads, and commercial areas are removed. The Dwelling Unit Density map illustrates neighbourhood density differences.

### CITY WIDE (2009 – 2014)

The Dwelling Unit Density maps illustrate neighbourhood density differences across the city. In 2009 the Municipal Census had insufficient dwelling unit data on many of the developing neighbourhoods on the edges of the city. The planned densities for the neighbourhoods were used for the 2009 map. Based on NASP and NSP statistics, developing neighbourhoods in recent years tend to have a planned density of over 30 du/nrha. Five years later, the 2014 Census indicated that sufficient development had occurred so that actual densities for 11 new neighbourhoods could be calculated. However, 24 developing Neighbourhood Structure Plans (indicated in green on the Dwelling Unit Density Map) had insufficient information to calculate a residential density.

## Who performs a census and when?

The Edmonton Municipal Census is undertaken every two years, with the last being completed in 2014. In mid 2016, the City of Edmonton began collecting Census Data. Data from this Census is anticipated to be released in full in 2017.

The Federal Census is conducted every five years, with the most recent Census occurring in 2011. In 2016, the Federal government has resumed its long form Census. Data from this Census is expected to be released in 2017. Since the volume of data obtained is high and subsequent analysis is substantial, different statistical information is released as it becomes available.

Dwelling unit density was calculated for 237 neighbourhoods in 2009 and 248 neighbourhoods in 2014. Of the established and mature neighbourhoods, a majority (132 neighbourhoods) had no change in density. Virginia Park had a decrease of 47 to 42 du/nrha. Canon Ridge (density 39), West Meadowlark Park (40), and Cromdale (81) increased in density by 5, 6, and 8 du/nrha respectively.

### CORE NEIGHBOURHOODS

Core neighbourhoods have the highest average density with more apartments, less single detached and row housing. Five of the top ten neighbourhoods with the highest dwelling unit density are located in the core. Downtown, Oliver, Boyle Street, Garneau, and Central McDougall all have dwelling unit densities over 100 du/nrha. The average density in the core is 125, with a range of 349 (Downtown) to 32 (Riverdale).

go to [www12.statcan.gc.ca/census-recensement/index-eng.cfm](http://www12.statcan.gc.ca/census-recensement/index-eng.cfm) for more info.



**MATURE NEIGHBOURHOODS**

Mature neighbourhoods tend to have lower densities and more single-detached homes than other neighbourhoods. The average density of mature neighbourhoods is 25 du/nrha, which ranges from 8 in Quesnell Heights to 81 in Cromdale. Five mature neighbourhoods (Abbottsfield, Cromdale, Empire Park, Queen Alexandra and Westwood) have a dwelling unit density over 50.

**ESTABLISHED NEIGHBOURHOODS**

Established neighbourhoods tend to have a lower average density than mature neighbourhoods, with less apartment housing and more row housing than other neighbourhoods. The average density is 24 du/nrha, which ranges from 11 in Wedgewood Heights to 123 in Mill Woods Town Centre. There are six neighbourhoods (Tawa, Ermineskin, Baranow, Terra Losa, Callingwood South, and Pembina) with a dwelling unit density between 50 and 100.

**DEVELOPING NEIGHBOURHOODS**

Many of the neighbourhoods classified as ‘developing,’ according to the Municipal Development Plan are almost fully developed. For example, in Eaux Claire 95% of the neighbourhood is covered by registered subdivisions.

New neighbourhood structure plans on the perimeter of the city initially may have low dwelling unit density because development is in its early stages and single-detached homes tend to be the first areas developed. Recent Neighbourhood Structure Plans have a trend towards higher planned densities that are greater than 30 du/nrha and contain a more balanced range of dwelling types. Clareview Town Centre had the highest dwelling unit density of 67 while Richford had the lowest dwelling unit density at 9.

**Looking Ahead: Density Targets in the Region**

The Capital Region Board’s draft growth plan is calling for changes in density minimums in the Region, including Edmonton. The City of Edmonton will continue to work with the Capital Region Board to ensure the needs of our citizens are met and we continue to build a resilient, innovative and liveable city within the Capital Region.

As of 2014, the City of Edmonton had 18 neighbourhoods with densities over 45 dwelling units per net residential hectare, including 6 with densities over 100 dwelling units per net residential hectare.

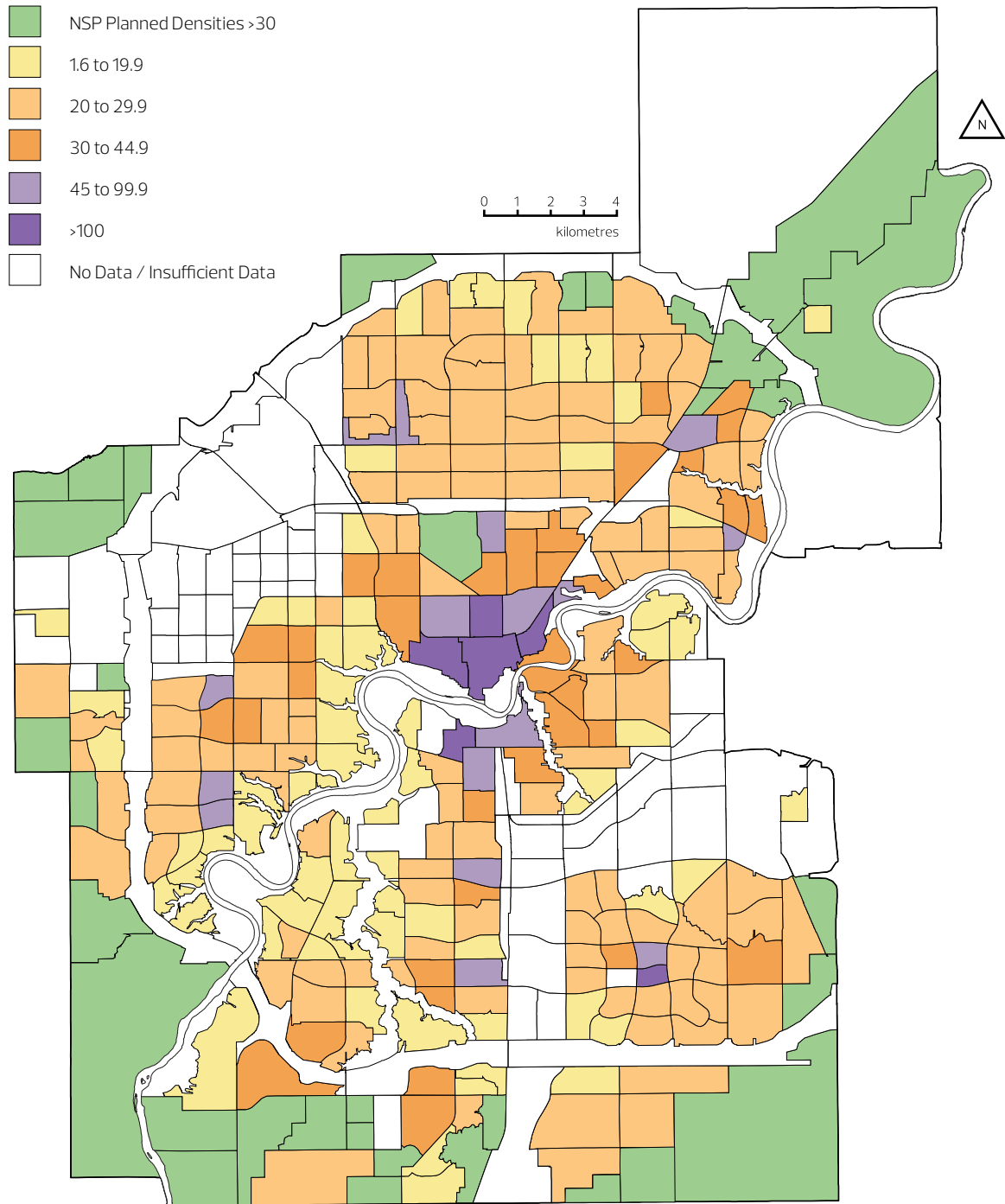
For more information and to view the draft plan, go to [www.capitalregionboard.ab.ca](http://www.capitalregionboard.ab.ca)

**FIGURE 5.1 NEIGHBOURHOODS BY RESIDENTIAL DWELLING UNIT DENSITY RANGE (AS PER 2014 MUNICIPAL CENSUS)**

Neighbourhood Type	Density (du/nrha)					TOTAL
	<25	25-29	30-44	45-99	>100	
Developing	25	18	6	2	0	51
Established	53	17	11	7	1	89
Mature & Core	52	18	24	9	5	108
City wide	130	53	41	18	6	248

# MAP 5.1 DWELLING UNIT DENSITY

(AS PER 2014 MUNICIPAL CENSUS)





## Development Trends

Residential development is monitored through building permits. Through building permits the annual number of new units, permit activity, and estimated construction value is tracked and assessed. During the last five years, all of these measures have shown growth. In 2015, permits were issued for 12,874 net new housing units, up 7% over 12,018 in 2014.

In 2015, approximately 27% of the net unit growth were single-family homes, 40% were apartment units, and 33% were other housing types such as secondary suites, semi-detached homes, and row housing. This is a shift from last year's percentages, when single family and apartment units were almost equal in numbers. This year there was a 32% increase in the net number of apartment units gained. Net units are total units within a building type, so a duplex would have two dwelling units.

### CORE NEIGHBOURHOODS

Core neighbourhoods grew by 645 units and accounted for 6% of total city wide growth in 2015. This is a 29% decrease from 2014 (904 units). In the core neighbourhoods, 96% of the gains were apartment housing. Of all core neighbourhoods, Oliver experienced the biggest gains with 279 net units, followed by Downtown with 237 units, and McCauley with 68 net units.

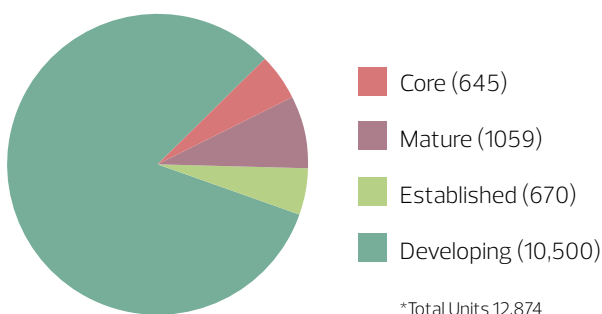
### MATURE NEIGHBOURHOODS

Mature neighbourhoods grew by 1056 units and accounted for 8% of all new units in 2015. This is an increase of 28% from 2014 unit growth (827 units). It is, however, a relatively low proportion of city wide growth due to strong increases in newer neighbourhoods. Mature neighbourhoods typically lose single-detached homes, and gain multi-unit development. In 2015 mature neighbourhoods had a total loss of 374 single-detached homes resulting in a net loss of 39 single-detached homes. Unit increases were driven by secondary suite creation (25%), multi-family units including semi-detached and row housing (52%), and apartment housing (23%).

Although mature neighbourhoods tend to experience a net loss of single-detached housing, the new single-detached homes that are built tend to be denser because they are built with secondary suites. In mature neighbourhoods, 335 new single detached homes were built, and 48 of these were built with secondary suites (approximately 14%). Comparatively, in developing neighbourhoods, only 3% of new single-detached homes were built with secondary suites.

Among mature neighbourhoods, Griesbach had the largest net gain of 319 units, followed by Malmo Plains which gained 110 units, and Bonnie Doon with 70 units.

FIGURE 5.2 2015 NET NEW HOUSING UNITS



### ESTABLISHED NEIGHBOURHOODS

Established neighbourhoods grew by 670 units and accounted for 5% of all new units in 2015. This is an increase of 86% from 2014 figures. As housing stock in established neighbourhoods is relatively newer, there tends to be fewer units demolished and most gains are through completion of remaining vacant parcels. Unit increases were driven via semi detached and row housing (27%), apartment housing (56%) and secondary suites (14%). The remaining 3% of the units consist of single detached units.

Among established neighbourhoods, Ermineskin had the largest net gains (141 units), which was driven by the construction of a large apartment development. Pembina had the second largest (119 units) which was also driven by the construction of a large apartment complex. Homesteader followed with 78 units. Combined, these three neighbourhoods accounted for 50% of all gains in established neighbourhoods

### DEVELOPING NEIGHBOURHOODS

Developing neighbourhoods grew by 10,503 units and accounted for 81% of all net new units in 2015. Within developing neighbourhoods, single and semi-detached homes accounted for 46% percent of all new dwelling units, row housing for 19%, and apartment housing for 35%.

Among developing neighbourhoods, Chappelle Area had the largest gains (994 units), followed by Walker (857 units), and Allard (556 units). Together, these three neighbourhoods gained more units than all the core and established neighbourhoods combined; this momentum is reflective of their developing neighbourhood nature.

FIGURE 5.3 2015 NET HOUSING UNITS (CITY WIDE)\*

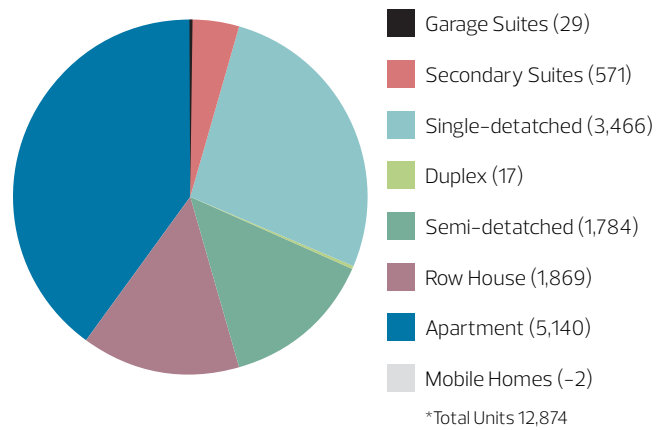
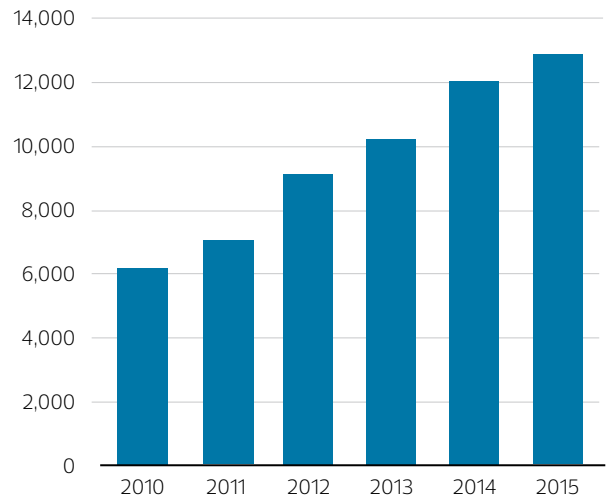


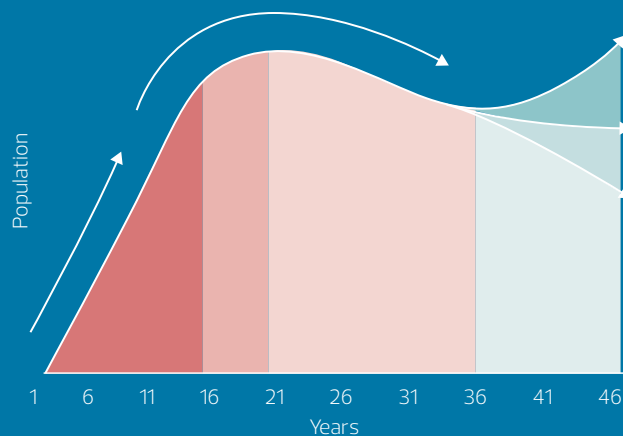
FIGURE 5.4 NET NEW HOUSING UNITS (2010-2015)



## What is a Neighbourhood Life Cycle?

All neighbourhoods change as they go through a typical lifecycle process. When they are first building out, new neighbourhoods experience rapid population expansion as the community develops, new households are formed and household size grows. They then tend to stabilize for a period of time, which is followed by population decline as children grow up and leave home. Neighbourhoods can then experience a variety of transitions and different outcomes over time. Neighbourhood populations may continue to shrink as household size declines for a period, or they may grow again as new generations of Edmontonians move in and expand their household size.

THE TYPICAL LIFECYCLE OF A NEIGHBOURHOOD



- Development of vacant lands results in population increase, typically young families with young children.
- Neighbourhoods are completed and in-migration slows. The population continues to grow as families have children.
- The population declines as children grow up and leave home.
- Neighbourhoods may be revitalized, or become seen as a desirable place to live. Redevelopment and intensification increase available dwellings and attract new residents.
- New in-migration from young families occurs as older couples begin to leave the neighbourhood. A stable neighbourhood population is achieved.
- Undesirable economic and social conditions may make neighbourhoods unattractive, resulting in population losses.





## Looking Deeper: Unit Growth and Construction Values in our City

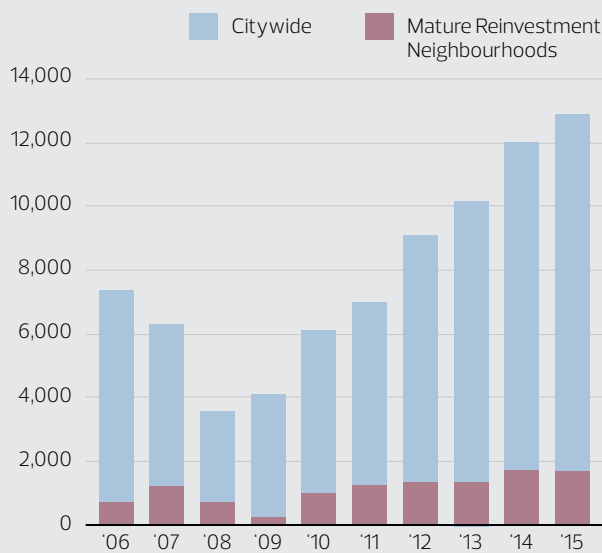
### UNIT GROWTH

When indicators are combined over multiple years a picture emerges that shows uneven reinvestment across neighbourhood types in terms of net unit gain (or loss). This uneven reinvestment is in part due to where a neighbourhood is within the Neighbourhood lifecycle (see page 45), attractive opportunities for development elsewhere in the City (competition), and can be a result of geographic location and perceived desirability of a neighbourhood.

In "The Way We Grow" Municipal Development Plan (2010), Section 3.1.1.2, the goal of 25% city wide housing unit growth to be located in the Downtown and Mature Neighbourhoods was established.

This percentage is calculated using the City's building permit data. The percentage calculation is influenced by the development activity in the rest of the city (developing and established neighbourhoods). As the City's developing neighbourhoods experience a higher number of residential unit growth, there is an impact on the percentages calculated. The residential unit count in the Mature and Core (Downtown) neighbourhoods have in fact been experiencing an upward trend since 2009, however, the highest percentage the City has obtained for this indicator is 19% in 2011 (see Figure 5.5). For every year the developing neighbourhoods experience high residential unit counts, the growth that is occurring in the mature neighbourhoods is not fully represented in this percentage indicator. Please refer to "Key Learnings" on p.59 for details.

**FIGURE 5.5 RESIDENTIAL LAND DEVELOPMENT TRENDS**



Net Unit Growth over 10 years (City wide versus Mature and Core Neighbourhoods)  
 \*\*"The Way We Grow" Municipal Development Plan Approved in 2010, monitoring begins in official capacity.

Over ten years, the City has grown by 65,984 units citywide. This is an average of almost 6,600 net units per year. In 2012, 2013, 2014 and 2015, our net unit growth was above this average (Please refer to "Residential Land Development Trends"). Of those net units, Mature and Core Neighbourhoods make up 15% of this ten year total. These unit counts are calculated through the City of Edmonton's permitting activity (data.edmonton.ca). In the following analysis, Neighbourhood types will be separated and analyzed when appropriate.







## Where do families live in Edmonton?

According to the 2011 Census<sup>\*</sup>, the highest percentages of families with children live in neighbourhoods that are classified as “Developing”. This neighbourhood type includes newer urban developments that are located close to the Anthony Henday ring road.

**Throughout this chapter, there will be information boxes describing some of these neighbourhoods that have high percentages of children.**

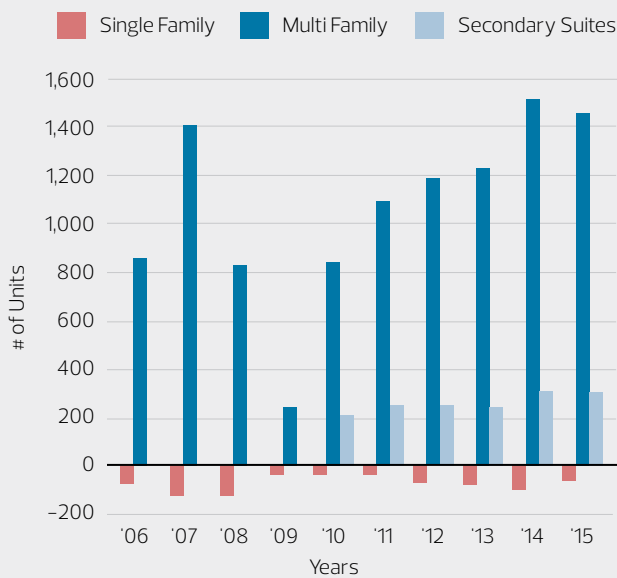
<sup>\*</sup> For more information, please refer to the 2011 Census Atlas  
[www.edmonton.ca/city\\_government/documents/PDF/2011-census-atlas\\_nov2015.pdf](http://www.edmonton.ca/city_government/documents/PDF/2011-census-atlas_nov2015.pdf)



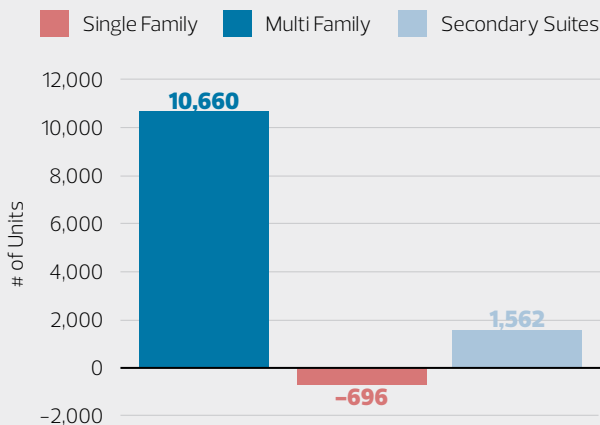
### TYPES OF UNITS

When we separate our unit growth into multi family units or single units we can tell another story. The traditional style of single unit home remains popular with Edmontonians, however, in our mature and core neighbourhoods, multi family units growth is prevalent.

**FIGURE 5.6 UNIT GROWTH BY YEAR AND TYPE CORE AND MATURE NEIGHBOURHOODS (2006-2015)**



**FIGURE 5.7 TOTAL UNITS IN CORE AND MATURE NEIGHBOURHOODS 2006-2015**



\*Total Units 11,526

### GAINS AND LOSSES IN MATURE AND CORE NEIGHBOURHOODS

A key trend that emerges when combining ten year's worth of data is that a couple of neighbourhoods in Edmonton's central core received the greatest amount of net unit increases while many of the mature neighbourhoods built further out from the core actually suffered from net unit loss.

**FIGURE 5.8 LOSSES IN MATURE AND CORE NEIGHBOURHOODS**

Cromdale	-25
Virginia Park	-18
Aspen Garden	-4
Rossdale	-3
Rio Terrace	-2
Quesnell Heights	-1
McQueen	0
Abbottsfild	0

**FIGURE 5.9 GAINS IN MATURE AND CORE NEIGHBOURHOODS**

Downtown	1,417
Griesbach*	1,316
Oliver	1,265
Queen Mary Park	560
Bonnie Doon	394
Queen Alexandra	309
Alberta Avenue	302

\*Due to Griesbach's proximity to the Mature Neighbourhoods, Griesbach has been included in the "Mature Neighbourhood Reinvestment Report and subsequent analysis. See [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis) for additional details.





## Oxford (Ward 2)

The Oxford neighbourhood is located in northwest Edmonton within the Palisades Area Structure Plan (ASP). The Palisades area was annexed to the City of Edmonton in 1982. Oxford forms the northwest corner of the Palisades and is bounded by 167 Avenue to the north, 133 Street to the east, 153 Avenue to the south and 127 Street to the west. Prior to urban development most of the land within Oxford was used for agricultural cultivation.

Development of the Oxford Neighbourhood began in the late 1980's and progressed from the area immediately west of 127 Street and 158 Avenue to the west, south and north. By December 1999, nearly all of the land in the southern two thirds of the neighbourhood had been developed. The northern third is still under development.

According to the 2011 Federal Census, over 60% of families living in Oxford have children at home. Of the 3100 residents in Oxford, 28% of them are under 20 years old. Approximately 64% of households have 3 or more residents.

## GAINS AND LOSSES IN ESTABLISHED AND DEVELOPING NEIGHBOURHOODS

The Established Neighbourhoods are completed neighbourhoods, generally within the Anthony Henday Transportation Corridor. "Developing Neighbourhoods" refers to neighbourhoods currently under development and planned neighbourhoods where lot registration is not yet started. As with the Core and Mature neighbourhoods, a pattern emerges when combining five year's worth of data in the Established and Developing neighbourhoods.

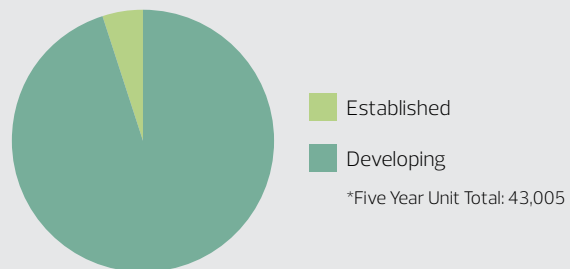
Over a five year period, the Developing and Established Neighbourhoods saw growth of 43,005 units. Conversely, in a ten year period, the Core and Mature Neighbourhoods experienced growth of 11,526 units (see figures on p.53 for details on Developing and Established neighbourhoods unit growth). Growth is occurring at a fast pace and in high volumes in our Developing Neighbourhoods, however, this activity will slow as land is fully developed.

The greatest amount of units (and highest construction values) occurred in the Developing Neighbourhoods (see figures on p.53 for details on Developing and Established neighbourhoods unit growth). This is not surprising, as high activity levels are expected at the beginning of a neighbourhood's life cycle. But which of these neighbourhoods experienced the highest and lowest unit growth?

When we look at unit growth in the Developing areas, it shows that the majority of the neighbourhoods with high numbers of unit growth are in the southern parts of the City, with the exception of Mcconachie in the north and the Hamptons and Secord in the west.

When we look at neighbourhoods with lower amounts of unit growth, the neighbourhoods are geographically located to the north and west sectors of the city, with the exception of MacEwan.

**FIGURE 5.10 UNIT TOTALS IN DEVELOPING AND ESTABLISHED NEIGHBOURHOODS**



Both the unit growth and losses in these neighbourhoods are a reflection of development status in these neighbourhoods. These unit numbers illustrate the high volume of development activity in the neighbourhoods in the south, with a slowing of development occurring in developing neighbourhoods elsewhere in the City. Developing neighbourhoods with lower unit growth are close to, or fully developed.

In the Established Neighbourhoods, examining the neighbourhoods on the high and low end of the spectrum of unit growth does not paint clear a geographic picture as it does with the Developing Neighbourhoods. This is in part due to where the neighbourhoods are in the "Neighbourhood Life Cycle" (see p.45), where they have been fully developed for more than 16 years. That being said, the number of neighbourhoods experiencing losses, or only very minor gains over five years (18 of the 92 neighbourhoods, or 20%), is interesting to note. Thirteen neighbourhoods experienced no unit growth or actual unit loss.





**FIGURE 5.11 DEVELOPING NEIGHBOURHOODS WITH OVER 1000 UNIT GROWTH OVER 5 YEARS**

Windermere	2,892
Walker	2,473
Summerside	2,443
Chappelle Area	2,197
Laurel	1,949
McConachie	1,913
Callaghan	1,680
Allard	1,468
Ambleside	1,414
The Hamptons	1,195
Secord	1,053

**FIGURE 5.12 DEVELOPING NEIGHBOURHOODS WITH UNDER 5 UNITS GROWTH OVER 10 YEARS**

Belle Rive	0
Canossa	0
Potter Greens	1
Breckenridge Greens	1
Cumberland	2
Mayliewan	4
Matt Berry	5
MacEwan	8
Ozerna	9

**FIGURE 5.13 ESTABLISHED NEIGHBOURHOODS WITH OVER 100 UNITS GROWTH OVER 5 YEARS**

Baranow	373
Larkspur	197
Silver Berry	169
Ermineskin	141
Wild Rose	136
Pembina	119
Canon Ridge	107
Kirkness	100

**FIGURE 5.14 ESTABLISHED NEIGHBOURHOODS WITH UNIT GROWTH OF ONE OR LESS OVER 5 YEARS**

Lee Ridge	-3
Callingwood South	-1
Skyrattler	0
Brander Gardens	0
Westridge	0
Sifton Park	0
Terra Losa	0
Ogilvie Ridge	0
Keheewin	0
Blue Quill Estates	0
Beaumaris	0
Blackburne	0
Callingwood North	0
Henderson Estates	1
Overlanders	1
Carter Crest	1
Thornclyff	1
Dechene	1





## Wild Rose (Ward 12)

The Wild Rose neighbourhood is located east of the Kiniski Gardens neighbourhood in Mill Woods, and within the west-central portion of the Meadows Area Structure Plan (ASP). Mill Creek runs the length of the neighbourhood's southern border. In addition to Mill Creek, the neighbourhood is bounded by 38 Avenue to the north, 17 Street to the east and 34 Street to the west. Prior to urban development the northern portion of Wild Rose was used for agricultural cultivation and the southern portion of the neighbourhood, adjacent to Mill Creek, was left in its natural state.

Wild Rose contains a variety of housing types, including single and semi-detached homes, row housing and apartments. The neighbourhood does not contain any community level commercial space but residents have good access to a variety of services, commercial and employment opportunities in adjacent Mill Woods, at South Edmonton Common, and at the Edmonton Research Park located west of the neighbourhood along 23 Avenue.

According to the 2011 Federal Census, over 60% of the families living in Wild Rose have children at home. Of the 8270 people living in Wild Rose, 31% are under 20 years old. Approximately 66% of households have more than 3 residents.

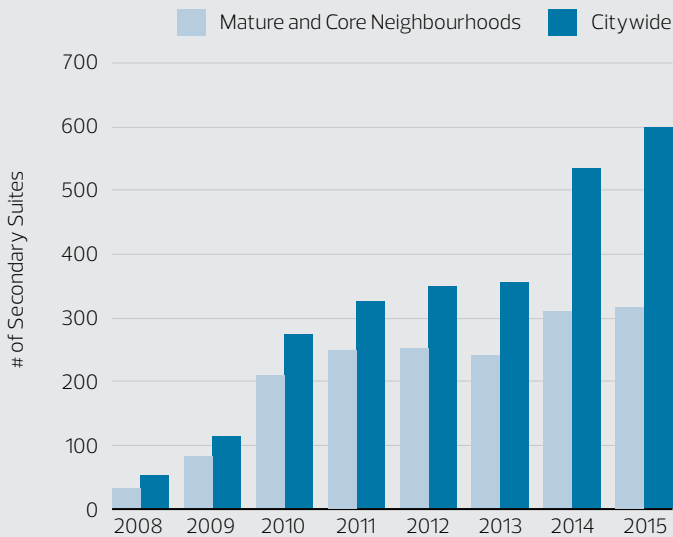




## SECONDARY SUITES

In 2007, the Zoning Bylaw was amended to allow for Secondary Suites in single-family dwellings. In 2009, the Zoning Bylaw was further amended to allow for Garden and Garage Suites in restricted areas on lots that have a single-family dwelling. As a result, the number of permits issued for Secondary Suites within the City has grown significantly (See Secondary Suites Graph below). It is significant to note that not all secondary suites are conversions occurring in existing housing units. Some new constructions are being built with secondary suite capacity in developing neighbourhoods, as illustrated in our city wide totals.

**FIGURE 5.15 SECONDARY SUITES 2008 - 2015**





## Silver Berry (Ward 12)

The Silver Berry neighbourhood is located within the Meadows Area Structure Plan (ASP) and defines the west-central portion of the ASP. Mill Creek runs the length of the neighbourhood's northern border and the neighbourhood is also bounded by 17 Street to the east, 23 Avenue to the south, and 34 Street to the west. Prior to urban development, the southern portion of Silver Berry was used for agricultural cultivation and the northern portion of the neighbourhood, adjacent to Mill Creek, was left in its natural state.

Silver Berry contains a variety of housing types including single and semi-detached homes, row housing and apartments. A large school and park site is located in the centre of the neighbourhood, adjacent to a linear park and surrounded by residential land uses. Two utility rights-of-way exist within the neighbourhood, one running east-west and the other running north-south, and both have been landscaped as linear parks.

According to the 2011 Federal Census, over 60% of the families in Silver Berry have children at home. Of the 7,910 residents, 35% of them are under 20 years old. Approximately 64% of households have 3 or more residents.



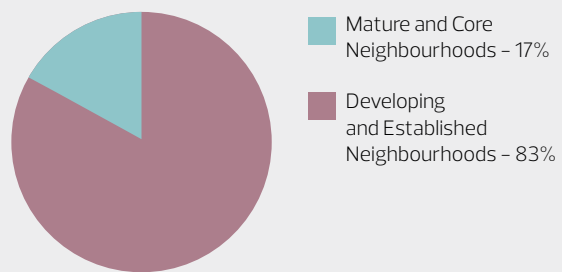
### CONSTRUCTION VALUES

The City of Edmonton measures construction values through building permit activity. Construction activity includes new unit builds, demolitions, interior renovations, and exterior renovations. Please refer to Open Data ([data.edmonton.ca](http://data.edmonton.ca)) for permitting information and details. When construction value is examined over a ten year period in the mature and core neighbourhoods, we can track annual and neighbourhood totals, capturing broad trends and neighbourhood specifics.

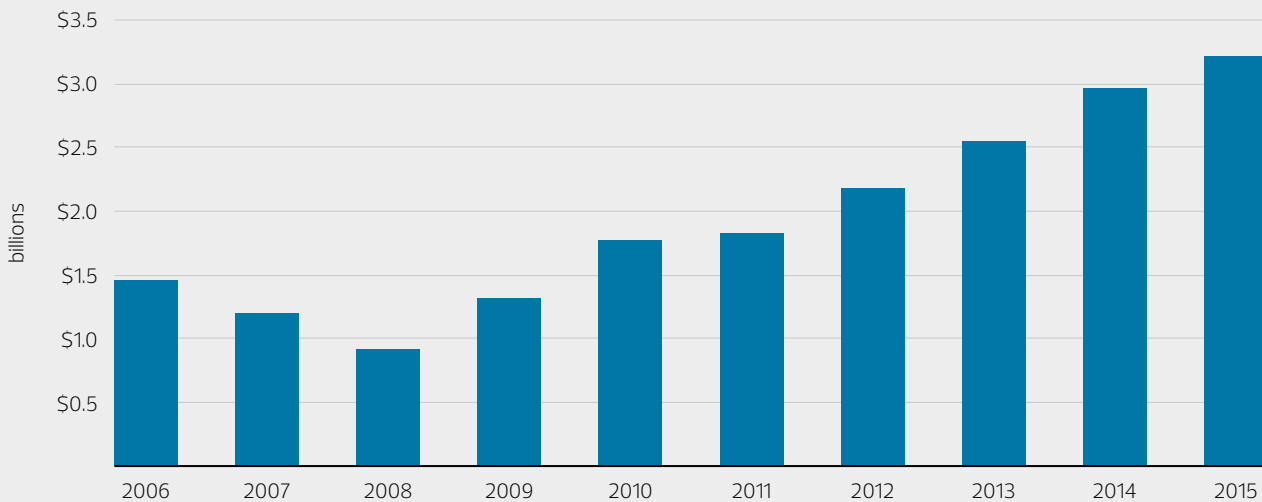
Construction value in the core and mature neighbourhoods totaled almost 6.5 billion over a ten year period. Development in the established and developing neighbourhoods totaled almost 162 billion dollars (161,694,700,200).

The citywide total residential construction value is over 19 billion dollars over a ten-year span. The average construction value per year is approximately 1.62 billion dollars. The City of Edmonton experienced higher than average construction values in 2012, 2013, 2014 and 2015 (see City Wide residential construction by year)

**FIGURE 5.16 CITY WIDE CONSTRUCTION VALUE**



**FIGURE 5.17 CITY WIDE RESIDENTIAL CONSTRUCTION BY YEAR**







## Bulyea Heights (Ward 9)

Bulyea Heights is an established neighbourhood in the southwest situated along the Whitemud Creek Ravine. Prior to being developed as a residential neighbourhood, the land in Bulyea Heights had been cleared for farming. Development in Bulyea Heights began with the 1979 creation of the Riverbend Area Structure Plan. The design concept in Bulyea Heights was to create a low density residential neighbourhood that took maximum advantage of its natural surroundings and effectively separated internal residential roadways from external traffic patterns through the creation of a hierarchical roadway system. The majority of the homes within the neighbourhood were constructed in the 1970s, and primarily single-detached homes and some medium density units make up the neighbourhood.

According to the 2011 Federal Census, over 60% of the families in Bulyea Heights have children living at home. Of the 3,660 residents, 25% are under 20 years old. Approximately 60% of households have 3 or more residents.



## KEY LEARNINGS\*

Development activity, as calculated by Units is not evenly dispersed throughout the City. Accelerated unit growth occurring in our developing neighbourhoods significantly contributes to the City wide construction values, and is reflective of where the neighbourhoods are in the "Neighbourhood Life Cycle" (please see p.45).

The largest growth spurt in units is being experienced in the Developing Neighbourhoods. As per the Neighbourhood Lifecycle, this period of accelerated growth lasts approximately fifteen years (of the thirty year lifecycle), with coinciding high numbers of families with young children moving to these areas. After this time period, neighbourhoods are fully developed out, or "completed", and immigration typically slows. The amount of growth the City of Edmonton experiences in these neighbourhoods will slow as vacant land is developed.

When we examine Unit growth city wide, a boom in one neighbourhood classification can sometimes overshadow the constant growth occurring in other neighbourhood classifications. Comparing growth year to year, neighbourhood classification to neighbourhood classification, tells a valuable story for Edmonton's residents.

The goal of 25% development to occur in our core and mature neighbourhoods is unlikely to be reached while the City continues to experience high numbers of unit growth in the Developing Neighbourhoods.

\* For more information, please go to [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis)





# NON-RESIDENTIAL GROWTH AND DEVELOPMENT PATTERNS

Non-residential uses include institutional (such as schools and hospitals), commercial (such as retail and offices), and industrial (such as manufacturing and processing plants). Industrial development is a key part of Edmonton's fiscal well-being and is needed to grow a great city.

Residential neighbourhoods exist to provide for housing and community amenities. Other areas of the city, such as industrial areas and commercial nodes, exist to provide employment and wealth generation. The amount of revenue the City needs from property taxation is determined for the City as a whole and takes into consideration the balance between residential and non-residential assessment.

Although non-residential uses make up only 25% of Edmonton's total assessment, they contribute about 50% of Edmonton's tax revenues, making these uses a key component of the City's fiscal well-being. This positive financial contribution to the City makes growing the non-residential tax base important to support other city-building initiatives such as provision of infrastructure and servicing new residential neighbourhoods.

The overall balance of residential and non-residential land in Edmonton is important in a number of ways. Residential areas provide places for people to live and build community. Non-residential areas provide employment, services, and amenities among other things. Both contribute to and are an essential part of the fabric of the city. Maintaining a healthy balance between them is critical.

In 2015, non-residential assessment shows that non-residential assessment made up approximately 26% of the total assessment base of the City.



As the City grows new residential areas, it must also grow its non-residential areas to maintain balanced growth for revenue generation and sustainability. For the City as a whole to maintain the current ratio, there needs to be approximately \$5 billion of non-residential assessment for every \$20 billion in residential assessment growth.



## ECONOMIC CONTEXT

Much of Edmonton's economy is based on its industrial lands. Approximately 50 percent of the wealth creation in Edmonton is generated from producing goods that are manufactured in the city's industrial neighbourhoods. Those neighbourhoods are also where a large portion of Edmonton's employment base works.

The industrial neighbourhoods are home to Edmonton's manufacturing clusters and supporting businesses. The energy, forestry and agriculture resource sectors are the main drivers and consumers of the products manufactured in Edmonton. The most dominant trend in industrial land is the tremendous growth opportunities and market demand evident in the Edmonton area.

The Alberta government's major project inventory lists \$150 billion of projects underway or announced in the Edmonton and northern Alberta catchment area. This results in high demand in Edmonton's industrial zones. And increasingly, international logistics, construction and metal fabricators are seeking a position in Edmonton's marketplace.

## INDUSTRIAL LANDS

Edmonton has four established and planned industrial districts; Northwest, Northeast, South/Southeast and the Edmonton Energy and Technology Park. These districts are strategically located along major transportation corridors and located throughout the city with 1,502 net hectares (3,712 gross acres) of vacant industrial land available for development, a further 4,810 gross hectares (11,886 acres) ideal for large green-field development available in the Edmonton Energy and Technology Park.

More than 795 net hectares (1,964 net acres) of vacant zoned industrial land is ready for immediate development.

Industrial land is located in 73 neighbourhoods across the city. As of year-end 2015, there were 4,796 gross vacant hectares of industrial land (1,516 net hectares) including 4,810 hectares in the Edmonton Energy and Technology Park. Of the vacant land, 24% is zoned as net industrial. Industrial land absorption rates dropped in 2015 to 78 hectares from 155 hectares the year before. This is a 50% decrease in land absorption. In 2015, 99 industrial building permits were issued in the city with a construction value of \$234 million.





## BUILDING PERMITS IN INDUSTRIAL AREAS

All new significant building activity, whether on a new site or a site with existing development is tracked to help understand all the building activity taking place in the city.

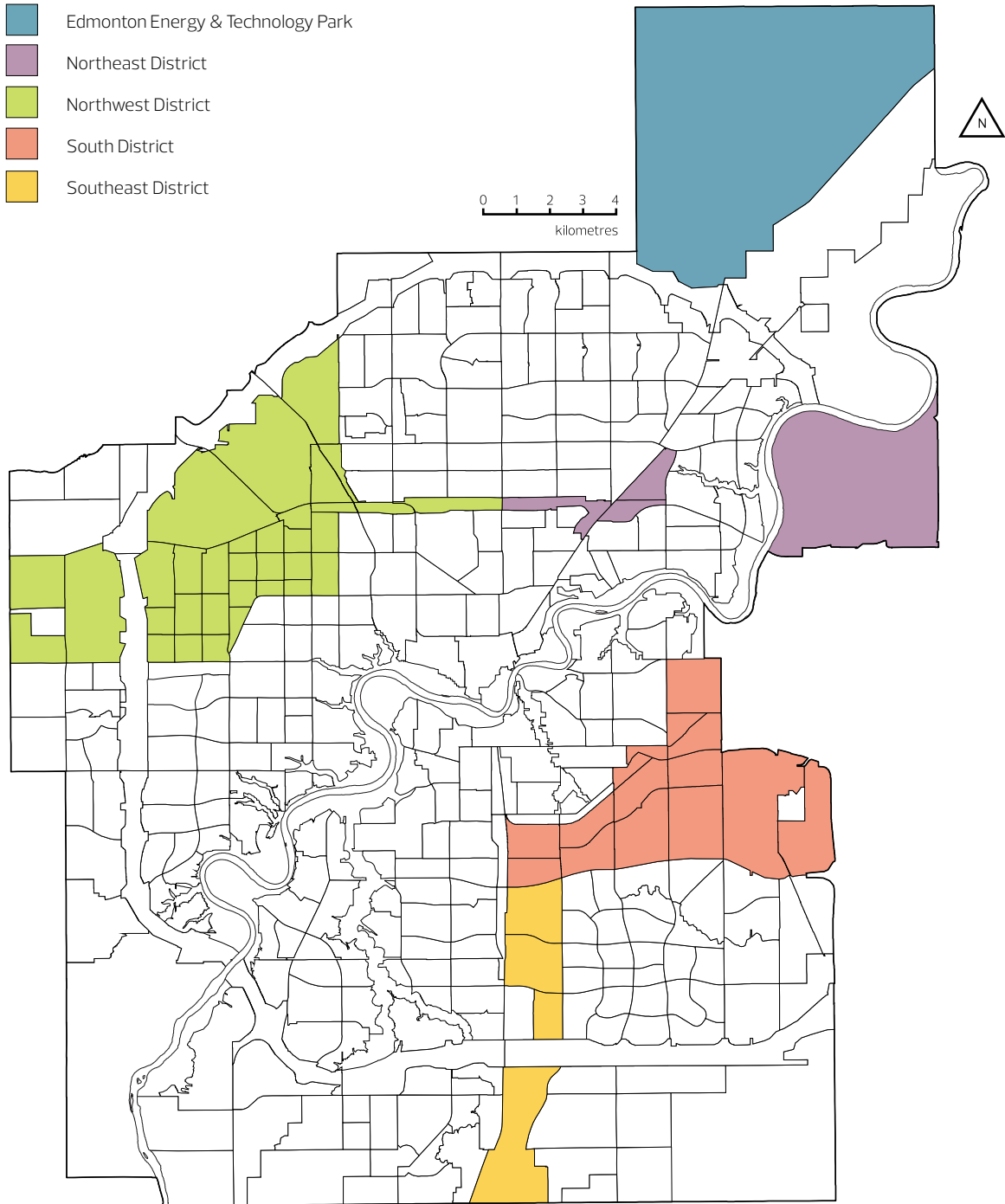
The table below shows the highest value of \$96,688,395 was issued in the South/Southeast Industrial Area. Other areas followed, including \$88,370,604 for the Northwest Industrial Area, and \$48,671,853 for the Northeast Industrial Area. Most of the building activity took place in a few key neighbourhoods. This includes Clover Bar Industrial at around \$36M, Winterburn at \$32M, Summerside at \$29M, Sunwapta at \$19M, Southeast Industrial at \$17M, Pylypow at \$17M, Ellerslie Industrial at \$13M, and Mistatim at \$9M. Together, these neighbourhoods comprised around 75 percent of building permit activity out of all industrial areas.

For more information on building activity in Industrial Areas, please refer to "Vacant Industrial Land Supply" ([www.edmonton.ca](http://www.edmonton.ca)).

**FIGURE 6.1 BUILDING PERMIT VALUES BY INDUSTRIAL AREA 2015**

Sector	Total (\$)
Northeast	48,671,853
Northwest	88,370,604
South/Southeast	96,688,395
<b>Total</b>	<b>233,730,852</b>

# MAP 6.1 EDMONTON INDUSTRIAL DISTRICTS



## NORTHWEST INDUSTRIAL DISTRICT

The Northwest Industrial District (Northwest District) is located in northwest Edmonton and has 2,694 net hectares (6,657 net acres) of developed industrial land, the largest concentration in the Metro Edmonton Region.

This District has the largest amount of developed industrial space within the city and is largely oriented to logistics, transportation, warehousing and light manufacturing. The Northwest District has approximately 727 net hectares (1,796 net acres) of vacant industrial land and is expected to continue to experience strong employment growth in the industrial sector.

Established large-scale industrial parks in the Northwest District include the Northport Business Park, Horizon Business Park, Henday Industrial Park, Pinnacle Park, Northwest Business Park and the Rampart Industrial Park.

Historically, the Northwest District has experienced steady industrial land absorption over the past decade averaging approximately 59 net hectares per year (109 net hectares per year). The Northwest District is dominated by the Goods Movement sector with over 60% of developed industrial lands comprising of uses within the warehousing, storage/wholesale trade and transportation sector.

## SOUTH/SOUTHEAST INDUSTRIAL DISTRICT

The South/Southeast Industrial District (South/Southeast District) is situated in southeast Edmonton and has approximately 2,523 net hectares (6,234 net acres) of developed industrial lands.

The industrial areas in the east part of the District are largely designated for medium and heavy industry. The area is largely associated with the energy sector and neighbouring "Refinery Row" in Sherwood Park (Strathcona County) and is largely built out. In contrast, the industrial areas in other parts of the South/Southeast Edmonton District are designated predominantly light and business industrial, which accommodate a broad mix of uses including knowledge-based sectors such as business services, research and development, advanced manufacturing, construction and logistics/distribution. Of the developed industrial land base, 48% is utilized for warehousing/wholesale trade/storage, followed by 18% for manufacturing, 9% for office and 7% for construction. Retail and service trade account for a combined 9% of the total.

A large share of the development on industrial lands within the City of Edmonton in the past decade has occurred in the City's South/Southeast District. Warehousing/logistics/storage has accounted for the majority of development in the past decade, largely in the form of prestige large-scale, multi-bay industrial condos. The area has also experienced growth in office and knowledge-based employment. Over the past decade, land absorption in the District averaged 47 net hectares per year in the last decade.



## NORTHEAST INDUSTRIAL DISTRICT

The Northeast Industrial District (Northeast District) has a developed industrial land base of approximately 649 net hectares (1,604 net acres). The District's industrial base is relatively small compared to the Northwest and South/Southeast Districts. Further, the composition of the District is highly oriented to medium and heavy industries. Currently, the area has a limited supply of industrial land available for development totaling 124 net hectares (306 net acres).

The recent extension of Anthony Henday Drive has greatly enhanced access to the area. Over the past five years, the area has seen significant development activity and industrial land absorption within the Aurum Industrial Area. The Aurum Energy Park is a recently developed industrial park of 283 hectares (699 acres) situated in the City of Edmonton's Northeast District. The park has a large concentration of companies related to the energy sector including Mammoet, Kiewit and WorleyParsonsCord. While the park has some vacant parcels remaining for development, the park is quickly approaching buildout.

## EDMONTON ENERGY AND TECHNOLOGY PARK

The EETP represents the largest green field area within the City that is available for industrial development. The Energy and Technology Park Area Structure Plan includes a developable land area of 4,857 hectares (12,000 acres). No development has occurred since the approval of the Area Structure Plan; however, there has been some land assembly and marketing of the lands for development. The park is being marketed as an eco-industrial hub, which will take advantage of its location within Alberta's Industrial Heartland and will accommodate a range of industrial uses including energy-related value added industries, manufacturing, logistics and research and development activities.

The EETP has been assembled into four specialized industrial precincts reflecting the land-use vision of the area and has been approved within the zoning bylaw:

- ▶ EETB – Business Park/R&D (13% of developable land area);
- ▶ EETC – Chemical Cluster Zone (38% of developable land area);
- ▶ EETL – Logistics Zone (23% of developable land area); and
- ▶ EETM – Manufacturing Zone (26% of developable land area)

Initial land assembly in the EETP includes the development of Pilot Sound Industrial which is in the EETP Manufacturing Zone and consists of 31 total hectares (77 acres), with 21 building parcels ranging in size from 0.5 to 3 hectares (1.35 to 7.4 acres).

## INDUSTRIAL NEIGHBOURHOOD SPOTLIGHTS

The **Pylypow Industrial Neighbourhood** is located in Southeast Edmonton immediately north of the Mill Woods residential area. Pylypow Industrial contains 332 hectares of land and is bound on the east by 34 Street, on the south by Whitemud Drive, on the west by 50 Street, and on the north by CN Rail.

Pylypow has experienced considerable development and grown into one of Edmonton's most prominent industrial neighbourhoods. Pylypow contains a mix of medium, light, and business industrial zoned land. The area supports predominantly manufacturing, construction, and warehousing businesses. Other business located in the area include mechanical repairs, home & auto retail, professional, scientific and technical services.

Within the **Clover Bar Industrial Neighbourhood** lies the 444 gross hectare Aurum Energy Park. The Park comprises of 665 hectares of industrial zoned land, positioned to serve Edmonton's rapidly growing need for rail serviced industrial sites. Aurum Energy Park is served by two major railway lines, Canadian National (CN) and Canadian Pacific (CP), and an intermodal facility.

**Aurum Energy Park's** strategic location provides excellent access to Yellowhead Trail. The Park will also have access to Anthony Henday Drive when completed. Aurum Energy Park is located within the city of Edmonton and can draw from the City's well-educated and highly skilled workforce.

A number of major pipeline corridors are also situated in the area. Heavy and medium industrial zoned land makes up the majority of the industrial area. The site also contains business industrial, and agriculture industrial reserve land.

An eco-industrial business park is being developed in a large 234 hectare riverside site. The Eco-Industrial Business Park Inc. has lots for lease, some of which are already being used for warehousing.

The City of Edmonton's Waste Management Centre is located within the **Clover Bar Industrial Area**. It is North America's largest collection of modern, sustainable waste processing and researching facilities. The 233 hectare site includes a variety of facilities for processing both residential and commercial/industrial waste.

The **Ellerslie Industrial Neighbourhood** consists of 429 hectares of industrial land. The area has a mix of industrial business and agricultural uses. The industrial business designation will accommodate a range of light industrial business and high-technology uses.

Ellerslie Industrial is adjacent to Queen Elizabeth Highway II with connection to Calgary, U.S. destinations, and Edmonton's International Airport. A CP rail line runs north-south along the western boundary of the neighbourhood. The future CP intermodal facility will be along this line. Anthony Henday Drive forms the northern boundary of the neighbourhood. Edmonton Research Park is located to the north and across Anthony Henday Drive.



**Ellerslie Industrial** contains three business parks:

- ▶ Gateway Business Park – Contains predominantly light industrial uses.
- ▶ Southport Business Park – Located next to the future intermodal facility, primarily used for rail support.
- ▶ Ellerslie Industrial Park – Composed primarily of office buildings and commercial uses.

Ellerslie Industrial is also minutes away from the five residential neighbourhoods: Ellerslie, Summerside, Charlesworth, Walker, and the Orchards at Ellerslie.

The **Winterburn Industrial Neighbourhood** is located in Northwest Edmonton and encompasses an area of approximately 1,060 hectares of land. This large industrial area is split into Winterburn Industrial East and Winterburn Industrial West.

**Winterburn Industrial East** consists of approximately 518 hectares. This area is accessed from the south by Winterburn Road (215 Street) off of Stony Plain Road, and from the north by Winterburn Road off of Yellowhead Trail. Winterburn Industrial East can also be accessed southbound by Anthony Henday Drive at 109 Avenue.

Winterburn Industrial East accommodates medium and light industrial uses, and also provides business commercial development opportunities. Current industrial developments include construction, metal and steel fabrication, auto wrecking and repair, transportation and warehousing, and wholesalers.

Typical development is two-storey with many sites containing large storage yards. Business commercial uses are located along arterial roads with high visibility and convenient access to the major routes of Stony Plain Road, Winterburn Road, Yellowhead Trail, and Anthony Henday Drive.

There is considerable land ownership concentration in Winterburn Industrial East. In 2012, new lots were formed and development will continue in the central-eastern portion of the area. The provision of better servicing and proposed higher-quality development will stimulate redevelopment in established areas.

Winterburn East has two business parks:

- ▶ Yellowhead Industrial Park: This future park contains various business, light, and medium industrial lots that will develop with high-quality and fully-serviced industrial businesses.
- ▶ Stony Industrial Park: Expected in the central-eastern portion of the Winterburn East area, with an approved subdivision in 2013 for 12 business industrial lots, 16 light industrial lots, and 5 medium industrial lots.

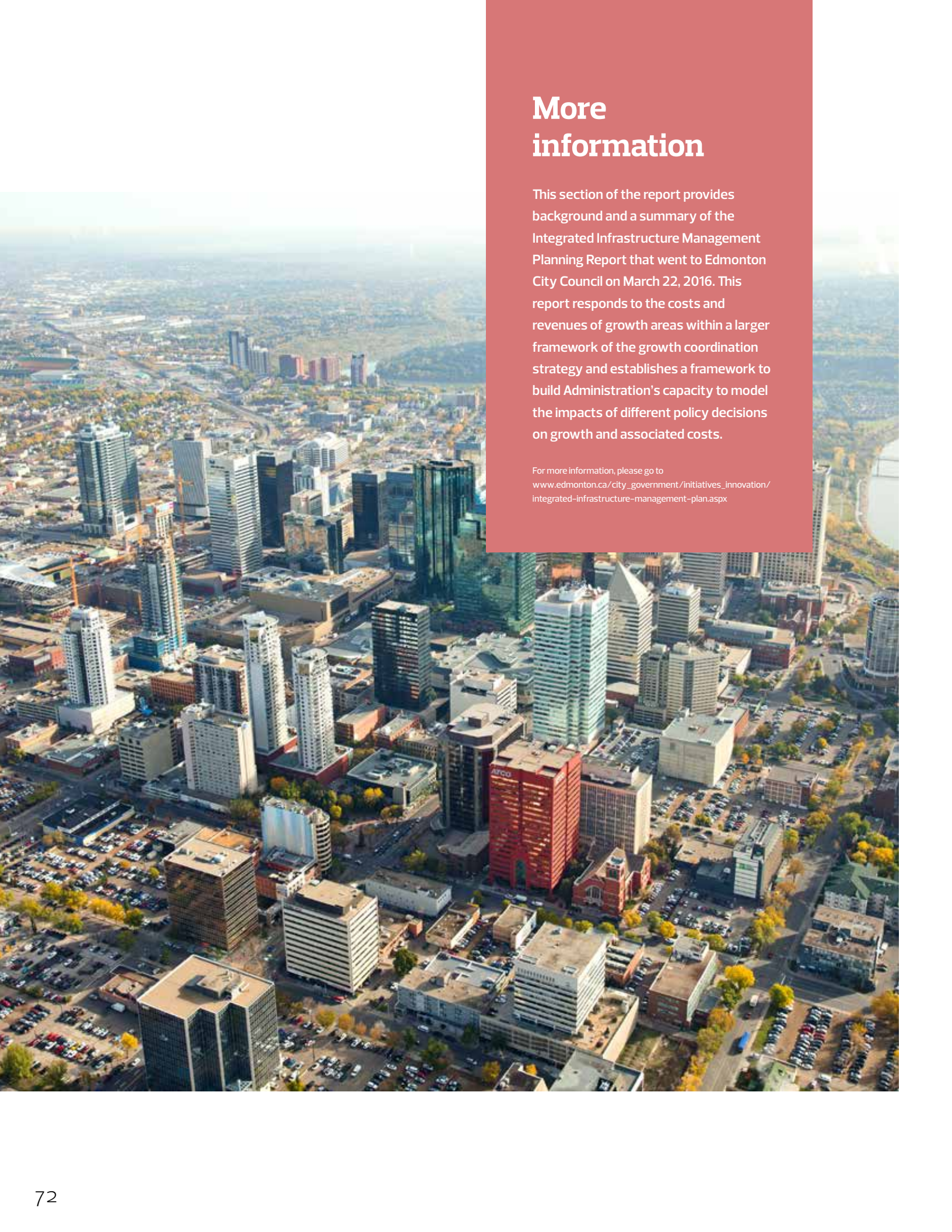


# INTEGRATED INFRASTRUCTURE MANAGEMENT PLANNING

"THIS IS A CRITICAL CONVERSATION HAPPENING IN CITIES ALL ACROSS CANADA; I INTENTIONALLY USE THE WORD 'CRITICAL' BECAUSE EDMONTON IS SIMPLY NOT FINANCIALLY SUSTAINABLE UNDER OUR CURRENT GROWTH MODEL... I AM HOPING THAT EDMONTON CAN SET A NEW KIND OF EXAMPLE (AS WE'RE GOOD AT DOING) FOR HOW THOUGHTFUL, EVIDENCE-BASED COOPERATION CAN SET OUR CITIES ON A MORE FINANCIALLY SUSTAINABLE PATH."

Mayor Don Iveson - March 18, 2016  
On "Calculating The Real Costs Of Growth"





## More information

This section of the report provides background and a summary of the Integrated Infrastructure Management Planning Report that went to Edmonton City Council on March 22, 2016. This report responds to the costs and revenues of growth areas within a larger framework of the growth coordination strategy and establishes a framework to build Administration's capacity to model the impacts of different policy decisions on growth and associated costs.

For more information, please go to [www.edmonton.ca/city\\_government/Initiatives\\_innovation/integrated-infrastructure-management-plan.aspx](http://www.edmonton.ca/city_government/Initiatives_innovation/integrated-infrastructure-management-plan.aspx)

Integrated Infrastructure Management Planning (IIMP) Framework is a City of Edmonton process for the gathering, synthesis, presentation, and use of data related to the provision of infrastructure to the three remaining Urban Growth Areas. Forecasting financial impacts is a speculative exercise.

The framework helps the City analyze infrastructure requirements, both initial and ongoing needs, as well as projected costs and revenue implications associated with growth, and determines how growth can be achieved in the most effective and sustainable way.

The Integrated Infrastructure Management Planning Framework addresses the development policies outlined in *The Way We Grow*. Together with the Growth Coordination Strategy, the framework presents infrastructure needs in context and is available to assist Council in decision-making as suburban growth in the Northeast, Southwest and Southeast continues to occur.

While not an all-inclusive guide for development approval, this framework is a lens to examine development with respect to the infrastructure required for the development, its costs and efficiencies, how it relates to other infrastructure (present and planned) in the City, implications to the City's operations, and a greater understanding of the affects of the timing of the development. The broad-based analysis provides a general indication of future cost implications and revenue potential.

The IIMP review was completed for the build out of the Urban Growth Areas (see Map 7.1) over a 30–39 year time frame, starting in 2016. Based on the information available at this time, the review generally shows that Urban Growth Areas will require a developer infrastructure investment of approximately \$3.8 billion as well as a capital investment by the City and/or the Province and/or other sources of approx. \$1.4 billion.

The City will need to continue to grow the industrial and commercial sectors and the overall 25% city wide non-residential tax base. This will help offset the imbalance resulting from areas where the proportion of residential assessment exceeds 75%.

## PURPOSE

The intent of the IIMP is to provide Council with information about the infrastructure required for the Urban Growth Area's development, how it relates to existing infrastructure timing, and the implications to the city's operations.

## BACKGROUND

The tax revenue generated by new residential areas are not meant to pay for the municipal programs and services associated with those neighbourhoods.

Residential neighbourhoods exist to provide for housing and community amenities. Other areas of the city, such as industrial areas and commercial nodes exist to provide employment and wealth generation. It is difficult to capture all of the indirect costs and benefits that are attributable in whole or in part to new residential neighbourhoods.

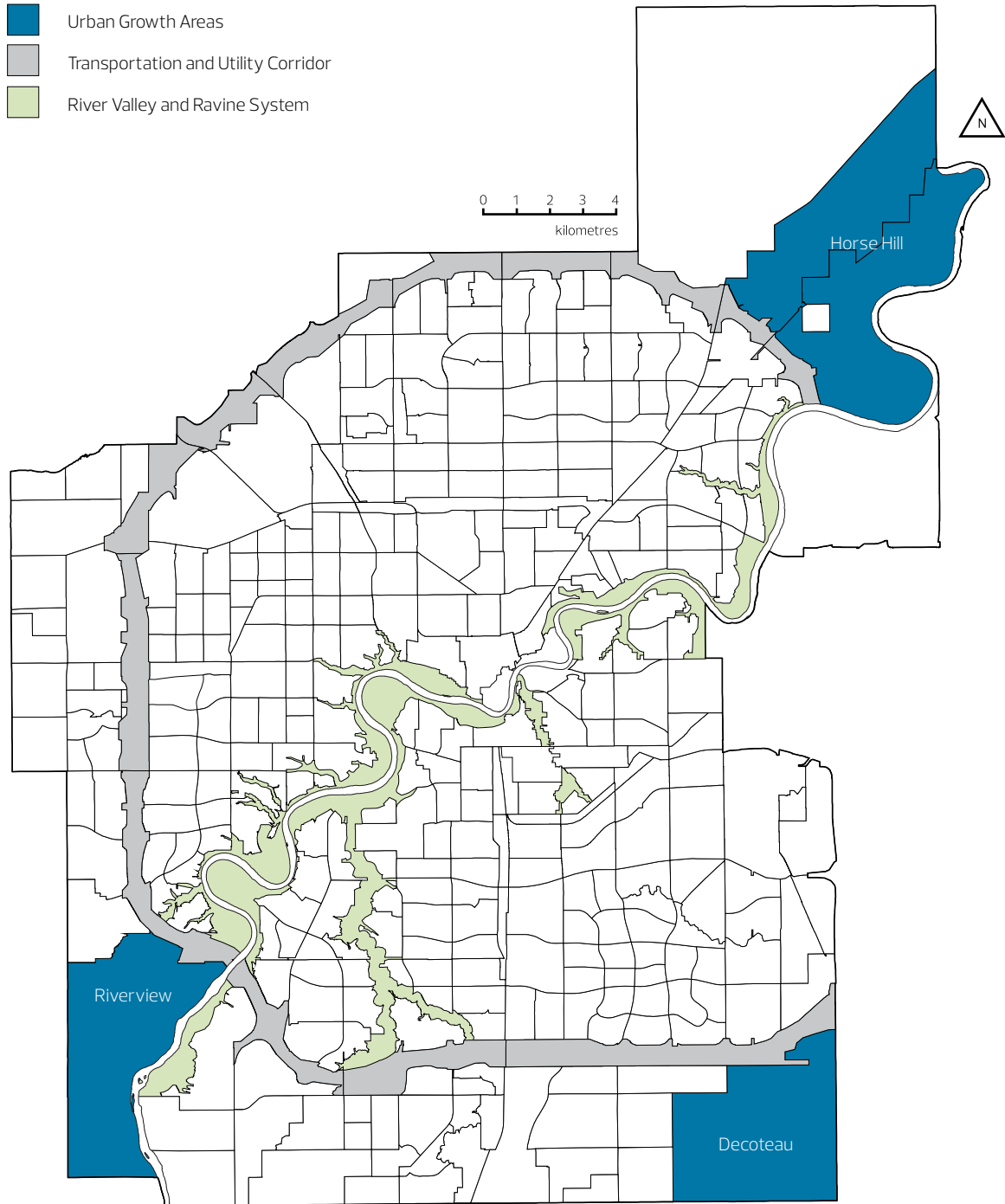
The challenges facing the City are to balance development costs with strategic benefits of sustainable growth, to achieve an appropriate balance of residential, commercial, and industrial development. Although the City of Edmonton has achieved some success in diversifying its revenue base, property tax remains the largest component of City revenue. The long term sustainability of cities in Canada will depend on a combination of smart, resource efficient growth mixed with a progressive form of revenue generation that provides for the services being enjoyed by the citizenry in the long term, without providing undue burden to any particular stakeholder.

When the three Area Structure Plans included in the Urban Growth Area's are examined, the projected population in these areas is approximately 195,000 people. There are two growth areas in the north, and one in the south. The highest population projection is for the Decoteau ASP in the south, with the Riverview ASP in the west having the lowest population projection.





# MAP 7.1 CITY OF EDMONTON URBAN GROWTH AREAS





The Urban Growth Areas are planned to include a variety of low to high density residential housing, district park sites with recreation centres, parks and natural areas, libraries, police facilities, fire stations, schools, commercial and mixed use sites and/or business employment areas. A full suite of services to citizens will also need to be provided in perpetuity.

The IIMP review was completed for the build-out of the Urban Growth Areas over a 30 to 39 year time frame (Decoteau-39 years, Horse Hill-36 years, Riverview-30 years), starting in 2016. Within these ASP areas, there is a total of 6187 hectares of land.

**FIGURE 7.1 IIMP FOR URBAN GROWTH AREAS (50 YEAR FORECAST)**

Population Estimated: 195,025

Required Private Infrastructure Capital Investment	\$3.8 billion
Required Public Infrastructure Capital Investment	\$1.4 billion
Required Public Infrastructure Operations, Maintenance and Renewal Investment	\$9.2 billion
<b>Total Public Infrastructure Investment</b>	<b>\$10.6 billion</b>
<b>Expected Revenue</b>	<b>\$9.2 billion</b>

Shortfall: \$1.4 billion

**INFRASTRUCTURE BREAKDOWN**

The amount of Infrastructure to be built by the developer, the City of Edmonton and/or the Province is a function of many things, including the design of the community, the service standards provided, the amount and density of population served, and the presence of existing infrastructure. Costs are calculated and considered for community facilities, drainage services, Edmonton Public Libraries, Edmonton Police Services, parks, Transportation-roads, Transportation-transit and waste management. Depending on the service, the City's expenditures are attributed to three categories: Initial Costs, Renewal Costs and Operating Costs.

**BALANCED GROWTH**

How does the proposed development of the Urban Growth Areas affect the balance of residential and non-residential assessments? Generally, the residential areas have less than 25% of their assessment base as non-residential, and the proposed Urban Growth Areas are projected to have between 6.5% and 8% of their assessment as non-residential. So, as the City grows this and other residential areas, it must also grow its non-residential areas to maintain balanced growth. For the City as a whole to maintain its current ratio, there needs to be approximately \$5 billion of non-residential assessment for every \$20 billion in residential assessment growth.

With both an aging and growing city, balancing investment choices between renewal and growth is a significant challenge. As infrastructure ages, more maintenance and rehabilitation is required to ensure that it is performing well and continuing to meet the needs of citizens.





# DEVELOPMENT HOTSPOTS

“...WE NEED TO ENSURE THAT OUR REGIONAL GROWTH IS RESPONSIBLE, WHICH MEANS HIGHER DENSITIES, MORE EFFICIENT USE OF INFRASTRUCTURE IN NEW AREAS, AND INFILL IN OUR EXISTING COMMUNITIES.”

Mayor Don Iveson,  
2016 State of the City

Edmonton continues to experience growth and provide diversity of housing choices for our new and current residents. These developments occur in the core, mature and established neighbourhoods within the City and have the potential to provide new housing units in recently re-zoned land.

Edmonton is investing in growth opportunities via partnerships with the public for Brownfield Redevelopment and Surplus School site redevelopment. Edmonton continues to invest in downtown and has also embarked on a series of transformational projects in or near the core area.

# What is Residential Infill?

Residential Infill means new housing and established neighbourhoods. In Edmonton, this refers to our Core, Mature and Established Neighbourhood classifications.

In 2014, Edmonton's Infill Roadmap was developed and released to the public. Since 2014, there have been events and outreach programs to collaborate with citizens throughout the City regarding potential Infill development and reinvestment in our established neighbourhoods. Infill reinvestment is occurring throughout the City in different forms. \*

\*In the "Way We Grow" Municipal Development Plan (2010), Section 3.1.1.2, the goal of 25% city wide housing unit growth to be located in the Downtown (also known as Core) and Mature Neighbourhoods was established. This goal does not include Established Neighbourhoods in its calculation.

A series of planned downtown projects will complement existing development, while major transformational projects in adjacent areas are expected to add additional housing units and people to this area.

Major projects include the Blatchford development to the north of downtown, ICE District, The Quarters, and the West Rosedale redevelopments in the Rosedale neighbourhood. Combined, these projects are expected to add over 50,000 people to the core area population over the next 35 years. Vibrant and attractive urban cores have begun to change the way in which we plan.

Modal shifts to include active or public transportation has resulted in a reduced need for parking as Millennials drive less than their parents' generation. Furthermore, their movement into urban centres has helped shift investment from the suburbs, and developers and businesses have begun to follow, by building condominiums and locating businesses in these urban areas in an attempt to capitalize on this generation's desired lifestyle.

## Brownfield Redevelopment

Brownfields are abandoned, idle or underutilized commercial or industrial properties where past actions have caused or may have caused environmental contamination, but where there is a potential for redevelopment. Brownfields constitute a subset of contaminated sites. These brownfield sites can be found throughout the City, but tend to be within the Core, Mature and Established neighbourhoods. The Brownfield Redevelopment Grant Program promotes redevelopment of qualified brownfield properties by helping cover some of the testing and remediation costs.

For more info on Infill and how you can get involved, please visit [www.edmonton.ca/city\\_government/urban\\_planning\\_and\\_design/evolving-infill.aspx](http://www.edmonton.ca/city_government/urban_planning_and_design/evolving-infill.aspx)

So far, the program has provided 15 grants for exploratory work to measure contamination levels. There have been six deals for major new developments in mature neighbourhoods, and four more are currently in progress.

Some of the projects that have accessed the grant program include: Fox Towers 1 and 2 on 104 Street, Mayfair Village on Jasper Avenue, and the Raymond Block on Whyte Avenue. Projects like these are changing the face of Edmonton, while reducing the level of land development in our greenfields. They contribute to more sustainable living and compact urban form by promoting infill in mature areas of the city, enable the use of existing infrastructure and public transit and improve esthetics and neighbourhood walkability.

The program is receiving recognition in multiple forms. Our Brownfield Redevelopment Grant has recently won the following awards:

- ▶ Canadian Urban Institute's Brownie Award for Reinvestment (2015)
- ▶ Minister's Award for Municipal Excellence for Larger Municipalities (2015)
- ▶ FCM Sustainable Communities Award for Brownfields Plan (2016)

All three awards look at sustainability, relevance and transferability of the program.

## Surplus School Sites

When new neighbourhoods are planned, land is set in reserve to meet the future needs for schools, parks and recreation. This land is serviced and made ready for development. Later, if a school board determines that land originally set aside for a school is not needed, the board may declare it surplus. Using vacant school building sites for other purposes makes sense. Because the vacant sites are in existing neighbourhoods, new developments can use infrastructure already in place, like water lines, sewers and roads. They can also take advantage of existing services and neighbourhood amenities, like transit, libraries, and parks. These new developments also advance the City's vision and long-term goal of creating a more compact, livable and sustainable community.

Since 2006, the City of Edmonton has acquired 40 surplus school sites. Of these, 20 are being developed to provide market-priced housing for first time home buyers under the First Place program. Eight have been approved for seniors' housing, and nine others will be used for civic use.

In 2009, another 20 sites surplus, of those 20, the City is currently engaged in public engagement for 9 of those sites. Public Engagement is extensive for these sites and it is expected to take approximately 2 years before any land use decisions are recommended to council.

For more information on Brownfield Redevelopment, please go to:  
[www.edmonton.ca/programs\\_services/funding\\_grants/brownfield-redevelopment-grant-program.aspx](http://www.edmonton.ca/programs_services/funding_grants/brownfield-redevelopment-grant-program.aspx)

## Transit Oriented Development (TOD)

Transit Oriented Development (TOD) is an exciting approach to city building that can help achieve Edmonton's vision of a more compact, transit-oriented, and sustainable community, where people walk, cycle, and use transit more than they do today. The TOD Policy and Guidelines approved by City Council in February 2012 help realize this vision and is part of the City's larger "Nodes + Corridors" planning priorities.

TOD integrates transportation, land-use and development by concentrating residential, commercial, and employment along a network of walkable and bikeable streets within a five-minute walk (approximately 400m) of a transit station. This proximity provides residents with the benefit of increased transportation choices with reduced dependence on personal automobile trips, reduced personal transportation costs, increased accessibility to daily needs, as well as improved health through physical activity.

Transit Oriented Development looks to capitalize on public investment in transportation to unlock development potential, achieve densification targets and bring more residents within reach of the transit system. TOD has the potential to transform neighbourhoods around LRT and transit centres into vibrant hubs of mixed-use activity that bring people together. It helps revitalize neighbourhoods, make a more efficient use of infrastructure and reduce energy consumption and pollution. Initiatives such as TOD developments such as the Mill Woods Station Area Redevelopment Plan, McKernan-Belgravia Station Area Redevelopment Plan and Stadium Station Transit Oriented Development Project will help shape Edmonton's lifestyles over the next 25+ years.

### MILLWOODS STATION AREA REDEVELOPMENT PLAN

Millwoods Station Area Redevelopment Plan recognizes the area's strategic location within southeast Edmonton and will guide its transition from primarily low-density, auto-oriented environment towards a more vibrant, mixed-use community. This will complement the surrounding neighbourhoods and establish a true urban centre.

The goals of the station area plan are to:

- ▶ Determine a vision for transit oriented development in Mill Woods.
- ▶ Facilitate appropriate development in the station area.
- ▶ Respect the unique character and history of the Mill Woods area.

### BLATCHFORD

Blatchford is a transit oriented development that will add approximately 11,000 homes over the next 20 to 35 years. With the opportunity to develop 217 hectares (536 acres) of raw land just minutes away from Edmonton's downtown core, the City reimagined how an urban community could be designed. In March 2016, City Council directed the Blatchford office to further investigate the development of a renewable energy utility model to achieve Blatchford's ambitious energy goals related to carbon neutrality and use of 100% renewable energy sources.





## Blatchford at a Glance

Location: Bordered by Yellowhead Trail to the North, Kingsway Avenue to the south, 121 Street to the west, and the Northern Alberta Institute of Technology (NAIT) and Jefferson Armories to the east

Size: 217 hectares

Timeline: 20 to 35 years

Population: 30,000

Major construction at the site will likely be delayed for approximately one year to allow the Blatchford office, in partnership with external consultants, time to deliver on Council's request for more information and to seek funding from the provincial and federal governments. The Blatchford office will provide an update to City Council in June 2016.

Blatchford will provide its up to 30,000 residents with a great quality of life and will utilize 100% renewable energy while providing a community that allows individuals to age in place. It offers a town centre with office space, retail and residential dwellings. Residents will be empowered to pursue a wide range of sustainable lifestyle choices. These include the ability to utilize transit with streets designed for walking and transit, ample park and open space, and urban agriculture including community garden plots.

Site preparation at Blatchford began in summer 2014. In 2015, significant work began to prepare the west side of the site for the first stage of development including building the infrastructure, setting architectural guidelines, creating the builders' performance standards and selecting prequalified developers who can deliver on Blatchford's vision. As Blatchford is building 'in' townhomes, low- and mid-rise apartments will be the only dwellings constructed.

## ICE DISTRICT (FORMERLY EDMONTON ARENA DISTRICT)

ICE district is located between 101 Street to 104 Street and along 103 Avenue to 106 Avenue. Once completed the 10.1 hectare district will be a master-planned community connecting Edmonton's central core to the north, east, west and south through its connections to five LRT stations, pedestrian-friendly streets, promenades and pathways, in addition to ample parking.

While the focal point will be the 18,647-seat Rogers Place arena and public plaza (expected to open in fall 2016), the district alone is expected to add another 1,000+ residential units in the form of luxury condominiums and premium quality rental. The district will also provide the opportunity for individuals to live where they work and play with 1.3 million square feet of rentable office space and over 270,000 square feet of retail being included in phase one alone. When completed the district will offer an integrated mix of retail, office, hotel, residential, and entertainment venue space.

Through this development the City of Edmonton, in partnership with the Edmonton Arena District joint venture, is working towards developing a well-designed, sustainable, vibrant and accessible downtown area that realizes the goals outlined in the Capital City Downtown Plan.

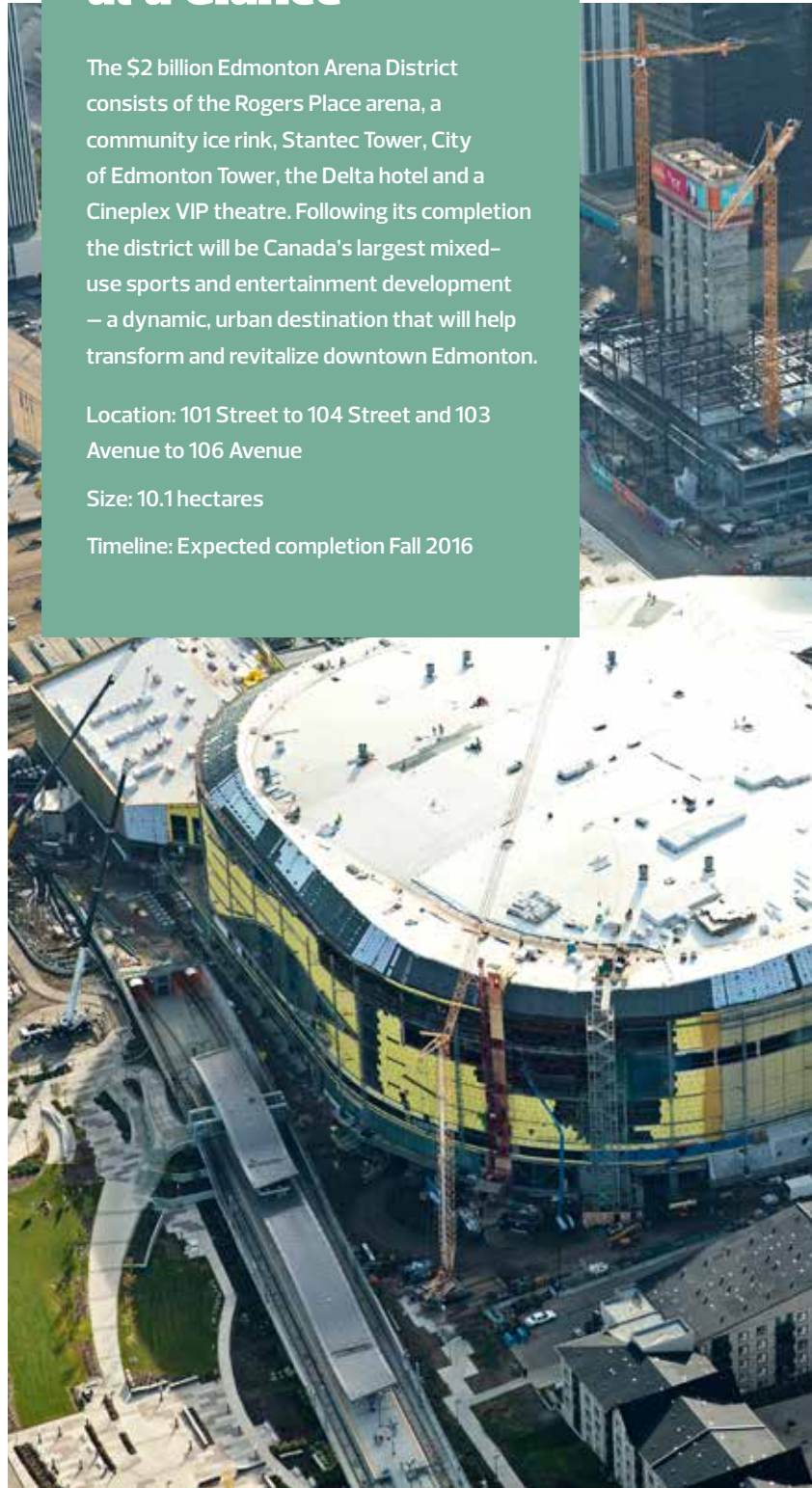
## Ice District at a Glance

The \$2 billion Edmonton Arena District consists of the Rogers Place arena, a community ice rink, Stantec Tower, City of Edmonton Tower, the Delta hotel and a Cineplex VIP theatre. Following its completion the district will be Canada's largest mixed-use sports and entertainment development – a dynamic, urban destination that will help transform and revitalize downtown Edmonton.

Location: 101 Street to 104 Street and 103 Avenue to 106 Avenue

Size: 10.1 hectares

Timeline: Expected completion Fall 2016





# Annexation at a Glance

Edmonton is projected to grow to 2.2 million people by 2064. In order to continue to provide the foundation for the region to prosper, we must extend our boundaries to responsibly manage future growth, facilitate sustainable development, and extend infrastructure in a cost-efficient way.

Location: south of the City, east and west of the Queen Elizabeth II Highway

Size: approximately 16,000 hectares

Timeline: 3 to 7 years on average to complete the annexation process

Population: approximately 231,440

## PROPOSED ANNEXATION

The City of Edmonton is quickly running out of room to accommodate anticipated growth. This is especially true for industrial lands but is also true for residential developments. Accounting for this, the City of Edmonton is collaborating with its regional partners to adjust boundaries to meet growth demands and to support future land development.

The city's population is expected to continue its growth pattern. Recent development and growth trends show the city has accounted for 70% of the region's population growth and slightly more than 71% of the housing units. The proposed annexation ensures that both industrial and residential land inventories meet the policy target of maintaining a minimum 30-year supply. Planning for the long-term population and employment is necessary to ensure the vibrancy and fiscal sustainability of both the city and the region.

## WEST ROSSDALE

The West Rosssdale Urban Design Plan was initiated by the City to provide a long-term vision for the western portion of the Rosssdale neighbourhood. West Rosssdale is approximately 22.5 hectares in the North Saskatchewan River Valley, directly south of the downtown and east of the Legislature grounds. The redevelopment concept envisions an urban village, with a main street developed along 96 Avenue and development that transitions from higher-rise buildings adjacent to the downtown to low-rise housing adjacent to South Rosssdale and the River.

West Rosssdale is planned to be a vibrant, diverse, walkable, sustainable, and inclusive community that will evolve over a 15 to 20 year period to eventually contain a population of approximately 3,000 people.

## THE QUARTERS

The Quarters Downtown is on the eastern edge of downtown Edmonton with easy access to the natural amenities of the City's river valley, arts, entertainment and financial districts. The area extends from 97 Street to 92 Street, and from 103A Avenue to the top of the river valley (approximately 40 hectares or 100 acres).

The Quarters includes the Boyle Renaissance, a made-in-community solution that will provide a range of market and affordable housing opportunities and a variety of services such as childcare, family services, cultural opportunities, park space and a community garden.

For more information see [www.edmonton.ca/city\\_government/projects\\_redevelopment/west-rossdale-urban-design-plan.aspx](http://www.edmonton.ca/city_government/projects_redevelopment/west-rossdale-urban-design-plan.aspx)

# West Rosssdale at a Glance

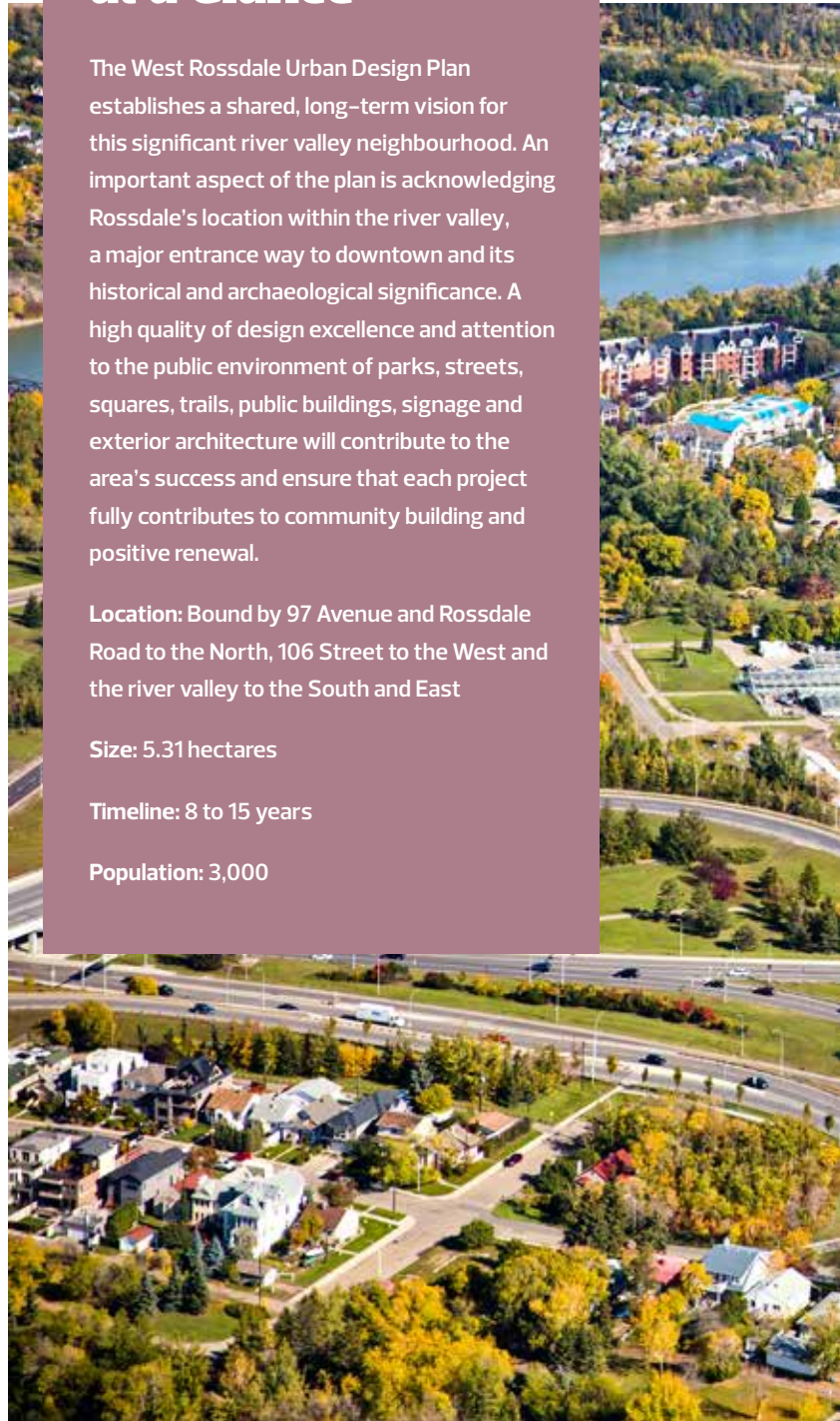
The West Rosssdale Urban Design Plan establishes a shared, long-term vision for this significant river valley neighbourhood. An important aspect of the plan is acknowledging Rosssdale's location within the river valley, a major entrance way to downtown and its historical and archaeological significance. A high quality of design excellence and attention to the public environment of parks, streets, squares, trails, public buildings, signage and exterior architecture will contribute to the area's success and ensure that each project fully contributes to community building and positive renewal.

**Location:** Bound by 97 Avenue and Rosssdale Road to the North, 106 Street to the West and the river valley to the South and East

**Size:** 5.31 hectares

**Timeline:** 8 to 15 years

**Population:** 3,000







The Quarters Downtown urban design plan features 5 distinct districts or precincts. There are 4 “quarters” linked by The Armature, each having their own unique character and design.

Over the next 5, 10, and 20 years, the area will be transformed into a vibrant, diverse and inclusive community well connected to the central business and cultural district and the river valley.

Once completed, The Quarters Downtown will be an environmentally-sustainable, walkable, diverse community with appealing design, inclusive housing, and green spaces. The area currently houses about 2,400 residents; however, it has abundant room for growth and redevelopment with the capacity to accommodate up to 20,000 people.

**Featured Projects:** There are many exciting projects underway in The Quarters Downtown. The City of Edmonton is financing \$56 million in infrastructure investments with revenues from The Quarters Downtown Community Revitalization Levy. These capital investments include upgrading area drainage services to handle the higher-density residential and commercial development zoning, as well as streetscaping improvements on 96 Street from Jasper Avenue to 103A Avenue.

In addition, there are a number of private developments in The Quarters Downtown that are under construction or in the planning stages. These projects include The Armature, Boyle Renaissance, Infrastructure improvements and upgrades, Hotel, Five Corners Residential Tower, Ukrainian Canadian Archives and Museums of Alberta, Artists Quarters and improvements to 104 Avenue (new sidewalks, landscaping and public realm improvements).

For more information on the Quarters, please go to: [www.edmonton.ca/city\\_government/projects\\_redevelopment/explore-the-quarters.aspx](http://www.edmonton.ca/city_government/projects_redevelopment/explore-the-quarters.aspx)





# INFORMATION PORTAL

The City of Edmonton's goal is to provide vital and meaningful information to a variety of stakeholders, to support informed decision-making. As our city continues to evolve and adapt, so do we, the information stewards, as we are constantly looking at new and innovative ways of providing the information and analysis that our stakeholders have come to rely upon.

This section provides an in-depth look at the variety of reports published since the 2015 Growth Monitoring Report, while also providing a "sneak-peak" at future publications. These reports and more can be found by clicking the linked report covers or online by visiting [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis).

An aerial photograph of a river valley during autumn. The foreground and middle ground are dominated by dense forests with trees in shades of yellow, orange, and brown. A winding river flows through the valley, with several small ponds and wetlands. In the background, a city or town is visible, with buildings and infrastructure. The sky is clear and bright.

## Published data sets

The publication of data sets is intended to target the technical user of information. These residents or stakeholders require raw information presented without analysis. The information is presented as either a spreadsheet on our website, through the Open Data website, or a combination of both. Although very elemental and raw, these publications offer the deepest level of information and are often used by those who require information be tailored to their unique needs.





### RESIDENTIAL BUILDING PERMITS DATA SET

The Residential Building Permits data set provides insight into where residential building activity is occurring throughout the city. This is accomplished by tracking the number of building permits issued in a calendar year. The spreadsheet contains information such as the geographic location (neighbourhood, address etc.) of the permit, the type of permit issued, the current zoning at the time of application, construction value, property investment, as well as unit gains or losses. Additionally, the data set provides a brief summary of development activity by neighbourhood and zoning.

### VACANT LAND INVENTORY DATA SET – 2014

The Vacant Land Inventory data set builds off the popular series of technical reports and snapshot on vacant land (please refer to our Technical Series and Snapshot Series of reports for more information on Vacant Land). The data set which is published on the City of Edmonton's Open Data Portal provides insight to developers and other stakeholders as to where vacant land is located, the size of vacant lots, potential for consolidation, current zoning and whether or not the vacant property is publicly or privately owned.

This Data Set is updated every two years.

[data.edmonton.ca/Indicators/Residential-Development-Permits/25sf-z8zd](http://data.edmonton.ca/Indicators/Residential-Development-Permits/25sf-z8zd)  
[data.edmonton.ca/Sustainable-Development/Vacant-Land-Inventory/svsw-2ub7](http://data.edmonton.ca/Sustainable-Development/Vacant-Land-Inventory/svsw-2ub7)

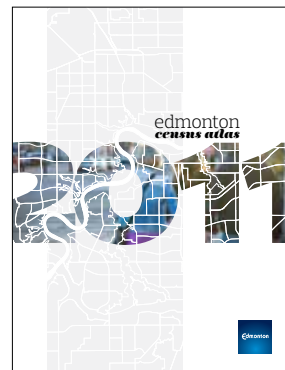


## Published technical series

The primary audience of the technical series includes specialized users looking for detailed analysis into where, when and how our city is growing. This analysis, usually presented as a report with a detailed methodology and references, identifies trends while also including charts, graphs and maps when appropriate. These publications offer a detailed analysis of a subject based on the data sets. These reports are intended for residents or stakeholders with knowledge and understanding of a specific topic.

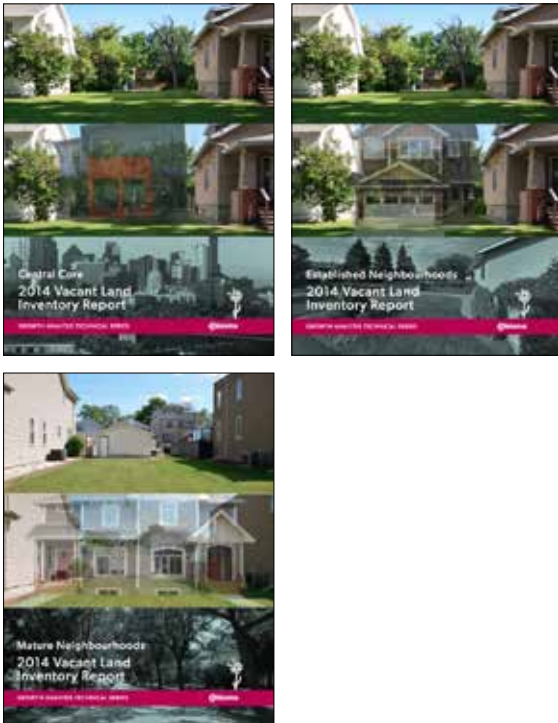
### CENSUS ATLAS

Statistics Canada provides a detailed numerical description about people living in Canada – ages, accommodation, level of education, length of residence and many other indicators. Using the most recent Federal Census of Canada data (2011), The Edmonton Census Atlas uses some of these indicators to provide an illustration of Edmonton's residents at the neighbourhood level. Comparisons for a number of indicators are made between Edmonton and select Canadian municipalities.



## VACANT LAND REPORTS

Unlike the raw data set, the Vacant Land Reports provide an in-depth analysis examining lot sizes, where vacant lands are located, and trends, in addition to maps and a detailed methodology. This report analysis does not include Developing Neighbourhoods, as land that appears to be vacant here, is in reality pending construction. The series of reports examine the distribution of land within the central core, mature and established neighbourhoods. This report is updated every two years.



## RESIDENTIAL BUILDING PERMITS AND ZONING REPORT

The Residential Building Permits and Zoning report provides an overview of how zoning relates to residential construction activity, as assessed through the review of distribution and number of building permits, estimated construction costs, and dwelling unit gains. Understanding how zoning shapes the built form is an important part of monitoring growth patterns and trends.



# Published technical series *cont.*

## NEIGHBOURHOOD PROFILES

The 2014 Neighbourhood Profiles provide an update to the popular 2006 profiles utilizing data from the 2011 Federal Census to provide an in-depth look into the demographics and built form each neighbourhood. Following a brief description of the neighbourhood the profiles outline relevant demographic information such as age and gender, income and ethnic composition, in addition to the built form (structure type and period of construction), methods of travel and existing land uses.

With the upcoming 2016 census, the Neighbourhood Profiles will be updated as new data becomes available.



# Zoning?

For information on zones, please refer to the Zoning Summary in the Appendix. To view the City of Edmonton's full Zoning Bylaw 12800, go to [www.edmonton.ca/Zoningbylaw](http://www.edmonton.ca/Zoningbylaw)

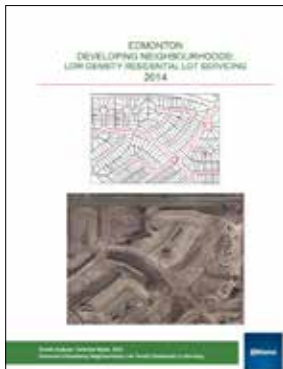
## MATURE NEIGHBOURHOOD REINVESTMENT REPORT

The annual Mature Neighbourhood Reinvestment (MNR) report provides a picture of private investment into residential units in mature neighbourhoods. This report, using Residential Building Permits, focuses on development activity within mature neighbourhoods and tracks the value of residential construction, unit growth, permits issued as well as the number of secondary suites. Together this information provides insight into where and how much reinvestment is occurring within Edmonton's mature neighbourhoods.



## SERVICING REPORT – LOW-DENSITY RESIDENTIAL LOTS IN DEVELOPING NEIGHBOURHOODS

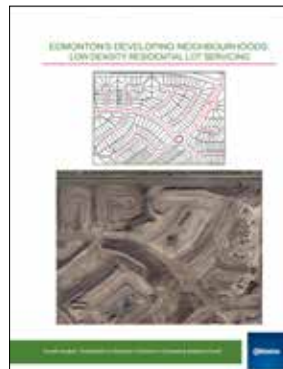
The Low-Density Residential Lot Servicing report analyzes servicing trends over the last ten years, while also providing a summary of servicing undertaken in 2015 at the subsector and Area Structure Plan (ASP) level. This report further provides a six-year servicing forecast within developing neighbourhoods that currently have approved ASPs. This understanding provides insight into where new development will occur in the future and allows for the timely delivery of services to these new homes.



## DWELLING UNIT DENSITY BY NEIGHBOURHOOD

This report provides a definition for low, medium and high-density developments. Through the use of graphic and pictorial examples, the various forms of development and different levels of density are shown and assist in the visualization of Edmonton's built form. The report utilizes data from the 2014 Municipal Census and the Spatial Land Information Management (SLIM) system. This report is current at the time of analysis and provides effective insight into how our neighbourhoods develop, in addition to allowing for comparisons to be made between different points in time.

This report will be updated once the 2016 census data is analyzed.



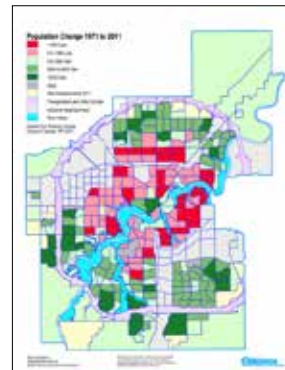


## Published growth snapshots

Growth Snapshots are short, reader-friendly publications that highlight key growth trends for the general user. These one to two page summaries use images such as maps, infographics, pictures and FAQs and are intended for those without a technical knowledge of the subject matter. These plain language snapshots are easy to read and are still of use to those with a technical background. They are short and to the point, providing a higher-level summary with only key highlights.

### DENSITY AND POPULATION CHANGE MAPS

These maps visually highlight how our population and built form has changed over a period of time using census data. The Dwelling Unit Density Map analyzes the density of dwelling units in a neighbourhood by dividing the number of dwelling units by the total land dedicated to residential purposes. These densities have been mapped out and help to visually compare the densities of Edmonton's neighbourhoods. The Population Change map compares census data from 1971–2011 and uses a map to visually represent which neighbourhoods have gained or lost population over this 40-year period. This map illustrates that inner city neighbourhoods for the most part have been losing residents, while developing neighbourhoods have experienced strong growth.



### INFILL SERIES

The Building Permits growth snapshots provide insight into the type of development activity that is occurring. Focusing on Infill in 2015 and supporting the Infill Roadmaps Actions 7 and 8, the snapshots analyze trends in row housing, secondary suites, duplexes and semi-detached houses, single detached houses as well as garage and garden suite activity.



### VACANT LAND SNAPSHOTS

The Vacant Land growth snapshot highlights information in the Vacant Land Reports in our "Technical Series" and provides concise information into the distribution of vacant properties in Edmonton's central core, mature and established neighbourhoods. Combining the results of the individual technical reports the growth snapshot indicates 1,342 lots within the three areas contain 180 hectares of vacant land. Using industry standard densities found in NSPs, the 75 hectares of vacant land currently zoned for residential use could accommodate approximately 3,287 dwelling units and an additional 7,725 people.

This report is updated every two years.







# APPENDICES



# A References

## REFERENCES

### **Canadian Mortgage and Housing Corporation – Housing Starts**

Adapted from Canadian Mortgage and Housing Corporation, Edmonton Housing Starts Summary, 1980 through 2015.

### **Census of Canada – Demographic Information**

Adapted from Statistics Canada, Census of Canada, 1940–2011. This does not constitute an endorsement by Statistics Canada of this product.

### **City of Edmonton – Land Use, Density, Registrations, Servicing, Permits**

The City of Edmonton provides this information in good faith. While every effort has been made to ensure the accuracy of information contained in this report, the City of Edmonton provides no warranty, express or implied, regarding the accuracy, completeness or correctness of information contained herein. The City of Edmonton disclaims any liability for the use of this information. No part of this material may be reproduced, in whole or in part, without acknowledgment.

All maps are compiled by Geodesign Unit, City Planning Branch. The City of Edmonton disclaims any liability for the use of the maps. No reproductions, in whole or in part, are permitted without express written consent of The City of Edmonton, Sustainable Development Department.







## B Definitions

### Area Structure Plan (ASP)

A statutory plan that identifies future neighbourhoods and where residential, commercial, institutional and recreational sites will be located in a previously undeveloped area and how essential municipal services such as water and sewer systems, roads and fire protection will be provided. These plans also describe the number of people that are expected to live in the new area and how development will be staged over time.

### Core Neighbourhoods

Consists of Downtown and neighbourhoods that have a strong inter-relationship with the Downtown, as defined by "Central Core" in the Way We Grow.

### Density

Density is the spatial concentration of a measure within a geographic area, and is commonly measured by population or dwelling units. Density per net residential hectare refers to the spatial concentration within an area designated for residential purposes. This standardizes neighbourhood comparisons as it accounts for other land uses such as parks, roads, and commercial spaces.

### Developing Neighbourhoods

Consists of neighbourhoods with facilities and services that are still under developed, as defined by the Way We Grow. For reporting purposes, this category also includes planned neighbourhoods that experience limited development activity, and is further broken into north, west, and south sectors.

### Established Neighbourhoods

Consists of mature neighbourhoods as defined by the Mature Neighbourhood Overlay and established neighbourhoods developed prior to 1995, as defined by the Way We Grow. For reporting purposes, newer neighbourhoods with over 95 % completion of all residential lots are also classed as established as they no longer experience significant servicing activity.

### Infill (Residential)

Residential infill is the development of new housing in established neighbourhoods. This new housing may include secondary suites, garage suites, duplexes, semi-detached and detached houses, row houses, apartments, and other residential and mixed-use buildings.

### Low-Density Residential

A single-detached house or semi-detached/duplex housing, which may include a secondary suite.

### Medium-Density Residential

Attached units, except semi-detached dwellings and duplexes, but including row-housing and low and mid-rise apartments/condominiums.

### High-Density Residential

Includes higher volume multi unit structures including residential tower structures



### Neighbourhood Area Structure Plan (NASP)

A statutory plan that identifies where future residential, commercial, institutional and recreational will be located in a previously undeveloped area and how essential municipal services such as water and sewer systems, roads and fire protection will be provided. These plans also describe the number of people that are expected to live in the new area and how development will be staged over time. NASPs are a smaller scale than an Area Structure Plan, but larger in area than a normal Neighbourhood Structure Plan. NASPs tend to be used in large, but uniform areas.

### Neighbourhood Structure Plan (NSP)

A statutory plan that aligns within a larger Area Structure Plan, but provides greater detail at the neighbourhood-level. An NSP will provide information on where residential, commercial, institutional and recreational sites will be located in a previously undeveloped area and how essential municipal services such as water and sewer systems, roads and fire protection will be provided. These plans also describe the number of people that are expected to live in the new area and how development will be staged over time.

### Semi-Detached House

A semi-detached house has another unit attached on one of its sides. It is included in single-family housing in this document for consistency.

### Single-Detached House

A single-detached house has open space on all sides and is not attached to any other structure (except its own garage or shed). This structure may have a basement suite that does not have a separate private entrance.

### Suite Addition

The addition of residential units to existing buildings (with or without the expansion of the building), such as introducing secondary suites into a detached house.

### Traffic District

Edmonton is divided into 31 traffic districts.

### Urban Growth Area

Areas identified in the Way We Grow for future urban growth.



# C Zoning Summary

## RESIDENTIAL ZONES

### **RF1 – Single Detached Residential Zone**

This zone provides the opportunity for single-family housing.

### **RF2 – Low Density Infill Zone**

This zone provides the opportunity for retaining single-family housing, while allowing some duplex development.

### **RF3 – Small Scale Infill Development Zone**

This zone provides the opportunity for single family and duplex housing while allowing some apartment or row housing with up to four units.

### **RSL – Residential Small Lot Zone**

This zone provides the opportunity for single family housing with attached garages on smaller lots.

### **RPL – Planned Lot Residential Zone**

This zone provides the opportunity for single family housing on smaller lots and accessed by a rear lane.

### **RMH – Mobile Home Zone**

This zone provides the opportunity for mobile homes developed within a mobile home park or subdivision.

### **RR – Rural Residential Zone**

This zone provides the opportunity for permanent single-family residential development in a rural setting.

### **RF4 – Semi-Detached Zone**

This zone provides the opportunity for primarily semi-detached and duplex housing.

### **RF5 – Row Housing Zone**

This zone provides the opportunity for relatively low to medium density housing, such as row houses or town houses.

### **RF6 – Medium Density Multiple Family Zone**

This zone provides the opportunity for medium density housing, such as row houses or town houses that may have separate second storey units.

### **RA7 – Low Rise Apartment Zone**

This zone provides the opportunity for low-rise apartment buildings up to four storeys.

### **RA8 – Medium Rise Apartment Zone**

This zone provides the opportunity for medium rise apartment buildings up to six storeys in height.

### **RA9 – High Rise Apartment Zone**

This zone provides the opportunity for high-rise apartment buildings.

## DIRECT CONTROL ZONES

### DC1 – Direct Development Control Provision

This zone provides the opportunity for detailed, sensitive control of the use, development, siting and design of buildings and disturbance of land. This zone is used to establish, preserve or enhance areas of unique character or environmental concern, or areas of special interest as designated under the Historical Resources Act.

### DC2 – Site Specific Development Control Provision

This zone provides the opportunity for direct control over a specific proposed development where the proposed mix of uses or the development regulations cannot be accommodated in a standard zone.

## SPECIAL AREA – DOWNTOWN\*

### HDR – High Density Residential

This zone provides the opportunity for high density housing with minor local commercial Uses in a predominantly residential environment where the concept of a livable urban village with a strong sense of identity and place, community activities and amenities are focused on a neighbourhood main street.

### JAMSC – Jasper Avenue Main Street Commercial Zone

This zone provides the opportunity for at-grade, predominantly retail commercial, office and service uses suitable for the Downtown's Main Street, Jasper Avenue, and to ensure that infill developments and the retrofitting and preservation of historical and older buildings incorporate human scale design characteristics to enhance a revitalized, Main Street atmosphere.

### CCA – Core Commercial Arts Zone

This zone provides the opportunity for high density and quality development that accommodates office, retail, service, institutional, residential, arts and entertainment Uses and meet the land use objectives for the Commercial Cultural Core.

### CMU – Commercial Mixed Use Zone

This zone provides the opportunity for medium intensity development that accommodates a mix of predominantly commercial, office, institutional and business Uses as a secondary office commercial area while emphasizing retail activities, entertainment and service Uses at grade.

\* This is a collection of special areas zones that apply only to the Downtown, and are listed in Section 910 of the Zoning Bylaw. These zones include the CCA, CMU, HA, HDR, JAMSC, RMU, UW, and AED zones.

# C Zoning Summary *(cont.)*

## INDUSTRIAL ZONES

### **IB – Industrial Business Zone**

This zone provides the opportunity for industrial businesses that carry out their operations such that no nuisance is created or apparent outside an enclosed building, and the use is compatible with any adjacent non-industrial zones.

### **IM – Medium Industrial Zone**

This zone provides the opportunity for manufacturing, processing, assembly, distribution, service and repair uses that carry out part of their operation outdoors or require outdoor storage areas. Any nuisance associated with these uses should not extend beyond the site.

### **IH – Heavy Industrial Zone**

This zone provides the opportunity for industrial uses that due to their appearance, noise, odour, risk of toxic emissions, or fire and explosion hazards are incompatible with residential, commercial, and other land uses.

### **AGI – Industrial Reserve Zone**

This zone provides the opportunity for agricultural and rural land use activities that will not impact future use of the land for industrial development

## COMMERCIAL ZONES

### **CNC – Neighbourhood Convenience Commercial Zone**

This zone provides the opportunity for convenience commercial and personal service uses, intended to serve the day-to-day needs of residents within the neighbourhood.

### **CSC – Shopping Centre Zone**

This zone provides the opportunity for larger shopping centres intended to serve a community or regional area. Residential, office, entertainment and cultural uses may be included in this zone.

### **CB1 – Low Intensity Business Zone**

This zone provides the opportunity for low intensity commercial, office and service uses located along arterial roadways that border residential areas.

### **CB2 – General Business Zone**

This zone provides the opportunity for businesses that require large sites and a location with good visibility and accessibility along, or adjacent to major public roadways.

## NON-RESIDENTIAL ZONES\*

### AJ – Alternate Jurisdiction Zone

This zones purpose is to provide for lands that do not require a Development Permit when operating under the jurisdiction of federal legislation, provincial legislation or the Constitution Act.

### UI – Urban Institutional Zone

This zones purpose is to provide for facilities of an educational or institutional nature, within mature areas of the city that could include additional uses that would complement the institutional development.

### US – Urban Services Zone

This zones purpose is to provide for publicly and privately owned facilities of an institutional or community service nature.

### PU – Public Utility Zone

This zones purpose is provide for a system or works that is used to provide for public consumption, benefit, convenience or use such as water or steam, sewage disposal, public transportation, irrigation, drainage, fuel, electric power, heat, waste management and telecommunications.

### AGU – Urban Reserve Zone

This zone provides the opportunity for agricultural and rural land use activities and a limited range of other uses that will not impact future development of the land.

### AP – Public Parks Zone

This zone provides the opportunity for an area of public land for recreational uses.

### CS1, CS2, and CS3 – Community Services Zones

The four Community Services Zones (CS1, CS2, CS3 and CS4) provide for relatively low to medium density housing generally referred to as row housing on lands that have become surplus to public education needs. In addition, each Community Services Zone has a distinct range of development opportunities.

\* This is a collection of all non-residential zones, and includes commercial, industrial, urban service (AJ, US and PU), and agricultural and reserve zones. Residential development tends to be limited in these zones as it is not their primary purpose.



## D Methodology Notes

### CENSUS INFORMATION

Differences in population statistics may occur due to rounding at the neighbourhood and age group level, and the exclusion of unconventional populations such as hotels and group counts.

### PERMIT INFORMATION

Information is based on City of Edmonton building permit data, and may be subject to error. Development that occurs without permits is not included.

Demolished units do not always account for secondary suites, and secondary suites can be removed without permits, so may be undercounted.

Permits referring to "stacked semi's" are recorded as duplexes. Stacked and side-by-side row housing is recorded as row housing.



## REGISTRATION AND SERVICING INFORMATION

Low density lot supply includes single-detached, duplex, and semi-detached building forms. Remaining low density lot supply is the calculated difference between registered lots and total projected lots, based on the most recent neighbourhood plan (or amended plan), up to December 31, 2015.

Neighbourhoods are considered complete when low density residential lots reach 95 % completion. Neighbourhoods may not reach 100 % completion due to servicing constraints or small variations between actual and projected unit numbers.

## MAPS

All maps are compiled by compiled by Urban Policy and City Planning (Sustainable Development). The City of Edmonton disclaims any liability for the use of these maps. No reproduction of these maps, in whole or in part, is permitted without express written consent of The City of Edmonton, Sustainable Development Department.

## E Edmonton Zoning Trends 2004–2015

	2004	2006	2008	2010	2012	2014	2015
City Size	69,980	69,980	69,980	69,980	69,980	69,980	69,980
Reserve or Agriculture Zoning	31,900	30,399	27,860	26,760	26,160	23,810	17,860
<b>Developed Zoning</b>							
Residential	18,042	19,052	20,290	20,750	21,090	22,180	22,590
Direct Control	2,064	2,249	2,550	2,790	2,880	2,960	2,990
Commercial	1,473	1,485	1,570	1,610	1,640	1,740	1,770
Industrial	7,200	7,294	7,550	7,630	7,630	8,190	8,630
Institutional	3,584	3,658	4,170	4,360	4,430	4,620	4,790
Parks and Open Spaces	5,717	5,843	5,990	6,080	6,160	6,510	6,810
<b>Total Developed Zoning</b>	<b>38,080</b>	<b>39,581</b>	<b>42,120</b>	<b>43,220</b>	<b>43,830</b>	<b>46,200</b>	<b>47,580</b>

The following Zones are included in each broad zoning category:

- ▶ Reserve/Agriculture: AG, AGI, AGU, EETR
- ▶ Residential: RF1–RF6, RA7–RA9, RSL, RPL, RMD, RMH, RR, RMU, TSDR, TSLR, RPLt, RF4t, RF5t, RA7g, RF5g, RA7w, HDR, GLD, GLG, CCSF, CCLD, CCMD, CCHD, HVLD, UCRH, GHLD
- ▶ Direct Development Control: DC1, DC2, DC(RDA)
- ▶ Commercial: CB1, CB2, CB3, CHY, CNC, CSC, CO, CCA, EZ, HA, MSC, TMU, CCNC, GVC, UVCa, CSCa, CSCw, UW, JAMSC, AED, TC-C
- ▶ Industrial: IB, IL, IM, IH, EIB, EIM, IC, EETB, EETC, EETL, EETM
- ▶ Institutional: US, PU, AJ, MA, MA1–MA3, CS1–CS4, UI
- ▶ Parks and Open Space: A, AP, AN, NA

“Developed Zoning” refers to zones with uses that require higher levels of servicing, as well as dedicated park zones. Roadways do not have zoning so roads take on the zoning of surrounding parcels. Note that although land may be zoned with “developable zoning,” actual development may not occur.

For more information on each zone, please see Edmonton's Zoning Bylaw (Bylaw 12800) [webdocs.edmonton.ca/InfraPlan/zoningbylaw/bylaw\\_12800.htm](http://webdocs.edmonton.ca/InfraPlan/zoningbylaw/bylaw_12800.htm)





## D CMHC Edmonton Housing Starts Summary 1980–2015

A "start," is defined by the CMHC as the beginning of construction work on a building, usually when the concrete has been poured for the whole of the footing around the structure, or an equivalent stage where a basement will not be part of the structure.

Information is provided by the Canadian Mortgage and Housing Corporation (CMHC), please see the MHC for more information at [www.cmhc.ca/housingmarketinformation](http://www.cmhc.ca/housingmarketinformation)

Year	Edmonton: City		
	Single	Multiple	Total
1980	2,655	5,791	8,446
1981	3,594	6,923	10,517
1982	1,683	7,428	9,111
1983	2,877	2,244	5,121
1984	1,722	155	1,877
1985	1,868	102	1,970
1986	1,710	200	1,910
1987	2,057	309	2,366
1988	2,105	597	2,702
1989	2,173	731	2,904
1990	2,495	937	3,432
1991	1,564	988	2,552
1992	2,346	1,541	3,887
1993	2,148	2,017	4,165
1994	1,690	1,461	3,151
1995	1,130	763	1,893
1996	1,421	514	1,935
1997	1,945	1,070	3,015
1998	2,032	1,559	3,591
1999	2,141	1,791	3,932
2000	2,137	1,628	3,765
2001	2,815	1,996	4,811
2002	4,158	4,664	8,822
2003	3,857	5,099	8,956
2004	4,030	4,129	8,159
2005	5,023	4,411	9,434
2006	5,363	4,453	9,816
2007	3,763	5,131	8,894
2008	1,220	2,759	3,979
2009	2,206	1,705	3,911
2010	3,417	2,963	6,110
2011	3,080	3,055	6,135
2012	3,517	5,971	9,488
2013	3,981	6,653	10,634
2014	4,750	5,048	9,798
2015	3,957	9,343	13,311



Edmonton: CMA			City as % of CMA		
Single	Multiple	Total	Single	Multiple	Total
3,674	6,293	9,967	72%	92%	85%
4,491	7,508	11,999	80%	92%	88%
2,204	7,534	9,738	76%	99%	94%
3,761	2,692	6,453	76%	83%	79%
2,197	187	2,384	78%	83%	79%
2,424	104	2,528	77%	98%	78%
2,355	206	2,561	73%	97%	75%
3,265	343	3,608	63%	90%	66%
3,469	664	4,133	61%	90%	65%
3,931	886	4,817	55%	83%	60%
4,759	1,162	5,921	52%	81%	58%
3,016	1,269	4,285	52%	78%	60%
4,683	2,081	6,764	50%	74%	57%
4,202	2,518	6,720	51%	80%	62%
3,225	1,781	5,006	52%	82%	63%
2,159	923	3,082	52%	83%	61%
2,944	690	3,634	48%	74%	53%
3,685	1,277	4,962	53%	84%	61%
4,080	1,867	5,947	50%	84%	60%
4,075	2,580	6,655	53%	69%	59%
4,072	2,156	6,228	53%	76%	60%
4,959	2,896	7,855	57%	69%	61%
6,860	5,721	12,581	61%	82%	70%
6,391	5,989	12,380	60%	85%	72%
6,614	4,874	11,488	61%	85%	71%
7,623	5,671	13,294	66%	78%	71%
9,064	5,906	14,970	59%	75%	66%
7,682	7,206	14,888	49%	71%	60%
2,606	4,009	6,615	47%	69%	60%
3,897	2,420	6,317	57%	70%	62%
6,062	3,897	9,959	56%	76%	61%
5,017	4,315	9,332	61%	71%	66%
5,658	7,179	12,837	62%	83%	74%
5,970	8,719	14,689	67%	76%	72%
6,832	7,040	13,872	70%	72%	71%
5,683	11,367	17,050	70%	82%	78%



**FOR MORE INFORMATION, PLEASE CONTACT**

Urban Policy, Sustainable Development, City Planning at 311 or [growthanalysis@edmonton.ca](mailto:growthanalysis@edmonton.ca)  
For more information, please go to [www.edmonton.ca/growthanalysis](http://www.edmonton.ca/growthanalysis)

