

WE ARE BUILDING A GREAT CITY

IEdmonton is a city of builders, a city of innovators, and a city that leads. Our community is bound together by a common vision and driven by individual efforts to make something great, a place where people actively build things and creatively make things happen. Edmonton is at the center of one of the fastest growing regions in the country, and is a young city with exceptionally strong job creation, diverse communities and a growing labour market. Each year, we welcome thousands of new arrivals. Edmonton is a driving force behind the economic success of the province and the nation.

City-building is a joint effort that requires broad commitment and ongoing efforts from our community, public, and private sectors. We all have a critical role to play in the long term prosperity of our community, and must effectively respond to Edmonton's rapid growth and change, while laying the foundation for the homes, jobs, and special places that our residents will call home for generations to come.

To help guide this change, Edmonton City Council set out an ambitious City Vision (The Way Ahead) and developed 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 strategically. Edmonton's Vision provides the platform for building the kind of communities that deliver choice, diversity, resiliency, sustainability, and innovation.

To achieve this Vision, Edmonton's growth is supported through a variety of initiatives. Transformational projects such as the Quarters, West Rossdale, Blatchford, Downtown redevelopment, and Transit Oriented Development 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 Edmonton grow "inward," and the construction of new neighbourhoods in developing areas enables our city to grow "outward." All of these growth opportunities are required to provide the diversity of homes, communities, services, amenities, employment, and commercial areas that Edmontonians - both existing and future - call home. **Strategically** growing "up, in and out" is necessary to enable an attractive and affordable range of housing types and to support non-residential growth in well-designed and well-connected places. To better understand our current and future development trends, this Report provides an annual summary of Edmonton's growth and change.





PART 1: HOW

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):

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, analyses, 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.

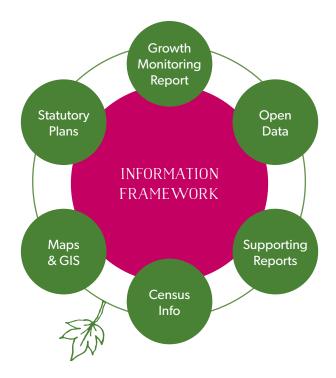
- Core areas (downtown and adjacent neighbourhoods)
- Mature areas (neighbourhoods outside the core, generally completed prior to 1970)
- Established areas (completed neighbourhoods, generally within the Anthony Henday Transportation Corridor)
- Developing areas (currently developing and planned neighbourhoods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

This Report contains information on key demographic, residential and non-residential growth trends across the city.

Information is sourced from Statistics Canada, City of Edmonton sources, and the Canadian Mortgage and Housing Corporation. Information is current as of May 31, 2014.¹

¹ For more information, see "References" in the appendix.

NEIGHBOURHOOD CLASSIFICATION Central Core Mature Established Developing Planned Urban Reserve Industrial Transportation



To help inform the Report's development, a Growth Coordination Committee made up 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 also noted areas where more information would be helpful for future iterations of this report, including:

- More detailed information on commercial and industrial growth
- Preparation of a vacant lot inventory
- Identification of mature neighbourhood infrastructure capacity
- Cost and revenue modeling for established neighbourhoods
- Occupancy data

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.

PART 2: WHY

WE HAVE A STRONG ECONOMY & BRIGHT FUTURE

Since its incorporation as a town in 1892, Edmonton has experienced tremendous change. In 1912 Edmonton was amalgamated with the City of Strathcona, and over the last one hundred years it has grown from a small municipal population of 53,611 people to a big city of 817,498 (2012 census).

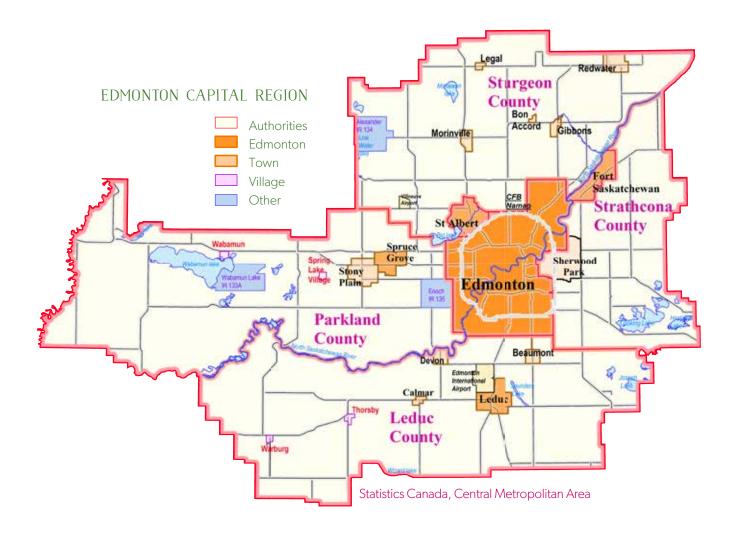
Throughout Edmonton's history, there have been periods of rapid growth, which have contributed to our population profile, added to the building stock, changed our boundaries, and substantially influenced the shape of our communities.

Outward expansion and urban intensification have occurred continuously.

Edmonton sits in a region of well over one million people and continued growth is expected. As the central city within a strong city-region, Edmonton's growth context is further strengthened by its connections to the north and the key role it plays within the Edmonton-Calgary corridor, one of the most significant economic regions in the country. Anchoring the northern end of this key economic corridor,

Edmonton provides the jobs, homes, highereducational opportunities, commercial, and industrial development that fuel and support economic prosperity. This presents a significant opportunity to continuously shape our city to improve livability for existing and future residents. Edmonton's growth and change has been, and will continue to be, impacted by its economic context. To provide background on this context, this section provides two snapshots of Edmonton's economic and development outlook, one from the City's perspective and one from a private development industry perspective.





CITY OF EDMONTON CHIEF ECONOMIST²

The Capital Region and Edmonton's economies have fully recovered from the downturn of 2008 and 2009 and have entered a new phase of expansion. A return to recession conditions is unlikely, and with softer conditions in the US and the rest of Canada the probability of an unsustainable boom is also low. Energy investment should continue to provide a strong stimulus for manufacturing, logistics, and professional services.

Very good growth prospects are anticipated, with relatively high growth rates for economic output and population growth. Employment growth has also been strong, and even as migration increased, unemployment fell. By April 2014, unemployment

was at 5.2%. Over the next few years, regional employment is expected to grow faster than city employment, reflecting several large regional construction projects.

In the longer-term, employment growth should moderate due to an aging population, although a relatively young demographic should continue to attract migrants and outperform Canada. Moving towards 2023, real economic growth is expected to average 3.4%.

²The full Economic Outlook Report and related documents are available at www.edmonton.ca/business_economy/economic_data/economic-outlook.aspx

Over the last few years, Edmonton's robust labour market conditions stimulated in-migration, and boosted overall population growth and new household formation. At the same time, Edmonton experienced the fastest employment growth among Canada's large metropolitan areas. Consequently, unemployment has fallen even as the city attracted record numbers of migrants.

The arrival of migrants pushed down Edmonton's rental vacancy rate to 1.4% in the first half of 2014, and new housing starts rose dramatically in 2012 and 2013. Aggressive construction levels balanced rapid growth in housing prices and sales, and increases have so far been modest compared to other markets such as Calgary.

Inflation, as measured by the Consumer Price Index (CPI), rose throughout 2013 from unusually low levels. As of May 2014, Edmonton's inflation rate was at 2.3% and this is expected to rise to 2.5% in 2014 as potential skill shortages, and wage and price spirals lead to rising shelter costs and wages. City project costs can also be expected to rise as higher labour and material cost inflation boost the cost of major capital projects. In the longer term, inflation should moderate to the 2% range.

After strong population growth in 2012 and 2013, Edmonton's population is expected to grow at 2.1% to 2018, and then at 2%. While this growth will help address labour shortages, it will place higher demand on the city for the services and capital investments needed to support new residents such as public transit, affordable housing, and recreation facilities. Construction levels and population growth are expected to remain above historical averages.

EDMONTON CENSUS METROPOLITAN AREA FORECAST

	Average Annual Growth			
Key Indicators	2014-18	2014-23		
Real Economic Output	3.7%	3.4%		
Population	2.1%	1.9%		
Employment	3.1%	3.1%		
Housing Starts - Units	13,700	14,300		

CITY OF EDMONTON FORECAST

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A MARKET PERSPECTIVE, URBAN DEVELOPMENT INSTITUTE³

The City of Edmonton is located within a dispersed regional setting where the development of residential and business opportunities occur in a variety of locations to serve different needs and meet different markets. Future development will include and embrace suburban growth, fueled by market demand and consumer's desire for choice. Additionally, there will be growth through infill development in both the downtown core and mature areas. This provision of balance and choice is imperative to supporting a quality of life that Edmontonians desire.

Employment growth has been, and will continue to be, the most significant factor influencing market demand. Consumers have clearly expressed their desire to work close to where they live. As people move to Edmonton for employment, the growth of the city will continue to respond. It is both sustainable and desirable for residents to live in reasonable proximity to new and growing employment centres.

A diversity of housing and commercial development is required to provide the choice and affordability demanded by residents and businesses as the region grows. In the coming years, it will be important that growth be based on allowing market dynamics to continue moving Edmonton towards a culturally, financially, environmentally, and socially sustainable landscape. Identified growth areas in the city will provide needed business, employment, recreational, and residential opportunities for the next 20 to 30 years.

Housing and commercial development will also respond to additional industrial demand that will occur both inside the city boundaries and within regional areas with low, medium, and heavy industrial areas. This will add to the job growth for the area and create demand for additional infrastructure in outlying areas. Employment in the Edmonton area will continue to be dispersed throughout the city and region. Although this is driven largely by the oil and gas industry, employment hubs are concentrating closer to Edmonton, as the Edmonton region strengthens its role as a hub for central and northern Alberta.

³ For more information, please contact the Urban Development Institute, www.udiedmonton.ca

PART 3: HOW

WE ARE A YOUNG & CHANGING COMMUNITY

Edmonton's population is young and diverse, with a mix of new Edmontonians and people who have been here for a long time. Over the past several years our population has grown by tens of thousands of people annually, and population change and expansion is shaping Edmonton's physical growth and new development. However, there are neighbourhood-level differences and this increase is not evenly distributed. As some communities age and lose population, and others rapidly increase through migration and births, there is increasing demand for housing diversity and options.

This section reviews Edmonton's past and present population trends. In late 2013, 2011 Census of Canada data became available at the neighbourhood level and this section is largely based on that information.

CITYWIDE POPULATION TRENDS

Edmonton's growth has been and continues to be supported by strong net migration and natural increase as people move here and establish their young families. In 2013, net migration to

the Edmonton region reached an estimated 38,000 people. Approximately 41% arrived from other parts of the country, 29% arrived internationally, 11% came from other areas within the province, and 19% were comprised of non-permanent residents such as the mobile workforce, students, refugees, and people with temporary work permits. As such, our population is not only growing but is becoming increasingly diverse.⁴

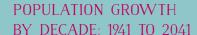
Edmonton's population expansion is anticipated to continue over the coming decades, with approximately 169,000 more people arriving between 2011 and 2021. A City of Edmonton forecast using the Municipal Development Plan's goal for infill housing projected that by 2022, the core neighbourhoods would gain 12,000 people, mature neighbourhoods would gain 15,000, and established neighbourhoods would gain 24,000. Developing neighbourhoods were projected to retain the majority of new population growth, and gain 129,000 new residents.⁵

⁴ For more information, see the City of Edmonton 2011 Population Report at www.edmonton.ca/growthanalysis

⁵Capital Region Board citywide population projections were geographically allocated by the City of Edmonton

NEIGHBOURHOOD POPULATION TRENDS

Edmonton has changed significantly over the past decades, and is expected to continue to change as it grows. However, not all areas of the city have experienced the same population growth over the same periods, and there are important differences between neighbourhoods depending on their era of development and the development opportunities they provide (see the map of Population Change 1971 to 2011 for an illustration). Over the past four decades the population in our core has been slowly growing and is increasingly full of young adults. People in our mature areas are ageing and neighbourhoods have been losing population. The children in our established neighbourhoods are growing up and leaving home while their parents are staying put. Younger families with small children are rapidly populating our developing neighbourhoods.







MEDIAN AGE OF CENSUS METROPOLITAN AREAS (2011 CENSUS OF CANADA)

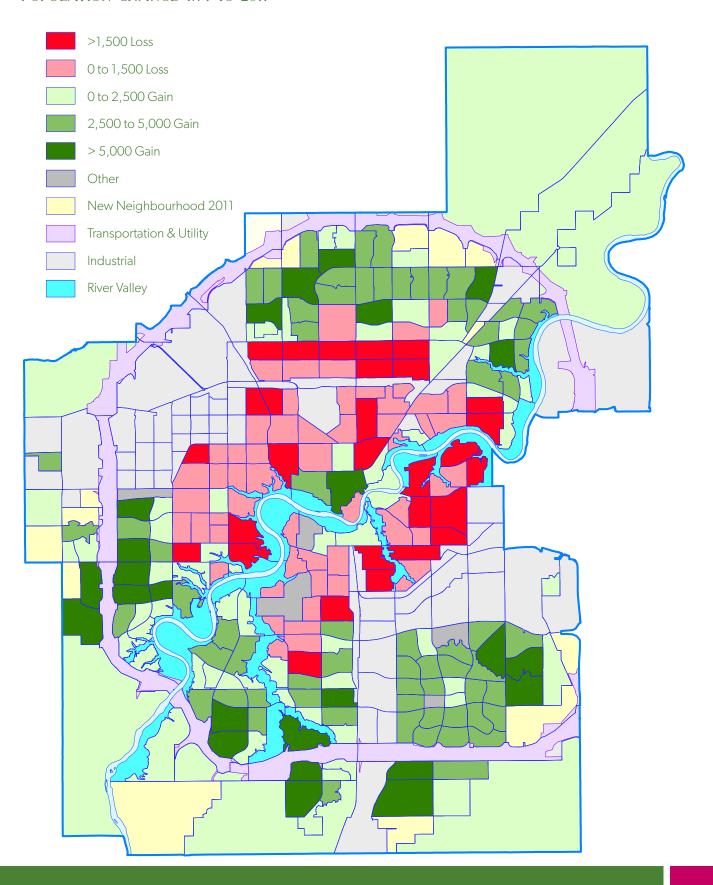
Edmonton	36.0
Calgary	36.4
Montreal	38.6
Winnipeg	39.0
Ottawa	39.2
Toronto	39.2
Vancouver	39.7

The Edmonton region (census metropolitan area) is younger than other major Canadian city-regions, with a median age of 36 years. Within the region, the City of Edmonton is younger than the communities surrounding it. Edmonton's single largest population cohort is the "echo-boom" generation, which are people in their mid- 20s to early 30s, while the largest cohort in surrounding communities is the "baby-boom" generation of people in their mid-50's and early 60's.6

⁶ For more information, see the City of Edmonton 2011 Population Report at www.edmonton.ca/growthanalysis



POPULATION CHANGE 1971 TO 2011

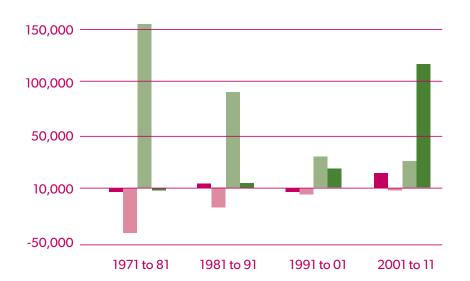


NEIGHBOURHOOD CHANGE BY COHORT 1971-2011

	38,860	16,055	8,335 4,165
35 -46,715 5 -16,315 40 -6,020	67,410 61,735	39,620 34,625	97,540 96,180
5 25,330	32,010	7,950	101,765 67,165 5 375,150
	5 -16,315 -6,020 0 15,870 5 25,330	5 -16,315 67,410 40 -6,020 61,735 0 15,870 61,620 5 25,330 32,010	5 -16,315 67,410 39,620 40 -6,020 61,735 34,625 0 15,870 61,620 19,985 5 25,330 32,010 7,950









CORE NEIGHBOURHOODS

Core neighbourhoods had minimal population change from the 1970s through to the 1990s. Beginning in the last decade, core neighbourhoods consistently gained population, and in recent years, this increase has been even faster. Core neighbourhoods have added over 11,000 new residents over the last 40 years, all of which occurred as a result of population growth in the last decade. Although the number of children under the age of 19 has declined in core neighbourhoods, over the last 40 years the number of young, middle aged and older adults has increased. The largest age group in terms of net population gain in core neighbourhoods are people between the ages of 20-34. In 2011, core neighbourhoods had an average household size of 1.62 people, the lowest in the city.



MATURE NEIGHBOURHOODS

Mature neighbourhoods have experienced a total population decline of over 73,000 people in the last 40 years, and the average age of residents has increased. In mature neighbourhoods, the number of residents between the ages of 0-49 has declined by 114,000 people, while the number of people over 50 years old has increased by 41,200. The largest population gains were realized in the 65+ age group.

ESTABLISHED NEIGHBOURHOODS

Established neighbourhoods showed high gains during the period of 1971 to 1991 as they built out. Over the past 40 years these neighbourhoods accommodated almost 300,000 people. As these areas have now been built out for a period of time, growth has slowed and the population has begun to age. Over the last decade, established neighbourhoods experienced a loss of over 6,300 children and teenagers between the ages of 0-19 and a significant increase of adults in the baby-boom generation of ages 50-64.

DEVELOPING NEIGHBOURHOODS

Developing neighbourhoods are rapidly gaining population as they build out and move closer to completion. Of all neighbourhoods, they experience the highest population growth and gained over 113,000 people in the last decade alone. Compared to other areas of the City, developing neighbourhoods have the most balanced range of age groups, and the highest numbers of school-aged children.

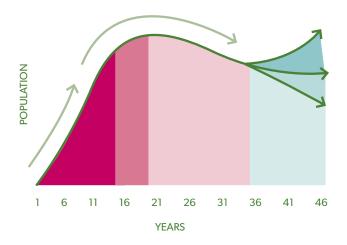
Between 2001-2011, developing neighbourhoods grew by 30,400 children between the ages of 0-19. In 2011, developing neighbourhoods had an average household size of 2.87 people, the highest in the city.



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 increases who are 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

PART 4: WHAT

OUR CITY'S DEVELOPMENT IS DIVERSE

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 and provide a range of opportunities for people to live, work, and play.

Development patterns shift and change as the city grows, and this section provides an overview of Edmonton's growth with respect to its non-residential and residential land use patterns and land use supply. To accommodate this growth, Edmonton is optimizing existing land uses through downtown development, infill growth, and LRT expansion⁷, and is also pursuing an annexation bid to increase residential and non-residential land to the south.⁸

⁷For more information see www.edmonton.ca/tod (Transit Oriented Development), www.edmonton.ca/evolvinginfill (Infill) and www.edmonton.ca/city_government/projects_redevelopment/downtown-projects-redevelopment.aspx (Downtown projects)

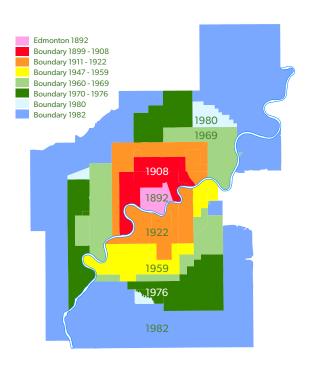
⁸ For more information see www.edmonton.ca/annexation

EDMONTON'S GROWTH PATTERN

Growth has occurred continuously throughout Edmonton's history, and often quite quickly through periods of particularly rapid expansion. For instance,

Edmonton experienced its fastest growth post-WWII, in the 1940's to 1960's, reflecting the robust economic activity and accompanying population influx after the 1947 discovery of oil in Leduc. During these years, Edmonton's compound growth rate hovered around 5% to 6%, and Edmonton's boundaries doubled to accommodate the demand for residential land (see the Boundary History map). The most recent municipal boundary change was in 1982, and this change was followed by the low growth years of the 1990's when there was a less than 1% compound population growth rate. Edmonton's growth is again in a period of expansion, and the city is growing by tens of thousands of people per year.

EDMONTON'S BOUNDARY HISTORY







As Edmonton grows, it develops and establishes different land uses in different areas. Land use is regulated through zoning, which informs the type and form of development appropriate for different parcels of land (see the General Zoning Category map for an illustration of citywide zoning). As parcels develop on the outer edges, land moves from "agriculture and reserve" zones to developable ones. In already zoned areas, parcels may be rezoned to allow for different opportunities.

Over the last 10 years, the proportion of agriculture and reserve land has dropped from 47% (32,911 ha) to 34% (23,810 ha). Since 2004, an average 810 ha of land has been converted from reserve zoning to developable land uses. This amount has increased over the last two years, to an average amount of 1,200 ha per year.

The current proportion of zoned land uses is roughly 48% residential, 4% commercial, 18% industrial, 10% institutional, and 14% parks and open space. Special "direct control" zones account for 7% of land uses. Direct control zones are used to define unique regulations or accommodate mixed uses, so Edmonton's actual land use breakdown may underrepresent areas where specialty zoning is more common, such as the downtown. As new land is developed Edmonton's land use breakdown may shift. For example, as of 2013, 62% of available industrial land was zoned for development. The majority of this unzoned land is in the Edmonton Energy and Technology Park, so as this area develops the industrial proportion of zoned land should increase.¹⁰

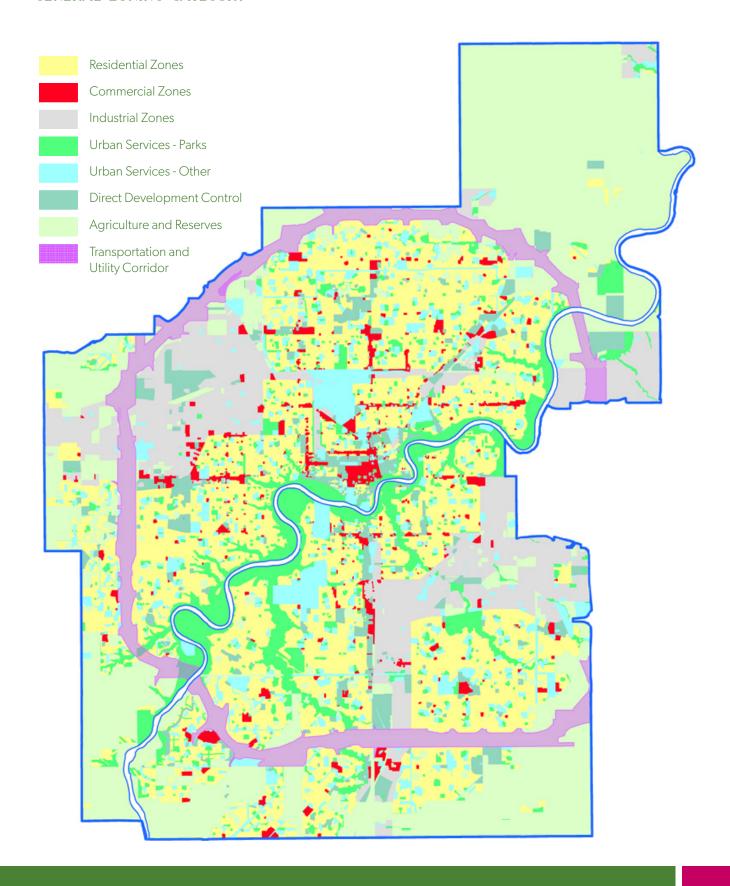
⁹ For more information, see Edmonton's Zoning Bylaw 12800 (www.edmonton.ca/zoningbylaw)

¹⁰ For more information, see Edmonton Zoning Trends 2004-2014 in the Appendix and in Open Data (https://data.edmonton.ca)

HOW BIG IS A HECTARE?

The grass surface within the running track of Commonwealth Stadium is approximately 1 hectare. In 2013, Edmonton rezoned approximately 1,200 ha of reserve land to developable uses; about the size of 24 West Edmonton Malls, or 1/6 the size of the River Valley.

GENERAL ZONING CATEGORY







NON-RESIDENTIAL DEVELOPMENT PATTERNS

Building Permits allow for the development of land or business activities, and are divided into residential and non-residential permits. The number of permits and combined total construction value has generally grown during the last 5 years, although non-residential construction values tend to be more variable as individual projects can have significant costs. In 2013, there were 11,782 residential permits and 1,801 non-residential permits issued. Total construction value was \$2.5 billion for residential permits and \$1.4 billion for non-residential. Of the non-residential permits, 56% of the total construction value was for commercial uses, 4% for industrial, 38% for institutional, and 2% for miscellaneous.

Industrial land is located in 73 neighbourhoods across the city, and three main districts: the northeast, northwest, and south/southeast. As of 2013, there were only 1,643 ha of vacant industrial land remaining in those districts, plus an additional 4,860 ha in the Edmonton Energy and Technology Park. Of the vacant land, approximately 62% is zoned. Over the last ten years, an average of 124 net ha per year has been developed. However, in the last few years development has significantly increased. In 2012, 142 ha of industrial land was developed, and in 2011 183 ha were developed. Over the last ten years, warehousing, logistics, and storage have accounted for the majority of development. In the south/southeast district, there has also been an increase in office and "knowledge-based" uses. 12

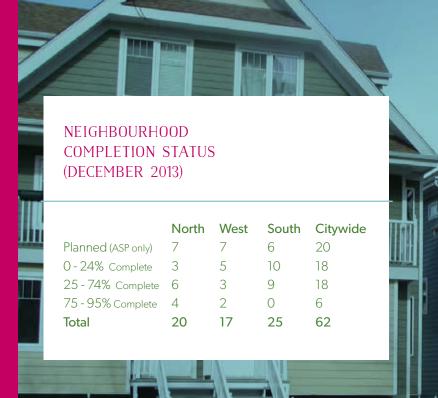
RESIDENTIAL DEVELOPMENT PATTERNS

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, with a 40-year average share of 70%. In 2013, Edmonton's housing starts accounted for 72% of all housing starts within the region. Within the region, Edmonton tends to account for the largest amount of multi-family residential growth, with an average 84% share.

¹¹ For more information, see the Current Planning Monthly Building Permit Summary (www.edmonton.ca/bylaws_licences/licences_permits/monthly-building-permit-summar.aspx) and Weekly Building Permit Reports (http://www.edmonton.ca/bylaws_licences/licences_permits/weekly-building-permit-report.aspx)

¹²For more information see the 2013 Vacant Industrial Land Supply Report (www.edmonton.ca/business_economy/documents/Vacant_Industrial_Land_ Supply_Report_2013.pdf) and the 2011 Industrial Land Supply and Demand Study

2013 NET NEW HOUSING UNITS Core Mature 5% 7% Established 5% Developing 83%



At the end of 2013, Edmonton had 62 developing neighbourhoods. Before significant housing development can occur in developing neighbourhoods, they must receive statutory planning approval through an Area Structure Plan (ASP) and a Neighbourhood Structure Plan (NSP).¹⁴ These Plans provide a framework for land use decisions, as well as an estimate of neighbourhood density and the total number of housing units. Twenty of the developing neighbourhoods are "planned neighbourhoods," with only high-level Area Structure Plans, while 42 have been fully approved for zoning and development through Neighbourhood Structure Plans. Ten of the twenty planned neighbourhoods were created in 2013 with the approval of the Horse Hill and Riverview ASPs, and the number of planned neighbourhoods is expected to increase with approval of an ASP for the 1,960 ha Southeast Urban Growth Area. In 2013 two planned neighbourhoods transitioned to developing with the approval of Plans, the Cavanagh and Graydon Hill neighbourhoods. Developing neighbourhoods are further broken into north, west, and south sectors for analysis.¹⁵

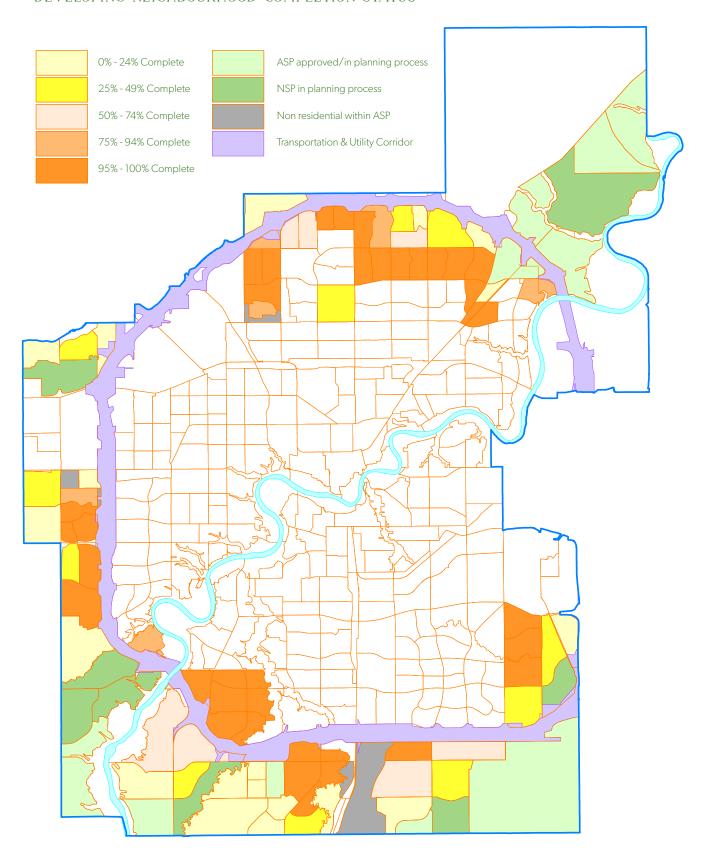
¹³ Regional housing starts are tracked by the Canadian Mortgage and Housing Corporation, see "Edmonton Region Housing Starts: 1980-2013" in the Appendix and in Open Data (https://data.edmonton.ca)

¹⁴ For more information on Developing Neighbourhood Plans see Current Planning's Plans in Effect page (www.edmonton.ca/city_government/urban_planning_and_design/plans-in-effect.aspx) or for a summary of 2014 Plan statistics see the 2014 Plan Statistics Summary on www.edmonton.ca/growthanalysis

¹⁵ For more information on neighbourhood completion see the 2013 "Land Supply in Developing and Planned Neighbourhoods" report at www.edmonton.ca/growthanalysis



DEVELOPING NEIGHBOURHOOD COMPLETION STATUS





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 2013, the potential lot supply available in developing neighbourhoods for single and semidetached housing was 96,908 lots. Once 95% of the low density lots available in a neighbourhood have been developed, 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. In 2013, two neighbourhoods reached 95% low density completion, Eaux Claires and Oxford (see the Status of Low Density Residential Development map for more information).

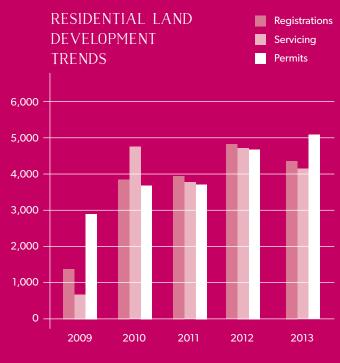
Tracking lot registrations provides a record of past development and indicates how economic activity, demand, and affordability affect the rate that lots were absorbed from supply. Typically, low density lots are absorbed faster than higher density lots. However, in recent years, medium density units 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.¹⁶

Past development trends, and future projections, are estimated 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 purposes prior to the construction of the first showhome in a new neighbourhood, so servicing projections can estimate the start of new construction areas. The number of low density residential lots serviced in Edmonton's developing neighbourhoods in 2013 was 4,430 and this number is expected to rise in the coming years. In 2013, the north increased its share of servicing, with the gain of over 280 serviced lots in Griesbach. The west remained relatively constant, and the south accounted for approximately half of all serviced lots. These breakdowns are projected to generally continue, with the south sector continuing to receive the majority of servicing and development activity.17

¹⁶ For more information on available lot supply by neighbourhood see the 2013 "Land Supply in Developing and Planned Neighbourhoods" report at www.edmonton.ca/growthanalysis

¹⁷ For more information on servicing and servicing projections see the "Low Density Residential Lot Servicing 2013-2019" report at www.edmonton.ca/growthanalysis





REGISTRATIONS, SERVICING, BUILDING PERMITS, AND HOUSING STARTS

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 starts¹⁸ 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. In 2013, registrations and servicing activity dropped slightly, although permit activity and starts rose. This suggests a focus on building housing on previously registered and serviced lots.

¹⁸ Housing starts are tracked by the Canadian Mortgage and Housing Corporation and reported citywide, 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 (https://data.edmonton.ca)

PART 5: WHERE

WE ARE GROWING UP, IN, AND OUT

Edmonton is growing and changing in many ways. Our neighbourhoods range from 1 to 100+ years old, and have different population characteristics, different housing characteristics, and different patterns of development. Section 3 described differences with respect to population size and age. This section builds on Section 3, by reviewing physical development patterns in terms of housing form and density, and by summarizing trends in recent development.

DEVELOPMENT PATTERNS

Different types of residential neighbourhoods have different residential patterns, as indicated by 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). 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.¹⁹

• Core Neighbourhoods: Core neighbourhoods have the highest average density, more apartment buildings, and less singledetached and row housing. Average core density is 118 du/nrha, which ranges from 324 du/nrha (Downtown) to 33 du/nrha (Riverdale). Median density is 82 du/nrha, the density of the McCauley neighbourhood.

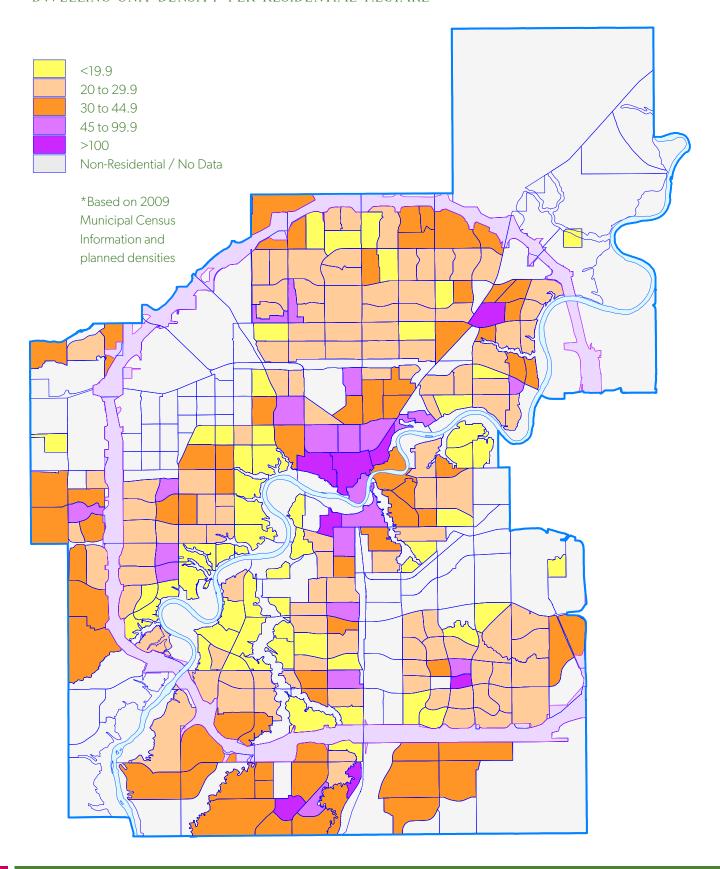
- Mature Neighbourhoods: Mature neighbourhoods tend to have lower densities and more single-detached homes than other neighbourhoods. The average density of mature neighbourhoods is 26 du/nrha, which ranges from 8 du/nrha (Quesnell Heights) to 73 du/nrha (Cromdale). Median density is 24 du/nrha, the density of the Beverley Heights neighbourhood.
- e Established Neighbourhoods: Established neighbourhoods have the lowest average density of all neighbourhoods, with less apartment housing and more row housing than other neighbourhoods. The average density is 24 du/nrha, which ranges from 11 du/nrha (Wedgewood Heights) to 123 du/nrha (Mill Woods Town Centre). Median density is 23 du/nrha, the density of the Meyonohk neighbourhood.
- Developing Neighbourhoods: Developing neighbourhoods have moderate planned densities and a more balanced range of dwelling types than other neighbourhoods.

Developing neighbourhoods have an average planned density of 33 du/nrha, which ranges from 18 du/nrha (Canossa) to 149 du/nrha (Heritage Valley Town Centre). Median planned density is 33 du/nrha, the density of the Glenridding Heights neighbourhood. In recent years, there has been a trend towards higher densities in the developing neighbourhoods, and among neighbourhoods approved in the last ten years, average density is 36 du/nrha, and median density is 35 du/nrha, the density of the Hays Ridge neighbourhood.²⁰

¹⁹ For more information on density or built form see the 2009 Census Density by Neighbourhood and 2011 Built Form by Neighbourhood spreadsheets (www.edmonton.ca/growthanalysis)

²⁰ As developing neighbourhoods are not yet complete census information can be misleading so this information is based on a 2014 summary of NASP and NSP statistics, available at www.edmonton.ca/ growthanalysis

DWELLING UNIT DENSITY PER RESIDENTIAL HECTARE*



HOUSING DIVERSITY BY NEIGHBOURHOODS (2011 CENSUS + PLANS)

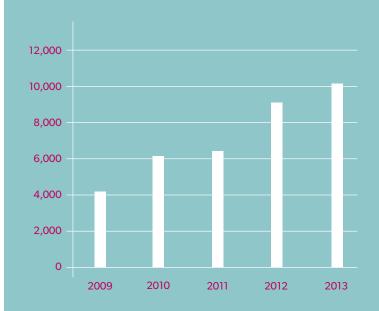
	Low Density	Row	Low-rise	High-rise	
	Residential	Housing	Apartments	Apartments	
Core	11%	1%	42%	46%	
Mature	66%	6%	25%	4%	
Established	62%	18%	19%	2%	
Developing (NSP)	55%	12%	24%	9%	

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 5 years, all these measures have shown consistent growth, with 2013 having the highest construction value, permit activity, and unit increase of all years.²¹

In 2013, approximately 36% of the net unit gains were single-detached homes, 34% were apartment units, and 30% were other housing types such as secondary suites, semi-detached homes, and row housing. Net units are total units within a building type, so a duplex would have two dwelling units. Although a range of housing types were constructed, certain types were less common. Only 9 garage suites, 22 duplex units, and 1 small-scale apartment (fourplex) were built in 2013.²²

2009 - 2013 NET NEW HOUSING UNITS



2013 NET NEW HOUSING UNIT TYPES

	Total Units	Proportion
Garage Suites	9	<1 %
Secondary Suites	346	3 %
Single-detached	3,710	36 %
Duplex	22	<1 %
Semi-detached	1,602	16 %
Row House	995	10 %
Apartment	3,513	34 %
Mobile Homes	6	<1 %
Total Units	10,203	100 %

²¹ For more information, see the 2009 – 2013 Building Permits by Neighbourhood spreadsheet (www.edmonton.ca/growthanalysis) or the full 2009-2013 Residential Building Permits in Open Data (https://data.edmonton.ca).

²² For more information, see the 2009 – 2013 Building Permits by Neighbourhood spreadsheet (www.edmonton.ca/growthanalysis) or the full 2009-2013 Residential Building Permits in Open Data (https://data.edmonton.ca).

CORE NEIGHBOURHOODS

Core neighbourhoods grew by 472 units and accounted for 5% of total citywide growth in 2013. In the core neighbourhoods, 84% of the gains were apartment housing, with an average new apartment building size of 75 units. Of all core neighbourhoods, Queen Mary Park experienced the largest gains with 201 net units, followed by Downtown with 135 units, and Oliver with 81 net units.

MATURE NEIGHBOURHOODS

Mature neighbourhoods grew by 704 units and accounted for 7% of all new units in 2013.

This is up 23% over 2012 unit growth (573 units). Mature neighbourhoods typically lose single-detached homes, and net gains are through multi-unit development. In 2013, mature neighbourhoods had a total loss of 343 single-detached homes and a net loss of 121 single-detached homes. Unit increases were driven by secondary suite creation (19%), semi-detached housing (22%), row housing (5%), and apartment housing (33%). The average apartment building size was 61 units.

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, 222 new single-detached homes were built, and 43 of these were built with secondary suites (approximately 1 in 5). Comparatively, in developing neighbourhoods, only 1 in 50 new single-detached homes are built with secondary suites.

Among mature neighbourhoods, Alberta Avenue had the largest net gain of 176 units, followed by Glenora which gained 59 units, and Ottewell which gained 55. Gains in Glenora and Ottewell were almost entirely the result of two large apartment projects.

TRANSFORMATIONAL PROJECTS

Edmonton is investing in the downtown, and has also embarked on a series of transformational projects in or near the core area. Major projects include the Blatchford airport redevelopment to the north of downtown, the Quarters redevelopment in the Boyle Street neighbourhood, and the West Rossdale redevelopment in the Rossdale neighbourhood. Combined, these projects are expected to add over 50,000 people to the core area population over the next 35 years.²³

TRANSFORMATIONAL PROJECTS

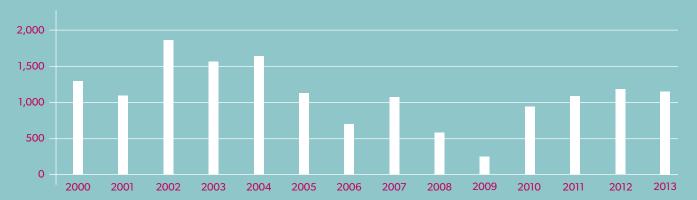
	Blatchford	The Quarters	West Rossdale
Area (ha)	217 ha	43 ha	5.31 ha
Population	30,000	18,000	3,000
Timeline	25-35 yrs	5-20 yrs	8-15 yrs

²³ More information on transformational projects is available online: Blatchford (http://www.edmonton.ca/blatchford), the Quarters (http://www.edmonton.ca/city_government/projects_redevelopment/the-quarters-downtown.aspx), West Rossdale (http://www.edmonton.ca/city_government/projects_redevelopment/west-rossdale-urban-design-plan.aspx)





MNO NET NEW HOUSING UNITS: 2000 - 2013



MATURE NEIGHBOURHOOD OVERLAY (MNO) ²⁴

The Mature Neighbourhood Overlay covers 108 older neighbourhoods in the core and mature areas (including downtown) and provides additional zoning regulations. In 2013, 1,176 units were developed within the MNO, representing 12% of total city growth Although this is a relatively low proportion of total city growth, this is mainly due to the strength of growth in developing neighbourhoods. MNO unit gains have generally been increasing since 2009, although 2013 numbers were slightly lower than 2012. This is partly

because of the variability of MNO neighbourhood development and the difference a single project, like a large apartment building, can make. Most of the growth in the MNO is through the creation of secondary suites, semi-detached homes, and larger apartment complexes, and there are fewer garage suite, duplex, and small-scale apartment housing developments. Since 2000, the MNO has grown by 15,760 units.

²⁴ For more information, see the 2000 – 2013 MNO Reinvestment Summary spreadsheet at www.edmonton.ca/growthanalysis and in Open Data (https://data.edmonton.ca)

ESTABLISHED NEIGHBOURHOODS

Established neighbourhoods grew by 532 units and accounted for 5% of all new units in 2013.

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 through secondary suites (8%), row housing (15%), and apartment housing (65%). The average apartment building size was 88 units.

Among established neighbourhoods, Baranow had the largest net gains (249 units), which was driven by the construction of a large apartment development. CPR Irvine (an industrial neighbourhood located adjacent to Strathcona), had the second largest (105 units), followed by Caernarvon (49 units), and Tawa (33 units). Similar to Baranow, gains in CPR Irvine, Caernarvron, and Tawa were driven by large, individual projects. Combined, these four neighbourhoods and four larger infill developments accounted for 82% of all gains in established neighborhoods.

DEVELOPING NEIGHBOURHOODS

Developing neighbourhoods grew by 8,495 units and accounted for 83% of all net new units in 2013. Within developing neighbourhoods, single and semi-detached homes accounted for 62% percent of all new dwelling units, row housing for 10%, and apartment housing for 28%. All apartment dwelling units were in buildings with more than 4 units.

Among developing neighbourhoods, Laurel had the largest gains (650 units), followed by Windermere (635 units), and McConachie (443 units). Together, these three neighbourhoods gained more units than all the core and established neighbourhoods combined.



PART 6: WHEN

WE ARE INVESTING IN OUR GROWTH

The City of Edmonton promotes a high quality of life for all residents by providing and maintaining programs, services and infrastructure that not only meets the community's needs today, but also into the future. This will allow Council to achieve its long term vision to build a great city.

As a city grows and evolves, it requires capital funding to build and maintain infrastructure that provides the services and amenities required in developing, established, mature and core neighbourhoods. The City of Edmonton must ensure the long-term financial sustainability of its infrastructure.

The City's establishment of financial analysis, agendas and plans, such as the 10-Year Capital Investment Agenda, Long Range Financial Plan, and Integrated Infrastructure Management Planning (IIMP) Framework, help to preserve good financial practices that promote informed decision making by Council. By enacting these plans and policies, the City has the tools to generate a responsible and effective capital budget which allows Council to make good decisions on infrastructure investments.

This section provides a high level overview of financial reinvestment in core, mature, and established neighbourhoods, as well as an overview of the amount of City capital funding, either committed or required, to be invested in developing neighbourhoods.

CORE, MATURE, AND ESTABLISHED NEIGHBOURHOOD REINVESTMENT

Core, mature, and established neighbourhoods have existing infrastructure and investment in these neighbourhoods is through renewal, replacement, and enhancement. In part, this is coordinated through Edmonton's Building Great Neighbourhoods initiative, which coordinates Drainage Services' "Drainage Neighbourhood Renewal Program," Transportation Services' "Neighbourhood Renewal Program," and Community Services' "Great Neighbourhoods Capital Program." ²⁵ Generally, projects consist of drainage maintenance, utility repairs, road and sidewalk upgrades, enhanced pedestrian and cycling accessibility, and capital improvements on city property. The Cromdale, Glenora, and Laurier Heights neighbourhoods are scheduled for 2014/2015 infrastructure improvements.

²⁵ For more information on the Building Great Neighbourhoods initiative, see www.edmonton.ca/for_residents/neighbourhoods/building-great-neighbourhoods.aspx





As well, through the Great Neighbourhoods Capital Program, four areas are receiving revitalization funding between 2009 and 2018 (Avenue Initiative, Central McDougall and Queen Mary Park, Jasper Place, and McCauley). The revitalization process is directed by community members, but supported by the city, and helps to determine goals and actions to build on community strengths and improve quality of life.

Reinvestment in existing neighbourhoods is also occurring through continuing capital investment in community facilities. Construction on the Meadows and Clareview community recreation centres continued through 2013, and the centres are scheduled to open in 2014.²⁶

DEVELOPING NEIGHBOURHOOD FUNDING

Investment in any new community occurs at both a private and public level. The development industry makes a substantial investment in the design, construction and marketing of a new community. Likewise, the City of Edmonton invests as well through the provision of municipal infrastructure and ongoing services.

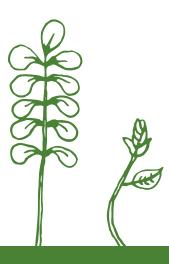
The analysis presented in this section focuses on the City's responsibilities for the initial capital costs associated with the provision of infrastructure in developing and planned neighbourhoods. It is based on the:

- current (2012-2014) Capital budget and long term planning activities, and is supplemented by Integrated Infrastructure Management Planning (IIMP) analysis on the Horse Hill and Riverview Area Structure Plans (ASP's).
- information provided in Area Structure Plans (ASP's) and Neighbourhood Structure Plans (NSP's) that may be subject to change and, in some cases, is very preliminary in nature.

The analysis does not include investment by the development industry, the City's operating costs, maintenance and renewal costs, and the utility (water, power, gas, drainage and waste) costs.²⁷

The City's ability to invest and maintain its capital infrastructure is sustainable only if the capital investment is made in a strategic and efficient manner. Not all capital infrastructure investment requirements are the same. Instead, Council's strategic context, distribution of growth pressures, and changing demographics, such as the increased need to support aging in place, all contribute to a policy environment through which highly complex investment decisions must be made. The City's 10-year Capital Investment Agenda (2015-24) and Four Year Capital Budget (2015-2018) will help Council in decision making for the City's capital infrastructure investment.

The following table illustrates costs sourced from City departments based on their understanding of current and future infrastructure investment requirements, supplemented with long term IIMP modeling of the Urban Growth Areas. For perspective, demographic information is provided to add context to the dollar amounts. It is important to note that the population figures provided relate to the neighbourhoods analyzed and not to the sector (North, South and West) as a whole. Final population is based on population expectations from the approved NSP documents.



²⁶ For more information on the capital spending on community facilities see http://www.edmonton.ca/city_government/budget_ taxes/2012budget-community-facilities.aspx

²⁷ For more information on the methodology involved with developing neighbourhood cost modeling, see the Appendix of this Report

INFRASTRUCTURE INVESTMENT IN APPROVED NEIGHBOURHOODS (as on December 2013)

	Capital Cons	struction Cost (\$ million)	Population		
Sectors	Current Fund	ded Future Funded	NSP (Projected)	2012	% Complete
North	\$ 244.4	\$ 616.6	226,020	70,783	31.3%
South*	\$159.6	\$1,337.8	320,537	60,602	18.9%
West	\$ 32.4	\$ 556.2	177,987	25,344	14.2%
Total	\$ 436.3	\$ 2,510.5	724,544	156,709	21.6%

^{*}Does not contain the SE Urban Growth Areas as IIMP analysis has not been performed on this area as yet.



The "Current Funded" column represents the value (in 2013 dollars) of infrastructure which has been approved and/or built. The "Future Funded" column represents the value (in 2013 dollars) of infrastructure required to complete the neighbourhoods. It should be noted that this does not necessarily mean that the infrastructure is required at this time, but will be over a period of time as the neighbourhoods build out.

Currently, Edmonton has approximately \$436 million as current funded and \$2.5 billion in anticipated future funded projects. Note that some of the future commitments (Future Funded) may move to current committed (Current Funded) with the approval of the 2015 – 2018 Capital Budget in December 2014. Projects considered in the current funded column will be removed as they are completed.

The following map provides more information relative to the different sectors and their respective current and future funded infrastructure investment requirements.

Public infrastructure is essential to all citizens in the City of Edmonton and is critical to the competitiveness of our economy, the quality of life citizens enjoy, and the delivery of public services. The ability to build and properly maintain municipal assets is essential to ensure Edmonton can provide services and remain an attractive and cost-effective place to live and do business.



Police

Transit

Parks

Total

Roads

Community

Facilities

Library

Fire

REFERENCES
DEFINITIONS
METHODOLOGY NOTES
INFRASTRUCTURE INVESTMENT
ZONING TRENDS
HOUSING STARTS



APPENDICES

REFERENCES

CANADIAN MORTGAGE AND HOUSING CORPORATION - HOUSING STARTS

Adapted from Canadian Mortgage and Housing Corporation, Edmonton Housing Starts Summary, 1980 through 2013.

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

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NOTE REFERENCE SOURCE

	TEL ETELTE	0001102
2	Economic Outlook Report (and related forecasts)	CoE (Chief Economist)
4	2011 Population Report - population trends by neighbourhood	CoE analysis and 1940-2011 Statistics Canada
6	2011 Population Report - population trends by neighbourhood	CoE analysis and 1940-2011 Statistics Canada
7	Redevelopment Initiatives Transit Oriented Development Evolving Infill Downtown projects	CoE (UPE)
8	Annexation	CoE (UPE)
9	Zoning Bylaw (12800) - zones and zoning regulations	CoE (Current Planning)
10	Zoning Trends Snapshot (2004 - 2014) - citywide macro changes in zoning	CoE (UPE)
11	Non-residential Building Permit summaries Monthly Summary Weekly Reports	CoE (Current Planning)
12	Industrial Reporting 2013 Vacant Industrial Land Supply Report 2011 Industrial Land Supply and Demand Analysis Study	CoE (UPE)
13	City and Regional Housing Starts	CMHC
14	Neighbourhood Plans (ASPs, NASPs, NSPs)	CoE (Current Planning)
14	2014 Neighbourhood Plans Statistics Summary - projected populations, densities, building types, land uses	CoE (UPE)
15, 16	2013 Land Supply in Developing and Planned Neighbourhoods Report - developing neighbourhood completion status and remaining lots	CoE (UPE)
17	Low Density Residential Lot Servicing 2013-2019 - developing neighbourhood servicing summary and forecast	CoE (UPE)
18	City and Regional Housing Starts	CMHC
19	Neighbourhood Density (dwelling units/net residential hectare)	CoE (2009 Municipal Census)
19	Neighbourhood Building Types	2011 Census of Canada
20	2014 Neighbourhood Plans Statistics Summary - projected populations, densities, building types, land uses	CoE (UPE)
21	Building Permits Summary 2009 – 2013 Neighbourhood Summary Total Permits	CoE (UPE)
22	Building Permits Summary 2009 – 2013 Neighbourhood Summary Total Permits	CoE (UPE)
23	Transformational Projects Blatchford the Quarters West Rossdale	CoE (UPE)
24	Mature Neighbourhood Building Permits Summary (2000 - 2013)	CoE (UPE)
25	Building Great Neighbourhoods	CoE (Community Services)
26	New Community Centres	CoE (Community Services)

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 interrelationship 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 with 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 midrise apartments/condominiums.

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 with 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.

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, 2013

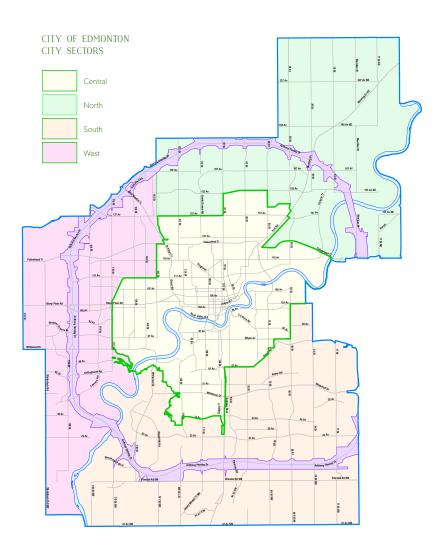
Neighbourhoods are considered complete when low density residential lots reach 95 % completion. Neighbourhoods may not reach 100 % completion due to servicing constraints or small variations between actual and projected unit numbers.

INFRASTRUCTURE INVESTMENT METHODOLOGY NOTES

1. SCOPE & METHODOLOGY

The scope of the analysis is limited to "Planned or Developing Neighbourhoods" and the two approved ASP's, Horse Hill and Riverview, included under the Urban Growth Areas. These areas have been identified in the Municipal Development Plan (MDP) The Way We Grow.

The data used in the financial analysis was provided by the department responsible for each infrastructure class. The numbers provided in the current funded and future funded columns in Table 1 are based on City capital cost estimates for building the asset; or in the case of the Urban Growth Areas, are based on the predicted land use as described in the Area Structure Plans. This data is collated into sectors (as below) and are tabulated.



2. GENERAL ASSUMPTIONS

Certainty in the eventual built form of a neighbourhood varies depending on where it is in the process. Assumptions for characteristics like density, population, and build-out time are estimated and refined as the neighbourhood moves through the design and approval process. Many factors influence the eventual outcome of a neighbourhood, including market conditions, improvements to technologies, changing service standards and the continuing efforts of both the City and the development industry to create better communities that reflect the needs and values of the citizens of Edmonton.

Through this report and this section, Administration is working to bring together the best information known as to demographic projections, development industry plans for future neighbourhoods, and the City's own vision and plans for the provision of infrastructure in developing and planned neighbourhoods.

The following outlines the assumptions made in the gathering and analysis of the data used to determine the fiscal implications of current and future infrastructure.

- 1. Numbers are presented in 2013 dollars and based on 2013 costs and servicing standards.
- 2. Only initial construction costs of infrastructure that the City is obligated to provide was included in this analysis. The following is therefore excluded:
 - a. Future City capital costs for renewal and rehabilitation related to the new infrastructure.
 - b. Costs incurred by the developers.
 - c. Costs for operation and maintenance of City infrastructure and associated service delivery

Further work in the assessment and analysis of this type of expenditure is performed for Urban Growth areas under the Integrated Infrastructure Management Planning Framework.

- 3. Broader economic benefits of new residential areas were not considered.
- 4. Items deemed current funded are those that are currently or will be under construction, are approved by Council and are included either in the current (2012-2014) or previous Capital Budgets.
- 5. The utility (water, power, gas, drainage and waste) costs are not included in the analysis. Utilities capital is funded through utility rates (and not through City General Revenues) hence are not included in the present analysis.



3. INFRASTRUCTURE SPECIFIC ASSUMPTIONS

Roads

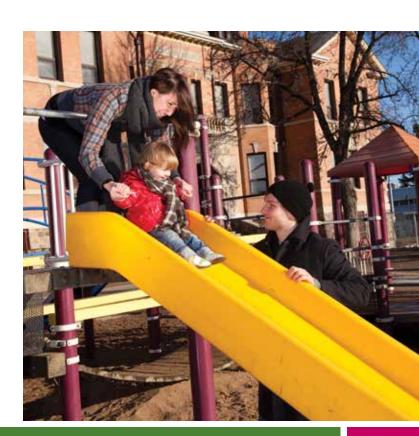
- For the purpose of this study, only arterial roadways were included in the assessment.
- Funded Costs do not represent the Arterial Road Assessment (ARA) obligations and are specific to costs assigned as per the 2012-2014 Capital budget towards Arterial Road Development.
- Cost per lane per meter = \$4,600. This can vary as much as +/- 50%. For simplicity of estimation, average lane meter cost for all road classifications was used for the lane rate.
- Lane meters do not include turn bays and auxiliary lanes
- Roadway lengths are a rough measurement. These can vary as much as +/- 25%.
- Only neighbourhoods within the scope of GMR were accounted for. There are other areas within the City that may require Arterial Road upgrades when warranted through increased development or traffic volumes.
- Only a few of the Regional Roadways are identified in this review (Whitemud in the west end is, Manning in the north end is not).
- The analysis does not include Land Costs.
- Costs are estimated in 2013 dollars and escalation of costs is not factored in. Many of the improvements are not required for several years/decades.
 Development activity and growth drives the need.
- 2014 developer funded arterial projects are not included.
- 2014 City funded arterial projects are assumed to be "funded infrastructure" for the purpose of this assessment.
- Costs do not include bridge structures for creek crossings/wildlife passage.

Transit

- The Transit contribution to the numbers shown in Table 1 under Current Funded and Future Funded Infrastructure represent buses needed for peak period bus service, with no downstream impacts. Infrastructure costs represent the purchase price of buses and mid-life refurbishment costs (\$540,000 per bus in 2013 dollars).
- This list does not include any LRT project or LRT related improvements.
- Bus terminals are not included.

Fire

- Two other Fire Stations Mistatim \$13,055,000 and South East Industrial \$15,112,000 are not included in this analysis. These neighbourhoods are industrial in nature and henceforth not part of the report.
- The City does not own land yet at Windermere.
 Area has been rezoned for PU for Fire Station.



EDMONTON ZONING TRENDS 2004-2014

Year	2004	2006	2008	2010	2012	2014
City Size in Hectares	69,980	69,980	69,980	69,980	69,980	69,980
Reserve/Agriculture Zoning (ha)	31,900	30,399	27,860	26,760	26,160	23,810
Developed Zoning (ha)						
Residential Hectares	18,042	19,052	20,290	20,750	21,090	22,180
Direct Control Hectares	2,064	2,249	2,550	2,790	2,880	2,960
Commercial Hectares	1,473	1,485	1,570	1,610	1,640	1,740
Industrial Hectares	7,200	7,294	7,550	7,630	7,630	8,190
Institutional Hectares	3,584	3,658	4,170	4,360	4,430	4,620
Parks and Open Space	5,717	5,843	5,990	6,080	6,160	6,510
Total Developed Zoning (ha)	38,080	39,581	42,120	43,220	43,830	46,200
Percent Developed	54%	57 %	60%	62%	63%	66%
Percent Reserve/Agriculture	46%	43%	40%	38%	37 %	34%

The following Zones are included in each broad zoning category. For more information on each zone, please see Edmonton's Zoning Bylaw (Bylaw 12800) http://webdocs.edmonton.ca/InfraPlan/zoningbylaw/bylaw_12800.htm

- 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 "developed zoning," actual development may not occur.

CMHC EDMONTON HOUSING STARTS SUMMARY 1980-2013 (NOTES)

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 CMHC for more information, online at www.cmhc.ca/housingmarketinformation.

CMHC EDMONTON HOUSING STARTS SUMMARY 1980-2013

YEAR	Edmonton - City			Edmonton - CMA			City as % of CMA		
	Single	Multiple	Total	Single	Multiple	Total	Single	Multiple	Total
1980	2,655	5,791	8,446	3,674	6,293	9,967	72%	92%	85%
1981	3,594	6,923	10,517	4,491	7,508	11,999	80%	92%	88%
1982	1,683	7,428	9,111	2,204	7,534	9,738	76%	99%	94%
1983	2,877	2,244	5,121	3,761	2,692	6,453	76%	83%	79 %
1984	1,722	155	1,877	2,197	187	2,384	78%	83%	79 %
1985	1,868	102	1,970	2,424	104	2,528	77%	98%	78 %
1986	1,710	200	1,910	2,355	206	2,561	73%	97%	75 %
1987	2,057	309	2,366	3,265	343	3,608	63%	90%	66%
1988	2,105	597	2,702	3,469	664	4,133	61%	90%	65%
1989	2,173	731	2,904	3,931	886	4,817	55%	83%	60%
1990	2,495	937	3,432	4,759	1,162	5,921	52%	81%	58%
1991	1,564	988	2,552	3,016	1,269	4,285	52%	78%	60%
1992	2,346	1,541	3,887	4,683	2,081	6,764	50%	74%	57 %
1993	2,148	2,017	4,165	4,202	2,518	6,720	51%	80%	62%
1994	1,690	1,461	3,151	3,225	1,781	5,006	52%	82%	63%
1995	1,130	763	1,893	2,159	923	3,082	52%	83%	61%
1996	1,421	514	1,935	2,944	690	3,634	48%	74%	53%
1997	1,945	1,070	3,015	3,685	1,277	4,962	53%	84%	61%
1998	2,032	1,559	3,591	4,080	1,867	5,947	50%	84%	60%
1999	2,141	1,791	3,932	4,075	2,580	6,655	53%	69%	59 %
2000	2,137	1,628	3,765	4,072	2,156	6,228	52%	76%	60%
2001	2,815	1,996	4,811	4,959	2,896	7,855	57%	69%	61%
2002	4,158	4,664	8,822	6,860	5,721	12,581	61%	82%	70 %
2003	3,857	5,099	8,956	6,391	5,989	12,380	60%	85%	72 %
2004	4,030	4,129	8,159	6,614	4,874	11,488	61%	85%	71 %
2005	5,023	4,411	9,434	7,623	5,671	13,294	66%	78%	71 %
2006	5,363	4,453	9,816	9,064	5,906	14,970	59%	75%	66%
2007	3,763	5,131	8,894	7,682	7,206	14,888	49%	71%	60%
2008	1,220	2,759	3,979	2,606	4,009	6,615	47%	69%	60%
2009	2,206	1,705	3,911	3,897	2,420	6,317	57%	70%	62%
2010	3,417	2,963	6,110	6,062	3,897	9,959	56%	76%	61%
2011	3,080	3,055	6,135	5,017	4,315	9,332	61%	71%	66%
2012	3,517	5,971	9,488	5,658	7,179	12,837	62%	83%	74 %
2013	3,981	6,653	10,634	5,970	8,719	14,689	67%	76%	72 %

Source: Adapted from CMHC, Edmonton Housing Starts Summary, 1980 through 2013.

