



MARKET HOUSING AND AFFORDABILITY STUDY

EVOLVING INFILL



Acknowledgements

MARKET HOUSING AND AFFORDABILITY STUDY

June, 2018

We respectfully acknowledge that we are located on Treaty 6 territory, a traditional gathering place for diverse Indigenous peoples including the Cree, Blackfoot, Metis, Nakota Sioux, Dene, Inuit, and many others whose histories, languages, and cultures continue to influence our vibrant community.

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Evolving Infill: Market Housing and Affordability Study

This Executive Summary represents a condensed version of Evolving Infill: Market and Study, to provide readers with a high-level summary of the report and its key conclusions.

Three other documents complement Evolving Infill: Market Housing and Affordability Study:

- Evolving Infill: What We Heard: Stakeholder Engagement Results
- Evolving Infill: Edmonton's Urban Neighbourhood Evolution
- Evolving Infill: Municipal Tools Review

PURPOSE

This report presents an overview of infill dynamics, challenges (from a consumer and builder perspective), opportunities, and a key factor that drives the housing market: consumer preference. The report presents an analysis of the residential market with three pillars in mind: infill, density and affordability. The report examines housing mix, affordability, consumer preferences, and market balance. The report also examines the interaction of the residential and commercial markets to determine if "retail follows rooftops, or if rooftops follow retail?"



KEY FINDINGS

Increasing housing density within core, mature or established areas of the city, while achieving affordability, is not an easy task. Edmonton's infill activity has been shifting the housing mix toward more dense dwelling forms; however, the purchase price of these infill dwellings is still not appealing enough compared to developing suburban areas.

The relationship between three key analytical pillars (infill, density and affordability) is not always linear (i.e. the most dense housing type may not be the most affordable, nor the most desirable from a consumer perspective). Therefore, it is important to effectively balance as many key aspects as possible that relate to infill development that is desirable and affordable for consumers.

Edmonton is one of the most affordable major cities in Canada when analyzed by its household income distribution compared to the average home price (resulting in an ownership level that is the highest in the country). If affordability is heavily impacted by the asking price of a dwelling, it is also strongly impacted by other factors such as the employment rate, household income, and economic policies, which are recently playing a big role in the local economy.

Edmontonians historically (and still to this day) prefer single-detached homes (approximately half of the infill homeowners surveyed during the focus groups searched for a single-detached home), however, most infill single-detached homes are unaffordable for the average middle-class family. Mature and established areas may also have limited land, which can make demolition with subsequent redevelopment the only real alternative, but it comes at a higher cost.

Infill dwellings like townhomes and duplexes tend to be a good alternative for families with a limited budget who are looking to own in a more central location. Furthermore, from qualitative findings, townhomes and duplexes have a reasonably high consumer preference that helps with demand, though not as high as single-detached homes. Infill townhomes and duplexes also strike a more balanced approach when trying to juggle competing aspects like consumer preference, density, and affordability compared to the resale market. Alternatively, as a secondary infill option instead of townhomes and duplexes, it may be advisable to build low-rise and mid-rise apartments in certain mature areas near existing commercial and transit nodes. Since low-rise and mid-rise apartments are the least favourite housing type (qualitative findings show that less than a quarter of infill homeowners searched for an apartment), it is important that they are built near existing infrastructure, like commercial and transit, in order to help boost their demand. However, it should be noted that slow sales absorptions for low-rise and mid-rise apartments, compared to single-detached sales absorptions, adds inherent risk to a builder and potentially longer sales timeframes. Furthermore, another challenge with low-rise and mid-rise infill apartments is their affordability compared to the same housing types in the suburbs (less expensive).

Based on Intelligence House data, the Edmonton housing market is reasonably balanced, however, roughly 16% of the population is priced out of the possibility of homeownership. Furthermore, first time homebuyers are waiting longer to purchase their first home (because of decreasing affordability), which leaves them in the rental market for longer. Based on this, the rental market may be another strong option for increasing density in infill areas. The purpose-built rental market is going through a healthy and important cycle of renovation with almost 4,000 new rental units coming/planned for infill areas between 2017



and 2020. These new rental units with “condo-like finishes,” present a great alternative to accommodate consumers who are excluded from ownership (because of an insufficient down payment, or other affordability measures that prevent them from getting a mortgage approval).

When analyzing residential and commercial markets, and how they interact with each other, an often-asked question is “does retail follow rooftops, or do rooftops follow retail?” The simple answer is that it depends on the scenario. For example, in new developing areas in the suburbs, a developer may decide to build 1,000 new homes. As a result, commercial businesses will then commit to building in this new developing area and are able to plan retail centres spanning multiple acres, so in this scenario “retail follows rooftops”. In mature neighbourhoods, however, smaller retail centres without grocery or department stores can be added, but new larger-scale retail centres can rarely be developed due to land scarcity. As a result, in mature neighbourhoods “rooftops follow retail” as new residential infill construction would follow existing larger-scale retail that is already in place. As a strategy for identifying which retail to follow in mature areas, the commercial portion of this report suggests six major commercial nodes that may have the highest probability of sustaining additional density. They are:

- Londonderry Mall
- Northtown Mall
- Kingsway Mall
- Capilano Mall
- Southgate Mall
- Westmount Mall







INTRODUCTION

PURPOSE AND SCOPE

The purpose and scope of this integrated residential, commercial, and qualitative report for Evolving Infill 2.0 is to identify and analyze a number of key data-driven components including the supply and demand of residential and commercial markets in Edmonton, price and size activity, sales absorptions, housing affordability, mortgage insurance regulations, interest rates, the rental market, and consumer behaviour and preferences.

Based on the overall analysis, shared conclusions (Part 3) are identified that integrate residential, commercial, and qualitative findings that pertain to the City's goal of increasing density in core, mature, and established neighbourhoods. Conclusions, however, will vary depending on the particular scenario at hand, and are not intended to be inclusive "blanket" statements that apply to all circumstances.

ECONOMIC OVERVIEW

Over the past decade, Alberta and Edmonton have experienced unprecedented economic growth driven by rapid expansion in the Alberta oil sands, one of the largest deposits of natural resources in the world. The high commodity price of oil and gas experienced during most of the early 2010 decade led to an investment of over \$322-billion in Alberta's energy sector between 2010 and 2016, which increased oil production capacity from 1.9 million barrels per day in 2009 to 3.1 million barrels per day in 2015. During the same period, Edmonton's economy grew 33.5% (almost double the national rate of 17.1%).

Edmonton's southern neighbour, Calgary, serves as the corporate headquarters for Canada's energy sector. Edmonton, on the other hand, serves as the transportation and operational hub, which, although affected in the long term by oil prices, tends to be somewhat sheltered from short-term oil price fluctuations due to Edmonton's more diverse economy – with stable sectors such as government, health care,

and education – compared to the rest of Alberta.

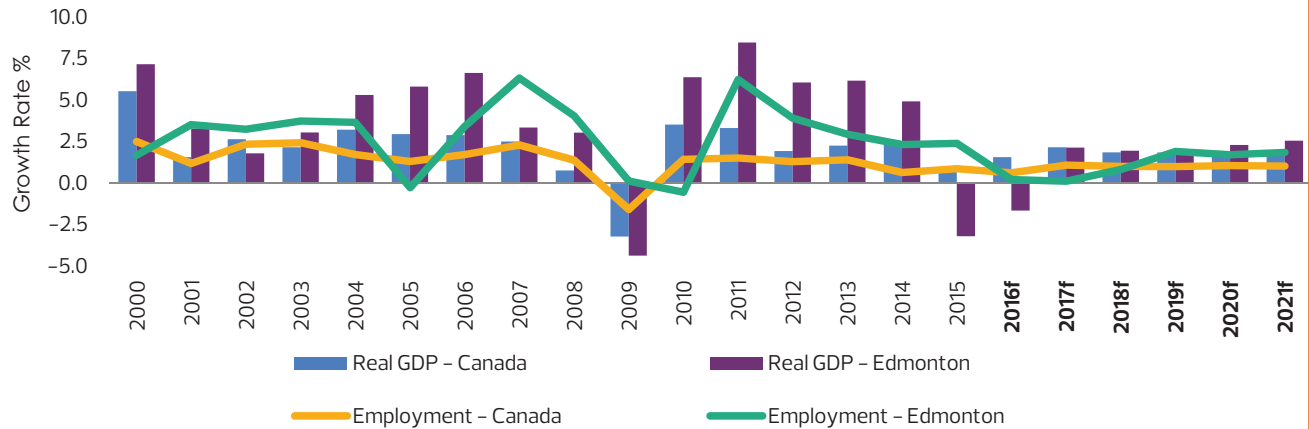
Nonetheless, Edmonton is still susceptible to boom-and-bust cycles of the oil and gas industries. Despite the impact that the downturn in oil prices has had on Edmonton's economy, the city has been, and will likely continue to be, one of Canada's engines of growth. However, this prediction is largely based on a stable provincial political landscape, and Edmonton's advantageous job diversity (government, health care, and education). While Edmonton's GDP was estimated to have contracted 2.7% in 2016, the Conference Board of Canada expects Edmonton to grow 2.4% annually between 2017 and 2020, among the highest average growth rates during the period for all major Canadian cities. Increased drilling activity and capital expenditure intentions in the energy sector, along with the federal government's approval of two major pipelines, is setting the stage for modest recovery in the years ahead. Although the construction of these pipelines is not expected to begin immediately, the spin off of design and engineering activities will provide much-needed relief to the service sector in the city.

PROVINCIAL AND EDMONTON HOUSING DRIVER TRENDS

Edmonton has historically been a leader for job creation in the country. Between 2009 and 2015, overall employment in Edmonton increased 18.3%, over twice the national growth level of 7.3% for the same period. Wages in the region are also much higher. In 2015, average weekly earnings for the province were \$1,146 compared to \$952 for the country as per the national survey of employment, payrolls and hours by Statistics Canada.

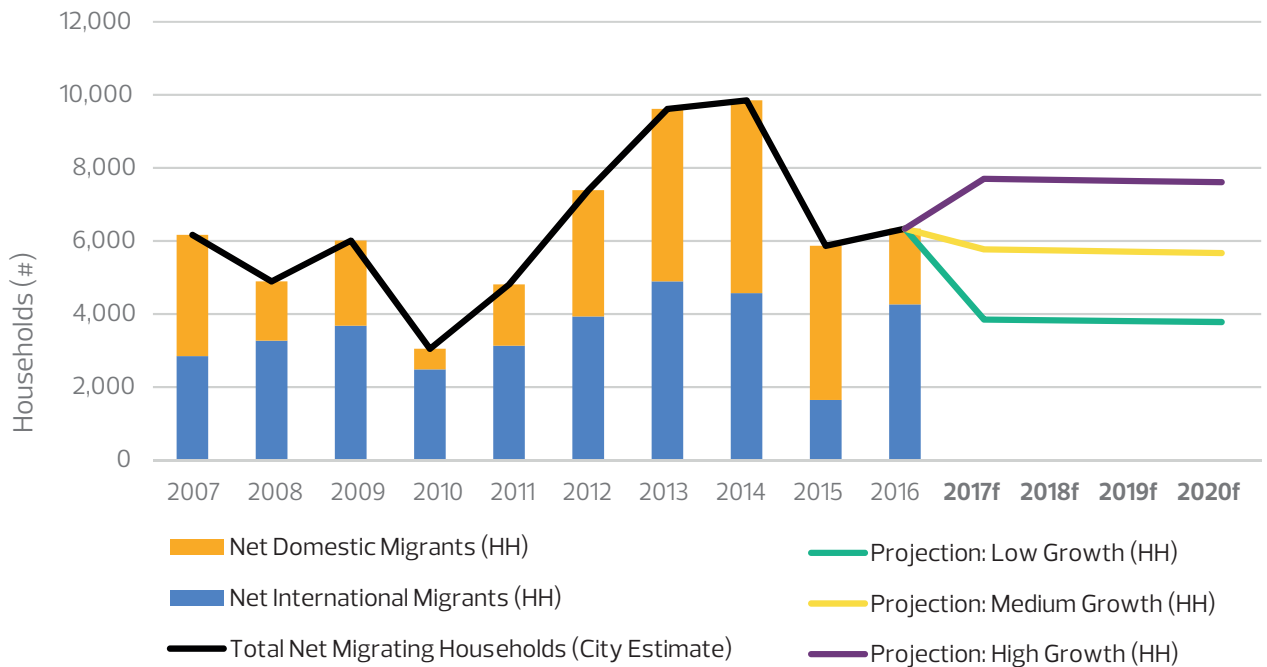
The city's impressive economic prospects attracted a diversified population as well as a young and highly educated workforce, even during the 2015-2016 economic downturn. According to the latest census data, Edmonton's CMA population grew a staggering

figure 1:
EDMONTON VS. CANADA ECONOMIC GROWTH



Source: Conference Board of Canada

figure 2:
EDMONTON HISTORICAL MIGRATION PATTERNS



Source: Intelligence House, Stats Can, Conference Board of Canada, Census

13.9% between 2011 and 2016; almost three times the national growth of 5%. Edmonton has been an overall net migration recipient, which has been one of the most important sources of population growth. Net international migration totalled 102,963 from 2009–2016, while net interprovincial and intraprovincial totalled 53,598 and 34,253, respectively, for the same period.

DATA LIMITATIONS & DEFINITIONS

The information, analyses and opinions in this report are based on various sources (publicly available data, and proprietary data) that were available (and up-to-date) at the time the report was initially produced. These various sources are believed to be reliable, but their accuracy cannot be 100% guaranteed. The information, analyses and opinions shall not be taken as representations for which Intelligence House Ltd., Colliers International, or any of their respective employees shall incur responsibility. All information provided in this report is only to be relied on for the purposes of estimation. Intelligence House Ltd. and Colliers International have not been engaged to verify the validity of any of the information collected in providing the analyses, as most of the material used is based entirely on data obtained from sources that have populated the data on their own accord without the direct involvement of Intelligence House Ltd. or Colliers International.

For clarity, when the term “affordability” is used in this report, it refers to a consumer’s power of purchase. It does not, in any way, refer to “affordable housing” that may be subsidized.

HOW DOES THIS REPORT WORK?

This document has been broken down into five (5) different parts outlined below. These sections are intended to give the reader a comprehensive overlook and understanding of the many facets that relate to infill development from a residential and commercial perspective, in comparison to what was shared during the qualitative focus groups conducted by Banister.

PART 1 – RESIDENTIAL ANALYSIS

Part 1 is a complex overview of the residential market in Edmonton (from a holistic perspective, as well as from an infill perspective). Key residential findings are included at the end of this section.

PART 2 – COMMERCIAL ANALYSIS

Part 2 is a complex overview of the commercial market in Edmonton (from a holistic perspective, as well as from an infill perspective). Key commercial findings are included at the end of this section.

PART 3 – MARKET ANALYSIS REPORT CONCLUSIONS

Part 3 provides shared conclusions (an integration of residential, commercial, and qualitative findings). For key overall findings, please consult this section.

APPENDIX (INCLUDES ADDITIONAL RESIDENTIAL CHARTS AND INFORMATION)

QUALITATIVE SUMMARY REPORT (BANISTER FOCUS GROUPS – SEPARATE REPORT)

Part 5 provides anecdotal housing information shared by the public during focus groups. This report shows consumer preferences, desires for particular home types, desires for particular amenities, barriers, and much more.



1. RESIDENTIAL ANALYSIS

1.1 RESIDENTIAL OVERVIEW

The city of Edmonton continues to attract, house, and employ people at record levels, and keeping pace with this growth remains a challenge. According to the latest census data, Edmonton was the fastest growing city in Canada with a population increase of 14.8% between 2011 and 2016 to a population of 932,546. Edmonton's population is forecasted to increase by 170,000 by 2025, and, if this pace continues, The Capital Region Board expects that 150,000 new housing units will be required by 2040.

With the projected growth that Edmonton is expected to undergo by 2025, current housing developments will not be able to accommodate the influx of people who will be looking for places to live and work in the region. A common strategy used by governments to increase housing supply, and therefore increase affordability, is through large greenfield land releases. This typically occurs in suburban areas away from the core (developing areas). According to the 2017 Annual Growth Monitoring Report, Edmonton added 80,221 homes between 2006 and 2016 with 84% of these homes located in developing areas. However, low-density suburban growth poses challenges related to infrastructure costs, sustainability, and transportation, among many others. Additionally, land release does not

necessarily equal housing supply, as sites take multiple years to be developed.

The City of Edmonton's goal, in order to counteract and alleviate some of the inherent challenges associated with suburban development, is to have 25% of net new housing located within core and mature areas around LRT stations and transit centers, where infrastructure supports redevelopment. Infill developments include a wide range of housing types such as new secondary suites, garage suites, duplexes, townhomes (also known as row homes or row housing), single-detached homes, apartments and other residential mixed-use buildings. According to the City of Edmonton in 2016, 24.5% (2,022) of new housing units were added in mature areas with a large majority being multi-residential units.

RESIDENTIAL SCOPE

The residential scope for this report is to identify and analyze a number of key data-driven components including the supply and demand of residential markets in Edmonton, price and size activity, sales absorptions, housing affordability, mortgage insurance regulations, interest rates, the rental market, and consumer behaviour and preferences.

1.2 HOUSING MARKET: OVERVIEW & FUNDAMENTALS

RECENT TRENDS

Edmonton's strong population growth between 2009 and 2014 brought new challenges such as increased demand for housing and a constrained supply. In 2010, the City of Edmonton, under the Municipal Development Plan: The Way We Grow, launched the infill initiative to improve the housing market in the city. This plan aims to have 25% of net new housing units located within core and mature areas. However, the two-year recession from low oil prices has led to an unbalanced housing market as developers increased housing starts in 2014 and 2015.

Despite a 41% decrease in housing starts between 2015 and 2016, as well as strong population and household growth, the number of unabsorbed units (those completed that have not been purchased) is growing rapidly. According to CMHC, in May

2017, unabsorbed homes in the market reached an all-time high at 2,133 units, 88% more compared to May 2015. It is also evident that there are significant differences among property types, as unabsorbed units have increased 2%, 74%, and 366% for single-detached, semi-detached and row, and apartment, respectively for the two-year period. From these statistics, it is important to note the large increase in unabsorbed apartment condos (i.e. slower absorption, and the least favourite consumer preference indicated during the qualitative focus groups; discussed more throughout this report).

figure 3:
EDMONTON CMA MONTHLY UNABSORBED HOUSING UNITS



Source: CMHC Rental Market Survey

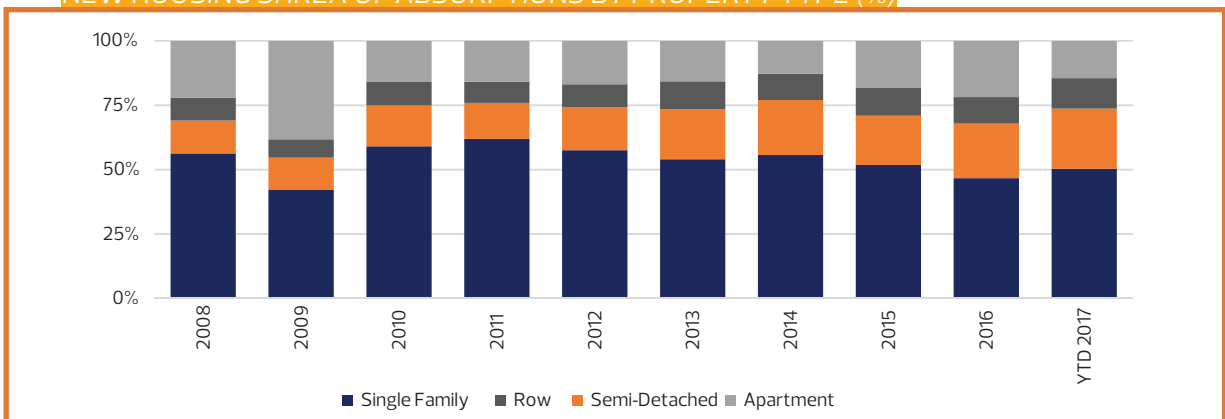
SUPPLY AND DEMAND OVERVIEW

In the last decade, Edmonton's population landscape has changed dramatically and is more generationally, culturally, and ethnically diverse. This shifting landscape (and the preferences associated with this shift) will continue to reshape the supply and demand dynamics in Edmonton's housing market.

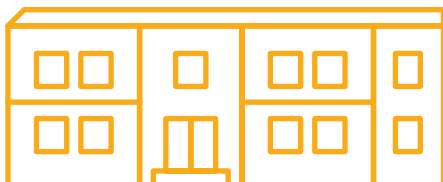
One important demographic factor that pertains to supply and demand (identified from a poll conducted for the Bank of Montreal in April 2016) is that the average

age of first time homebuyers in Canada has increased to 36 (from an age of 30, for current home owners), as delayed parenthood and smaller families become the norm. This delay in ownership has important ramifications for Edmonton's new housing market, as well as the rental market. The wave of baby boomers retiring is also set to grow in the next few years, and will be accompanied by a downsize in real estate. However, this group's housing footprint reduction is smaller and is taking longer than in past years.

figure 4:
NEW HOUSING SHARE OF ABSORPTIONS BY PROPERTY TYPE (%)



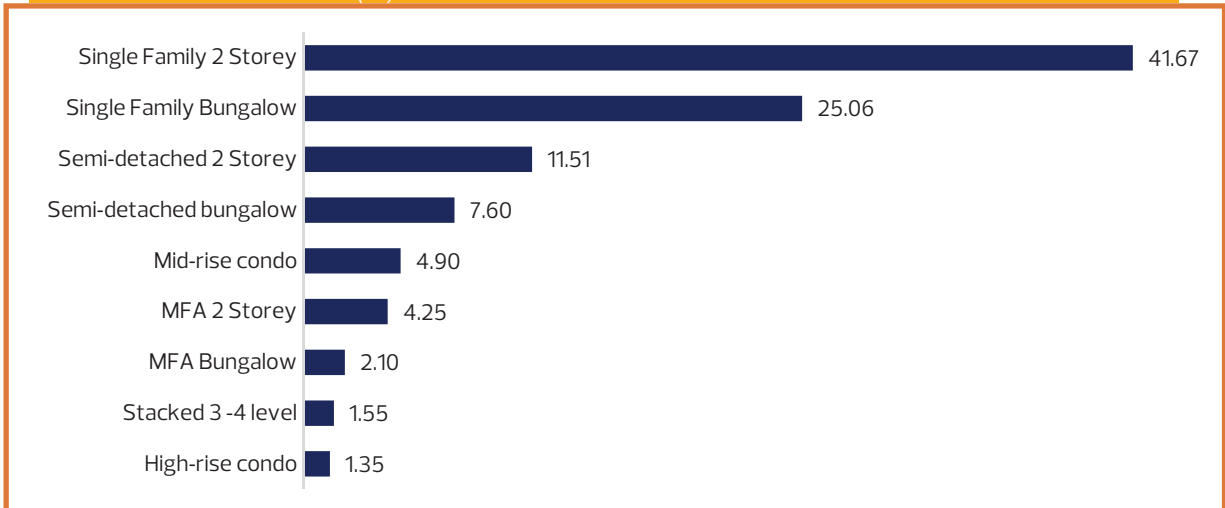
Source: CMHC Housing Information Portal



In terms of housing preferences over the past 10 years (and still to this day), single-detached homes have represented over 50% of new home sales in Edmonton (seen in figure 4, and in Part 5's qualitative findings). Furthermore, based on Avid Ratings Canada consumer preference survey, roughly 67% of Canadians gravitate toward living in single-detached

homes (figure 5). Household demand and loyalty to low-density, single-detached homes continues to be the highest preference, while high-density properties (like apartments) have the lowest demand (Part 5's qualitative findings indicate that less than a quarter of infill homeowners searched for an apartment).

figure 5:
PREFERRED HOME TYPE (%) – AVID RATINGS CANADA CONSUMER PREFERENCE SURVEY

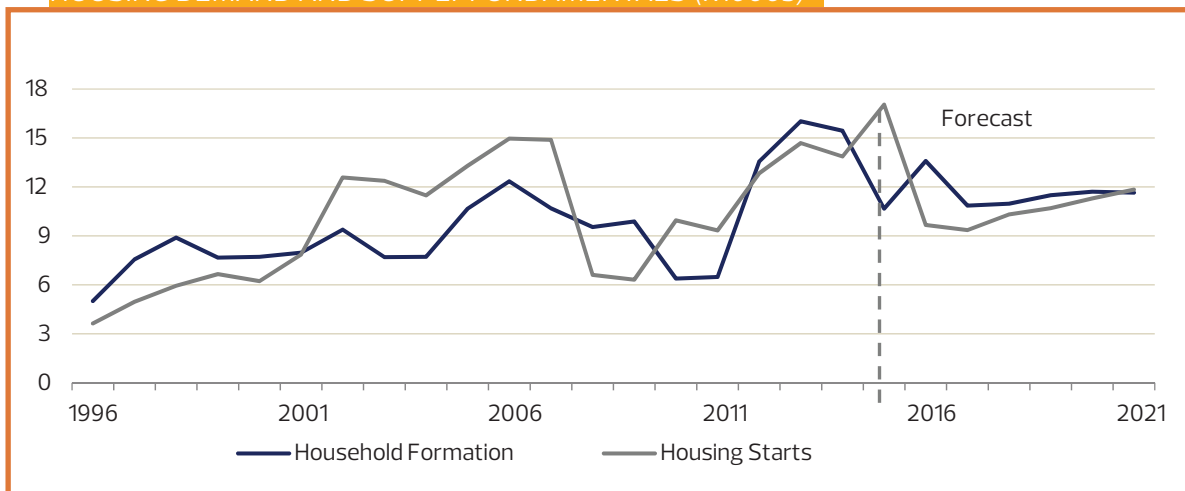


Note to the reader: The above chart was produced from a 2017 Avid Ratings Canada report in partnership with the Canadian Home Builders' Association. Entitled "2017 Canadian Homebuyer Preference National Study", it is based on a sample size of 21,929 new homeowners being surveyed across six Canadian provinces (BC, AB, SK, MB, ON, NS). The report indicates, "the desire for a single-family home has increased to over 65% (compared to roughly 55% in 2015)".
Source: Avid Ratings Canada

Housing demand rises during periods of economic growth, as increasing incomes enable households in the rental market to become homebuyers. This demand, in turn, drives supply as it prompts developers to build different types of homes at price points where the demand is greatest. As well, employment opportunities drive migrants to Edmonton, which results in demand for even more housing. A shortage in supply provides impetus for developers to add new dwellings to the market. However, when economic growth halts, new supply will lag to adjust as new construction is completed.

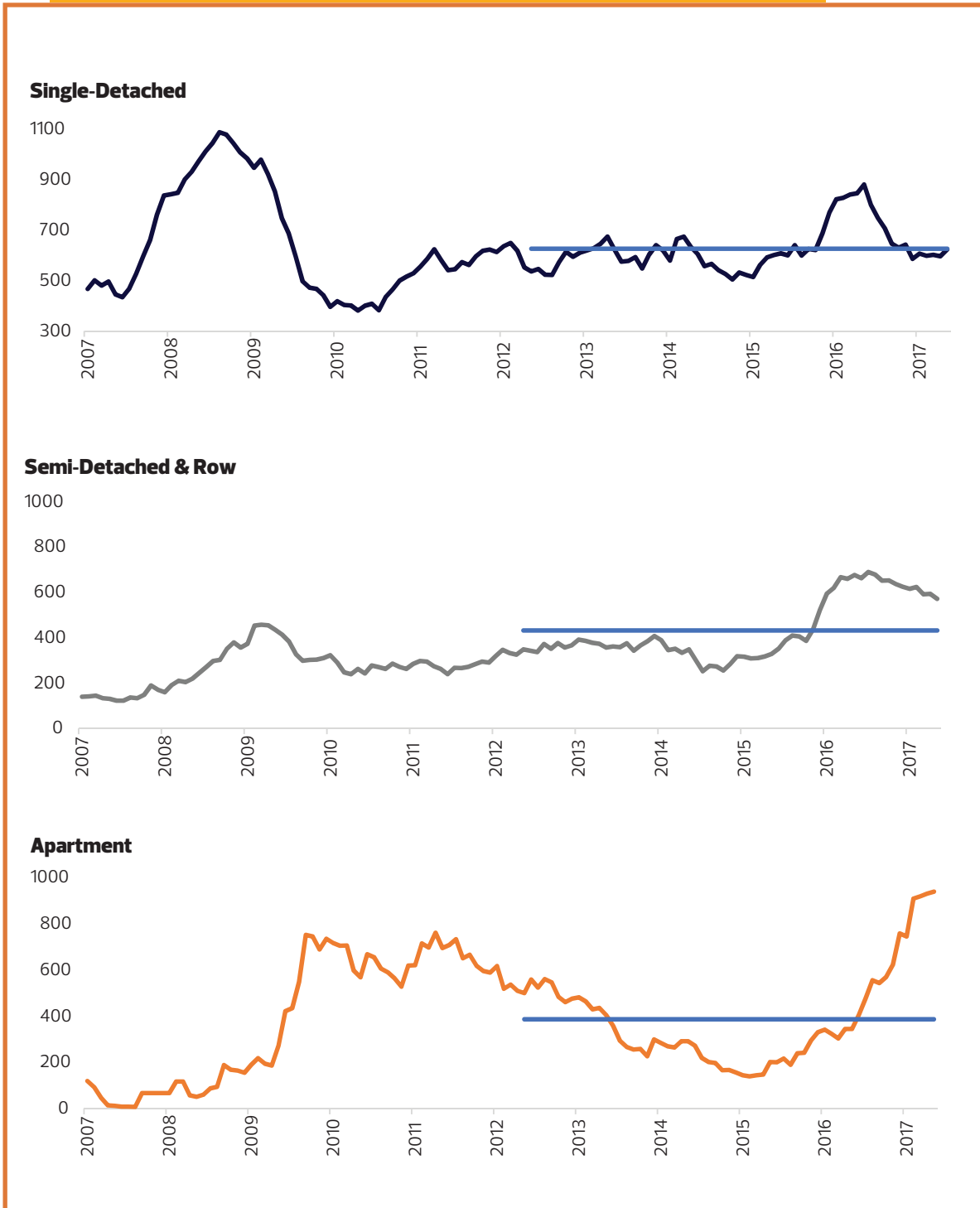
Figure 6 shows the historical relation between demand (measured through household formation), and supply (measured through housing starts). Developers in Edmonton were anticipating that the strong growth experienced between 2010 and 2014 would continue. This led housing starts to an all-time high of 17,050 units in 2015. However, the impact of the most recent recession in international oil prices has halted industry expansion and pushed Edmonton's unemployment rate to levels not seen in over 20 years. This led to a drastic drop in housing demand and created an oversupply of inventory (figure 7).

figure 6:
HOUSING DEMAND AND SUPPLY FUNDAMENTALS (x1000s)

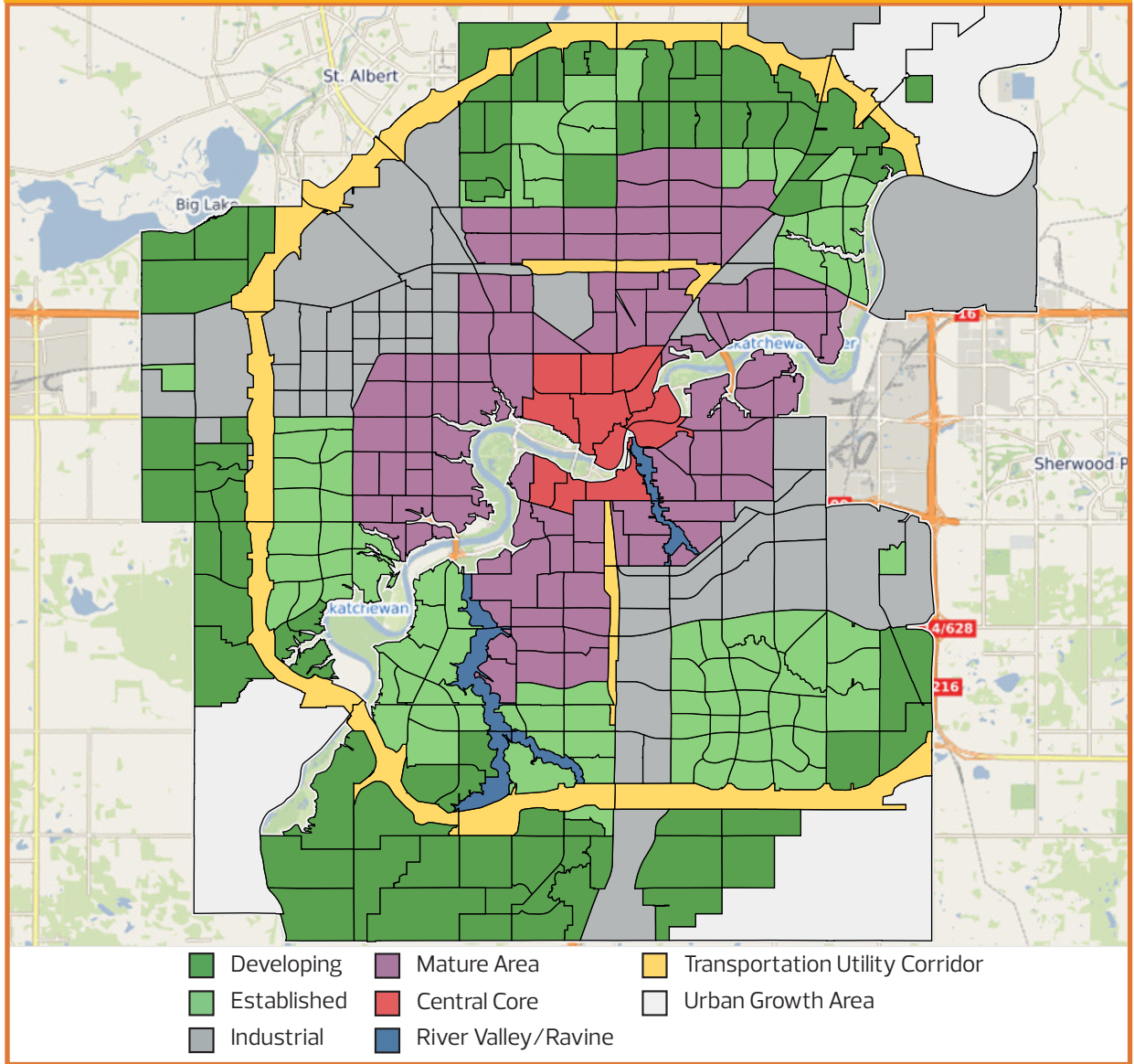


Source: Conference Board of Canada

figure 7:
EDMONTON CMA MONTHLY UNABSORBED UNITS BY PROPERTY TYPE



Note: Blue horizontal lines on each graph represent its 5-year average.
Source: CMHC Housing Information Portal



1.3 NEIGHBOURHOOD CLASSIFICATION

The geographic analysis in this report follows the City Administration classification of Developing, Established and Mature areas as shown in the map above.

DEVELOPING AREAS (NEW HOUSING)

Intelligence House data shows that Edmonton's new housing market is displaying signs of recovery to a more stable market. Following three consecutive quarters of declined activity, 1,907 new lots were absorbed across the city in the second quarter of 2017. This represents an increase in activity of 51% over the previous quarter. Increased absorption quarter over quarter was observed for all home types and sectors, with the largest increases in estate homes (+90%), and single-family detached-garage homes (+66%), and in the south (+85%), west (+81%), and southeast (+79%) sectors. This could signal a return to a more stable market following a period of consistently increasing supply and decreasing demand.

In terms of overall empty lot inventory, it declined by 1,327 lots (-13%). This was driven by a combination of three factors: increased pre-sale absorptions (when a home is purchased before it is built) from 551 in 2017 Q1 to 870 in 2017 Q2, increased absorptions of empty lots for new spec home construction (homes built without a buyer) from 541 in 2017 Q1 to 789 in 2017 Q2, and fewer new empty lots replacing sold lots. Despite an increase in spec home construction, there was less than 1:1 replacement (789 new spec homes vs. 1,037 sales of spec homes), resulting in a net reduction of spec home inventory of -248 homes in 2017 Q2. Furthermore, the percentage of spec homes in the "built" phase has steadily dropped from 74% in 2016 Q2 to 67% in 2017 Q1

to 62% in 2017 Q2 (figure 8), as demand has responded to incentives by builders.

A common benchmark in the housing industry to measure supply and demand balance is the Years of Supply (YOS) metric. A market with 1.5 to 2.0 YOS is believed to be a balanced market. When YOS is below 1.5 or above 2.0, the new housing market is believed to be undersupplied and oversupplied, respectively. According to Intelligence House data, overall, in 2017 Q2, the new housing market appears to be balanced with 1.91 YOS (figure 8 and figure 9). Apartment condos, on the other hand, have 2.04 YOS signalling a slightly oversupplied market, however, there are significant differences between areas in the city. YOS for apartment condos in developing neighbourhoods is 1.76 compared to 4.28 and 2.32 YOS for new apartment condos in mature areas outside the core, and mature core, respectively (figure 10). Developing areas account for 64% of the overall apartment condo sales and over 55% of the total available apartment condo inventory in Edmonton.

figure 8:
NEW HOUSING MARKET INDICATORS SUMMARY (EXCEPT APARTMENT CONDOS)

City_Sector	RF5	RF4	RPL	RSL	RF1	Total
NW	3.84	1.93	3.17	1.93	2.41	2.41
NE	3.07	1.27	1.79	2.87	4.33	2.42
SE	2.74	1.20	1.01	1.52		1.57
S	2.12	1.36	0.76	1.06	0.80	1.24
SW	2.43	1.49	1.02	1.48	2.73	1.76
W	2.39	1.35	1.65	2.95	4.44	2.36
Total	2.65	1.40	1.25	1.98	2.71	1.91

Source: Intelligence House RF5=Row, RF4=Duplexes, RPL=Single-Family Detached Garage, RSL=Single-Family Attached Garage, RF1=Estate

figure 9:

DEVELOPING AREAS 2017 QUARTER 2 NEW HOUSING – YEARS OF SUPPLY (EXCEPT APARTMENT CONDOS)

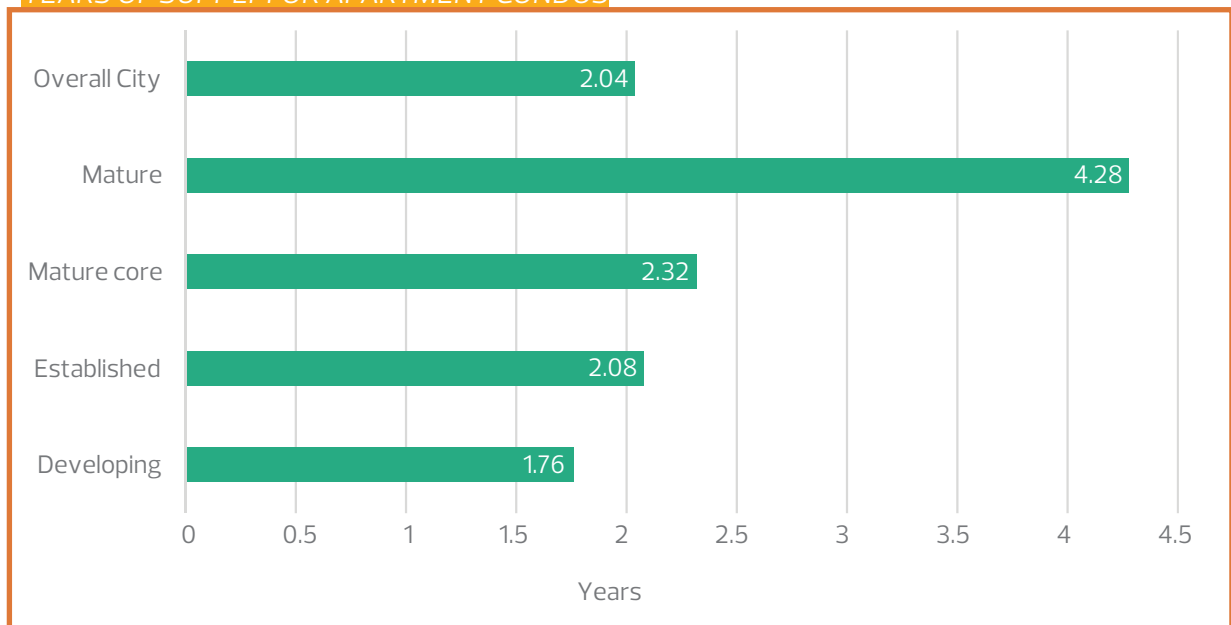
NEW HOUSING MARKET INDICATORS SUMMARY – EDMONTON

	2017 Q2		2017 Q1		2016 Q4		2016 Q3		2016 Q2
Total Sales	1907	▲	1263	▼	1279	▼	1504	▼	1982
Empty Lot Supply	8571	▼	9888	▼	9962	▲	9687	▼	9898
Spec Home Supply	2343	▼	2430	▼	2435	▲	2156	▼	2196
Years of Supply	1.91	▼	2.30	▲	2.27	▲	1.97	▲	1.53
Spec Replenishment Rate	92%	▼	99%		n.s.		n.s.		n.s.
Spec Homes Av. Ready	62%	▼	67%	▲	66%	▼	69%	▼	74%

Source: Intelligence House

figure 10:

YEARS OF SUPPLY FOR APARTMENT CONDOS



Source: Intelligence House

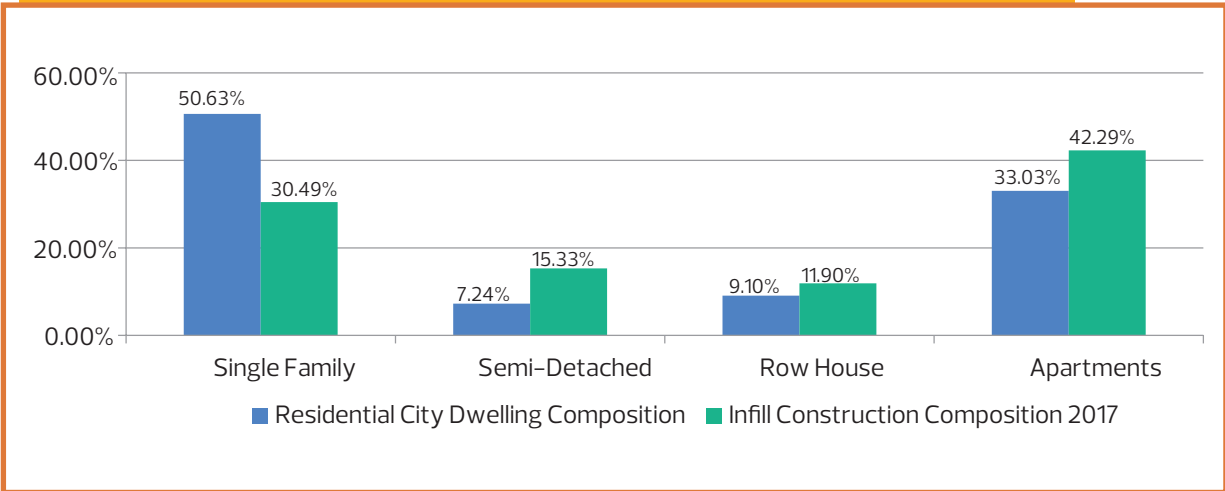
INFILL AREAS (MATURE AND ESTABLISHED)

The City of Edmonton intends to support a shift from suburban development to increased density by encouraging 25% of net new housing growth to be in core and mature areas. The successful revitalization of older mature neighbourhoods into affordable regions for an ever-increasing population requires the cooperation of several stakeholders. From the City's perspective, there are many advantages associated with infill (decreased infrastructure burden, transportation requirements, environmental degradation, etc.). However, from a builder and consumer perspective, there are many challenges including an increased risk for builders, limited financing options, land supply issues, higher land costs, higher input costs when building, and the traditional preferences for Edmontonians to choose single-detached, street-oriented housing in the suburbs instead of multi-residential in the city's core and mature areas.

In terms of the housing mix for infill compared to the housing mix for the city of Edmonton in 2017, figure 11 shows that single-detached homes represent more than 50% of existing city dwellings, while only 30% of infill development is single-detached. On the other end of the spectrum, apartment condos represent 33% of the existing city dwellings, while 42% of infill development is apartment condos. This shows that the City's infill program is slowly "shifting the needle" toward higher density in the core when compared to the citywide housing stock, however, the higher financial costs and longer timeframe associated with infill still remains a challenge, along with the consumer preference for single-detached homes.



figure 11:
EDMONTON RESIDENTIAL DWELLING COMPOSITION (%) BY STRUCTURE TYPE VS. 2017 INFILL CONSTRUCTION COMPOSITION



Source: Intelligence House

figure 12:
TOTAL EDMONTON APARTMENT CONDO SALES

	2015	2016
Number of new dwellings	69	75
Total Sales	1,078	791
Average monthly sales per project	1.3	0.88

Source: Intelligence House

For infill apartment condos, concerns over the lack of strong demand (driven by lower consumer preference and higher prices compared to suburban apartment condos) result in slower sales activity and an increase in unabsorbed new units.

As shown in figure 12, Edmonton apartment condo sales per month per project averaged 1.3 suites in 2015 and 0.88 in 2016. The low number of sales reveals the risk associated with uncertain demand, which limits the amount of new supply generated by the private sector.

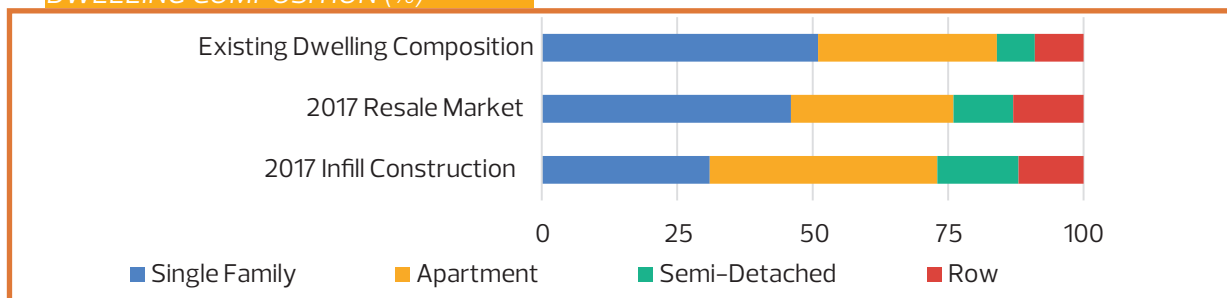
According to figure 13, in 2017, low-density single-detached homes represented more than 50% of the total dwelling inventory (housing stock), 46% of the resale market, but only about 30% of the new infill construction in Edmonton. Alternatively, apartment condos represent the largest share of new construction in mature infill areas at 42%, but only 30% of the resale market.

This shows a potential imbalance in the mix of dwellings brought to the market by developers of infill construction – that is ultimately reflected in the available supply.

For additional context, consider the following. The inventory of empty lots for single-detached homes is roughly 52% in developing areas, roughly 46% of the supply in the resale market, but only 26% of the activity in the infill market. Furthermore, developing areas allocate a higher percentage of new lots to semi-detached dwellings like duplexes and townhomes (roughly 37% of new lots), as compared to 32% of the existing supply in the infill market for these home types.

Intelligence House data showed that developing neighbourhoods accounted for 64% of the total apartment condo sales between 2015 and 2016 (figure 14). As shown in figure 16, the average sale price for a new apartment condo in a developing area was \$262,804 in 2016. This is 13% less expensive than the average citywide new apartment condo, and almost 60% lower than apartment condos in downtown.

figure 13:
DWELLING COMPOSITION (%)



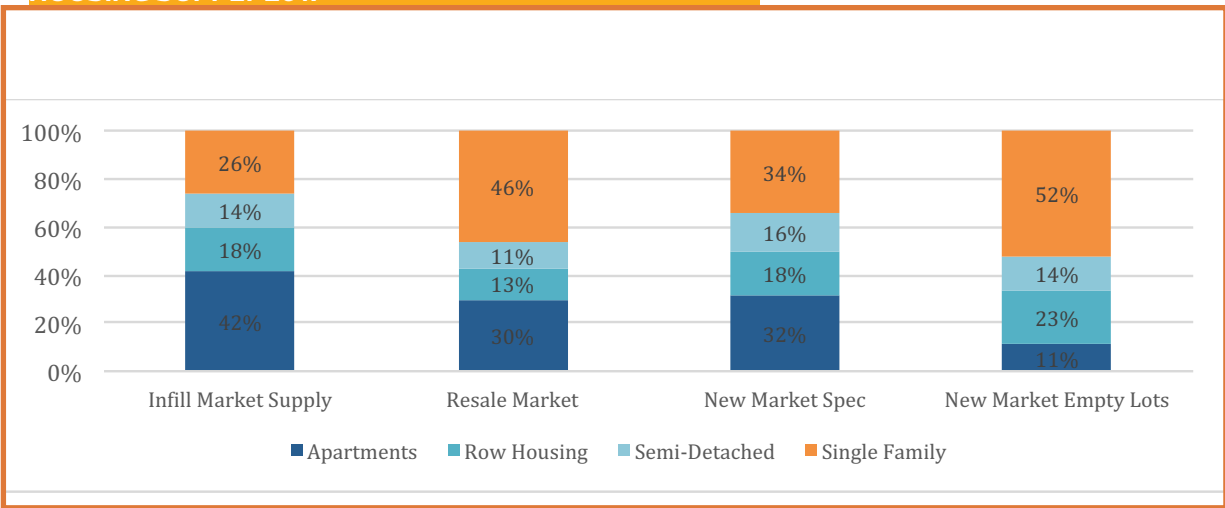
Source: Intelligence House

figure 14:
TOTAL APARTMENT CONDO SALES

City Areas	Sales		Available 2017	% Sales 2015-2016
	2015	2016		
Developing Areas	639	554	1051	64%
Established Areas Infill	82	13	99	5%
Mature Areas Infill	41	39	171	4%
Core Area Infill	316	185	582	27%
TOTAL	1078	791	1903	100%

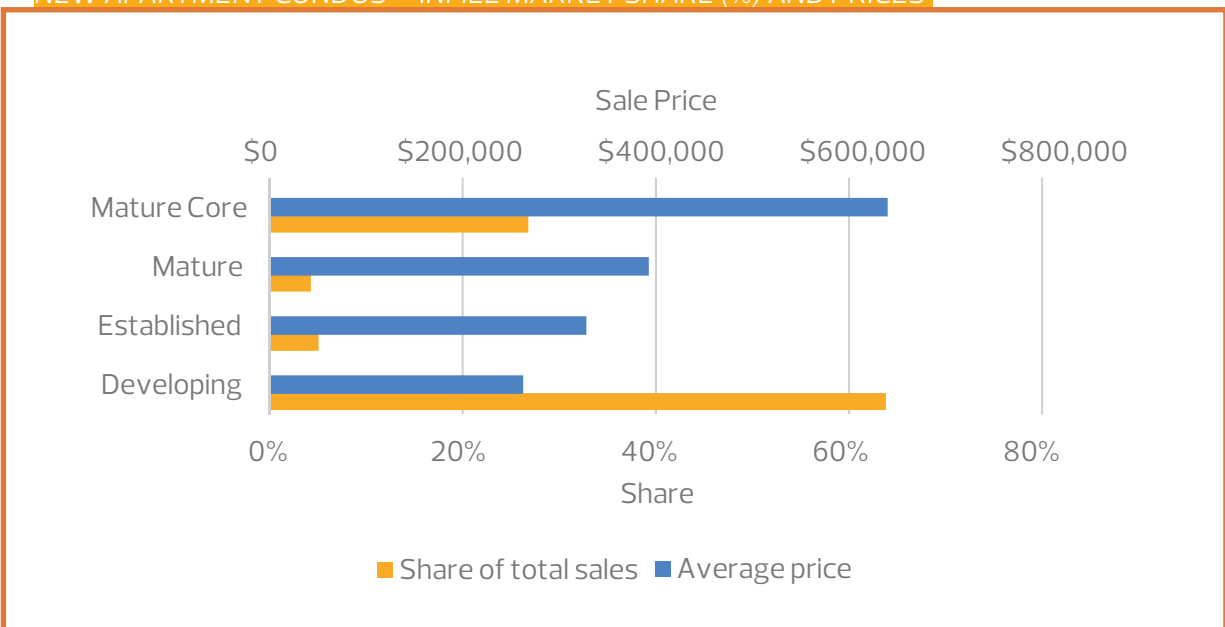
Source: Intelligence House

figure 15:
HOUSING SUPPLY 2017



Source: Intelligence House

figure 16:
NEW APARTMENT CONDOS - INFILL MARKET SHARE (%) AND PRICES



Source: Intelligence House

When comparing low-rise versus high-rise apartment condos, 93% of apartment condo sales in developing areas were low-rise, while only 35% of apartment condo sales in mature areas were low-rise. This same trend (consumers gravitating toward low-rise instead of high-rise) is evident from looking at the current citywide Years of Supply for low-rise apartments (1.67 YOS) and high-rise apartments (3.01 YOS) – meaning that low-rise is absorbed more quickly citywide.

Overall, this exposes two challenges for infill development: the mismatch between supply and demand preferences, and the challenge of infill being affordable for Edmontonians. Higher input costs for infill single-detached homes prevents most families from being able to afford them, while infill apartment condos face a limited market size (demand), and are also more

expensive than the same product in a developing area.

Note: In order to help further understand the challenges faced by consumers and builders who would like to build an infill home, Intelligence House has provided detailed scenarios for each (consumer and builder) in the Appendix.

As mentioned earlier, a higher upfront cost (particularly for land) is also an important factor to consider, as infill land is more expensive than land in developing areas (except for townhomes). The payment terms and carrying costs for infill development are also much different (and higher) compared to developing areas. Figure 17 shows a summary of land costs for developing areas and infill areas in Edmonton over the last five years.

figure 17:

LAND COSTS (PER DOOR) OF DEVELOPING AREAS VS. INFILL AREAS

Developing Areas				Mature and Established Areas (Infill)			
Single-detached	Single-detached narrow	Duplex	Townhouse	Single-detached	Single-detached narrow	Duplex	Townhouse
\$162,000	\$121,000	\$120,000	\$108,000	\$281,861	\$178,595	\$132,862	\$70,313

Source: Intelligence House

Figure 18 shows infill activity in recent years broken down by dwelling type. On average, duplexes and townhomes provide higher profit margins for builders (measured by Sold Price/Lot & Construction Costs), compared to single-detached homes. These two types of infill dwellings (duplexes and townhomes) also have sale prices that are much more in line with existing resale options for duplexes and townhomes across all neighbourhoods by household income bracket.

As shown in figure 19, it is not surprising that more prestigious neighbourhoods in Edmonton have higher land costs and, therefore, will have more expensive real estate compared to average neighbourhoods. Average neighbourhoods are more price-sensitive and infill

construction is traditionally the highest priced dwellings in these locations. This scenario adds risk to the developer, as the property could be for sale for a long period. Figure 19 also shows that in a neighbourhood with average household incomes above \$150,000, we see that a single-detached “skinny” home is only 42% more expensive, on average, than resale, while 106% more expensive in a neighbourhood with average household incomes between \$30k-\$60k. Duplexes, on the other hand, remain fairly consistent across all neighbourhoods.

figure 18:
EDMONTON INFILL ACTIVITY COST STRUCTURE BY DWELLING TYPE
(AVERAGE BY DWELLING TYPE)

	New Dwelling			Old Dwelling		
	Sold Price/Lot & Construction Cost	Sold Price	SQFT	Construction Cost	Year Built	Lot Price
Single-Detached	19%	\$835,617	2192	\$409,359	1931	\$281,861
Single-Detached Skinny	32%	\$682,084	1846	\$345,126	1947	\$178,595
Duplexes	50%	\$439,700	1512	\$164,845	1947	\$132,862
Townhomes	56%	\$310,950	1413	\$118,292	1939	\$70,313
TOTAL	32%	\$673,339	1905	\$313,268	1938	\$215,296

Source: Intelligence House

However, the best opportunity for infill development may be townhomes in neighbourhoods with average household incomes between \$30k-\$60k, as the average infill townhome price is only 26% more than what is found in the resale market.

When analyzing established, mature, mature core areas of the city (figure 19a), average sale prices for new infill duplexes and townhomes are 28% and 65% higher than their resale competitors, respectively. While for single-detached and apartments, the difference jumps to 88% and 116% respectively. Duplexes are the closest categories when comparing infill to where the

demand is (only 28% on average more expensive for a duplex in a mature area compared to resale). Final pricing of a home is just one factor that plays into the overall equation of affordability. Government mortgage regulations and policies, and of course interest rates, also play very important roles in determining a household's power of purchase.

figure 19:
2012-2017 INFILL SALES BY DWELLING TYPE AND NEIGHBOURHOOD
HOUSEHOLD INCOME

	Single Detached		Narrow Lot			
	Infill	Infill/Resale	Infill	Infill/Resale	Resale	
Neighbourhoods with household income between \$30-60k						
Average	549,510	81%	624,829	106%	303,814	
Mean	512,000	77%	628,000	117%	289,000	
Neighbourhoods with household income between \$60-100k						
Average	727,640	108%	613,133	75%	350,413	
Mean	736,000	116%	642,500	89%	340,000	
Neighbourhoods with household income between \$100-150k						
Average	896,024	112%	754,318	79%	422,357	
Mean	763,250	93%	754,950	91%	395,000	
Neighbourhoods with household income of \$150k+						
Average	1,223,370	95%	891,750	42%	625,805	
Mean	1,144,000	108%	851,000	55%	550,000	
	Duplex			Town House		
	Infill	Infill/Resale	Resale	Infill	Infill/Resale	Resale
Neighbourhoods with household income between \$30-60k						
Average	399,366	33%	301,140	306,950	26%	243,832
Mean	385,000	37%	280,500	306,950	31%	234,500
Neighbourhoods with household income between \$60-100k						
Average	452,052	58%	286,052	331,633	60%	207,837
Mean	459,000	69%	272,000	365,000	81%	202,000
Neighbourhoods with household income between \$100-150k						
Average	407,133	28%	317,383			257,974
Mean	397,400	30%	306,000			250,000
Neighbourhoods with household income of \$150k+						
Average	600,000	36%	441,645			348,945
Mean	600,000	43%	420,000			318,500

Note to the reader: the above chart shows the relationship between the price of a new infill home (single-detached, duplex, or townhome) compared to the price in the resale market, broken down by neighbourhoods with particular household incomes.

figure 19A:

2012-2017 AVERAGE SALE PRICE (\$1000) BY DWELLING TYPE AND AREA

	Single-Detached			Duplexes			Townhomes			Apartments		
	Resale	Infill	Delta%	Resale	Infill	Delta%	Resale	Infill	Delta%	Resale	Infill	Delta%
Established	\$422	\$576	36%	\$307	\$332	8%	\$226	\$347	54%	\$206	\$261	27%
Mature Area	\$387	\$768	98%	\$365	\$434	19%	\$223	\$381	71%	\$200	\$445	123%
Mature Area- Core	\$457	\$834	82%	\$514	\$568	11%	\$389	\$479	23%	\$283	\$660	133%
TOTAL	\$404	\$761	88%	\$338	\$431	28%	\$231	\$382	65%	\$239	\$516	116%

1.4 IMPACT OF PUBLIC POLICY – CMHC AND BANK OF CANADA

Canada Mortgage and Housing Corporation (CMHC) is the extension of the Government of Canada that serves as the country's housing authority. CMHC contributes to financial stability by providing mortgage default insurance to reduce risks to lenders. CMHC services a wide range of housing forms throughout the country with a particular focus on portions of the market that are not adequately served by private insurers. The Government of Canada backs all CMHC mortgage insurance obligations.

Mortgage loans are determined relative to the value of the property to be purchased, household income and expenses, current debt levels, financial history, the interest rate given by the lender, the length of time to pay off the mortgage, and the down payment. Mortgages can be classified into "high-ratio" (less than 20% down payment) or "low-ratio" (at least 20% down payment). In Canada, homebuyers are required to purchase loan insurance for high-ratio mortgages. This enables qualified borrowers with lower down payments to access lower interest rates comparable to those received by buyers with higher down payments. Low-ratio mortgages do not have to be insured, but coverage can be purchased. The two types of policies are transactional insurance (typically paid by the borrower) and portfolio insurance (paid by the lender). The majority of low-ratio mortgage insurance is portfolio insurance. For more information pertaining to portfolio insurance, please consult the Appendix.

In October 2016, Finance Minister Bill Morneau announced new regulations to ensure Canadian borrowers only take on mortgages they can afford. The new policies are intended to keep the housing system robust, protect the financial security of borrowers, and improve tax fairness for homeowners. Prior to October 2016, high- or low-ratio mortgages could qualify for a larger loan by opting for a 5-year fixed rate mortgage

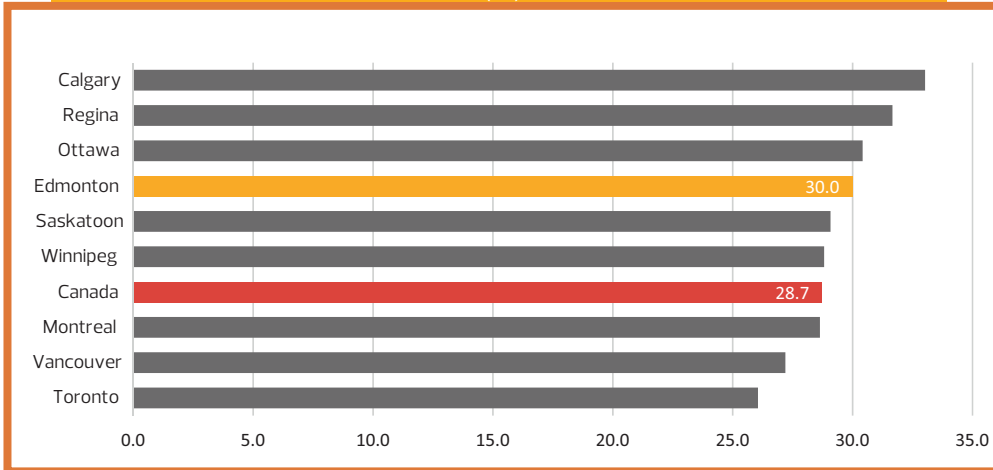
with a low interest rate in the affordability calculation. The qualification rules for a 4-year or less fixed-rate term or variable rate required a "stress test" using the much higher Bank of Canada (BoC) "benchmark rate" in the affordability calculation. As a lower rate equated to a higher loan amount, borrowers tended to gravitate to the 5-year fixed rate.

Now, however, to qualify for mortgage insurance, high-ratio homebuyers must undertake the "stress test" to determine if the borrower could afford to pay back a loan if interest rates increase. Borrowers are judged against the BoC 5-year standard rate (4.64%) as of July 30, 2017. The mortgage benchmark rate is usually significantly higher than what typical lenders are currently offering.

On July 12, 2017, the BoC raised its overnight interest rate to 0.75 per cent (up from 0.5 per cent). This is the first rate increase by the BoC in seven years as multiple indicators signal strong economic growth. Although the rate increase was modest, monetary policy is expected to continue tightening over the coming months. For context, following the 2007–2009 global recession, the BoC dropped the benchmark rate to decrease the costs of borrowing and incentivise the economy. Disappointing growth, compounded with the collapse in oil prices in 2014, kept interest rates at low levels, unwinding a near-decade long era of cheap-and-easy money. The recent decision to hike rates by the BoC was driven by the strong growth of the Canadian economy including the performance of the housing industry.

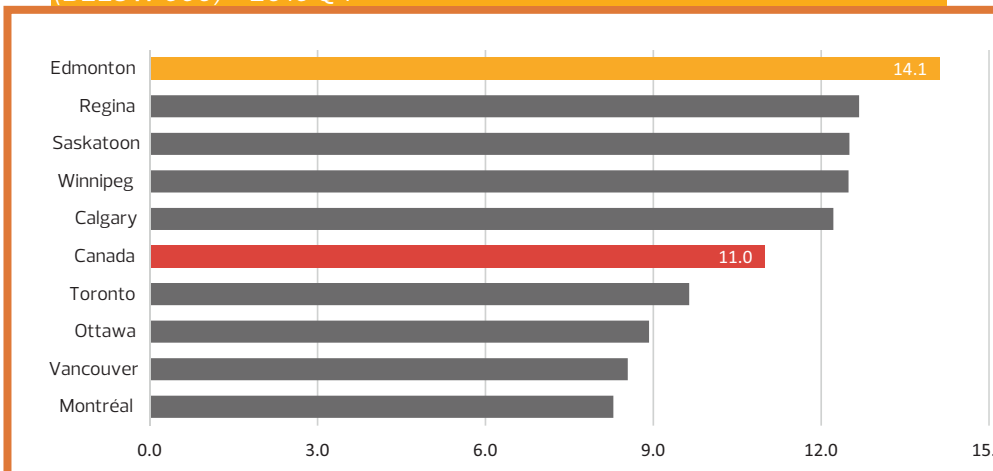
The recent changes planned and implemented by CMHC are driven purely by recent developments in Canada's housing sector, particularly the issue of affordability in Toronto and Vancouver. The government's concern is that the sharp rise in home prices observed over the last year or so in the nation's largest cities could increase the risk of defaults, as mortgage rates

figure 20:
CONSUMERS WITH A MORTGAGE (%) – 2016 Q4



Source: CMHC Rental Market Survey

figure 21:
SHARE OF NEW MORTGAGE HOLDERS WITH POOR CREDIT SCORE
(BELOW 660) – 2016 Q4



Source: CMHC Rental Market Survey

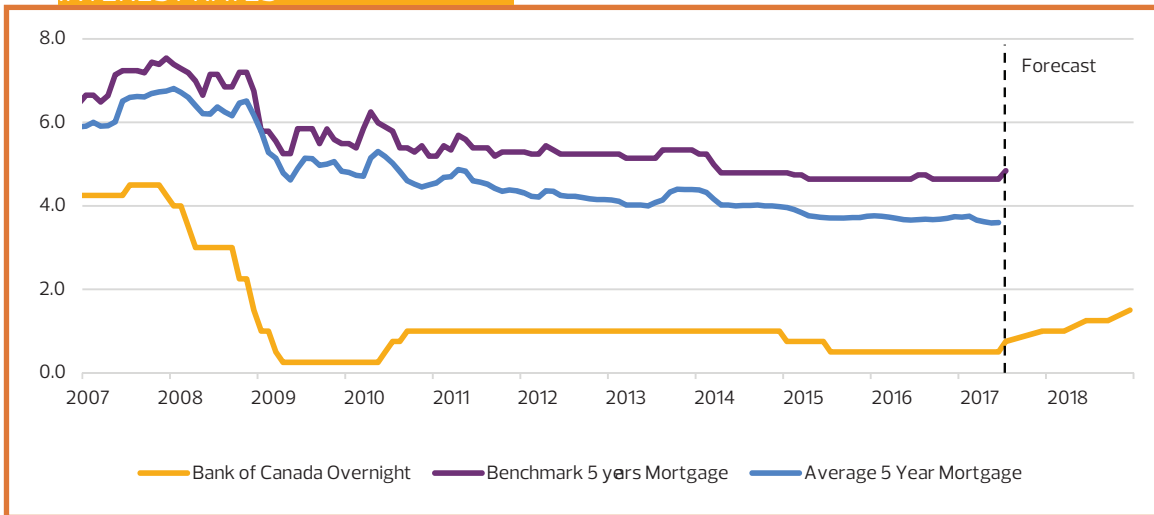
increase. However, the new rules will likely affect buyers with no equity, mainly first time buyers. Additionally, the regulations will impact affordability in markets outside of Toronto and Vancouver, such as Alberta, where the slumping economy is already hurting home sales and prices.

As shown below, Intelligence House estimates that the implementation of the "stress test" resulted in an

18% drop in housing affordability (with every additional 25 basis point increase negatively impacting another 1.8%). A household's power of purchase would only be compensated by a significant increase in income.

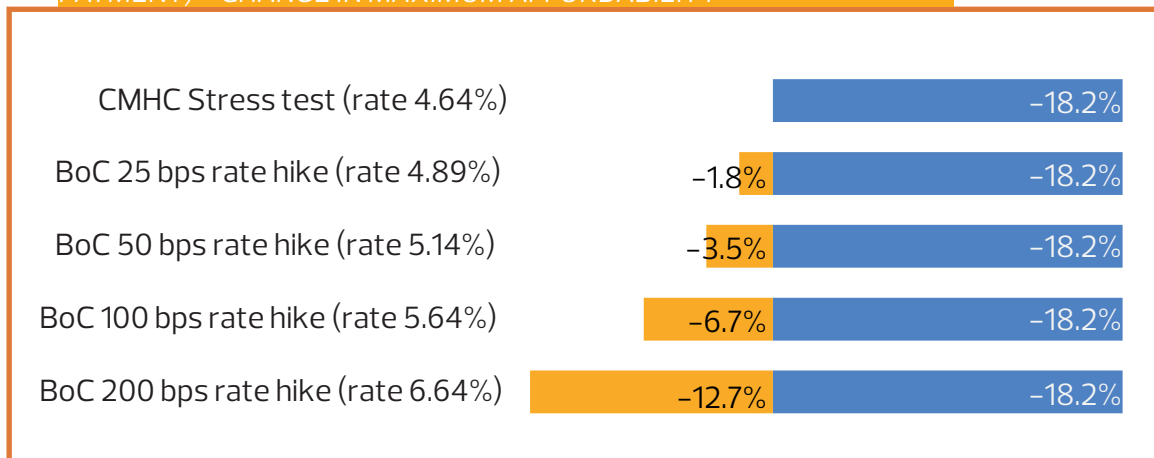
The goal of the new policies is to ensure that households are able to pay their debts in a higher interest rate environment or if they are faced with a reduction in income. The stress test reduces the

figure 22:
INTEREST RATES



Source: Statistics Canada and BMO

figure 23a:
IMPACT OF INCREASED INTEREST RATES (ASSUMING A 10% DOWN PAYMENT) – CHANGE IN MAXIMUM AFFORDABILITY



maximum loan value that borrowers in Edmonton can get by approximately 18.2%, affecting housing affordability.

The rate increase will impact household finances, as borrowing will become more expensive. As mentioned, the increase of 25 basis points to the BoC's benchmark rate led to an additional reduction of 1.8% in the maximum housing value that can be afforded. This compounds to a 20% decrease in housing purchase

power. The rate increase will mean a higher financial cost for Edmontonians along with a reduction in housing affordability, particularly for first time buyers and those with lower down payments.

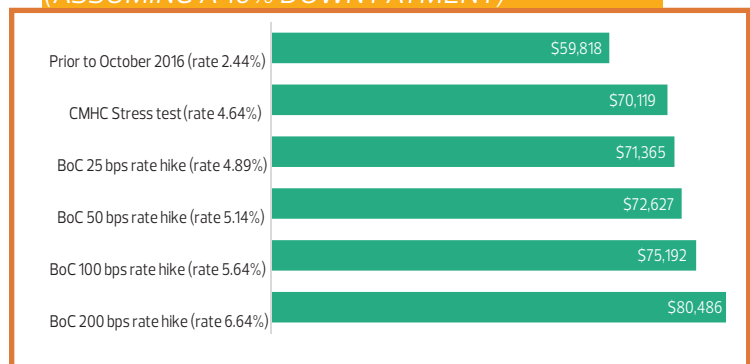
The new regulations will cause many households to re-evaluate their housing prospects. Some will have to lower their expectations (shifting from the dream of owning a single-detached home to a duplex, townhome or condo) or searching for a home outside



of their desired area. Other families will put house hunting on hold until they have saved more for a down payment or decide to do renovations on their existing property instead. Many will be forced out of homeownership and, instead, remain part of the rental market, which represents 29% of the city's housing tenure. Low interest rates during the past few years pushed ownership costs to historical lows – owning a home was only 15% more expensive than renting in 2016, down from over 30% in 2006. However, as interest rates begin to rise and affordability decreases, renting will remain the only viable option for many households, including those who cannot purchase a home and those wishing to have a larger down payment.

The stress test reduces the maximum loan value that borrowers in Edmonton can get by approximately 18.2%, affecting housing affordability.

figure 23b:
**REQUIRED INCOME FOR A \$350,000 HOME
 (ASSUMING A 10% DOWN PAYMENT)**



Source: Intelligence House

1.5 AFFORDABILITY

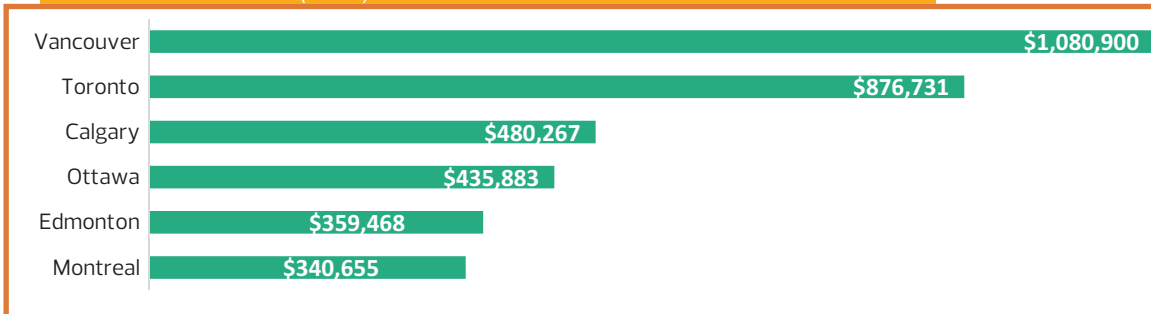
As previously discussed, affordability in Edmonton is decreasing as stricter mortgage regulations have been implemented and interest rates are slowly rising. However, Edmontonians still, on average, earn higher incomes relative to the rest of Canada, and have one of the largest shares of homeownership across major cities, according to Statistics Canada. Furthermore, with 15.8%, Albertans have the highest household savings rate in the country (much higher than the national average of 5%).

Over the past few years, Canadians have embraced credit at unprecedented levels as the BoC kept interest rates at historically low levels in an effort to support the economy. Interest rates are, however, slowly climbing as central banks across the globe roll back on stimulus programs, which will translate into more expensive and limited borrowing.

Edmonton's housing affordability has experienced a decline for low- and middle-income households, particularly for immigrants and first time buyers. This is due to a long period of housing price inflation. According to the CMHC, the average price for a new home in Edmonton increased roughly 75% to \$518,101 in 2016, compared to \$296,277 in 2006. However, in the resale market, Edmonton's average price is the second lowest amongst the six major cities.

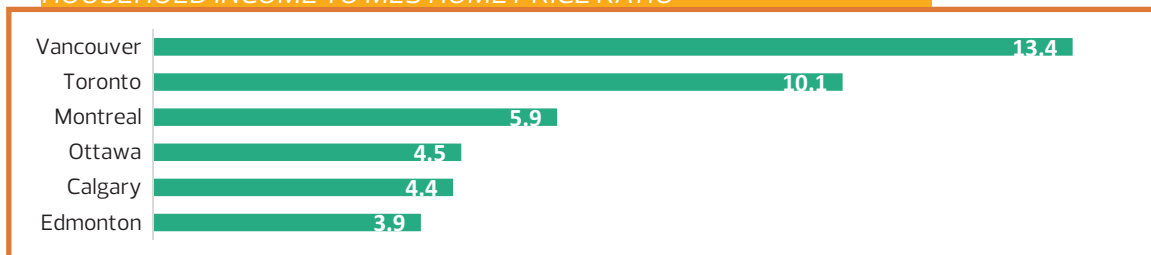
Another way to look at affordability and purchase power is to calculate a ratio that divides the average home price by the average household income. The resulting ratio puts Edmonton in the best possible position amongst the six major Canadian cities (figure 25). Combine this with Edmonton's high household savings rate, and it would take an Edmonton family an average of 29.5 months to save for their down payment.

figure 24:
2017 YEAR TO DATE (YTD) AVERAGE MLS RESALE HOME PRICE



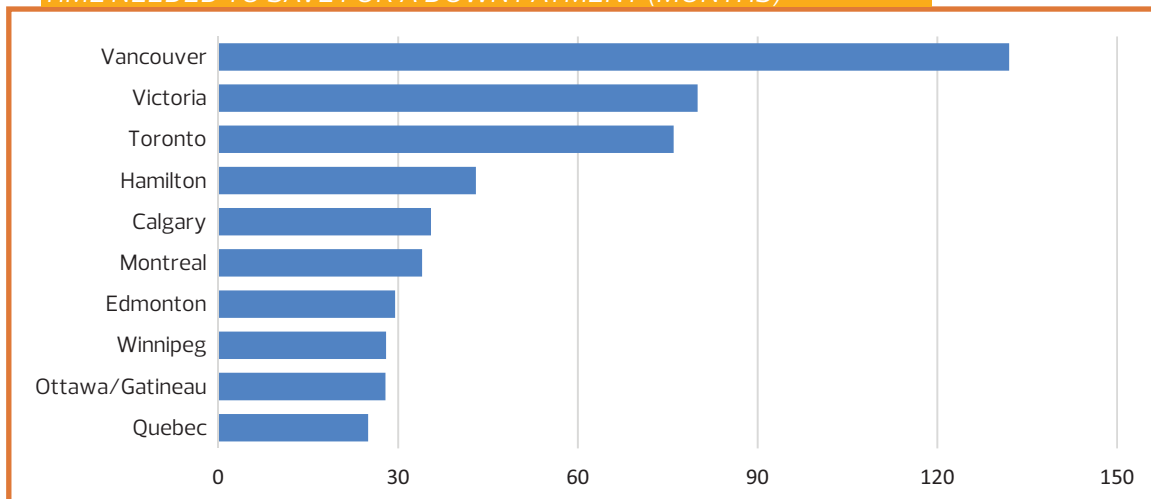
Source: Intelligence House

figure 25:
HOUSEHOLD INCOME TO MLS HOME PRICE RATIO



Source: Intelligence House

figure 26:
TIME NEEDED TO SAVE FOR A DOWN PAYMENT (MONTHS)



Source: Intelligence House

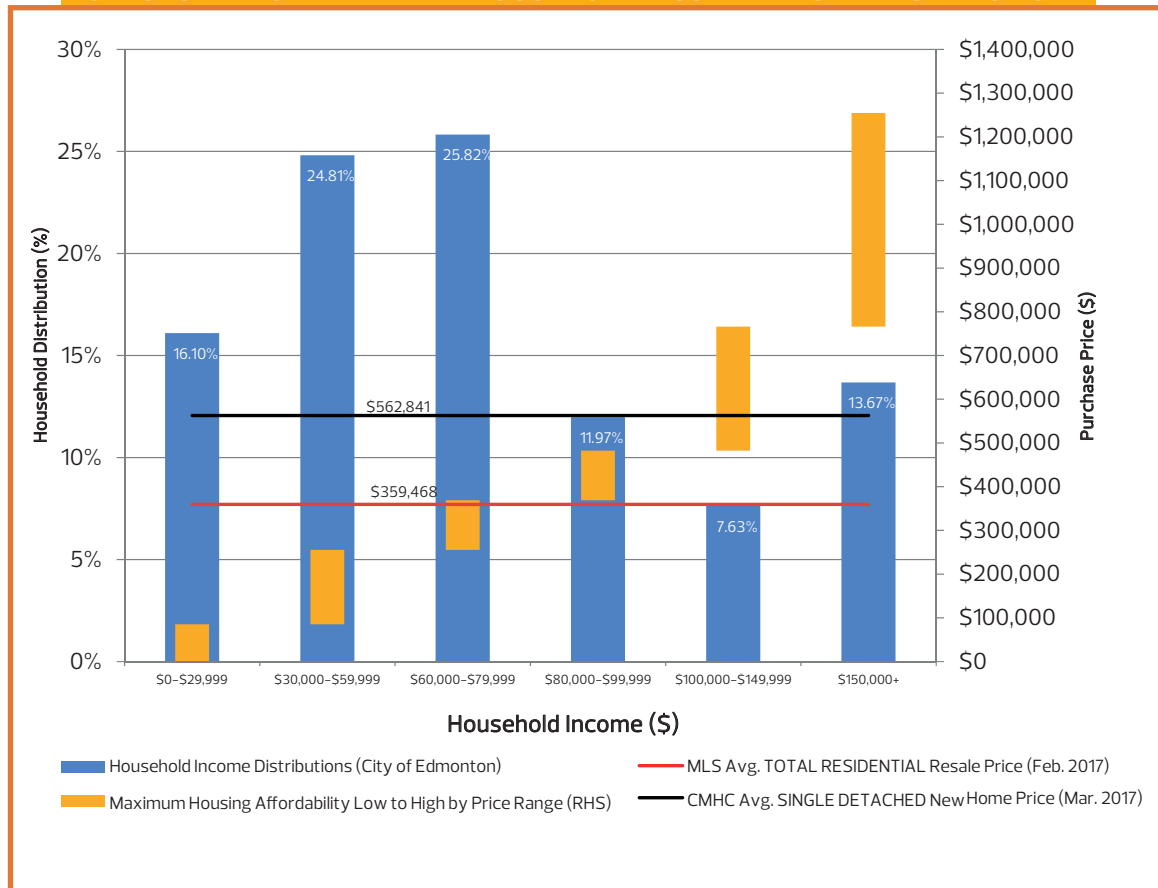
POWER OF PURCHASE (MORTGAGE AFFORDABILITY) AND PRICES

Figure 27 shows housing affordability by income distribution, assuming a 10% down payment, based on CMHC loan amounts. Results show that roughly 59% of Edmonton households could purchase a home for \$359,468 – the average home price in Edmonton. Further details about how to interpret figure 27 are included below the figure. According to figure 27, household income and maximum affordability are as follows:

- **Income up to \$29,999:** \$83,000 maximum affordability
- **Income up to \$59,999:** \$249,000 maximum affordability
- **Income up to \$99,999:** \$470,000 maximum affordability
- **Income up to \$149,999:** \$747,000 maximum affordability
- **Income of \$150,000+:** \$747,000+ maximum affordability

figure 27:

MORTGAGE AFFORDABILITY BY HOUSEHOLD INCOME BRACKET DISTRIBUTION



Note to the reader: In the above chart, household income brackets are along the x-axis, while the y-axis (left side) is the % of households within that particular income bracket (e.g. 25.82% of households earn between \$60,000-\$79,999). Maximum housing affordability is represented by the orange boxes. In the paragraph above, we indicated "roughly 59% of Edmonton households could purchase a home for \$359,468." This 59% calculation is obtained by adding together the income distributions that have an orange box (affordability) that touches, or is above, the red horizontal purchase price line of \$359,468 (i.e. 25.82 + 11.97 + 7.63 + 13.67 = 59.09%).
Source: Intelligence House

When analyzing current market availability by price and dwelling type, the housing market in Edmonton presents itself as relatively dynamic and well balanced. Figure 28 shows the distribution of the population by income and the percentage of inventory currently available by dwelling type that they could afford. From an ownership perspective, there is one group that can be considered currently out of the ownership market, and rental would be their only option. This group contains 16.1% of Edmontonians who make up to \$30,000 per year. They can only afford 0.7% of the available inventory in the market, and only have one dwelling option (apartments, with limited choice of 2.2% of its available inventory). For incomes of \$30,000 per year and above, Edmonton families have a variety of options in the rental or owner market to satisfy their housing needs.

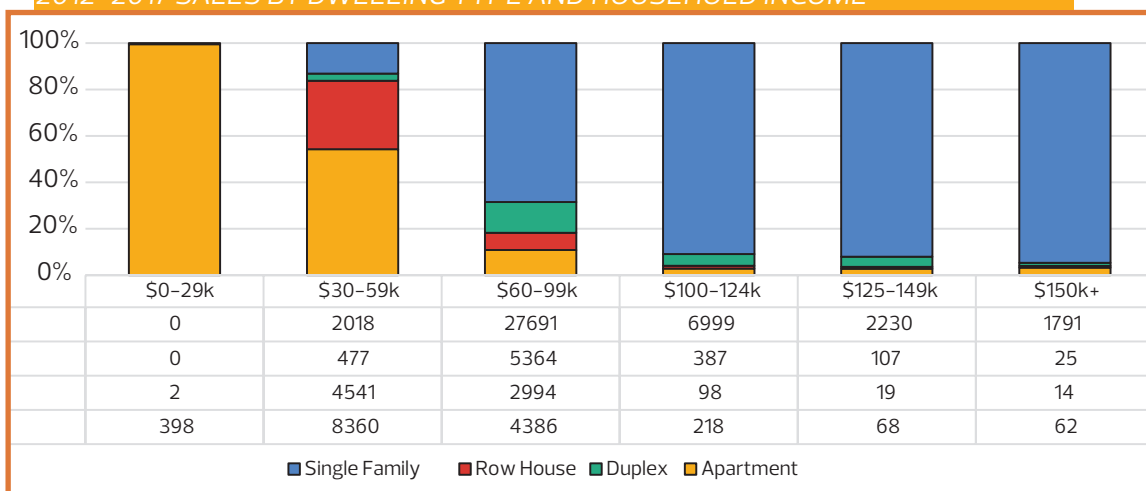
Figure 29 below shows an estimate of the number of sales in the last five years by dwelling type and household income bracket. As expected, virtually 100% of the families earning up to \$29,999 per year would only be able to afford an apartment. On the other hand, incomes of \$60,000+ tend to gravitate towards single-detached dwellings.

figure 28:
HOUSING AVAILABILITY BY DWELLING TYPE AND HOUSEHOLD INCOME

Income Group	Population	Apartment	Row House	Duplex	Single-Detached	All Housing Types
\$0-30k	16.1%	2.2%	0.0%	0.0%	0.0%	0.7%
\$30-60k	24.8%	65.6%	54.1%	6.8%	2.7%	29.0%
\$60-80k	25.8%	87.6%	91.2%	65.7%	21.8%	55.7%
\$80-100k	12.0%	95.0%	97.2%	86.5%	55.6%	76.3%
\$100-150k	7.6%	98.5%	99.5%	98.9%	87.2%	93.4%
\$150k+	13.7%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Intelligence House

figure 29:
2012-2017 SALES BY DWELLING TYPE AND HOUSEHOLD INCOME



Source: Intelligence House

1.6 GAP ANALYSIS

SUPPLY AND DEMAND GAP IN DWELLING TYPE AND PRICE POINTS

RESIDENTIAL

When evaluating potential market gaps by neighbourhood, the methodology we employed involved using the number of housing transactions (actual sales) in a neighbourhood compared to how this neighbourhood was expected to perform (expected sales) given the potential purchase power of the households that live in that neighbourhood.

For example, if 20% of households in a neighbourhood earn \$60,000 to \$99,999 per year, we would expect the same percentage (20%) of housing sales would happen in a price range that these households could afford. Therefore, if this neighbourhood had a total of 500 sales per year, we would expect that 100 sales (20%) would happen in a price range of \$249,000 to \$470,000 (the affordability bracket of households earning \$60,000 to \$99,999 per year). If, however, the actual sales in this neighbourhood were 110 (instead of the expected 100), a positive number will be generated (as shown in blue boxes in figure 30 and figure 31). A positive number of +10 (110-100), in this example, indicates demand. For the full version of figure 30, please see the Appendix.

This same methodology can be used by dwelling

type (instead of neighbourhood), as shown in figure 31. Again, a positive number shows that actual sales exceeded expected sales. For example, in figure 31, single-detached homes from \$249,000 to \$470,000 (affordability bracket of households earning \$60,000 to \$99,999) exceeded sales expectations by 17,174 over the last five years (largest demand in the city). However, single-detached prices up to \$470,000 are typically only seen in the new housing market in a developing area (or in the resale market in all areas).

As stated, positive numbers are highlighted in blue (indicates demand). These are areas where demand exceeded expectations. When analyzing the negative numbers (where demand was below expectations), there are two possible reasons for this: lack of demand or lack of supply. Our hypothesis indicates that negative numbers to the right of the blues show a lack of demand (a reflection of buying behaviour or consumer preference). Negative numbers to the left of the blues show a lack of supply (can indicate market gap potential or unrealistic expectations that cannot be built by a builder). For example, in figure 31, the largest untapped demand for single-detached homes shows a negative number (-8,087) for households

figure 30:
2012-2017 Supply and Demand Deficit by Neighbourhood and Household Income (Single-Detached, Neighbourhoods with Average Incomes from \$60,000 to \$99,999)

	\$0-\$29k	\$30-\$59k	\$60-\$99k	\$100-\$124k	\$125-\$149k	\$150k+
ALLENDALE	-34	-58	130	-11	-1	-26
ARGYLL	-9	-12	42	-4	-10	-7
ATHLONE	-28	-16	97	-21	-15	-17
AVONMORE	-28	-41	93	-6	-2	-16
ALBERTA AVENUE	-180	157	106	-42	-19	-23
BALWIN	-63	-11	96	-10	-7	-5
BEACON HEIGHTS	-46	22	65	-20	-11	-11

Source: Intelligence House

earning \$30,000 to \$59,999 (affordability bracket of \$249,000 or less). This is a negative number because it is unrealistic for a builder to build a single-detached home for \$249,000 or less. With this same affordability bracket in mind (\$249,000 or less), duplexes (-1,101) would be a more likely product choice for this income bracket, while townhomes (2,638) show even greater demand potential.

Please note, for a full set of average sold prices from 2012–2017 by neighbourhood, dwelling type, and year of construction, refer to charts A4–A8 in the Appendix. The Appendix also contains a collection of charts broken down by dwelling type, geography, city cluster, and dwelling price.

figure 31:
2012–2017 SUPPLY AND DEMAND DEFICIT BY DWELLING TYPE AND HOUSE-HOLD INCOME

	\$0-29K	\$30-59K	\$60-99K	\$100-124K	\$125-149K	\$150K
SF	- 6,555	- 8,087	17,174	2,123	- 876	- 3,778
Dplx	- 1,024	- 1,101	3,722	- 374	- 378	- 845
TH	- 1,232	2,638	1,014	- 820	- 566	- 1,034
Aptm	- 1,774	5,012	902	- 1,397	- 961	- 1,783

Source: Intelligence House

1.7 RENTAL MARKET

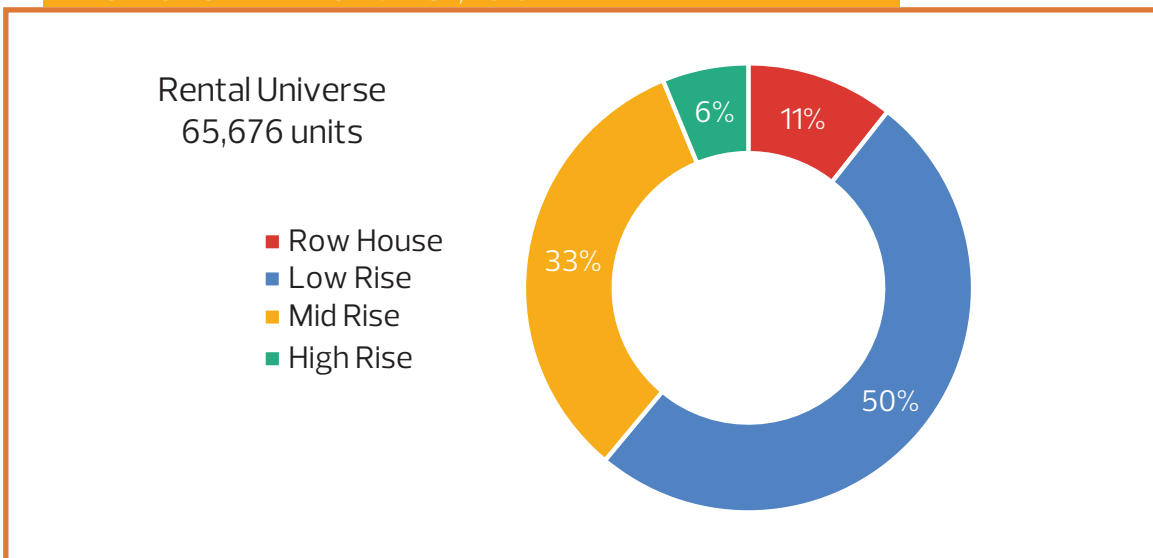
Higher unemployment and lower net migration compared to recent years, along with a recent spike in the construction of purpose-built rental buildings, have all contributed to lower rental rates.

Edmonton's rental market has grown strongly as over 11,000 purpose-built rental units have been added to the market over the past five years. The city's overall rental universe has expanded to 65,000 units, back to peak levels not seen since 2003. Apartment buildings comprise 89% of the city's rental inventory, with low-rise apartments accounting for 56%. Townhomes, which are street-level homes, represent only 11% of the total inventory. It is important to note that the existing stock of townhomes has dramatically diminished to almost half of 1990 levels as the inventory aged or was converted into condo housing.

According to Intelligence House data, the wave of new rental construction is not over. Between 2017 and 2020, roughly 3,738 more units are expected to be added to the rental market. Furthermore, secondary rental units (investor-owned) will also add competition to both new housing and purpose-built rental units.

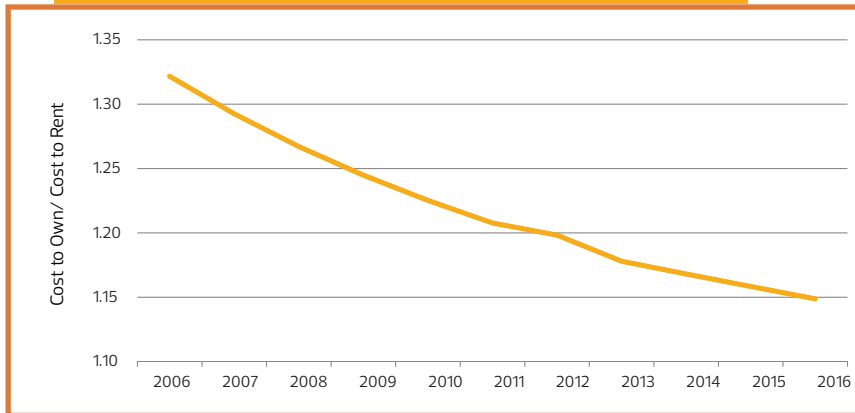
In terms of rental vacancy in Edmonton, it increased from 1.3% in 2013 to 6.9% in 2016. The large influx of supply in the rental market, coupled with lower demand from slower migration and a sluggish economy, has put upward pressure on vacancy.

figure 32:
EDMONTON'S RENTAL UNIVERSE, 2016



Source: CMHC Rental Market Survey

figure 33:
OWNERS' SHELTER COSTS RELATIVE TO RENTERS'



Source: Conference Board of Canada

Market conditions have forced landlords to lower their average rental rates (by 2% between 2015 and 2016) and add incentives to attract and retain tenants. Although demand is expected to pick up, vacancy will remain above 3%, which is considered a balanced market over the coming years. These factors will likely continue to push average rental rates down.

The rental market is an important component of the Edmonton housing system. Strong economic growth throughout the early 2010's led to an increased share of homeownership in Edmonton. However, 29% of Edmonton's population rents. This includes youth and most migrants who tend to be renters before purchasing a home.

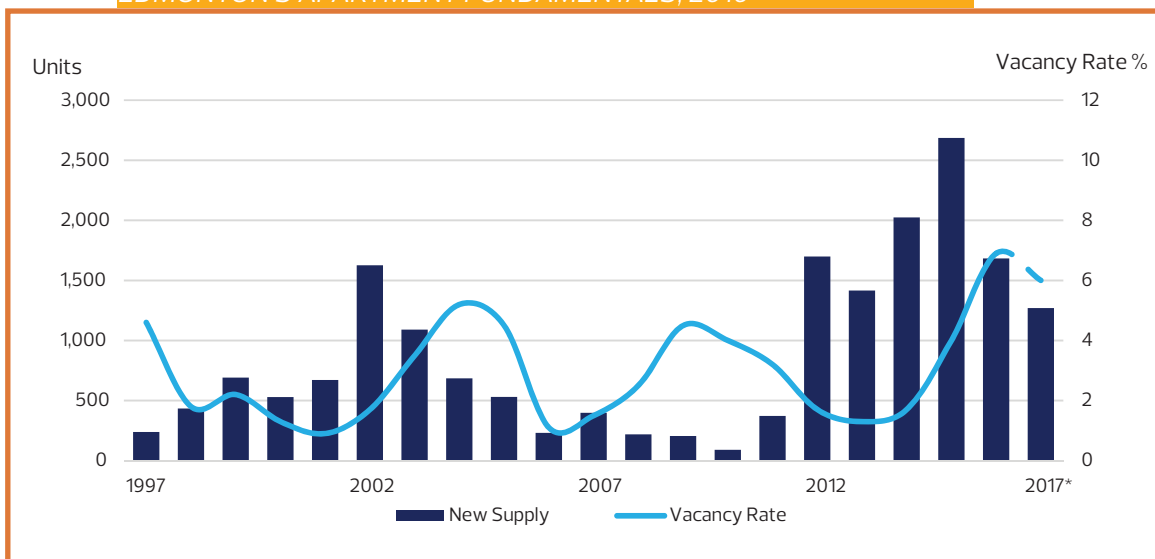
The stigma of homeownership as a measure of personal and financial success is historical, but is fading as renting offers flexibility and lower risk without the long-term financial commitments. A silver lining of the recent high levels of vacancy is an increase in affordability and more options for households in the rental market. This is welcome relief for some families following the blow caused by the CMHC stress test and by interest rate hikes. At the same time, increased housing demand by these families will likely help

balance the rental market, as more families seek quality rental products.

In terms of infill development, the rental market may be a viable option to increase housing density in the city's core and mature areas, particularly given the age of the existing rental inventory. According to CMHC, 85% of Edmonton's rental inventory was built before 2000, with almost 65% built between 1960 and 1979 (figure 36). As opposed to homeownership, access to rentals is much easier as one does not need bank approval. Additionally, an ample rental sector provides a cushion for population growth spikes driven by our boom-bust resource-based economy.

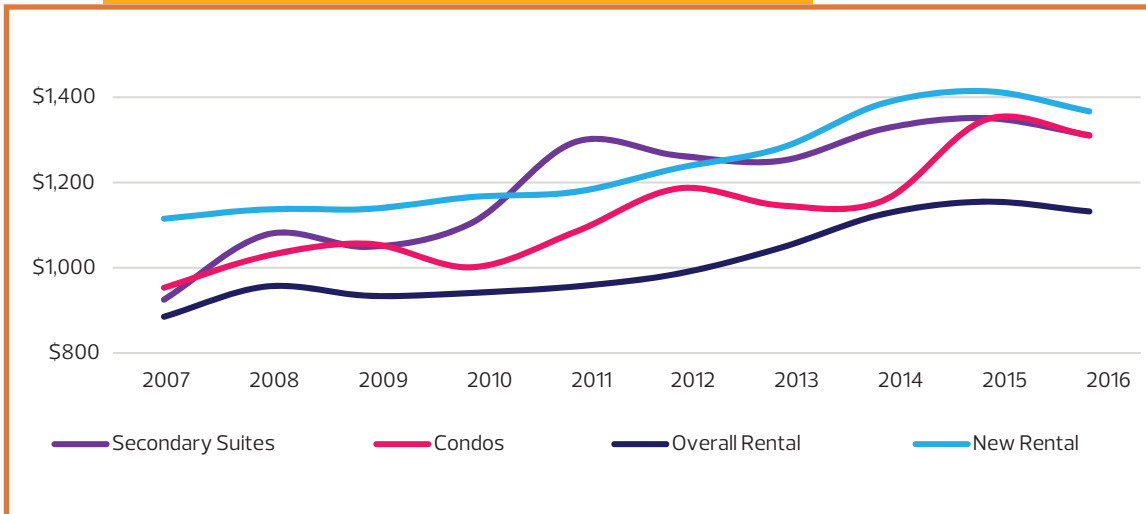
In the short term, it is possible to have an unbalanced market (peaking at 7% vacancy according to Intelligence House's moderate scenario), market dynamics typically prevail in the long run and developers adjust supply to match demand. A potential hypothesis of the most recent market dynamic and the much-needed renovation of the primary rental market, is a vacancy increase in B-grade and C-grade rental properties, as consumers move to more expensive and better quality new rental buildings.

figure 34:
EDMONTON'S APARTMENT FUNDAMENTALS, 2016



Source: CMHC Rental Market Survey

figure 35:
2007–2016 EDMONTON RENTAL RATES



Source:CMHC Rental Market Survey

figure 36:
RENTAL UNIVERSE BY YEAR OF CONSTRUCTION AND DWELLING TYPE

Year of Construction	Apartment	Row Home	TOTAL
Before 1960	5%	20%	7%
1960–1979	66%	47%	64%
1980–1999	13%	25%	15%
2000 or Later	16%	8%	15%

Source:CMHC Rental Market Survey

A potential consequence of this “flight for quality” is to force old inventory to decrease rental rates further or even convert to condos, supplying the market with lower price points. Public policies, such as land use designations or servicing, will impact the speed at which developers can increase supply. However, strategies that fail to recognize that households in Edmonton continue to demonstrate a strong preference for single-detached homes, rather than high-density, might disrupt the housing sector.

Government agencies can only create development conditions and the private industry will produce the supply driven by consumer demand.

1.8 RESIDENTIAL ANALYSIS FINDINGS

The following conclusions are based on findings from the residential analysis and the qualitative focus groups conducted by Banister (indented bullet points). Some conclusions are more general economic conclusions, while others are more specific.

Despite the continued challenges in Alberta's energy sector, the overall housing market in Edmonton is still relatively healthy and affordable for most middle-income families. The overall housing industry in Edmonton is fairly well balanced in terms of supply and demand, and is able to generally accommodate ups and downs in the economy due to its stable and diversified job sectors such as government, health care, and education.

Qualitative data, from the focus groups conducted by Banister, backs up the notion that housing in Edmonton is generally affordable for most families, as the majority of "homeowners felt that there were affordable options during their (home) search".

Natural periods of oversupply and undersupply will always happen in housing, as supply cannot be adjusted as rapidly as demand can dictate. An imbalance in supply and demand will always affect consumer affordability.

External affordability factors that the housing industry cannot dictate (economic conditions, government policies, interest rates, incomes, mortgage rules, etc.) will always exist and fluctuate – either increasing or decreasing affordability. The majority of builders in Edmonton can accommodate a certain degree of change, and are capable of building a variety of home types for all income brackets. The rental market is also playing an important factor in the affordability equation, as many first time homebuyers are waiting longer before purchasing their first home.

During the focus groups, a couple of renters even indicated a preference for continuing to rent long-term (20 years or more) in order to have the flexibility to travel and move around.

Consumer demand and preferences continue to show that most families desire a single-detached home; however, this home type is difficult to find in an infill neighbourhood at an affordable price. Generally, infill single-detached homes are too costly for most average income families, given the higher upfront costs (land), limited financing options, permits, and overall carrying costs.

Qualitative findings indicated that approximately half of the infill homeowners searched for a single-detached home, while approximately three-quarters of infill homeowners searched for a street-oriented home (single-detached, duplex, or townhome). Less than one-quarter of infill homeowners searched for an apartment condo.

For renters who would consider buying a home in the near future, they indicated they would be most likely to look for a single-detached home (just under half of the respondents), followed by a semi-detached home (a few respondents).

Opportunities for infill construction do exist if the proper product is matched with a household's purchase power and desired product. As presented in the residential portion of this study, there is a potential opportunity for infill townhomes and duplexes given their reasonably close price points compared to the resale market, as well as their relatively high consumer preference (but not as high as single-detached homes), while still achieving a certain degree of density.



Opportunities for infill construction do exist if the proper product is matched with a household's purchase power and desired product.

As a secondary infill option, instead of townhomes and duplexes, low-rise and mid-rise apartments could present a strong high-density opportunity; however, these products are the least favourite housing types, as shown in numerous charts throughout this section, as well as in qualitative findings from the focus groups.

City by-laws and processes must be evaluated in order to make infill construction more efficient, and less expensive in terms of carrying costs. The trifecta of "affordability-infill-density" is not necessarily as linear as policy makers would hope. Facilitating supply (through more flexible regulations, reduced costs and risks, and less "red tape") is the best solution for finding equilibrium in the market.

Qualitative findings indicated that one of the significant barriers to infill was the high cost or lack of affordability.

As much as possible, the City should evaluate the potential of allocating infill public land for street-oriented dwellings, and more specifically, for single-detached homes at prices comparable to developing areas.

The City should facilitate easier lot assembly and reduce the current barriers that are preventing major land developers from participating in infill, as the majority of current infill projects are "one-offs" by small-scale builders, and are often on a single lot. By relaxing current by-laws and regulations (and allowing for larger-scale projects), it would encourage major developers to participate in infill, resulting in more competition, better quality, and lower purchase prices for consumers. Big developers are typically not interested in small-scale projects, as they gain efficiency and higher profit margins from larger, scalable projects.



2. COMMERCIAL ANALYSIS

2.1 COMMERCIAL REAL ESTATE OVERVIEW

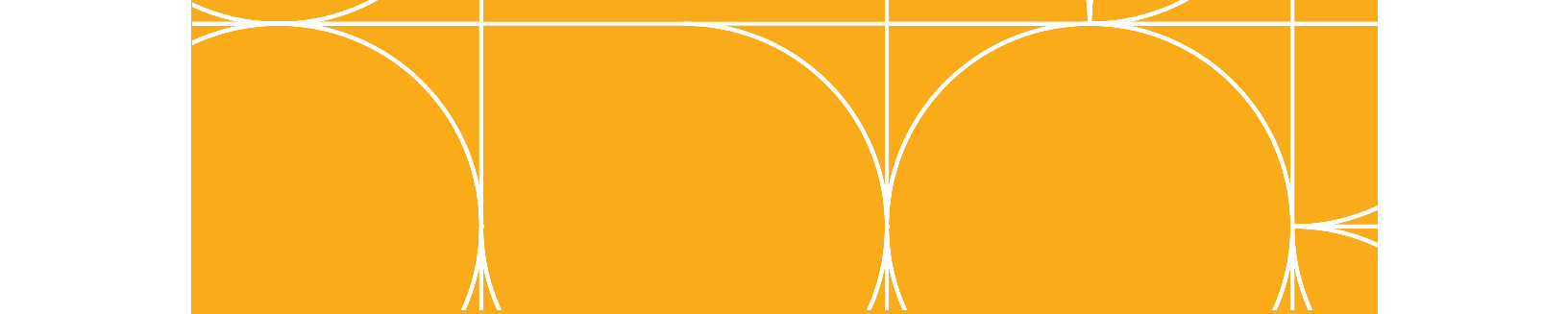
Findings from Intelligence House suggest the best opportunity for infill development may be townhomes and duplexes, as they are the most affordable infill products compared to their respective prices in the resale market, and have reasonable high consumer preference that is indicated in qualitative findings (although single-detached homes still have the highest consumer preference). As a secondary option, instead of townhomes and duplexes, apartments will increase density at a faster rate, however, there are concerns over the lack of strong consumer demand, and lack of affordability regarding this type of infill product when compared to apartments in the suburbs. We agree with their findings that townhomes and duplexes may be the best opportunity for infill development. In the case where townhome and duplex infill developments are not sufficient to achieve density goals, it may be advisable to construct higher-density low-rise and mid-rise apartments near existing commercial and transit nodes. Since low-rise and mid-rise apartments are not the preferred product type for consumers, it is important that other key factors (like commercial, transit options, and existing infrastructure) are already in place in order to aid demand for this particular product.

Commercial properties, and uses, are not the primary driver behind residential infill development, however, they can play a role in creating preferred areas to live by due to the amenities they provide. For this reason, our research has focused on strategies for approaching infill neighbourhoods to introduce low-rise and mid-rise apartment development, if townhome and duplex

infill developments are exhausted, or insufficient for achieving density targets.

The Municipal Development Plan outlines a key target of 25% of annual housing to be developed in mature areas. With the Infill 2.0 goal primarily focused on how to increase density in mature neighbourhoods in an affordable and sustainable (supply and demand equilibrium) way, densification through low-rise and mid-rise apartments effectively contribute to achieving this objective, but the method for achieving this development is what we have explored. Low-rise and mid-rise apartments are highly efficient (in terms of dwellings per hectare) ways to achieve the goal of densification, and while we are slowly shifting the needle toward these higher density uses in mature neighbourhoods, the development of low-rise and mid-rise apartments in these neighbourhoods is stifled by a lack of demand and lack of affordability.

As highlighted by Intelligence House, "roughly 67% of Edmontonians gravitate toward living in single-detached homes with street access"; furthermore, "Household demand and loyalty to low-density, single-detached homes continues to be the highest preference, while high-density properties have the lowest demand" (Residential Analysis, page 15). To build and absorb low-rise and mid-rise apartments we must find a way to increase consumer preference for these units by identifying and increasing the value proposition that makes these developments appealing, such as close proximity to amenities and transit. A



shift by residents to smaller dwellings (i.e. 900 SF apartments instead of 1,800 SF single family homes with a yard) goes hand in hand with a focus on the area surrounding the dwelling and a pursuit of entertainment, social interaction and services. The other value proposition that we expect will appeal to these consumers is the opportunity to reside in a neighbourhood that would otherwise be unaffordable with shorter commutes to the central core and as well as nearby transit access. Identifying areas that meet the priorities of consumers through transit and retail amenities as well as neighbourhood attributes can provide locations upon which to focus the implementation of this additional density. It is this aspect that drives us to recommend that the pursuit of feasible locations for low-rise and mid-rise apartment development consider the proximity to retail centres, especially those with strong public transit options as well as brand new retail development, in mature neighbourhoods along boundary roads.

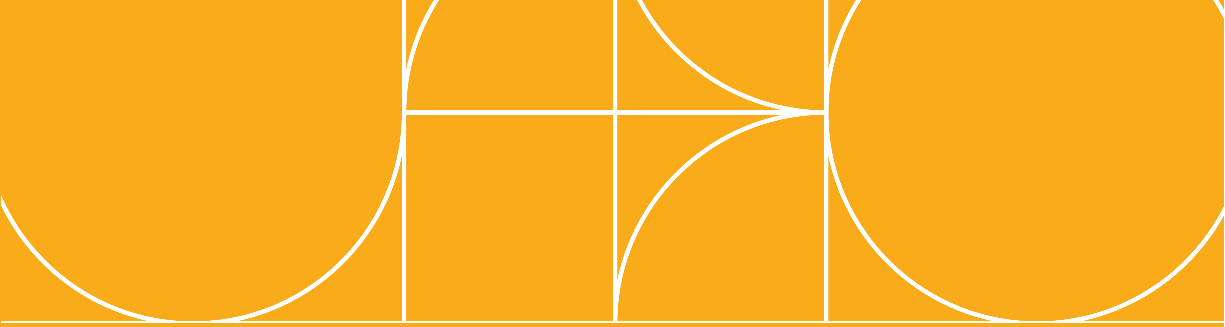
PURPOSE

The purpose of the following Commercial Real Estate Scope section is to:

1. Provide insight regarding the interaction between different commercial products and residential uses and our areas of focus;
2. Summarize the distinction between developing areas and mature neighbourhoods and explore the pursuit of balance between residential and commercial uses;
3. Highlight the role of retail in the shifting livability equation; and
4. Summarize what mixed use development has been taking place

Once these aspects have been addressed we will explore the forces at work in the retail market and the two principal strategies to achieve increased density in mature neighbourhoods that have the highest probability for success, namely infill development that is:

1. Retail centre focused; and
2. Boundary road focused.



2.2 COMMERCIAL BACKGROUND

COMMERCIAL PRODUCT

Commercial real estate includes many types of properties which accommodate businesses and commercial activity. The three primary categories of commercial real estate are commonly held to be industrial, office and retail, and of these three categories it is the retail segment that has the greatest amount of interaction with residential development.

The City of Edmonton, like all cities grew over time and as such it found a balance between use types (namely residential and commercial) at each stage of its growth. As the City continues to grow and densify infill locations, some uses (industrial for example) are no longer the highest and best use for their locations, however many still function as their historical uses today. Despite increasing land prices in mature neighbourhoods and availability of land in newer industrial areas on the outskirts of the City for industrial uses, many groups have elected to not relocate which in some ways restricts the rejuvenation of these areas. Industrial properties are a strong deterrent for residential development generally so removal of industrial is one of the precursors to introduction of residential generally. As industrial is a simple deterrent for residential development the interaction between the two is not explored further. Office space is generally able to coexist with residential harmoniously, however office also tends to cluster independently of residential and as such the interaction between office and residential is not a focus of this report. It is retail that has a strong symbiotic relationship with residential development whereby they are both dependent upon each other to a large extent.

The City has implemented Business Improvement

Areas (BIA) as well as special overlays for many areas of the City that have significant amounts of commercial real estate which often have the general intention of rejuvenating these areas over time, however these areas are not a part of the majority when we are contemplating the mature neighbourhoods in Edmonton. Our focus is directed towards the typical residential neighbourhoods in the City that are comprised almost exclusively of single family homes and some with minor retail along their boundary roads (roads that form the perimeter boundary of a neighbourhood).

The scope of our report does not include the Core areas of the City as defined in the Neighbourhood Classification (Residential Analysis, page 18) as there are higher density residential and commercial uses in place in these areas. As well, as mentioned above, there are specific plans in place such as BIAs for the majority of these core neighbourhoods with different fundamentals at work compared to mature neighbourhoods that are primarily single family today.

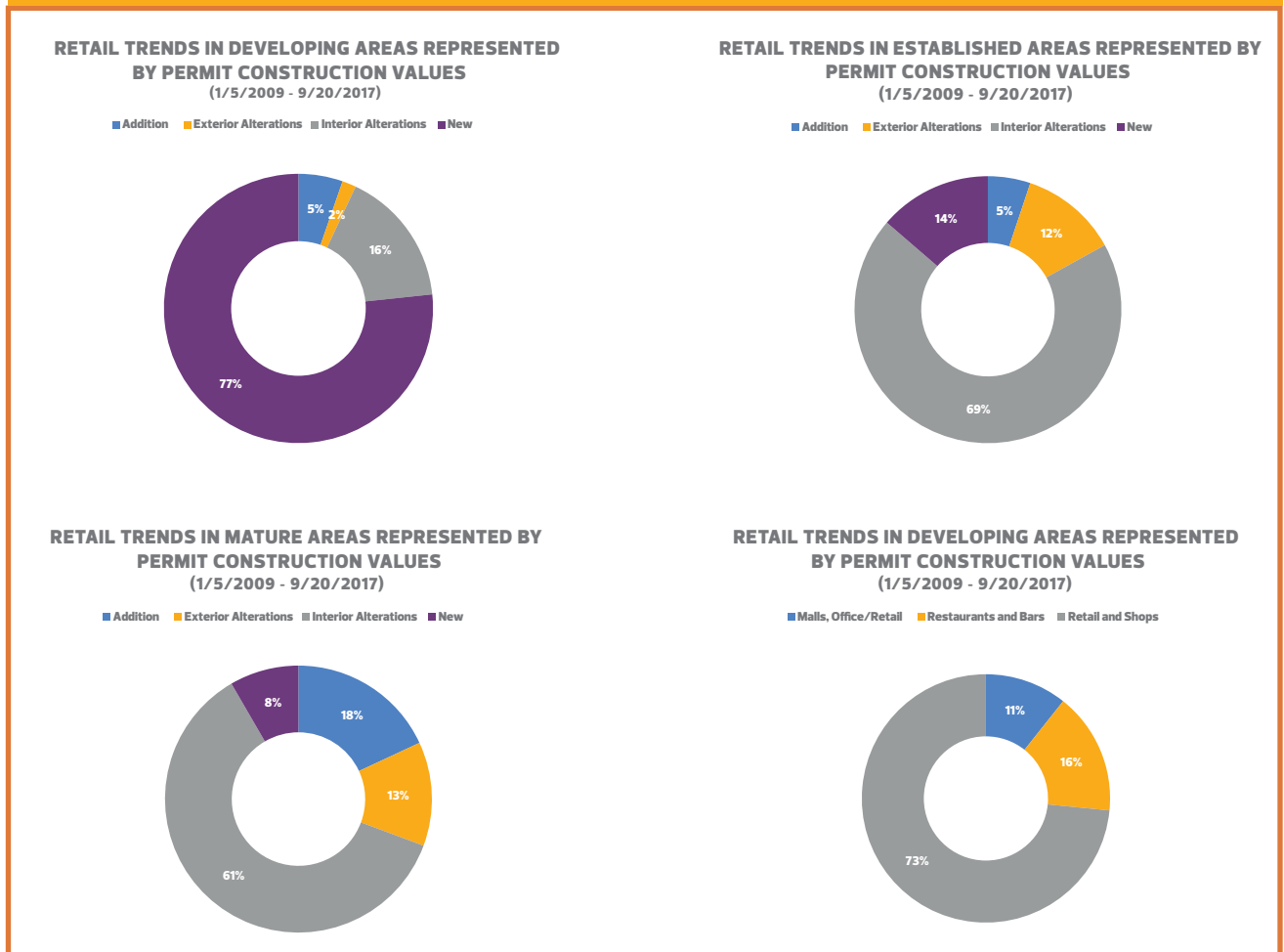
DEVELOPING VS. MATURE NEIGHBOURHOODS

New retail centres can be built as populations grow into developing areas on the perimeter of the City, but in mature neighbourhoods where land is scarce, achieving the balance between retail and residential while increasing density is a more challenging task. Because new larger scale retail centres can rarely be developed in mature areas due to land scarcity (typical anchored retail centres utilizing 5 to 7 acres), efficient use of existing retail infrastructure is paramount.

Presumably when all the neighbourhoods in Edmonton were developed they were planned with the adequate quantity of retail amenities for that period of time and the residents within a certain radius, however as the City has grown, central core areas have densified, the populations commuting through, to and from these areas have increased and the consumer demands have also changed. As such, it is important to revisit these retail elements in mature neighbourhoods as these areas grow. Maintaining a proper balance of retail uses requires greater creativity than in the newly establishing neighbourhoods in other parts of the City. In mature areas where land is scarce, retail properties are effectively "created" by reinvesting in and reimagining existing property and doing so can bring new tenants that change the profile of a property or even a neighbourhood.

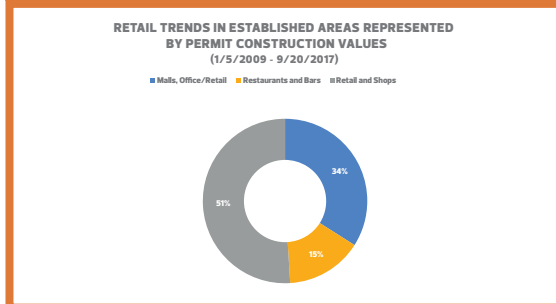
As we move inwards from developing areas to mature areas, our research indicates that the type of building permits being applied for changes materially. In developing areas, over 75% of retail permits since 2009 have been for new construction (fig. C1); this percentage decreases to roughly 14% for established areas (fig. C2) and 8% for mature areas (fig. C3) which is not surprising as new retail development is challenging in central areas that are already built-up. The commercial mix also changes across neighbourhoods: in developing areas nearly 75% of retail activity is for Retail and Shops (fig. C4), whereas in mature areas nearly 50% of the retail activity is from Malls (fig. C5) which reinforces the fact that the product type within new developing areas is also different than the malls that remain the commercial hubs in the mature neighbourhoods.

figure C1-C4:
PERMIT VALUES IN DEVELOPING AREAS



Source: City of Edmonton Building Permits

figure C5:
TYPES OF COMMERCIAL CONSTRUCTION



Source: City of Edmonton Building Permits

LIVABILITY AND BACKYARD

The balance between residential and commercial development in mature areas contributes to livability. While residential developments provide places for people to live, commercial developments provide amenities required for day-to-day living, along with employment. As the city grows it is important that a balance is achieved between residential and commercial forms to create livable and desirable neighbourhoods. The concept of livability includes elements such as walkability as well as conveniently located amenities such as grocery, restaurants and other services.

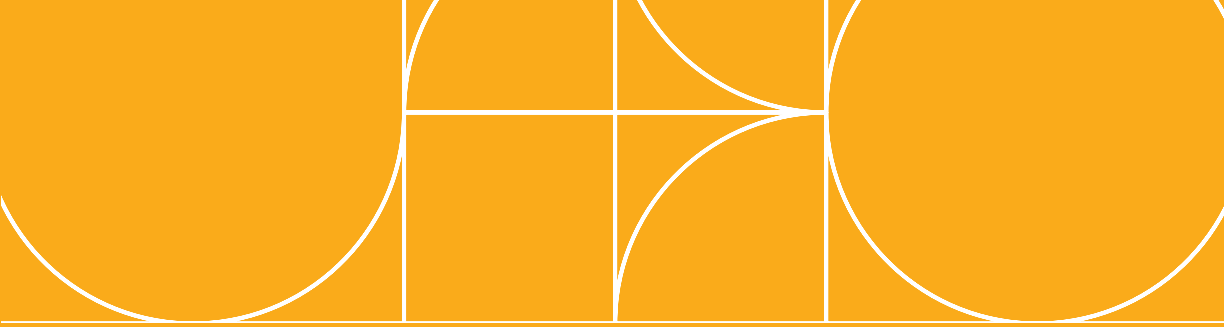
The difference between a developing neighbourhood and reimagining Edmonton's typical mature residential neighbourhoods is that there needs to be shift away from having a larger home with a yard, two vehicles, and driving to leave your home to a more urban philosophy of a smaller dwelling within a walkable neighbourhood with services in close proximity and a focus on public transit. Single-family vehicle oriented developing areas function with everything being a car ride away, however in densifying mature neighbourhoods there is a different interaction that is desired and it is one of renting or owning a smaller unit and having the immediate surrounding area acting as the "extended backyard". Within infill neighbourhoods vehicles should

lose some of their priority and necessity for everyday tasks, with public transit playing a more significant role and retail amenities being within walking distance. Within infill neighbourhoods with higher density there is a greater sense of a social community that often thrives in retail environments with neighbours meeting at the local restaurant/pub for example. It is for this reason that densification requires retail in relatively close proximity and why the pursuit of low-rise and mid-rise apartment construction should have a focus on retail amenities as well as an integration of main floor retail into residential projects creating mixed-use developments.

LAND-USE DEVELOPMENT ACTIVITY

According to our analysis of building permits since 2009, \$187,236,750 has been spent building nine new mixed-use buildings across Edmonton, three of which are located in mature areas (Station on Whyte, 109 Street Apartments, and Peli at Scona). As part of the MDP, the goal of policy 4.1.1.1 is to encourage "higher density mixed-use development where an LRT station or transit centre is to be located", however only one (Mayfair North) of the 9 mixed-use projects developed since 2009 are located near an LRT station. Mixed-use development still represents a very small amount of overall multi-family development. Since 2009, \$2.7 billion¹ of multi-family product has been developed in Developing, Core, Established and Mature neighbourhoods, but mixed-use developments have only accounted for 6.9% of this total. This lack of development could be an opportunity to increase density by adding mixed-use apartment buildings near both LRT station/transit centers and major shopping centers. Developing mixed use projects along the boundary roads of a neighbourhood is an effective way to introduce amenities to neighbourhoods that are currently deficient in commercial amenities or where developing larger format retail is a challenge, both of which are typical of most mature neighbourhoods.

¹measured by Edmonton Building Permit construction values of New Apartments and Apartment Condos from Jan. 1, 2009 to September 20, 2017.



2.3 RETAIL MARKET OVERVIEW

VACANCY AND RATES

Strong population growth in Alberta and Edmonton, along with sustained retail spending, has helped bolster demand for retail goods and services in our City.

Although declining oil prices slowed retail spending in 2015, Alberta has consistently remained above the national average of \$14,673.11 per capita. In 2016, the average retail spending per capita was \$17,290.19, adding up to nearly \$74 billion of retail trade in Alberta recorded by Statistics Canada.

According to Colliers International 2017 Retail Survey Market Data, enclosed regional shopping centres continued to have the lowest vacancy rates (low of 1%, high of 3%) and the highest net rental rates (low of \$45 and high of \$65 per square foot per year). Neighbourhood shopping centres had the most affordable net rental rates (low of \$18 and high of \$25 per square foot per year) and vacancy between 2% to 4%. Generally, retail properties are among the most sought after assets of all of the commercial real estate categories for real estate investors due to the strong historical performance of both the tenants and the properties in our market.

Despite these strong fundamentals there are areas of Edmonton with retail properties that still have chronic vacancy or that are not being utilized for their highest and best use, which serves to restrict the vibrancy and the growth of these areas. The nature of commercial

real estate is that ownership is generally fragmented (different properties all have different owners) and there are varying degrees of attention, pride and vision being demonstrated by these owners. While this means that some properties receive great attention and perform at a very high level, others are not reinvested in despite being beyond due, and ultimately there is little that can be done from a planning perspective to improve these properties. Initiatives such as the creation of the BIA's along with grant programs and architectural controls implemented through the Edmonton Design Committee can be effective methods for inducing change, however this change is dependent on the commitment of landlords. As the situations contributing to the state of properties not currently reflecting the highest and best use are so diverse and property specific, we will not be focusing on strategies to address underutilized commercial properties in mature neighbourhoods. In theory these situations sort themselves out in the fullness of time as under-performance often leads to ownership changes which often leads to reinvestment. As the fundamentals of the retail market in Edmonton remain strong it stands to reason that the motivation to maintain properties at a high level should be there as those who do will be rewarded.

DRIVERS FOR TENANTS

Commercial centre demand is ultimately driven by the customers which either reside in a neighbourhood or commute through a neighbourhood. It is only a small segment of the tenants that are larger retailers which are considered destination retail which are less dependent upon location, whereas the fundamentals of exposure and convenience play a key role in the success of most retail businesses. Most commercial users require exposure and the right mix of area residents and demographics of potential customers within a certain radius. The recipe for success for these users on the demographic side can vary based on the nature of the business, however the general rule is that greater population with higher incomes within the surrounding area, will contribute to better sales numbers for the businesses. Therefore, the demand for retail property from tenants looking to operate in an area is largely governed by population, job growth and spending patterns.

The symbiotic nature of the relationship between retail and residential is also evidenced by the somewhat "chicken and egg" evaluation criteria at play for both sides. Retailers want to locate in areas with dense populations and generally residents (specifically those considering a multi-family dwelling) want to live in an area with strong retail amenities. In the case of mature neighbourhoods, retailers have a good base of population to draw from, however they have to be selective and choose the neighbourhoods with the right mix of quantity and demographic of potential customers. We will further explore this relationship in the sections that follow.

RETAIL TRENDS

ONLINE RETAILING AND EXPERIENTIAL RETAILING

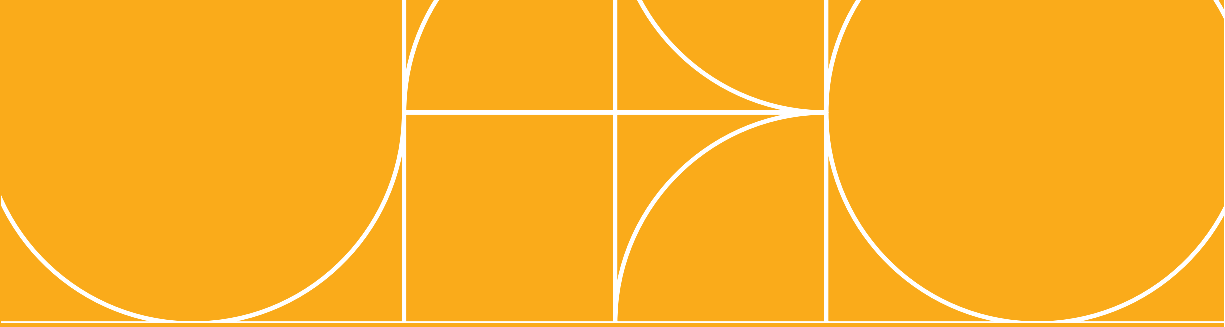
A retail trend that has been impacting retailers in Edmonton is the consumer shift to e-commerce. Product-based retailers, such as BCBG Max Azaria who earlier this year closed all retail stores across Canada including three in Edmonton, have been pushed out of the market due to more convenient and affordable competitive product available online. Online retailing has been expected to impact retail categories such as clothing and electronics more heavily than other uses such as grocery; however, even grocery has been recently innovated with new services such as Amazon Fresh, Amazon's new fresh produce and grocery delivery service. The proliferation of e-commerce has also guided retailers to focus on the experiential element of visiting their stores. Some retailers that are experience-based such as restaurants, cafes, and entertainment are insulated as their offerings cannot be replicated online. This trend is important to note as the characteristics of retailers are changing, along with the purchasing decisions of consumers. According to GlobalData consumer spending data in 2006, 23.7% of spending by those under 25 was channeled to experience-based retailers such as cafes, restaurants, and entertainment. In 2016, that figure increased to 38.8%. Taking this trend into account for infill development, the strategic and conscious placement of experiential retail around residences, or at the base of them in the case of mixed-use, may help with increasing attractiveness of an area for homebuyers in the future.

INCREASING LOCAL RETAIL NETWORK

Another trend has been changing the retail landscape is the departure of large department stores, and the introduction of local small businesses. Shopping centres across Canada have seen large department retailers closing such as Sears Canada Inc. whom recently announced the closing of roughly one-third of its retail locations in Canada, including four in Edmonton. The departure of these department stores, in combination with the reinvestment in shopping malls, has created increasing opportunity for local retailers. Londonderry Mall has announced a campaign encouraging customers to shop Canadian and will bring in eight Alberta-based businesses to compliment a new Simon's store. Southgate also made a significant announcement regarding the opening of the flagship store for the Edmonton-based business Poppy & Barley; the excitement in part behind this store opening stems from the fact that this store has only operated online and through pop-up locations until now and have escalated to a storefront retail location. Two new local retailers have also recently opened in Kingsway Mall, and West Edmonton Mall has recently revealed a brand-new retail concept called RAAS (an acronym for retail-as-a-service which uses underutilized mall space to host small-businesses for short-term leases). The redevelopment of shopping malls, not only indicates retail activity, but also reimagination of the retail uses within them that continually create new amenities for surrounding residents.



Online retailing has been expected to impact retail categories such as clothing and electronics more heavily than other uses such as grocery



2.4 RETAIL CENTRE FOCUS

REDEVELOPMENT TRENDS

The changing demands of customers combined with trends in retailing force change within retail properties, especially larger format retail centres such as shopping malls. These changes enable and encourage owners of shopping malls to reimagine their property and can lead to additions of alternate uses such as residential property within what was traditionally a pure retail property. In our Spring 2017 National Retail Report, Colliers International highlighted the redevelopment of malls into mixed-use town centres in the following excerpt: "Malls are in a constant state of evolution, reacting to competition, adapting to a revolving door of local and international tenants, and trying to maintain the interest of a consumer who has a near-infinite range of ways and places to spend their money. More so than any other land use, retail spaces are reinvested in, rebuilt, remodeled, or somehow reinvented, on a regular basis. Take the example of Calgary's Chinook Centre, which has completed a major redevelopment or addition every decade since 1960 when it was a Chinook Drive-In Theatre and driving range. Most recently, in 2010, it expanded by adding 180,000 square feet of new retail space in a two-level wing accommodating 60 new retailers. It is now planning yet another redevelopment that could add residential tower, a structured parkade and outward-facing storefronts." It is this reinvestment into retail centres that contributes significantly to putting them in the best position to attract the most exciting and desirable new retailers that consumers may prefer.

Further, "regional shopping centres near major markets are particularly well-positioned for future

development, occupying 50 to 100 acres in urban areas, on major arterial roadways or intersections, and centrally located within municipalities that have added population, civic and institutional land uses, and infrastructure over the decades since the mall was built. In most cases, shopping centres were built at the fringe of urban areas where large tracts of land could be acquired or assembled. After decades of urban growth, relatively low-density regional shopping centres can be found in city centres [and serve as great areas for adding density]." As the trend of urban centres is at an early stage in our city, we are not able to point to any successful precedents in the Edmonton market yet; however current proposals such as the Mill Woods Station Area Redevelopment Plan are paving the way for this type of redevelopment. Due to the vast offerings of amenities (often including restaurants, bars, movie theatres, shopping, etc.) it is forecast that retail centres will become even stronger attractors of multi-family development in and around their sites moving forward.

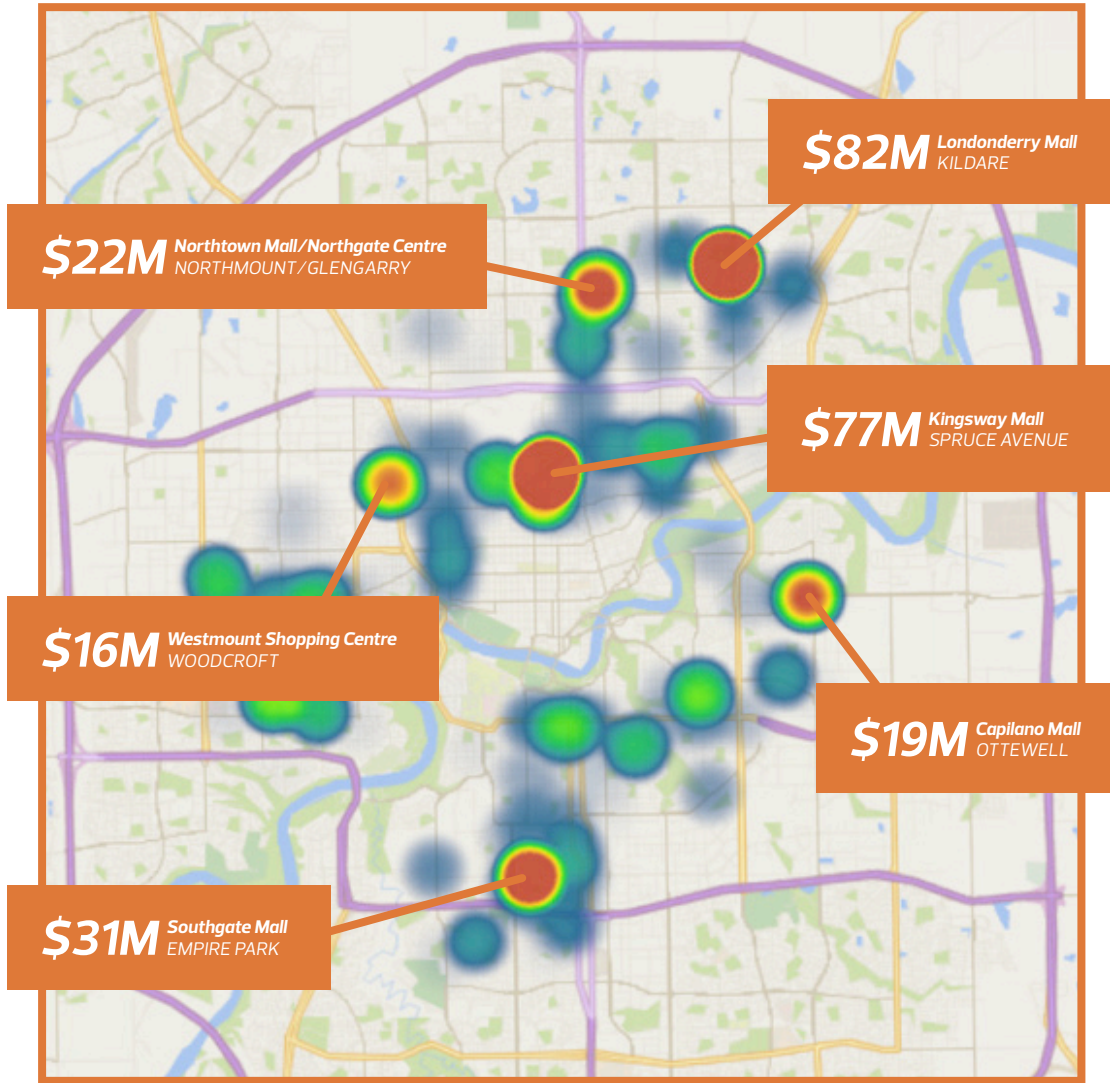


figure C6:
Retail Building Permits Issued in Mature Neighbourhoods

EDMONTON MALLS AND PERMITS

On the basis that the most attractive retail centres are those that have invested heavily in the properties, the projects that may have the highest probability of success for attracting residents are those that are in the immediate vicinity of significant upgraded retail centres. "The Way We Grow" annual progress reports published by the City of Edmonton use building permit data to track evolution of our city in relation to targets set out in land use plans such as

the Municipal Development Plan. For the purposes of analyzing relationships between commercial and residential growth, we will continue using building permits as the source of data as much as possible to create transparency and reproducible research. For the purposes of this study, retail building permits include permits for Malls, Office/Retail, Retail and Shops, and Restaurants and Bar building types. By analyzing retail permit values, varying hot spots of activity arise among mature neighbourhood nodes.



As can be seen from the heatmap of Retail Building Permits Issued in Mature Neighbourhoods (fig. C6) which demonstrates values of commercial permits issued, there has been significant reinvestment into the City's largest shopping malls located in the mature areas.

The most prominent nodes, represented by the highest aggregate permit construction values, in the mature areas consist of (in no particular order):

1. Londonderry Mall (Kildare)
2. Northtown Mall/Northgate Centre (Northmount/Glengarry)
3. Kingsway Mall (Spruce Avenue)
4. Capilano Mall (Ottewell)
5. Southgate Mall (Empire Park)
6. Westmount Shopping Centre (Woodcroft)

For visualized retail permit trends in each node highlighted, please see fig. C9–C14 in the appendix.

According to our analysis of permits from January 1, 2017 to September 20, 2017, retail activity has totaled nearly \$108M. Although retail activity has

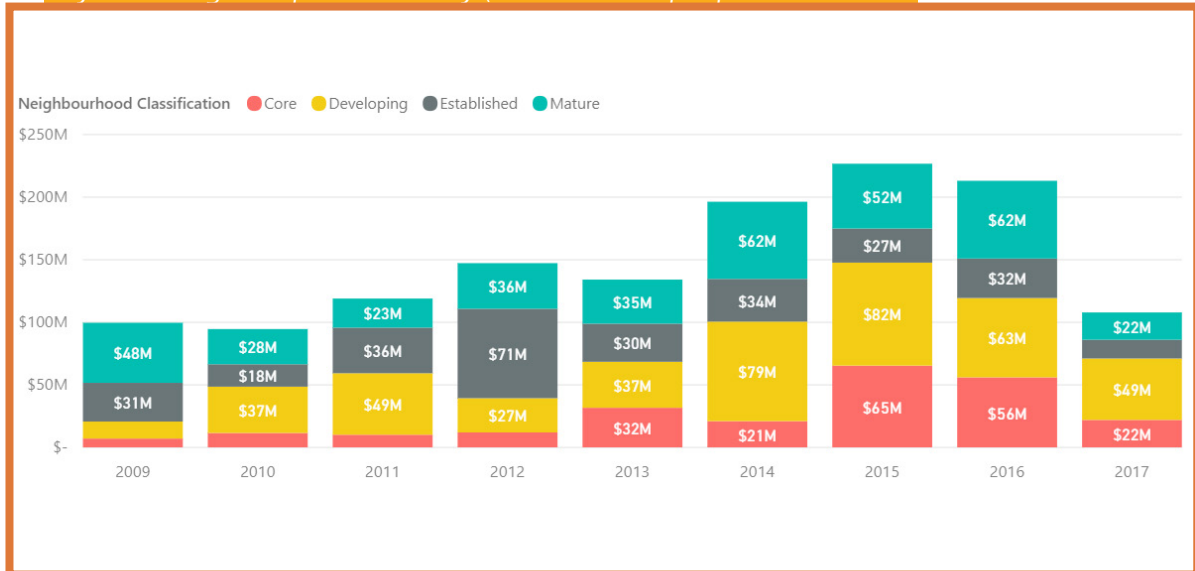
slowed compared to the same time horizon in 2016, the percentage share of mature area building permits has increased: out of all areas, the mature area has accounted for 27.5% of retail activity which is a 7% improvement over 2016 (fig. C7). Among all mature area commercial nodes, Londonderry mall has seen the highest retail activity, totaling \$82M since 2009. A majority of the activity began in 2014 with a substantial redevelopment plan; a \$21.5M permit was issued in August 2014 for main and second floor corridor remodels and retailer space retrofits. Development continued in 2015 when a \$27.5M permit was issued for a new additions and new full-service dining experience. Retail investment is expected to continue at Londonderry Mall, as their plan initially outlined a renovation and redevelopment budget of \$130M. Londonderry Mall currently houses over 150 shops including large departments and grocery stores such as Hudson Bay, Winners, Save-On Foods and Shoppers Drugmart; all of which are key amenities for surrounding residents.

Londonderry Mall (fig. C8) is an example of a redeveloping mall that represents a location with a high probability of success for both increased density in the surrounding area and even transformation into a mixed-use town centre through the addition of residential product within the property. With an increasing number of amenities offered, this major commercial node could not only sustain, but thrive with increased density nearby and serve as an optimal location for new developments such as apartments, especially as the area is transit-oriented. It is important to note that the concept of multi-family development surrounding retail centres and shopping malls is not a new concept as most of the major retail centres in Edmonton have an inventory of properties ranging from RF4 to RA9 zoning within their immediate vicinity, which lends support to the viability but leaves an opportunity for it to be done to a much greater extent and potentially to greater density levels than simply row housing or townhouses.

RIPPLE

The density surrounding commercial centres can be paralleled to the ripple effect of dropping a pebble

figure C7:
8-year trailing retail permit activity (2017 data as of September 20th)



Source: City of Edmonton Building Permits

into water. The larger the pebble, the larger the ripple; in other words, the larger the commercial node or corridor, the more density that can likely be supported. Additionally, the further away from a commercial node or corridor, the lower the density becomes. This methodology also provides the most natural and elegant transition from the commercial nexus through to the single-family housing that surrounds it.

Existing major commercial centres should be focused on as the areas most readily developable for mid-rise and low-rise multi-family development with the greatest densities located immediately adjacent to the commercial projects and declining the further you move away. Focusing on LRT stations as well as retail centres that have LRT or major bus service provides an area to focus efforts that will leverage this infrastructure and provide a higher probability of adoption by the three key participants required for success (developers, residents, and retailers).

We recognize that although it sounds very eloquent to describe a ripple effect and a smooth natural transition from retail to medium to low to single

family development, it is not possible to achieve even concentric rings given the nature of mature neighbourhoods and existing properties. However, this is an approach that can be applied on a case by case basis to evaluate uses and achieve additional density in areas which are conducive and will have a stronger appeal to potential residents.

RETAIL CENTRE FOCUS RECOMMENDATIONS

The most logical areas to focus energies and try and achieve additional density are prioritized below:

1. Major commercial nodes and corridors that are transit-oriented
2. Major commercial nodes and corridors
3. LRT Stations
4. Minor commercial nodes and Convenience centres .



2.5 BOUNDARY ROAD FOCUS

ALONG BOUNDARY ROADWAYS

Introducing additional low-rise and mid-rise apartment construction at the previously noted nodes is one implementation strategy that can increase density in mature neighbourhoods, however there is an opportunity as well to introduce additional apartment construction within the respective communities. A typical residential community represents roughly 2.5 square kilometers, is bounded on each of its four sides by a boundary road which are typically secondary roads (ex. 109 Street, 142 Street, 111 Ave, 75 Street, 63 Ave, etc.), and has a school/park near its centre. Depending upon the neighbourhood there is often a neighbourhood commercial centre along one or two of the boundary roads and sometimes there is a major retail centre at one of the four corners. The balance of the area in these neighbourhood is often comprised of single family development. To increase density throughout the mature neighbourhoods a strategy is required for introducing more density within these neighbourhoods as well.

Commercial is very complimentary with relatively undesirable residential development as the attributes that do not work well for residential units are key contributors to the success of commercial units. Main floor residential units are less attractive, especially on major arterials due to concerns regarding noise, traffic and security and when main floor units are developed for residential purposes they often use a grade separation to create privacy that detracts from an active street front. From a commercial perspective however, main floor units with the highest exposure to traffic and position next to a major intersection are

the most valuable; this forms a part of the equation as to how mixed-use development may make financial sense to developers. There have been many projects developed along the boundary roads between residential neighbourhoods that have introduced low-rise development, however the majority of these are not a mix of residential and commercial and instead have been homogenous (all residential or all commercial).

109 Street is a prime example of a secondary road that forms the boundary between residential neighbourhoods from 72 Avenue to 82 Avenue (specifically McKernan and Queen Alexandra) and along this stretch there has been an increasing number of new developments that have replaced older residential inventory with four-storey buildings of increased density. One such project is the University Properties at 79 Ave and 109 Street. This development consists of four storeys of multifamily development with no retail on the main floor and instead created an elevated main floor grade to create separation from the street level. Another project just a couple of blocks down at 76 Ave and 109 Street is the United Health Centres Building which is four storeys of strictly commercial development (office on top of retail) which also significantly increased density but did not include any residential development. Both of these projects effectively increased density and replaced less attractive lots for single family with low-rise development that increased density. Although they did not incorporate retail below residential they do provide good precedents for the viability of retail and low-rise residential along the boundary road of

a primarily single-family home neighbourhood. The commercial building contributes to a more active streetscape through the interaction of a patio as well as retail unit entrances at the sidewalk level which does not exist when homes are located along these boundary roads. It should be noted that the zoning along 109 Street is primarily a combination of RF6 and RA7 which is conducive to this sort of increased density development and it is likely a combination of deteriorating utility of the existing homes (some along this stretch of road have been condemned for years) and increased demand for diverse housing types in mature neighbourhoods that has prompted the increasing number of residential developments along 109 Street.

Although we are not certain why in the subject stretch of 109 Street the projects being developed do not include residential above retail, one theory is that it is a unique developer that has a strong skill set in both residential development and commercial development as most developers have a much higher aptitude in either one of these disciplines or the other, but not typically for both.

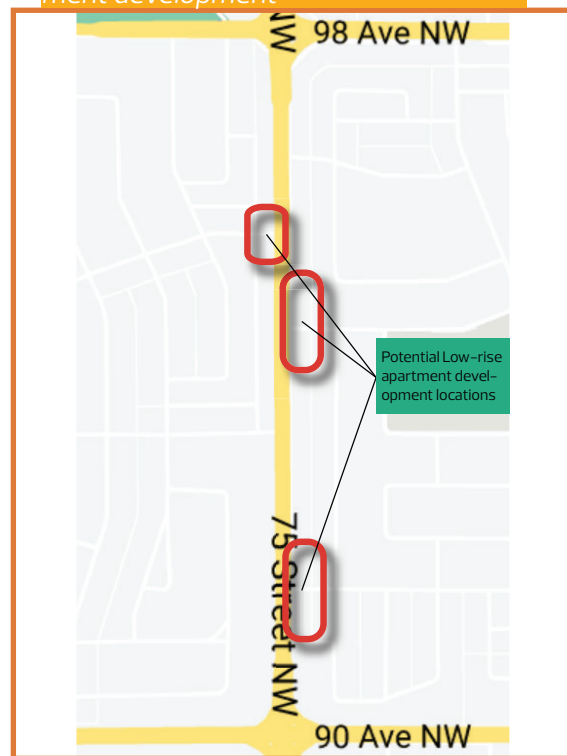
Planning for redevelopment along boundary roads to accommodate low-rise and mid-rise apartments with main floor commercial will be more practical than locating similar developments within the centre of mature residential neighbourhoods due to exposure. The commercial in these projects will benefit from the exposure of being along the boundary road and the upper levels will be more insulated to the passing traffic by being at an elevation above the roadway (compared to existing homes located at ground level).

Although most of the commercial uses that will occupy the main floors of mid-rise developments will not be large scale grocery or drug uses, the smaller businesses such as quick serve retail, pubs, and professional services that will be attracted to these properties will provide additional amenities to both the

residents of the subject mixed-use project as well as the residents within the neighbourhood surrounding the development. The previously mentioned trend of consumer preferences towards local and experiential retailers is very synergistic with the smaller local retail locations that would be created in these projects.

Although site-specific research would have to be done regarding transportation impacts, servicing capacities, etc. we are providing the an image of the lots and zoning along a section of 75 Street (fig. C15) as a representation of intersection locations along boundary roadways that embody some of the necessary fundamentals for successful low-rise apartment with main floor retail development where detached single-family homes stand today.

figure C15:
Example location for low-rise apartment development





2.6 COMMERCIAL REAL ESTATE FINDINGS

In the case where townhome and duplex infill developments are not sufficient to achieve density goals, it may be advisable to construct higher-density low-rise and mid-rise apartments near existing commercial and transit nodes. Low-rise and mid-rise apartments are attractive “missing middle” development types since they are the most efficient (in terms of dwellings per hectare) for achieving densification targets. However, while we are slowly shifting the needle toward these higher density uses in mature neighbourhoods, the development of low-rise and mid-rise apartments in these neighbourhoods has not taken place due to a lack of consumer preference as referenced by Intelligence House findings. Since low-rise and mid-rise apartments are not the preferred product type for consumers, it is important that other key factors (like commercial, transit options, and existing infrastructure) are already in place in order to aid demand for this particular product.

The challenge for developers in pursuing projects of this nature is three-fold:

1. There have been many public expressions of resistance to densification in mature neighbourhoods which has made it a contentious political issue and whether merely perceived or real can add to the complexity of redevelopment.
2. It is very challenging to assemble sites of this nature (3–6 single family homes) as the current owners will often negotiate aggressively if they


know that an assembly is being worked on to try and achieve a value well above market for the existing home. In theory, the existing homes along major arterials (especially those located at an intersection) should be the most economical to purchase which should facilitate such developments, however if the current owners have no strong motivation to sell they may easily stand in the way of development by demanding above market pricing.

3. A developer trying to conduct an assembly of this nature in an area that is currently zoned RF1 for example, perceives that they will be taking on a significant amount of risk from potentially not being able to attain the required zoning to develop the type of project desired. Without a plan from the City outlining what will be approved or without some level of certainty from the development officers (often not achievable until everything is owned and a full proposal is submitted) there is more risk in this proposition than a prudent developer would be prepared to take on and as such these assemblies are not commonplace.

Similar to the comments made for the Retail Centre Focus section, development of low-rise apartments and mid-rise apartments on the periphery of residential neighbourhoods is not a new phenomenon, however it is the logical area to focus and the type of product to promote as it works to introduce greater density into neighbourhoods that are primarily comprised of single family homes while also, in the case of mixed-use, activating the street front and adding amenities to the surrounding neighbourhoods.

To facilitate the above strategies there are various methods that could be employed which would require alignment with other City priorities, however the following are some concepts for consideration:

1. Grant or incentive programs for encouragement of the forms of development desired;
2. Rezoning for locations that are not currently zoned for low-rise or mid-rise development based upon the site identification metrics outlined herein;
3. Taxation programs targeted at motivating redevelopment and rejuvenation of areas that require changes to align with City objectives;
4. Project specific parking calculation methodologies which consider aspects such as proximity to transit, counter-cyclical parking (different use types driving parking demands at different times), and residents/consumers within walking distance who are not likely to utilize parking;
5. Engagement with major retail centres prior to redevelopment initiatives with an intention of highlighting opportunities for mixed use development.



Since low-rise and mid-rise apartments are not the preferred product type for consumers, it is important that other key factors are already in place in order to aid demand for this particular product.



3. CONCLUSIONS



SHARED CONCLUSIONS

INTEGRATION OF RESIDENTIAL, COMMERCIAL & QUALITATIVE FINDINGS

The following shared conclusions are based on findings from the residential analysis, commercial analysis, and qualitative focus groups. Some conclusions are more general economic conclusions, while others are more specific. The indented bullet points provide qualitative data shared during the Banister focus groups. The overwhelming majority of the following shared conclusions are based on the residential portion of this report (and closely resemble the findings from Part 2).

- Despite the continued challenges in Alberta's energy sector, the overall housing market in Edmonton is still relatively healthy and affordable for most middle-income families. The overall housing industry in Edmonton is fairly well balanced in terms of supply and demand, and is able to generally accommodate ups and down in the economy due to its stable and diversified job sectors such as government, health care, and education.
 - Qualitative data, from the focus groups conducted by Banister, backs up the notion that housing in Edmonton is generally affordable for most families, as the majority of "homeowners felt that there were affordable options during their (home) search".
- Natural periods of oversupply and undersupply will always happen in housing, as supply cannot be adjusted as rapidly as demand can dictate. An imbalance in supply and demand will always affect consumer affordability.
- External affordability factors that the housing industry cannot dictate (economic conditions, government policies, interest rates, incomes, mortgage rules, etc.) will always exist and fluctuate – either increasing or decreasing affordability. The majority of builders in Edmonton can accommodate a certain degree of change, and are capable of building a variety of home types for all income brackets. The rental market is also playing an important factor in the affordability equation, as many first time homebuyers are waiting longer before purchasing their first home.
 - During the focus groups, a couple of renters even indicated a preference for continuing to rent long-term (20 years or more) in order to have the flexibility to travel and move around.
- Consumer demand and preferences continue to show that most families desire a single-detached home; however, this home type is difficult to find in an infill neighbourhood at an affordable price. Generally, infill single-detached homes are too costly for most average income families, given the higher upfront costs (land), limited financing options, permits, and overall carrying costs.
 - Qualitative findings indicated that approximately half of the infill homeowners searched for a single-detached home, while approximately three-quarters of infill homeowners searched for a street-oriented home (single-detached, duplex, or townhome). Less than one-quarter of infill homeowners searched for an apartment condo.
 - For renters who would consider buying a home in the near future, they indicated they would be most likely to look for a single-detached home (just under half of the respondents), followed by a semi-detached home (a few respondents).
- Opportunities for infill construction do exist if the

proper product is matched with a household's purchase power and desired product. As presented in this study, there is a potential opportunity for infill townhomes and duplexes given their reasonably close price points compared to the resale market, as well as their relatively high consumer preference (but not as high as single-detached homes), while still achieving a certain degree of density. As a secondary infill option, instead of townhomes and duplexes, low-rise and mid-rise apartments could present a strong high-density opportunity if they are built near existing infrastructure like commercial and transit nodes. Since low-rise and mid-rise apartments are the least favourite housing types (as indicated in a number of residential charts, and reiterated in the qualitative focus groups), it is important that attractive commercial areas and convenient transit options already exist in mature areas in order to help boost consumer demand for these types of products.

- City by-laws and processes must be evaluated in order to make infill construction more efficient, and less expensive in terms of carrying costs. The trifecta of "affordability-infill-density" is not necessarily as linear as policy makers would hope. Facilitating supply (through more flexible regulations, reduced costs and risks, and less "red tape") is the best solution for finding equilibrium in the market.
 - Qualitative findings indicated that one of the significant barriers to infill was the high cost or lack of affordability.
- As much as possible, the City should evaluate the potential of allocating infill public land for street-oriented dwellings, and more specifically, for single-detached homes at prices comparable to developing

areas.

- The City should facilitate easier lot assembly and reduce the current barriers that are preventing major land developers from participating in infill, as the majority of current infill projects are "one-offs" by small-scale builders, and are often on a single lot. By relaxing current by-laws and regulations (and allowing for larger-scale projects), it would encourage major developers to participate in infill, resulting in more competition, better quality, and lower purchase prices for consumers. Big developers are typically not interested in small-scale projects, as they gain efficiency and higher profit margins from larger, scalable projects.



RESIDENTIAL APPENDIX

Part 4 – Appendix

Note: the Appendix is residential-related only.

Portfolio Insurance

Low-ratio mortgage loans that lenders insure using portfolio insurance must now meet the eligibility criteria that previously only applied to high-ratio insured mortgages. The new criteria includes the following requirements:

1. A loan whose purpose includes the purchase of a property or subsequent loan renewal;
2. A maximum amortization length of 25 years;
3. A property value below \$1,000,000;
4. Variable-rate loan payments that are recalculated at least once every five years to conform to the established amortization schedule;
5. For variable-rate loans that allow fluctuations in the amortization period;
6. A minimum credit score of 600;
7. "Stress test"; and
8. If the property is a single unit, it will be owner-occupied.

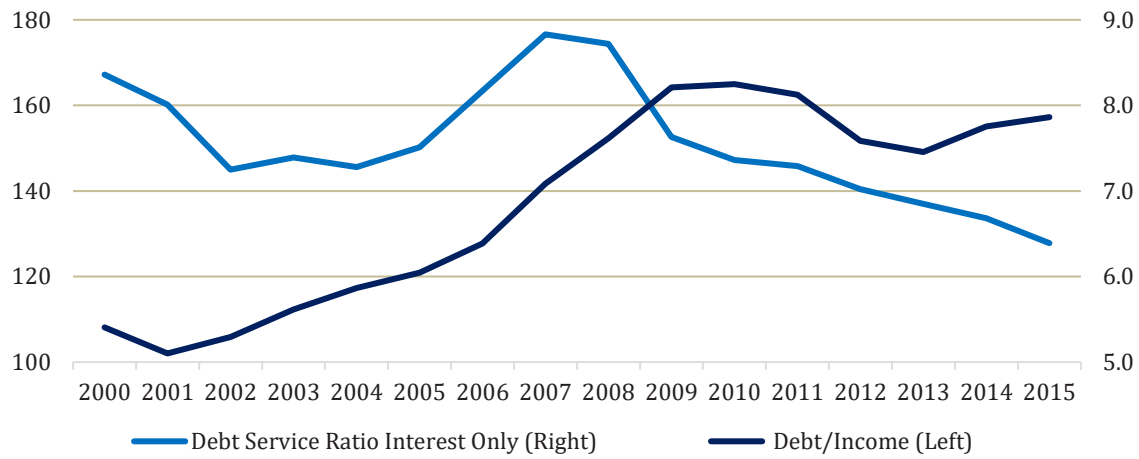
The new regulations were issued as a result of low interest rates and the effects that shifting attitudes towards debt have had on the housing market. Concerns about an increased risk of defaults, should mortgage rates rise, continues to increase as some borrowers have taken on high levels of debt. However, the Canadian housing market continues to show signs of stratification. Home prices in Toronto and Vancouver have risen substantially in recent months, driven by strong demand and limited supply. By contrast, home prices in Alberta have been flat over the past two years due to a fall in demand driven by employment weakness.

Mortgage Rules (additional information)

Canada's new mortgage rules also increase the risk of pushing borrowers who do not qualify for insurance (and those that wish to increase their loan amount) to the so-called "shadow lending" market. Unconventional second mortgage lenders are private investors frustrated by low interest rates who are eager to earn higher returns. Homebuyers wanting to get into the market, at any cost, will end up paying higher mortgage payments for a longer period, increasing the possibility of bankruptcy and dampening the overall housing financial system.

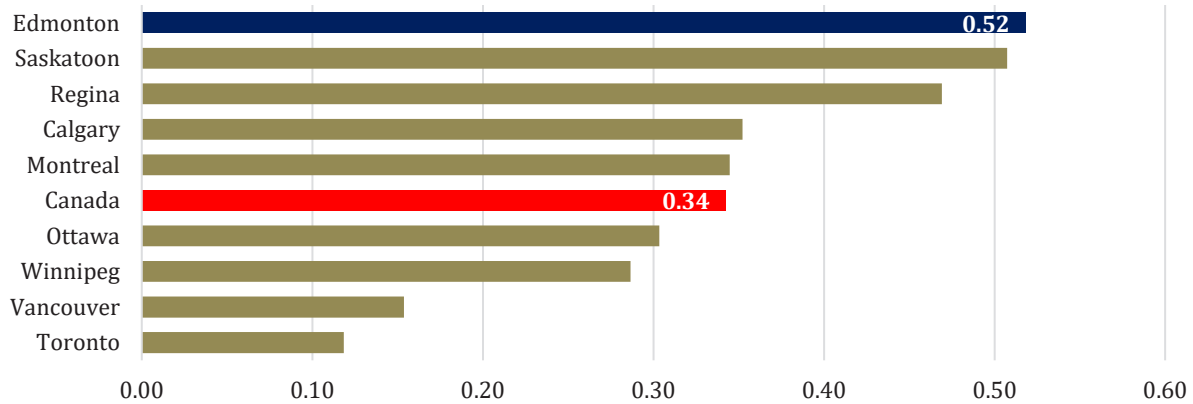
To qualify for mortgage insurance, a homebuyer must have a Gross Debt Service (GDS) ratio no greater than 39% and a Total Debt Service (TDS) ratio no greater than 44%. GDS ratio represents the cost of homeownership including mortgage payments, taxes and heating costs, relative to the homebuyer's income. TDS ratio is the cost of homeownership and all other debt payments relative to the homebuyer's income.

Alberta Debt Level

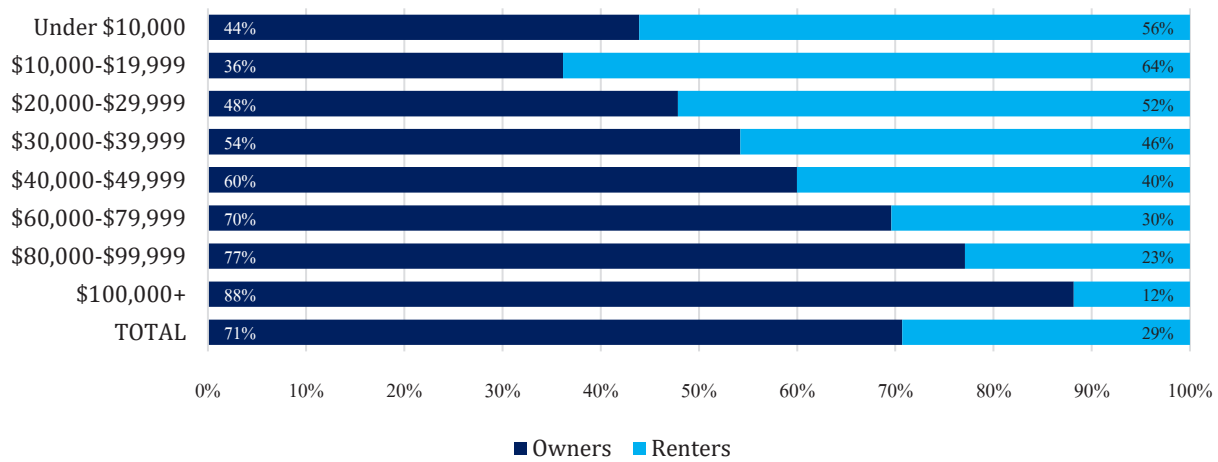


Source: Statistics Canada, Intelligence House calculations

Mortgage Delinquency Rate – Q4 2016



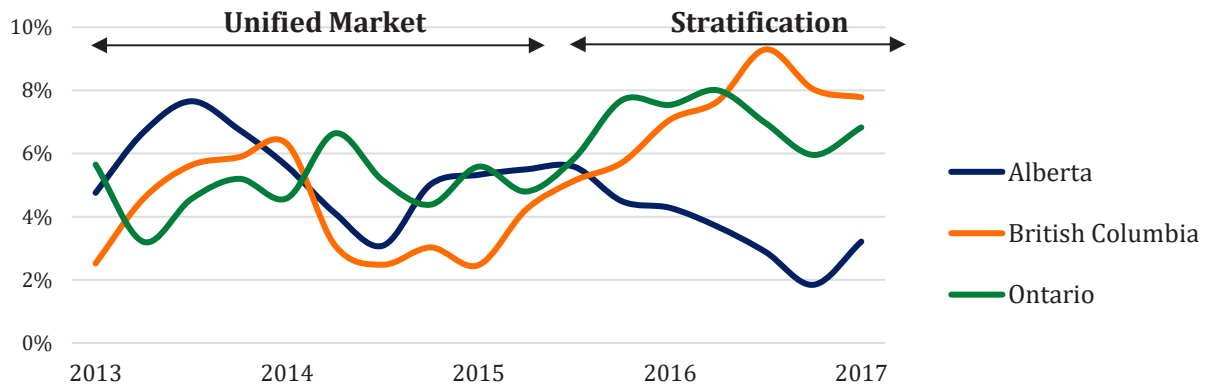
Homeownership by Income Group (Statistics Canada)



Source: Statistics Canada

Figure A1: Housing Market Stratification (Statistics Canada)

Quarterly growth of residential mortgage value



Source: Statistics Canada

Scenario 1: A Homeowner Building an Infill Home

Homebuyers looking to purchase a home within a mature infill neighbourhood might decide to build a custom home if existing availability fails to satisfy their needs and desires. However, due to a complex financing process, households might face a cash flow constraint. Infill construction mortgages provide money in phases, known as draws, as opposed to traditional mortgages that provide a lump sum to the seller at closing. Although the number of draws varies for different creditors, draws are related to construction stages. Lenders typically conduct inspections before the next portion of the loan is made available. Furthermore, down payment requirements for infill construction are a minimum of 20% of the value of the existing dwelling (much higher than the typical 5% or 10% required for a traditional home purchase).

If a homeowner wishes to build an infill home, they must first purchase land in the form of an existing dwelling to be torn down. Then, they hire a builder to construct their new home. Lenders provide a single loan to finance the land purchase, and the construction of the dwelling can only be financed by the builder or directly by the homeowner. However, homeowners will not receive their construction loan until the loan that covers the land is paid off. Therefore, builders or homeowners will carry the financial costs and risks associated with demolishing the existing property, and the costs of the new construction.

Figure A2 presents the exercise of a homeowner developing an infill property broken down into the three main stages of the process:

- 1) Purchase of existing home to be demolished
- 2) New Construction
- 3) Mortgage Draws

The scenario starts with a homeowner purchasing an old property to be demolished by putting down 20% of the price, and financing the balance. For this exercise, demolition expenses are \$10,000 and construction costs are estimated between \$190–\$280 per square foot.

The biggest financial challenge for buyers building an infill custom home is managing the carrying costs of construction. If homeowners try to access credit from lenders, they must first liquidate the portion of the mortgage used to acquire a teardown property before receiving money for construction. Funds provided by the lender are calculated by the stage of construction of the new home. If the homeowner does not wish to access credit, they need to finance the construction by paying cash directly to the builder. Alternatively, risk could be transferred to the builder, as they could finance the homeowner.

According to Intelligence House calculations, a homeowner building a \$960,000 infill home would have to directly finance more than 55% of the construction until the net effect is positive, making the financial requirements of infill construction unattainable for most families.

Figure A2: Homeowner Infill Financing

		Dwelling Size (SF)	1,500 SF	1,800 SF	2,200 SF	3,000 SF
Purchase of	Price		\$200,000	\$300,000	\$400,000	\$500,000

existing home to be demolished	20% Down payment	\$40,000	\$60,000	\$80,000	\$100,000
	Loan	\$160,000	\$240,000	\$320,000	\$400,000
	Mortgage Payment*	\$926	\$1,389	\$1,852	\$2,315
Demolition	Cost	\$10,000	\$10,000	\$10,000	\$10,000
Construction	Cost per SF	\$190	\$210	\$250	\$280
	Total Construction	\$285,000	\$378,000	\$550,000	\$840,000
Infill Total Cost	Land + Demolition + Construction	\$495,000	\$688,000	\$960,000	\$1,350,000
Mortgage Draws	15%	\$42,750	\$56,700	\$82,500	\$126,000
	25%	\$71,250	\$94,500	\$137,500	\$210,000
	40%	\$114,000	\$151,200	\$220,000	\$336,000
	55%	\$156,750	\$207,900	\$302,500	\$462,000
	70%	\$199,500	\$264,600	\$385,000	\$588,000
	85%	\$242,250	\$321,300	\$467,500	\$714,000
	100%	\$285,000	\$378,000	\$550,000	\$840,000
True Down Payment	Loan + Recovery draw	\$239,500	\$324,600	\$465,000	\$562,000
	Share total costs	48.40%	47.20%	48.40%	41.60%
X	Represents the stage at which the loan was recovered				

Source: Intelligence House Own Scenarios

Scenario 2: A Builder Building an Infill Home

Increased demand for housing within mature infill areas motivates builders to proactively build infill homes before they are sold, or through pre-sales built for a specific customer. However, there are multiple barriers of entry that can discourage builders, particularly those without redevelopment experience.

Infill repurposing requires a higher upfront investment compared to construction in suburban areas. Land in mature infill neighbourhoods tends to be scarce and expensive. Accumulation of empty lots is also an issue, as available parcels are smaller and typically have different owners. The alternative, purchasing existing housing to be demolished, implies an additional cost and the possible risk of contamination that requires special clean up. Infill builders are also responsible for the cost of excavation and upgrading utilities that do not exist in a new development.

Furthermore, challenges continue even once a construction site is secured. Infill regulatory processes are longer, more costly, and there is uncertainty surrounding zoning approval, which causes potential builders to hesitate. Additionally, financing options are limited as lenders view these projects as risky. In addition, each infill project is unique, therefore, there is little efficiency gained from small economies of scale. Predicting demand is also more challenging, so builders have little room for error.

Another important factor for a builder is their construction schedule. In figure A3, we compare the construction schedule for a home in an infill area versus that of a developing area. The table was presented to Council by IDEA. This comparison shows the additional challenges faced when building an infill home such as the price of the lot, by-law and permit requirements, new services that may need to be added, the increased length of time between buying the lot and selling the new home, the carrying cost (and interest cost) associated with financing, and the final price of the home.

Figure A3: Additional Information about the Timing and Costs of Infill Development

Two Narrow Lot Houses in MNO				Two RPL Houses in New Subdivision					
Week	Activity	Cost	Interest (weekly)	Week	Activity	Cost	Interest (weekly)		
1	Lot Purchase	\$400,000.00		1	Lot Purchase (15% deposit)	\$37,500.00			
2				2	Design	\$2,700.00	\$36.00		
3				3	Architectural		\$36.00		
4				4	Control Approval		\$36.00		
5				5	Permits	\$7,500.00	\$46.00		
6	Blockface Survey	\$750.00	\$385.00	6	Build	\$700,000.00	\$77.00		
7			\$385.00	7			\$108.00		
8	Design and Subdivision (concurrent)	\$7,000.00	\$392.00	8			\$139.00		
9				\$392.00			9	\$170.00	
10				\$392.00			10	\$201.00	
11				\$392.00			11	\$232.00	
12				\$392.00			12	\$263.00	
13	Permits	\$7,500.00	\$400.00	13			\$294.00		
14				\$400.00			14	\$325.00	
15				\$400.00			15	\$356.00	
16				\$400.00			16	\$387.00	
17				\$400.00			17	\$418.00	
18				\$400.00			18	\$449.00	
19				\$400.00			19	\$480.00	
20				\$400.00			20	\$511.00	
21				\$400.00			21	\$542.00	
22				\$400.00			22	\$573.00	
23				\$400.00			23	\$604.00	
24				\$400.00			24	\$635.00	
25				\$400.00			25	\$666.00	
26				\$400.00			26	\$697.00	
27				\$400.00			27	\$728.00	
28		\$400.00	28	Lot Payout			\$212,500.00	\$759.00	
29	New Service	\$19,800.00	\$418.00	TOTAL			\$960,200.00	\$9,768.00	
30	Build	\$700,000.00	\$449.00						
31				\$480.00					
32				\$511.00					
33				\$542.00					
34				\$573.00					
35				\$604.00					
36				\$635.00					
37				\$666.00					
38				\$697.00					
39				\$728.00					
40				\$759.00					
41				\$790.00					
42				\$821.00					
43				\$852.00					
44				\$883.00					
45				\$914.00					
46				\$945.00					
47				\$976.00					
48				\$1,007.00					
49				\$1,038.00					
50				\$1,069.00					
51				\$1,100.00					
TOTAL			\$1,135,050.00	\$ 26,579.00					

Total cost of MNO Houses	\$ 1,161,629.00
Total cost of new subdivision houses	\$ 969,968.00
Difference	\$ 191,661.00

Assumptions

- 1 Cost of lots in new subdivision is \$5,000 per front foot (\$125,000 per lot).
- 2 Infill houses are identical to RPL houses.
- 3 Build costs of all four houses are equal.
- 4 Interest rate of 5% p.a.
- 5 Expedited permit approval for RPL houses.

Source: IDEA Edmonton. Retrieved from: <https://www.infilledmonton.com/>

Figure A4: Neighbourhoods with Average Income of \$30,000–\$59,999

Community	average income	SF						Dplx				TH			Aptm				
		Urban Growth (1905-1913)	War Years (1914-1945)	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	City Modern (1971-1989)	New Era (1990+)	Infill	Urban Growth (1905-1913)	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill
Abbotsfield	\$48K											\$160K							
Belvedere	\$51K	\$293K	\$182K	\$287K	\$297K	\$343K	\$413K	\$223K	\$237K	\$286K	\$336K	\$162K			\$79K	\$90K	\$190K		
Britannia Young..	\$57K		\$245K	\$288K	\$330K	\$473K	\$473K		\$270K	\$362K	\$370K	\$183K	\$313K	\$334K	\$97K	\$89K	\$124K		
Canora	\$51K		\$242K	\$287K	\$331K	\$413K	\$408K	\$318K	\$272K	\$348K	\$375K				\$92K	\$72K	\$236K		
Cromdale	\$42K		\$384K	\$425K	\$625K	\$541K									\$100K	\$161K	\$185K		
Eastwood	\$46K	\$238K	\$195K	\$249K	\$349K	\$405K	\$398K	\$248K	\$256K	\$351K	\$365K	\$241K	\$307K	\$277K	\$71K	\$101K			
Elmwood Park	\$49K		\$340K	\$279K	\$341K	\$335K			\$251K	\$425K	\$425K				\$88K				
Inglewood_ED..	\$44K	\$331K	\$340K	\$333K	\$462K	\$627K	\$631K	\$260K	\$271K	\$421K	\$420K	\$190K	\$345K	\$370K	\$88K	\$150K	\$161K		
Parkdale_EDMO	\$55K	\$377K	\$205K	\$223K	\$275K	\$321K	\$367K			\$292K	\$295K	\$175K				\$165K	\$167K		
Queen Alexandra	\$51K	\$406K	\$371K	\$382K	\$525K	\$654K	\$757K		\$343K	\$528K	\$542K		\$363K	\$409K	\$169K	\$197K	\$322K	\$324K	
West Jasper Pla..	\$54K		\$291K	\$268K	\$391K	\$465K	\$562K		\$265K	\$373K					\$60K	\$83K	\$196K		
Westwood_ED..	\$44K	\$281K	\$237K	\$286K	\$327K	\$527K		\$380K	\$260K	\$457K	\$481K		\$260K		\$103K	\$84K	\$191K		
Boyle Street	\$37K	\$380K	\$183K	\$264K		\$404K							\$338K			\$89K	\$129K	\$374K	
Central Mcdoug..	\$37K	\$203K	\$283K	\$322K	\$635K					\$277K			\$281K			\$74K	\$134K	\$273K	
Downtown_ED..	\$60K					\$354K							\$479K		\$205K	\$189K	\$213K	\$365K	\$826K
Garneau	\$58K	\$527K	\$498K	\$488K	\$690K	\$1,005K	\$1,303K			\$620K		\$384K	\$397K	\$452K		\$215K	\$264K	\$383K	\$871K
Mccauley	\$37K	\$224K	\$197K	\$259K	\$304K	\$365K	\$414K			\$261K	\$275K							\$247K	
Queen Mary Park	\$43K		\$289K	\$334K	\$509K	\$325K	\$380K	\$242K					\$339K	\$342K		\$81K	\$118K	\$252K	\$308K



Note to the reader: This chart shows the average sale prices of homes (by year of construction, and dwelling type) in mature and mature core areas with an average household income of \$30,000 – \$59,999. This chart provides an historical reference of average sales prices.

Figure A6: Neighbourhoods with Average Income of \$100,000-\$149,999

Community	average income	SF						Dplx				TH			Aptm				
		Urban Growth (1905-1913)	War Years (1914-1945)	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	City Modern (1971-1989)	New Era (1990+)	Infill	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	
Aspen Gardens	\$132K			\$507K	\$665K												\$213K		
Capilano	\$114K			\$432K	\$702K	\$806K	\$830K												
Greenfield	\$121K			\$408K	\$493K			\$295K											
Grovenor	\$117K		\$353K	\$354K	\$542K	\$673K	\$747K		\$297K	\$416K	\$421K	\$295K	\$424K	\$481K				\$276K	
Lendrum Place	\$105K			\$431K															
Parkallen_EDMO	\$100K		\$287K	\$422K	\$558K	\$744K	\$768K			\$442K	\$445K				\$170K		\$339K		
Rio Terrace	\$138K			\$501K	\$591K														
Westbrook Esta..	\$144K			\$944K	\$1,248K	\$1,088K	\$3,595K		\$487K			\$492K							
Mature Area Rossdale	\$112K	\$370K	\$299K	\$400K	\$609K	\$760K	\$938K						\$491K				\$293K	\$1,149K	



Note to the reader: This chart shows the average sale prices of homes (by year of construction, and dwelling type) in mature and mature core areas with an average household income of \$100,000 – \$149,999. This chart provides an historical reference of average sales prices.

Figure A7: Neighbourhoods with Average Income of \$150,000+

Community	average income	SF						Dplx			TH			Aptm		
		Urban Growth (1905-1913)	War Years (1914-1945)	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Infill	Post-War years (1946-1970)	New Era (1990+)	Infill	Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990+)	Post-War years (1946-1970)	New Era (1990+)	Infill
Belgravia	\$197K			\$600K	\$769K	\$1,199K	\$1,126K		\$622K	\$610K	\$571K		\$497K	\$192K	\$444K	
Crestwood	\$228K			\$633K	\$961K	\$1,741K	\$1,425K	\$420K	\$360K	\$493K			\$740K	\$405K		
Glenora	\$219K	\$1,150K	\$827K	\$610K	\$809K	\$1,083K	\$1,203K		\$716K	\$692K				\$190K		\$469K
Grandview Heig..	\$262K			\$794K	\$1,190K	\$1,775K	\$1,815K									
Laurier Heights	\$151K			\$625K	\$902K	\$951K	\$1,353K									
Parkview	\$152K			\$569K	\$967K	\$1,095K	\$1,171K					\$263K				
Quesnell Heights	\$290K			\$824K	\$1,007K											
Windsor Park_E..	\$218K		\$1,052K	\$789K	\$1,071K	\$1,897K	\$1,482K							\$679K	\$741K	
Mature Area Cloverdale	\$158K		\$380K	\$411K	\$666K	\$895K	\$892K		\$608K	\$630K			\$412K		\$356K	



Note to the reader: This chart shows the average sale prices of homes (by year of construction, and dwelling type) in mature and mature core areas with an average household income of \$150,000+. This chart provides an historical reference of average sales prices.

Figure A8: 2012–2017 Market Demand (Number of Sales) by Dwelling Type and Areas

		2012				2013				2014				2015				2016				2017			
		SF	Dplx	TH	Aptm	SF	Dplx	TH	Aptm	SF	Dplx	TH	Aptm	SF	Dplx	TH	Aptm	SF	Dplx	TH	Aptm	SF	Dplx	TH	Aptm
Established	Resale	1,940	220	692	431	1,597	219	662	394	1,830	219	762	443	1,502	183	666	378	1,397	196	468	293	631	89	249	147
	New	54	19			28	30	83		30	22	228		30	20	159		47	14	274		7	5	4	
Mature Area	Resale	2,429	192	172	430	2,126	183	158	436	2,499	257	201	465	2,127	193	209	337	1,993	247	137	368	1,003	107	79	170
	New	149	108	48		156	197	59		211	221	36		231	179	71		293	197	80		78	40	19	
Mature Area - Central Core	Resale	119	7	30	782	108	15	45	697	151	9	30	833	99	17	28	596	107	13	27	532	56	7	12	254
	New	12	13	4		27	6	8		26	6			33	8	4		20	10	6		2	6		
Total		4,703	559	946	1,643	4,042	650	1,015	1,527	4,747	734	1,257	1,741	4,022	600	1,137	1,311	3,857	677	992	1,193	1,777	254	363	571

Note to the reader: This chart shows the number of sales (new and resale) between 2012 and 2017 by dwelling type in established, mature, and mature core areas.

Figure A9: Infill Single-Detached 2012-2017 Sales vs. Areas, and Sales Price

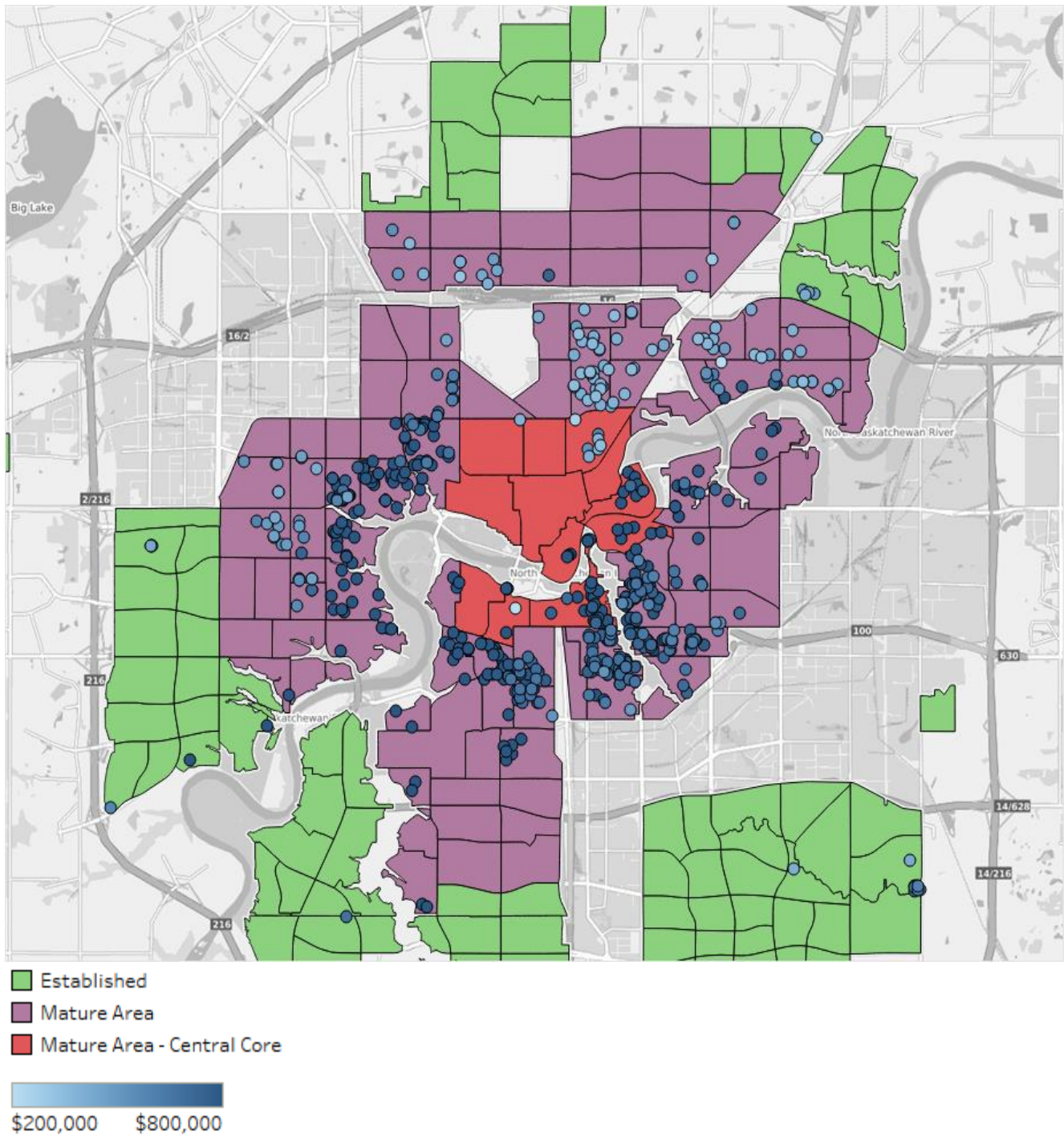


Figure A10: Infill Single-Detached 2012-2017 Sales vs. Areas, Neighbourhood Average Household Income

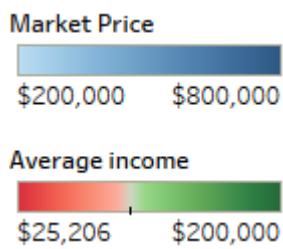
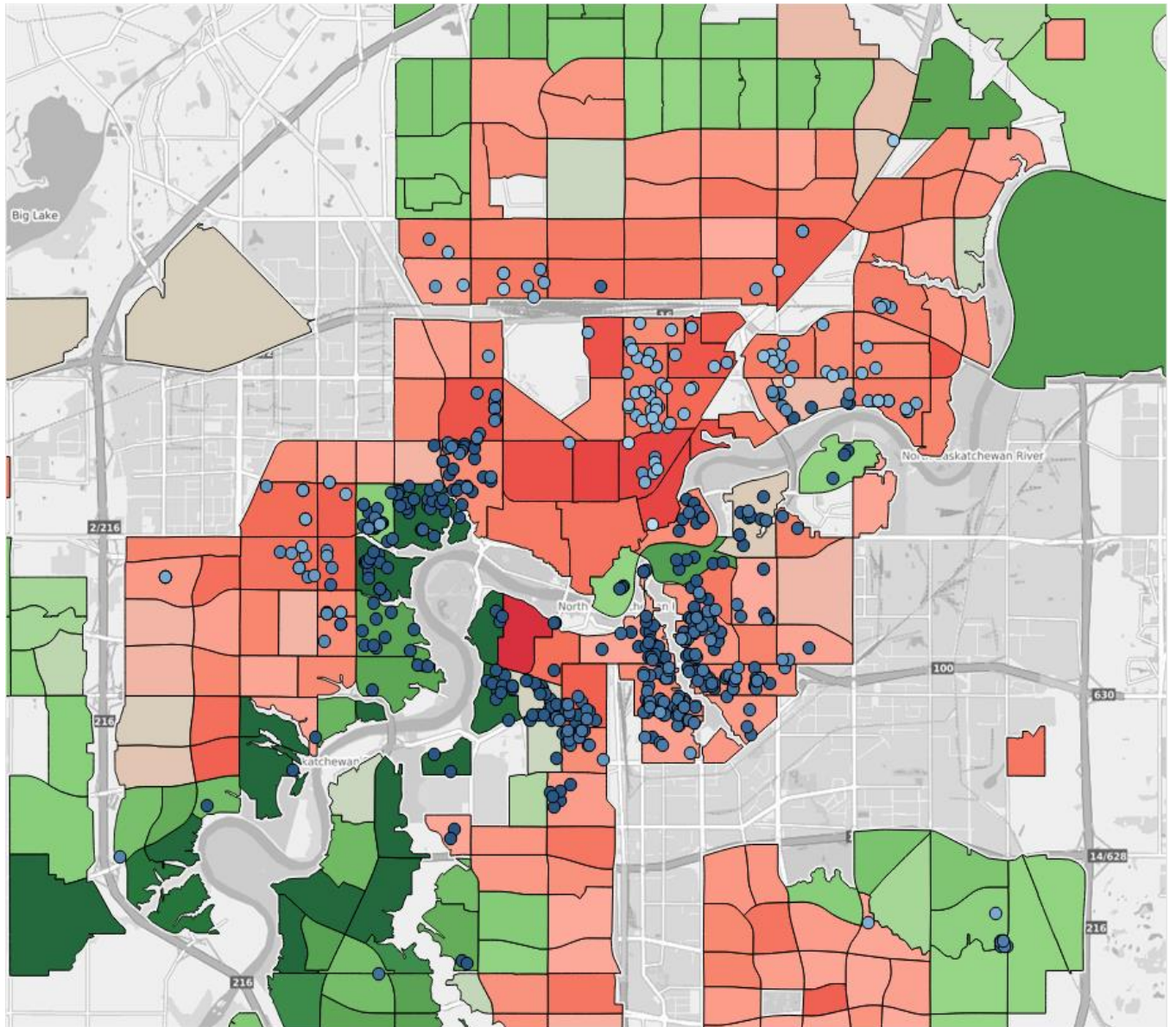


Figure A11: Infill Duplexes 2012-2017 Sales vs. Areas, and Sales Price

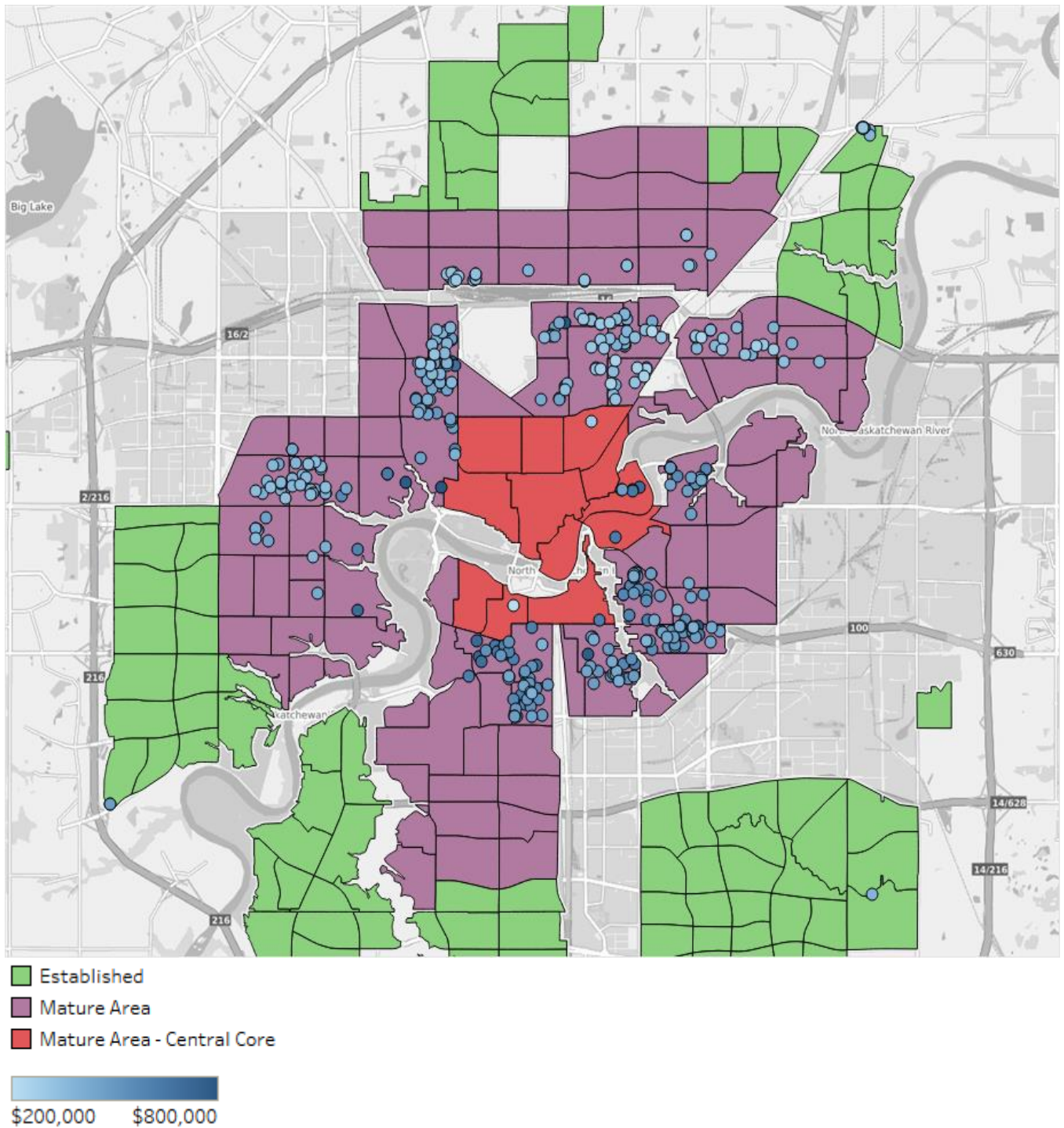


Figure A12: Infill Duplexes 2012-2017 Sales vs. Areas, and Neighbourhood Average Household Income

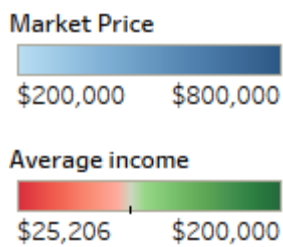
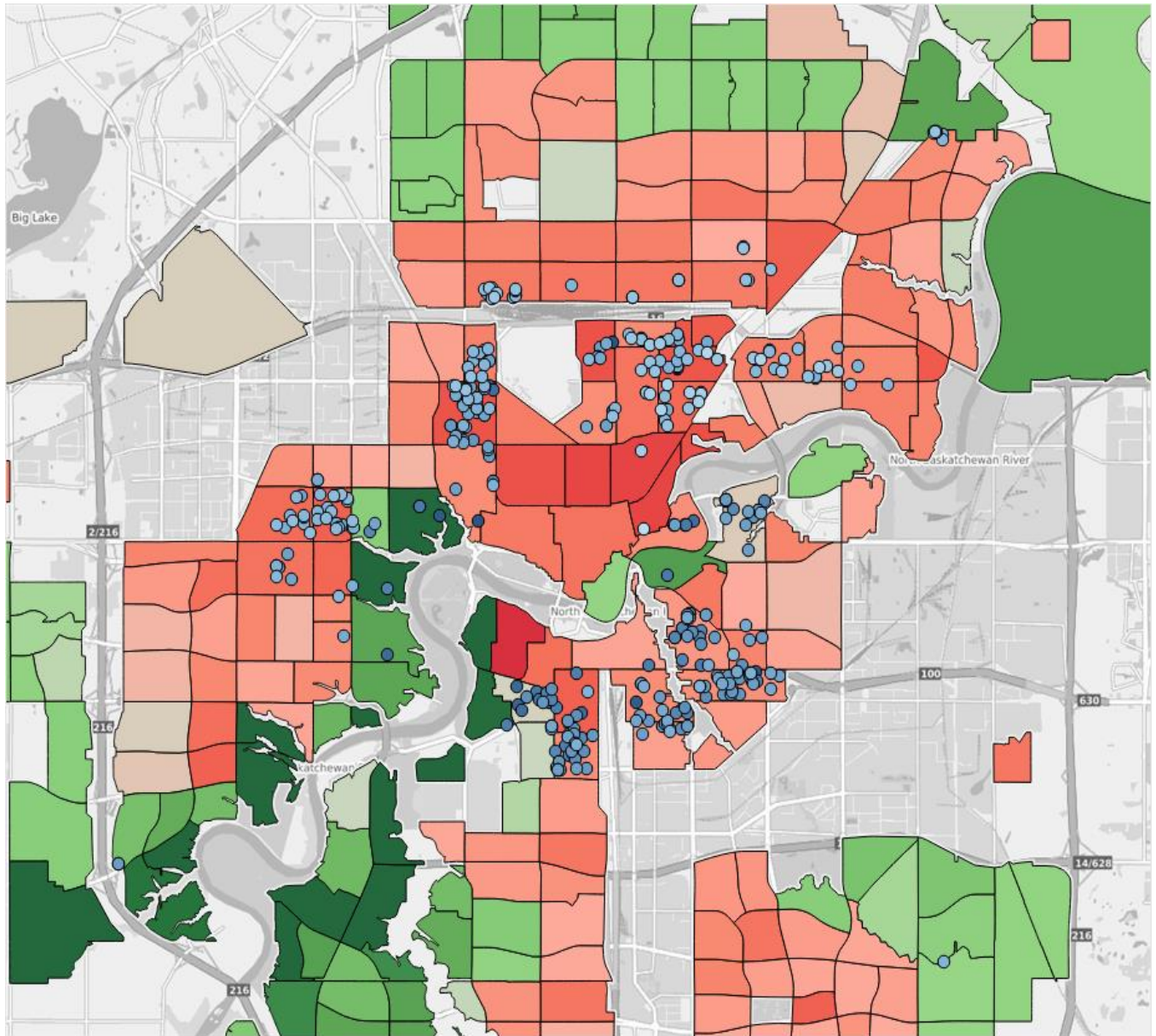


Figure A13: Infill Townhomes 2012–2017 Sales vs. Areas, and Sales Price

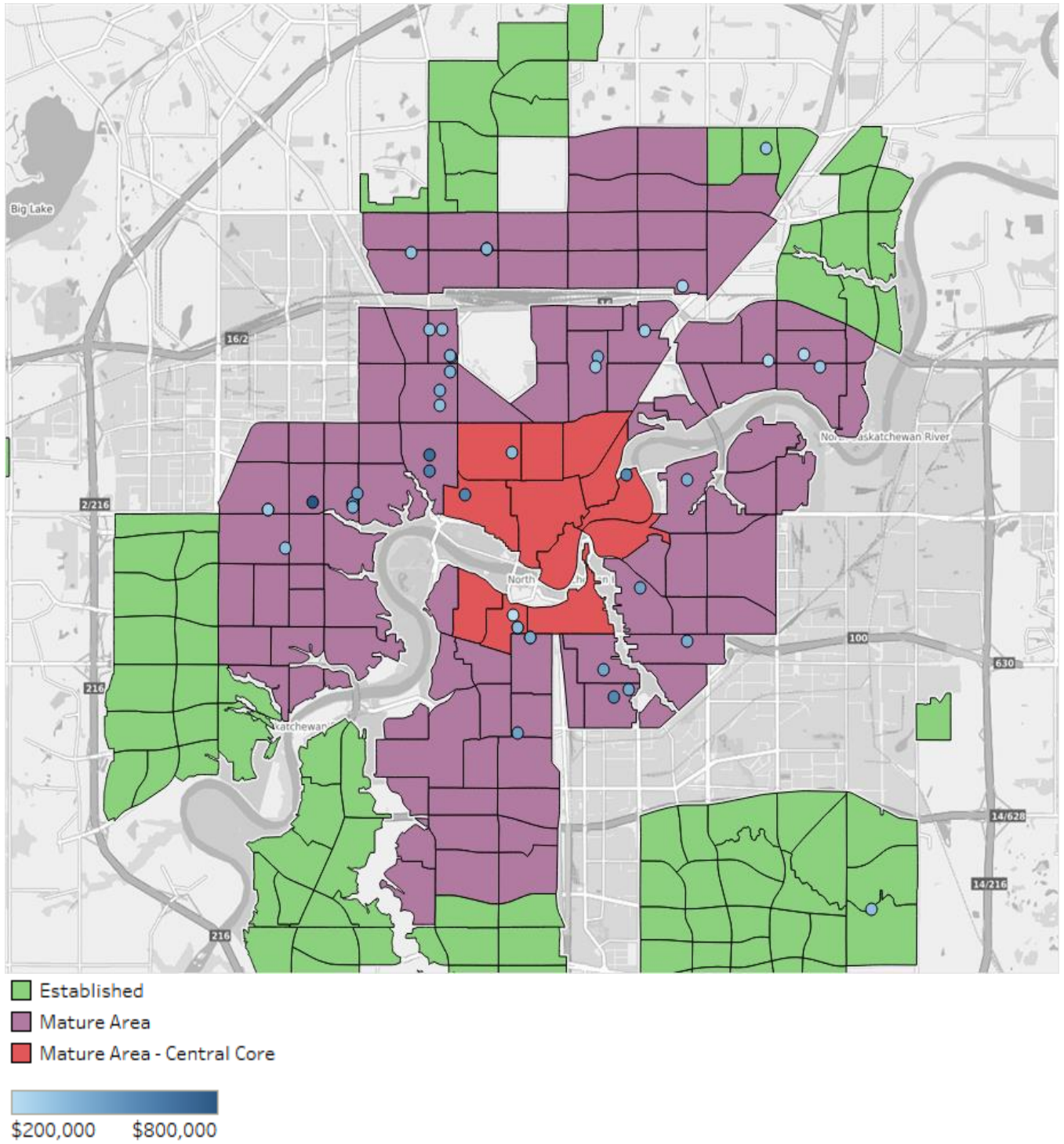


Figure A14: Infill Townhomes 2012–2017 Sales vs. Areas, and Neighbourhood Average Household Income

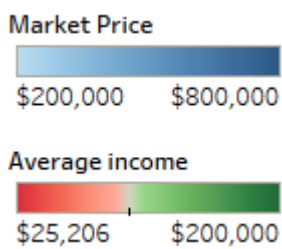
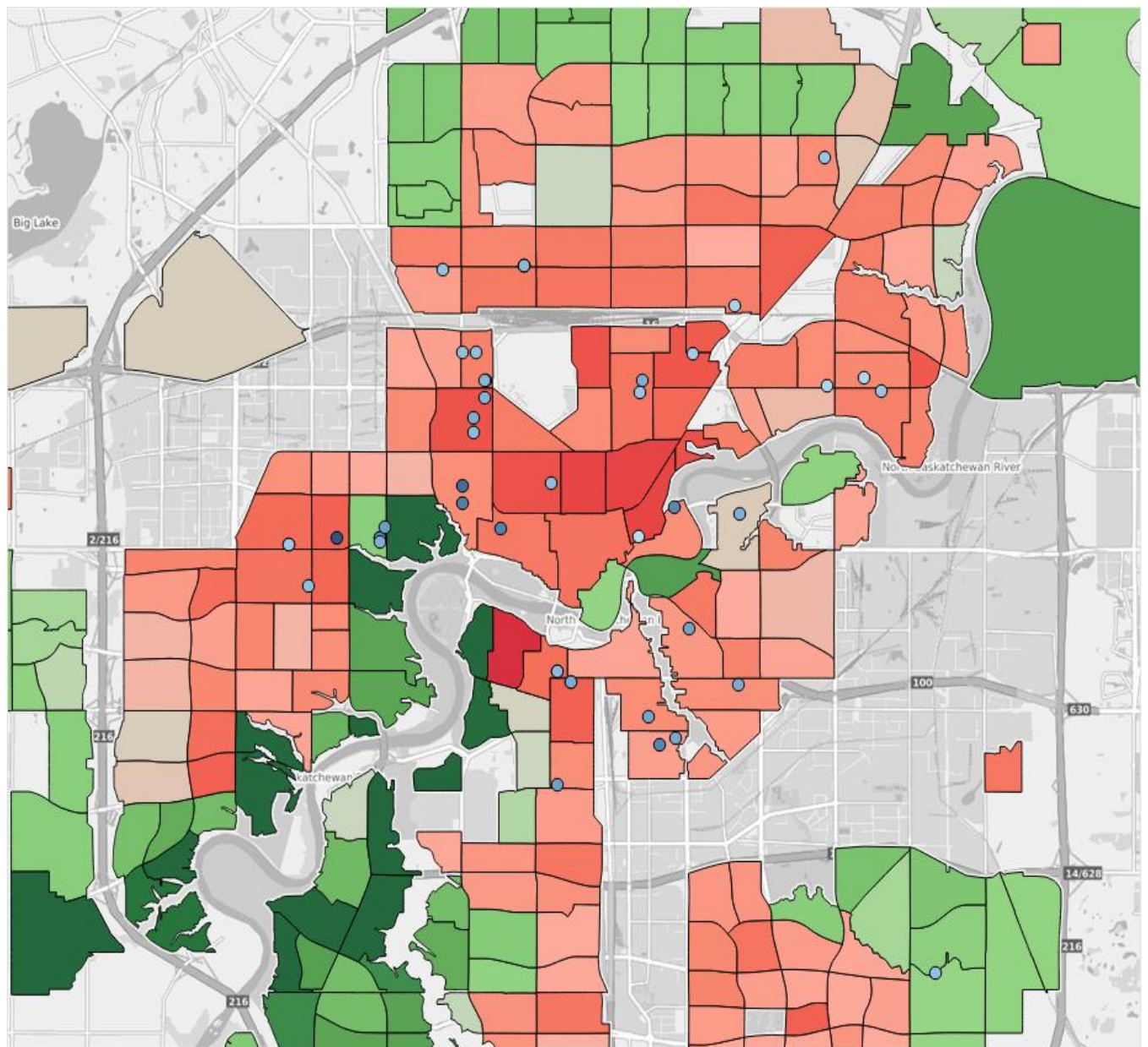


Figure A15: All Products; 2012–2017 Market Activity by Price vs. Areas

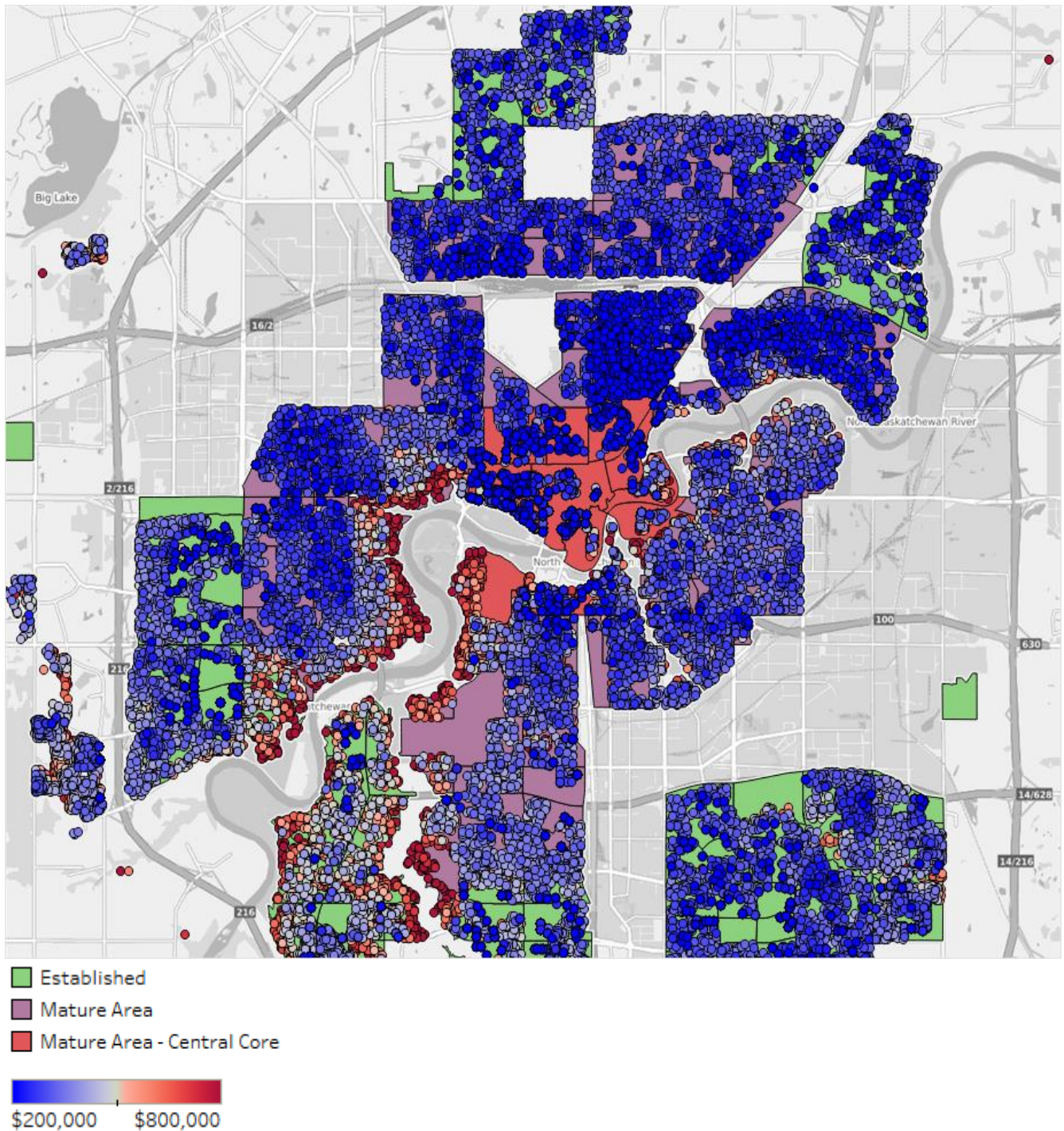


Figure A16: Single-Detached; 2012-2017 Market Activity by Price vs. Areas

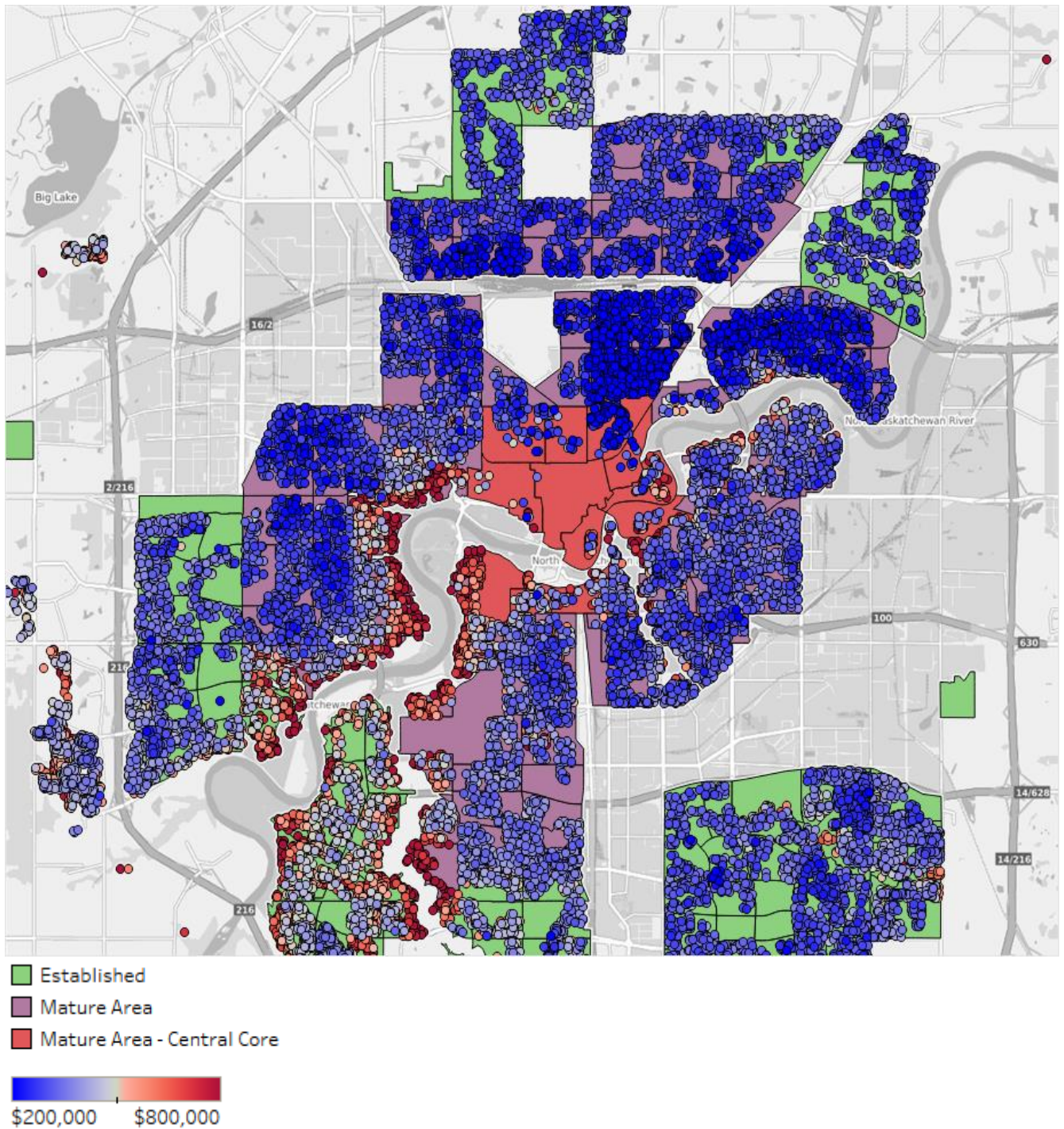


Figure A17: Duplexes; 2012–2017 Market Activity by Price vs. Areas

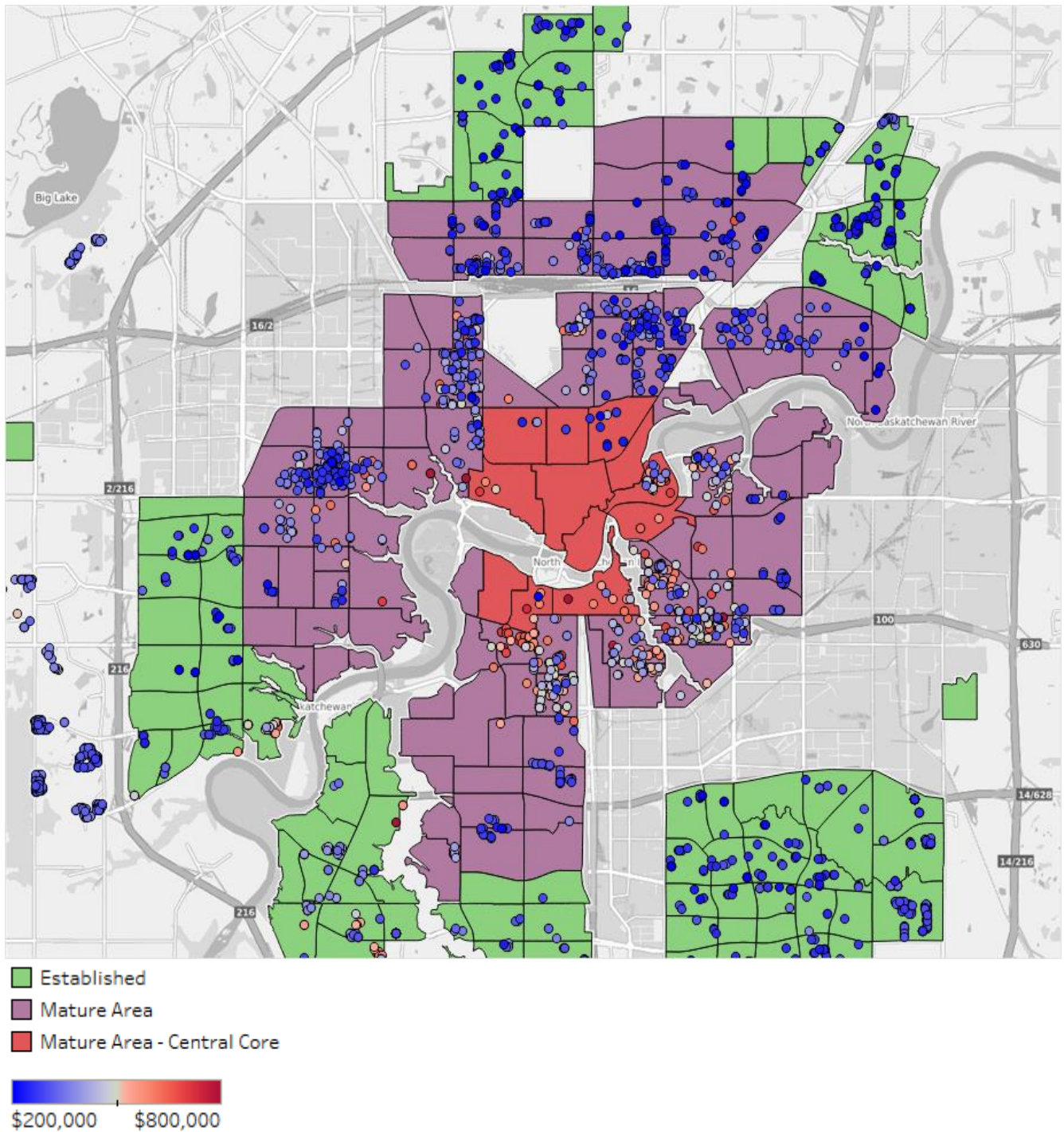


Figure A18: Townhomes; 2012-2017 Market Activity by Price vs. Areas

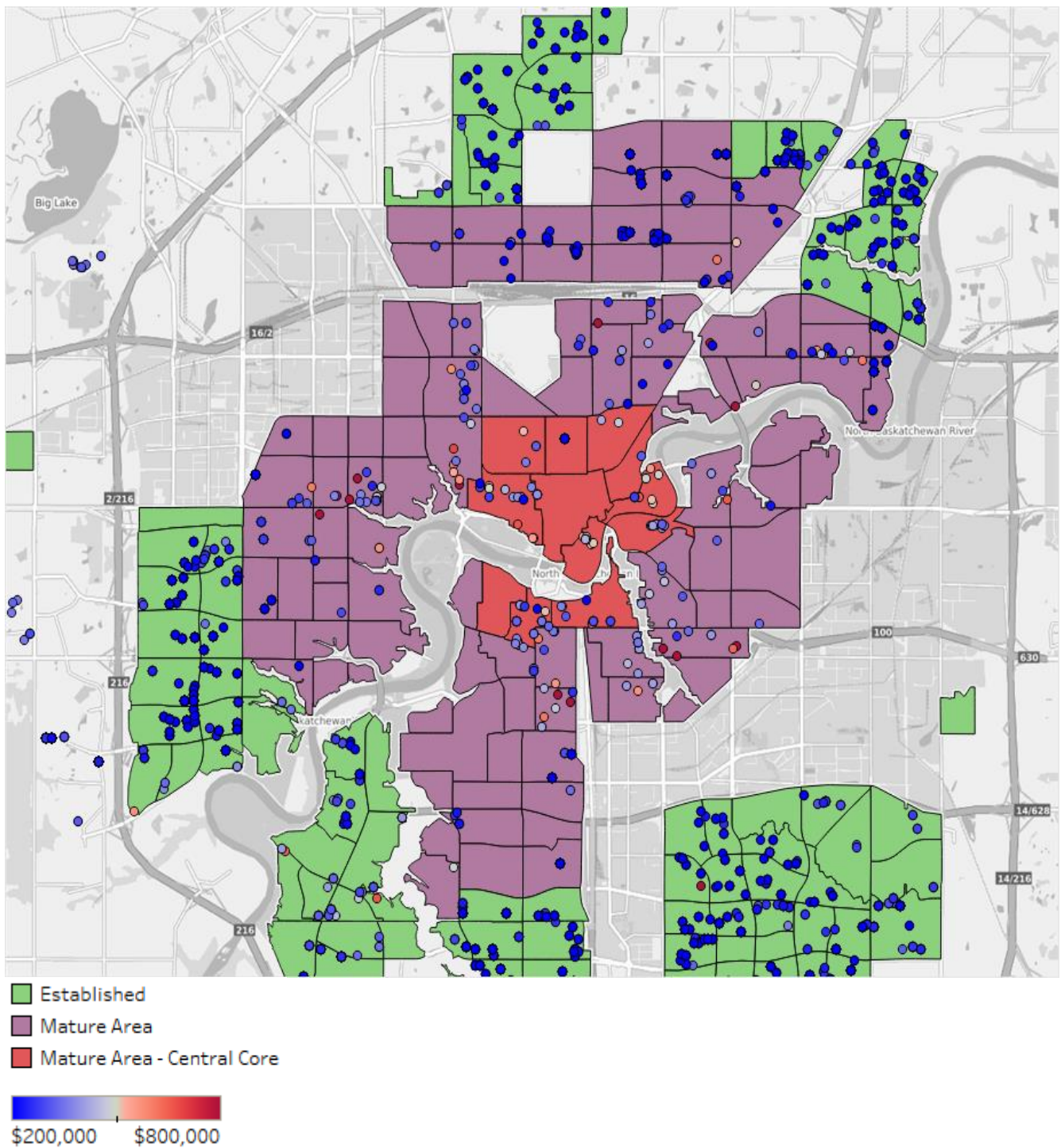


Figure A19: Apartments; 2012–2017 Market Activity by Price vs. Areas

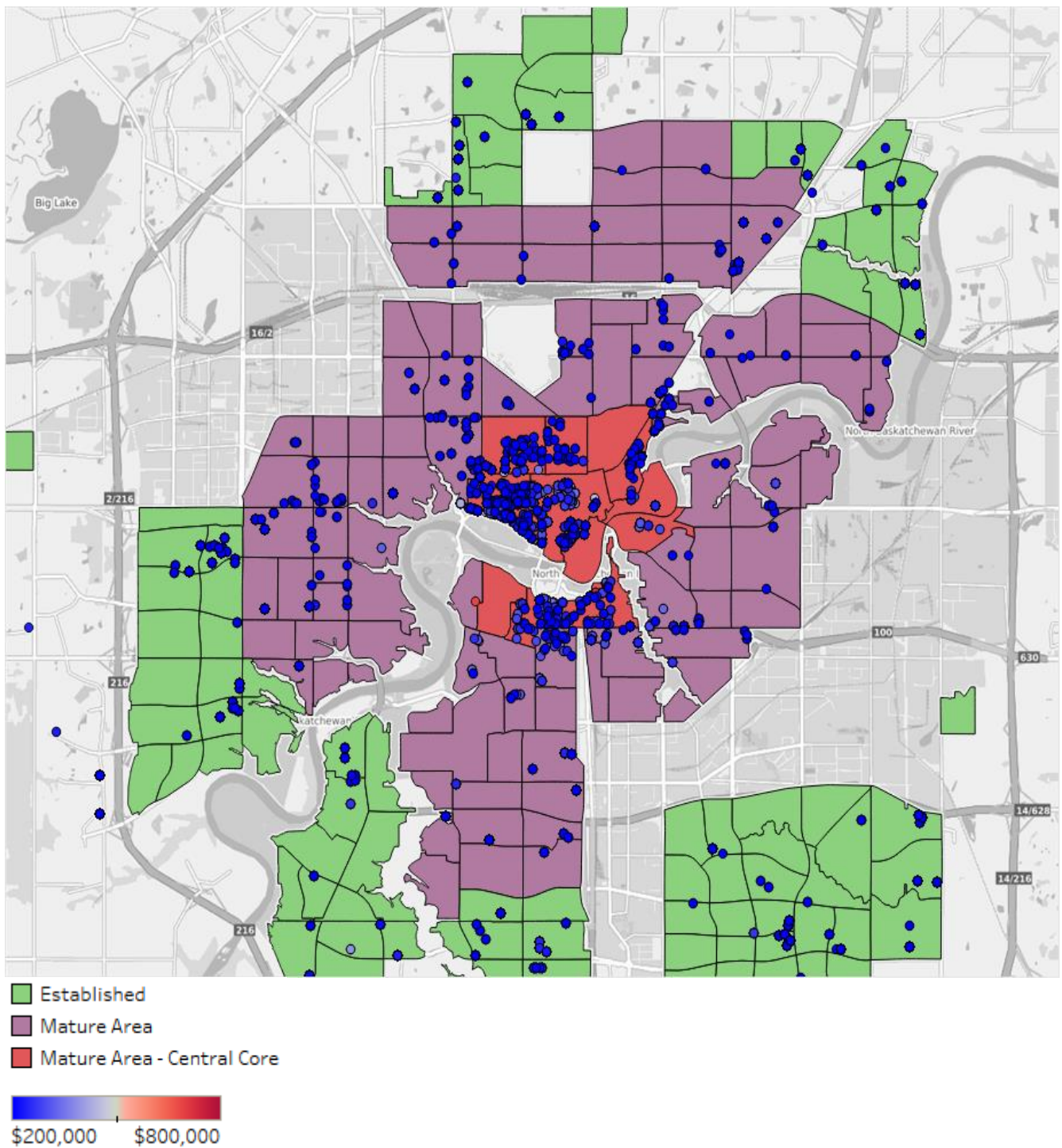


Figure A22: Duplexes; Neighbourhood Average Household Income, and 2012–2017 Sales Price

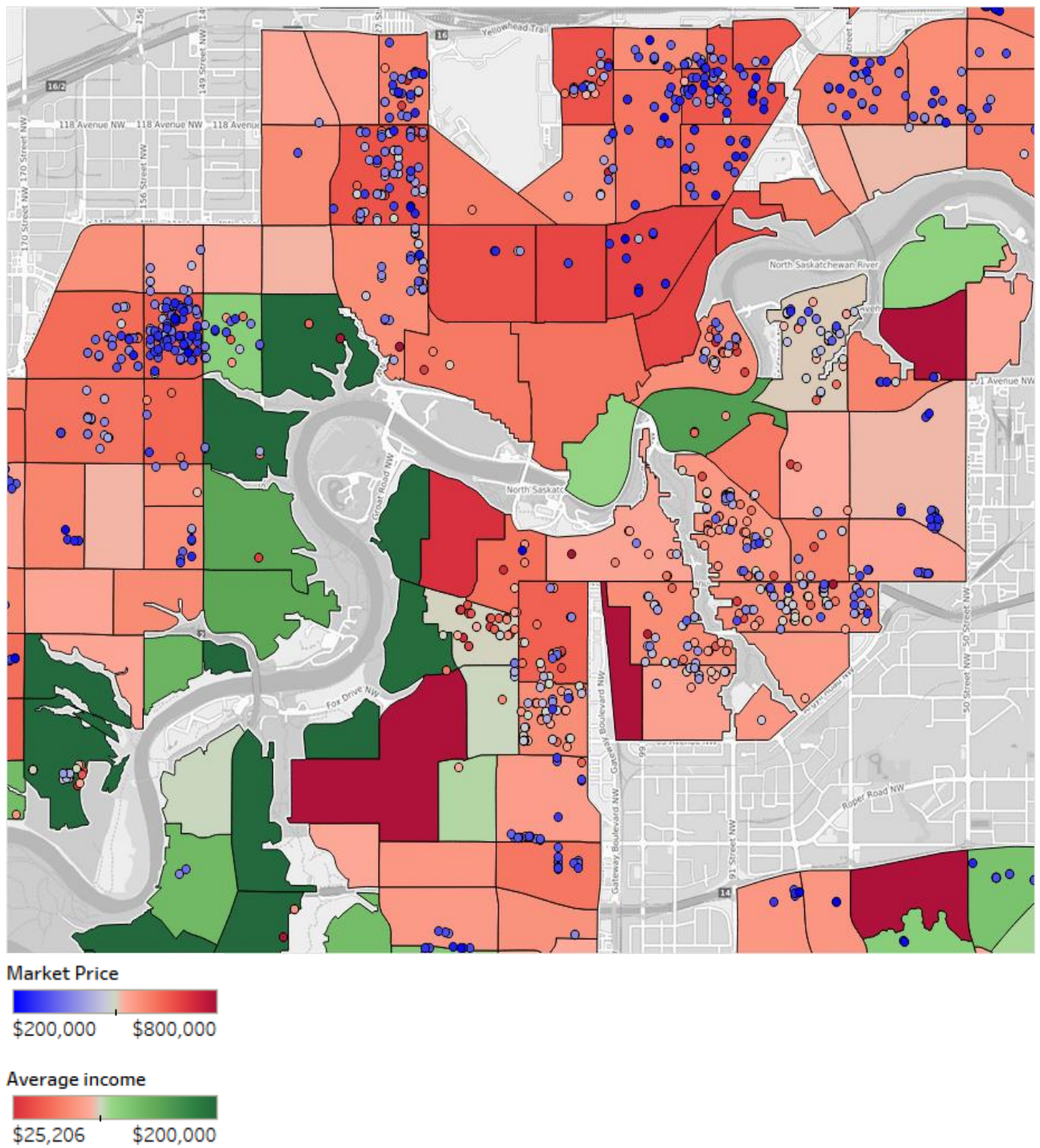


Figure A23: Townhomes; Neighbourhood Average Household Income, and 2012–2017 Sales Price

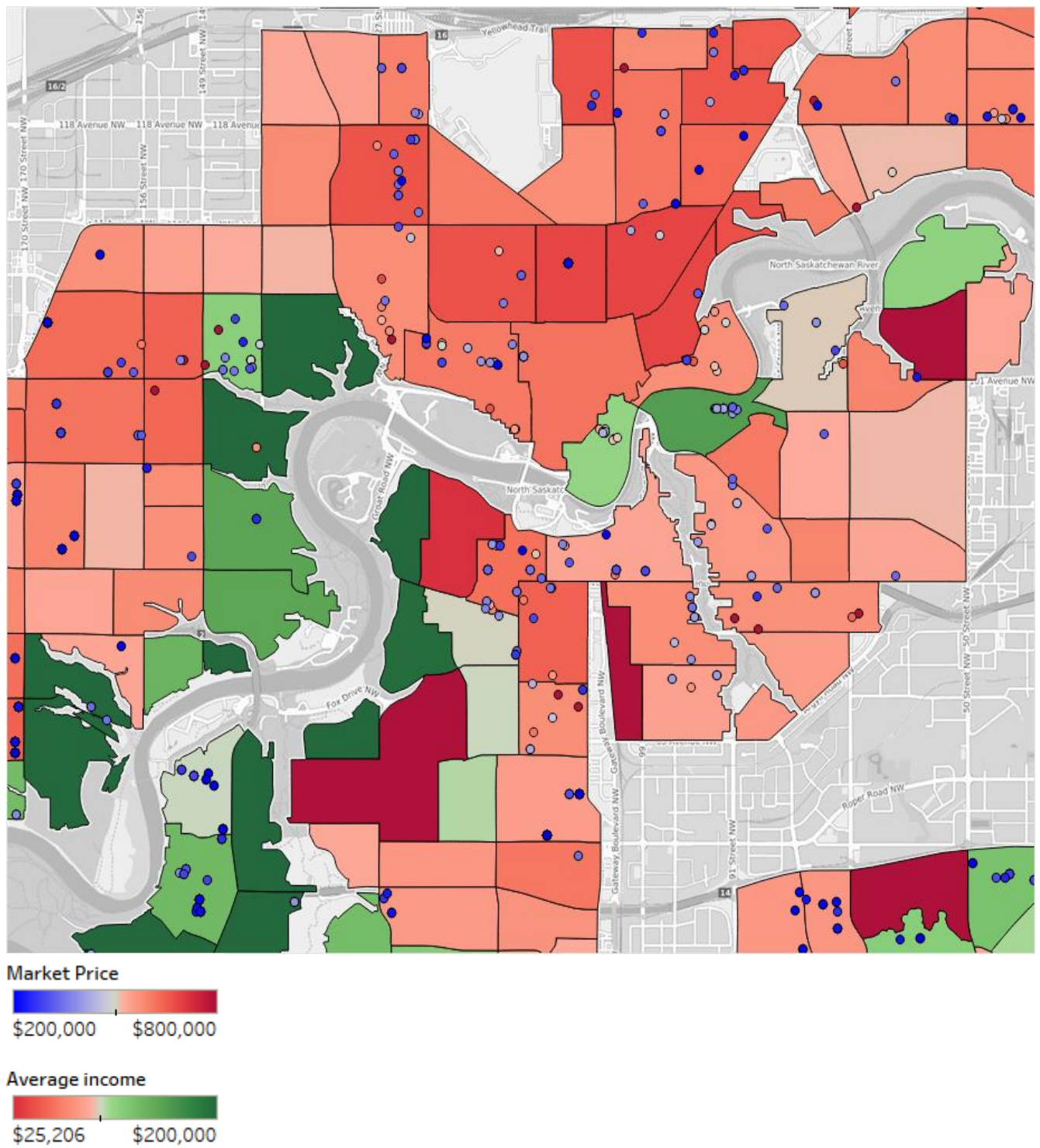


Figure A26: Duplexes; Neighbourhood Supply & Demand Deficit, and 2012-2017 Sales Price

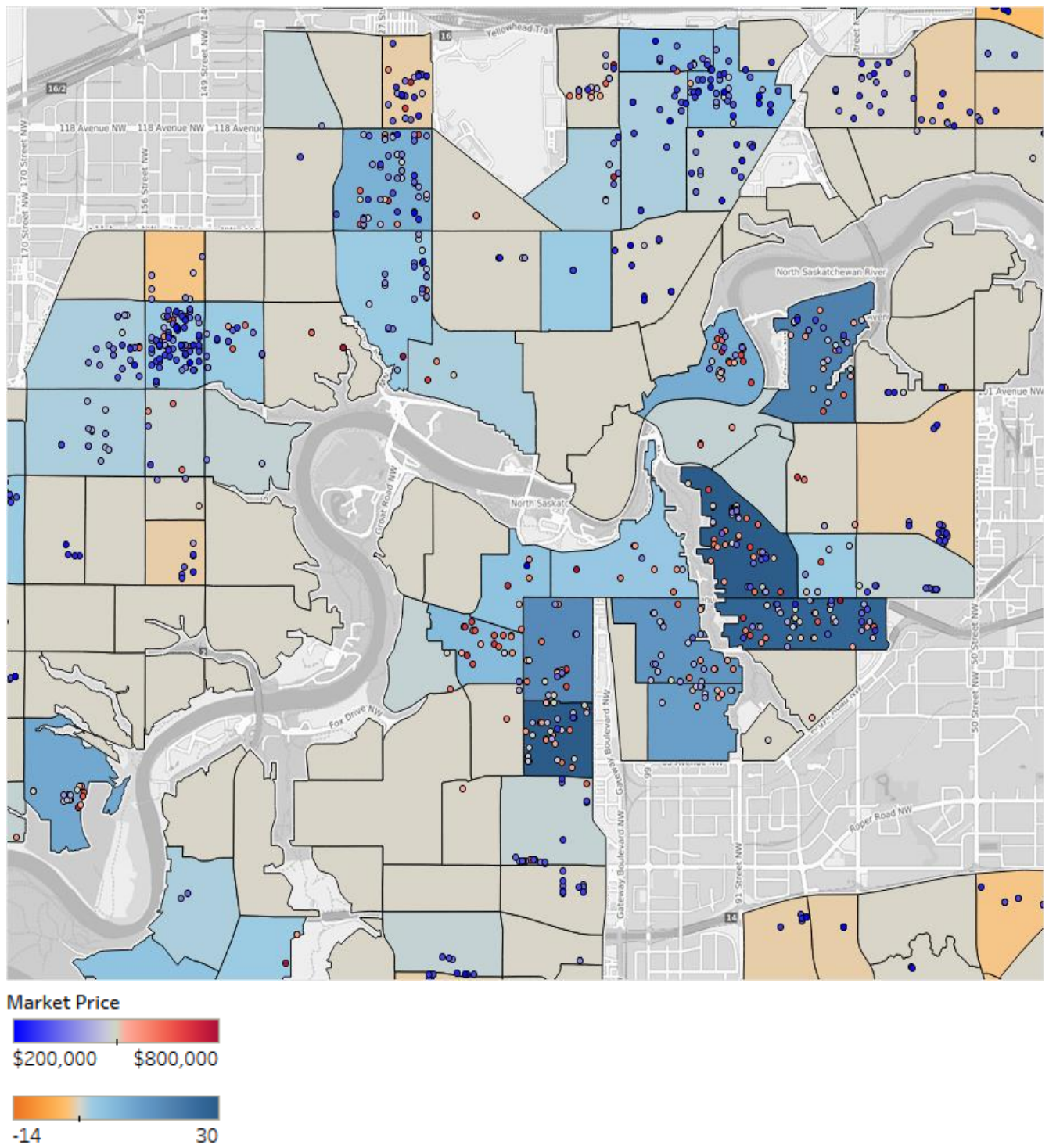


Figure A27: Townhomes; Neighbourhood Supply & Demand Deficit, and 2012-2017 Sales Price

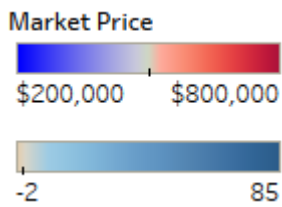
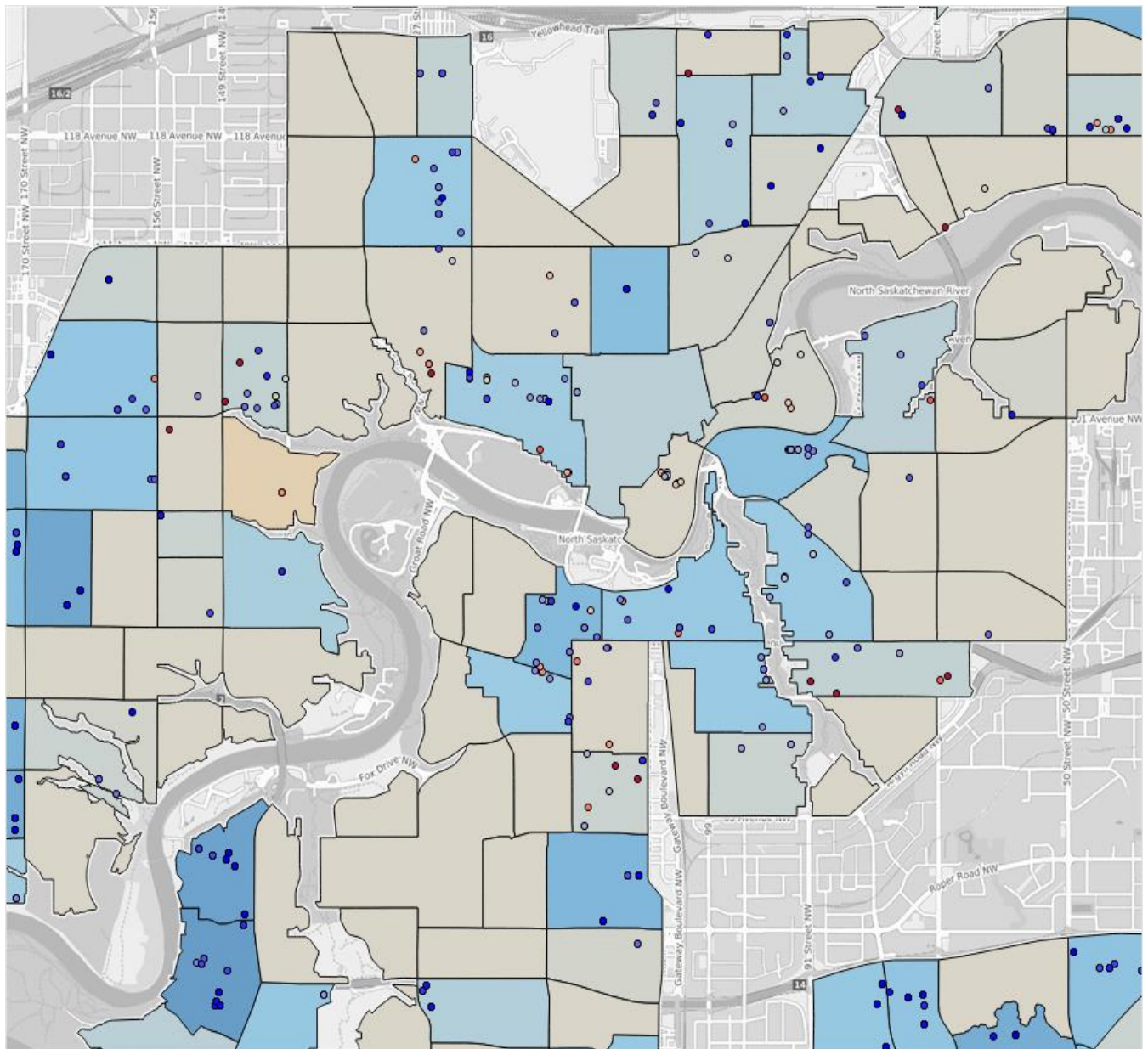


Figure A29: 2012–2017 Sales by Household Income and Dwelling Type (Citywide)

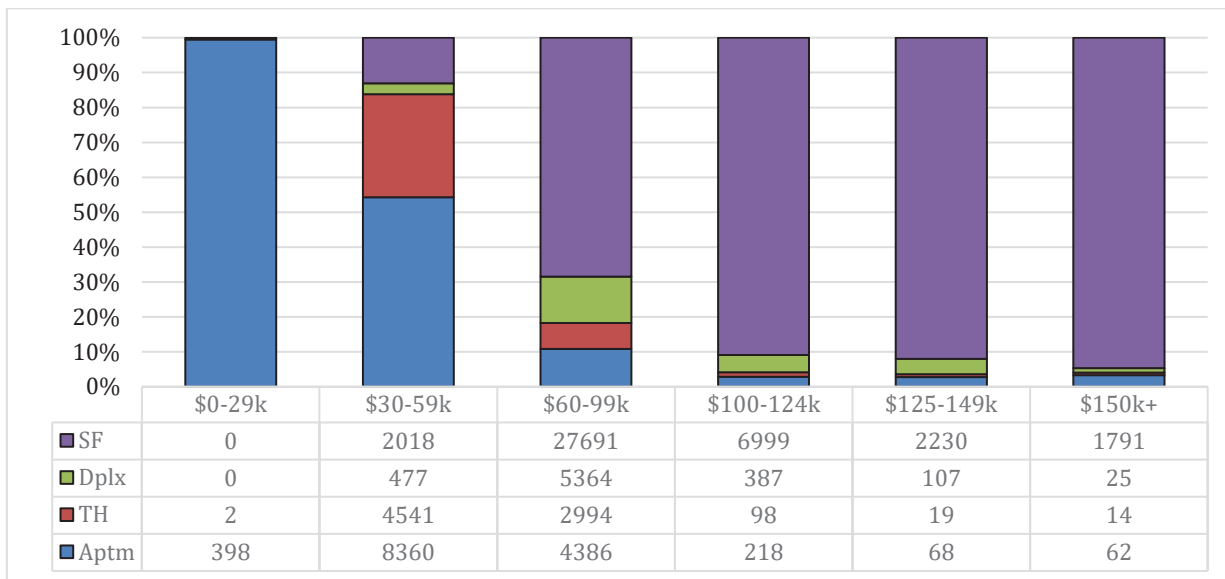


Figure A30: 2012–2017 Sales by Household Income and Dwelling Type (Established)

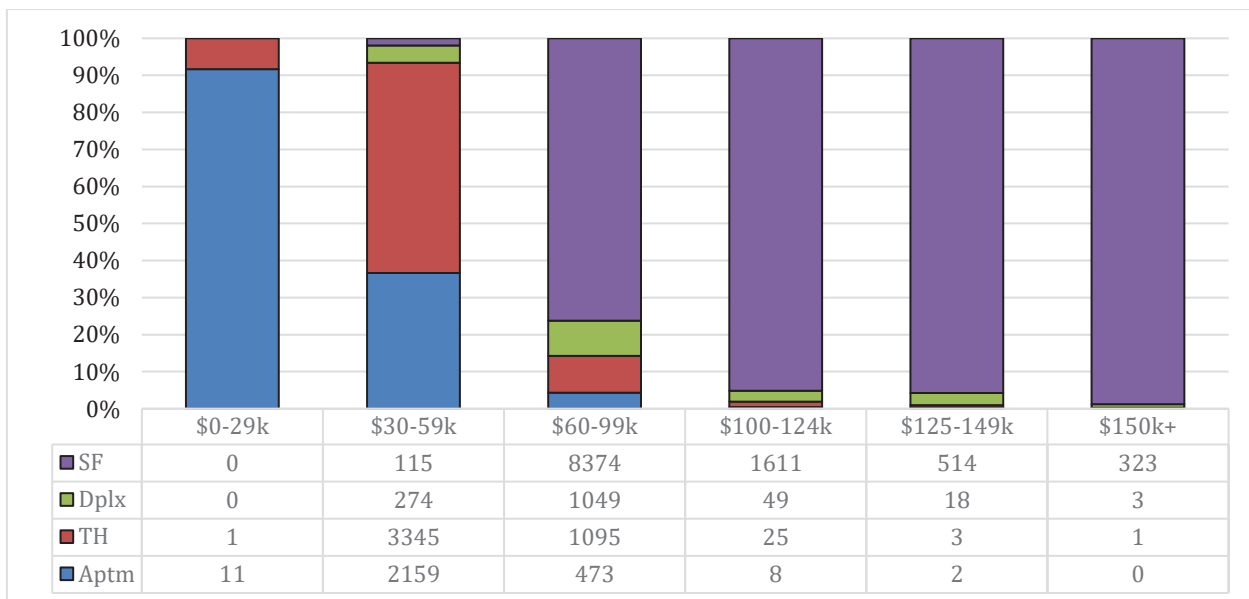


Figure A31: 2012–2017 Sales by Household Income and Dwelling Type (Mature)

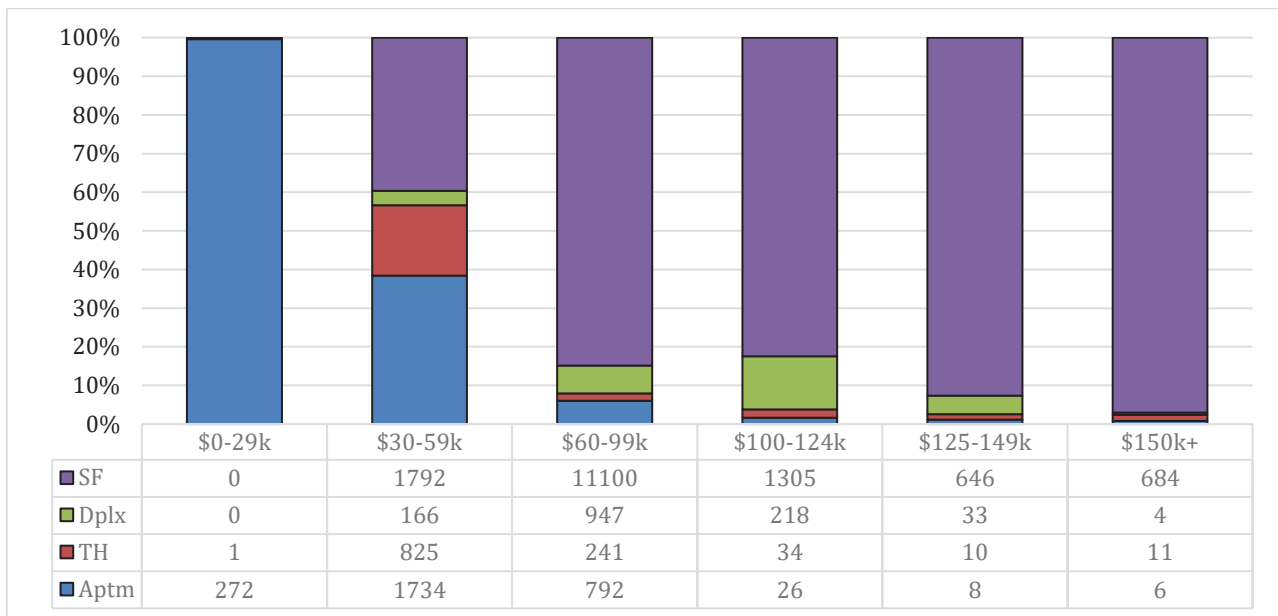


Figure A32: 2012–2017 Sales by Household Income and Dwelling Type (Mature – Core)

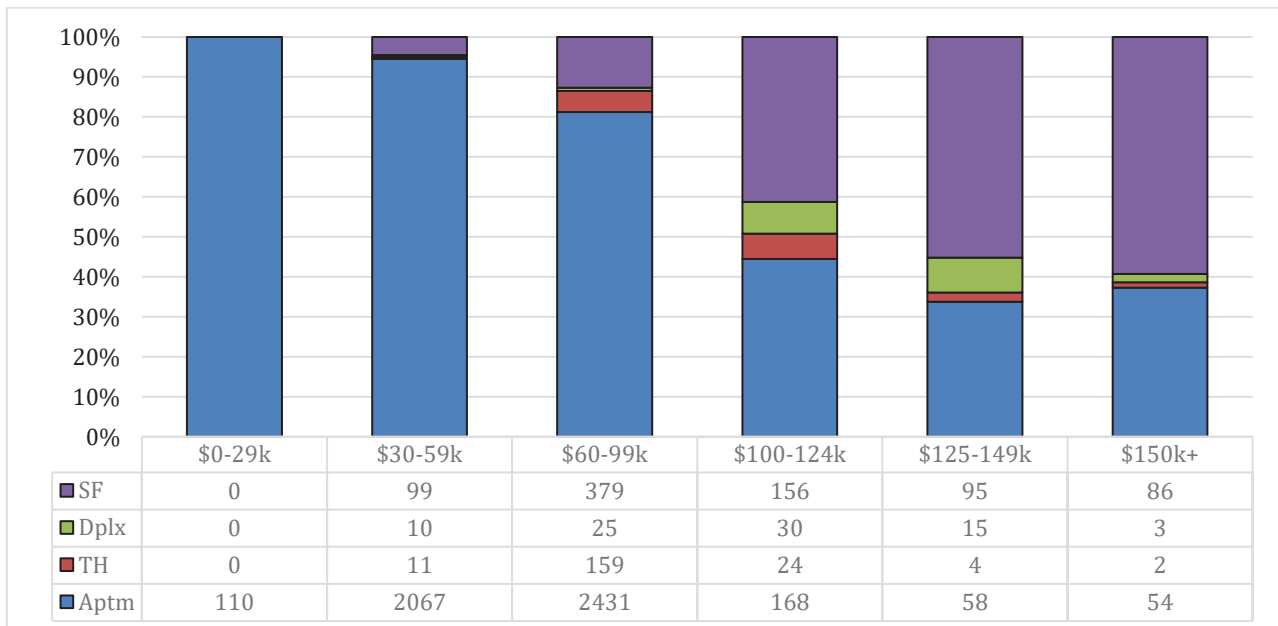


Figure A34: 2012–2017 Supply and Demand Deficit by Household Income; Single-Detached (Neighbourhoods with Average Incomes up to \$60k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ABBOTTSFIELD						
BELVEDERE	-59	-26	110	-11	-7	-6
BOYLE STREET	-6	1	5	0	0	0
BRITANNIA YOUNGSTOWN	-43	-11	78	-13	-6	-5
CANORA	-22	-13	46	-5	-4	-2
CENTRAL MCDOUGALL	-10	-2	11	0	0	0
CROMDALE	-7	-3	5	4	2	-1
Downtown_EDMO	0	0	1	0	0	0
EASTWOOD	-59	47	24	-7	-2	-3
ELMWOOD PARK	-18	-8	37	-5	-3	-3
GARNEAU	-54	-27	27	38	19	-3
INGLEWOOD_EDMO	-55	-40	156	-11	-11	-40
MCCAULEY	-82	47	42	-2	-2	-3
PARKDALE_EDMO	-88	98	16	-17	-6	-4
QUEEN ALEXANDRA	-44	-56	96	-2	12	-6
QUEEN MARY PARK	-34	-20	62	-1	-3	-4
WEST JASPER PLACE	-26	-31	57	5	-1	-4
WESTWOOD_EDMO	-41	-13	60	-2	-2	-2

Figure A35: 2012–2017 Supply and Demand Deficit by Household Income; Duplexes (Neighbourhoods with Average Incomes up to \$60k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELVEDERE	-9	-1	14	-2	-1	-1
BRITANNIA YOUNGSTOWN	-8	-7	20	-3	-1	-1
CANORA	-31	-25	73	-8	-5	-3
CENTRAL MCDOUGALL	-3	-2	5	0	0	0
EASTWOOD	-20	-9	32	-2	-1	-1
ELMWOOD PARK	-1	0	1	0	0	0
GARNEAU	-3	-1	-1	5	1	0
INGLEWOOD_EDMO	-21	-17	59	2	-8	-15
MCCAULEY	-7	5	2	0	0	0
PARKDALE_EDMO	-10	-2	15	-2	-1	0
QUEEN ALEXANDRA	-8	-10	-2	18	3	-2
QUEEN MARY PARK	-1	1	1	0	0	0
WEST JASPER PLACE	-1	-1	3	0	0	0
WESTWOOD_EDMO	-6	-5	12	-1	0	1

Figure A36: 2012–2017 Supply and Demand Deficit by Household Income; Townhomes (Neighbourhoods with Average Incomes up to \$60k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ABBOTTSFIELD	-41	64	-16	-5	-1	-2
BELVEDERE	-3	5	-2	0	0	0
BOYLE STREET	-1	-1	2	0	0	0
BRITANNIA YOUNGSTOWN	-8	15	-3	-2	-1	-1
CANORA	0	0	1	0	0	0
CENTRAL MCDOUGALL	-17	-5	23	-1	0	0
Downtown_EDMO	-4	-4	8	1	-1	0
EASTWOOD	-4	1	4	0	0	0
GARNEAU	-19	-9	30	2	-1	-2
INGLEWOOD_EDMO	-4	-4	12	-1	-1	-3
MCCAULEY	-2	-1	2	1	0	0
PARKDALE_EDMO	-1	2	-1	0	0	0
QUEEN ALEXANDRA	-1	-2	2	1	0	0
QUEEN MARY PARK	-1	-1	1	1	0	0
WEST JASPER PLACE	0	0	0	0	0	1
WESTWOOD_EDMO	-2	0	2	0	0	0

Figure A37: 2012–2017 Supply and Demand Deficit by Household Income; Apartments (Neighbourhoods with Average Incomes up to \$60k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELVEDERE	-8	87	-47	-16	-8	-8
BOYLE STREET	-73	64	15	-1	-1	-3
BRITANNIA YOUNGSTOWN	-6	19	-8	-3	-1	-1
CANORA	5	22	-14	-6	-4	-3
CENTRAL MCDOUGALL	-32	43	-5	-3	-1	-1
CROMDALE	-27	62	-18	-6	-3	-8
Downtown_EDMO	-305	86	436	-77	-46	-94
EASTWOOD	2	2	-3	-1	0	0
ELMWOOD PARK	3	1	-3	-1	0	0
GARNEAU	-173	39	175	-1	-11	-29
INGLEWOOD_EDMO	12	27	-11	-7	-7	-14
PARKDALE_EDMO	-33	69	-25	-6	-2	-1
QUEEN ALEXANDRA	-37	4	69	-16	-9	-11
QUEEN MARY PARK	-104	108	57	-26	-15	-19
WEST JASPER PLACE	-1	6	-3	-1	-1	-1
WESTWOOD_EDMO	-9	18	-5	-2	-1	-1

Figure A38: 2012–2017 Average Sales Price by Dwelling Type and Construction Year (Neighbourhoods with Average Incomes from \$60k–\$100k)

Community	average income	SF						Dplx					TH					
		Urban Settlement (1870-1904)	Urban Growth (1905-1913)	The War Years (1914-1945)	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill	The War Years (1914-1945)	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill	The War Years (1914-1945)	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill
Alberta Avenue	\$61K	\$243K	\$220K	\$209K	\$235K	\$292K	\$37K	\$380K	\$160K	\$345K	\$300K	\$293K	\$302K				\$271K	\$399K
Allendale	\$74K			\$312K	\$370K	\$483K	\$565K	\$712K		\$630K	\$455K	\$518K	\$506K			\$778K	\$439K	\$458K
Argyll	\$80K				\$359K	\$450K	\$765K			\$470K								
Athlone	\$84K			\$197K	\$269K	\$381K	\$374K	\$446K		\$275K		\$412K					\$319K	
Avonmore	\$82K			\$295K	\$376K	\$689K	\$671K	\$695K		\$525K								
Balwin	\$65K			\$203K	\$283K	\$284K	\$280K	\$454K		\$261K	\$306K	\$353K	\$340K			\$619K	\$169K	\$277K
Beacon Heights	\$71K			\$261K	\$258K	\$288K	\$370K	\$386K		\$281K	\$358K	\$296K	\$380K			\$540K	\$480K	\$229K
BelleVue	\$84K	\$199K	\$270K	\$343K	\$860K	\$509K	\$552K										\$900K	
Bergman	\$76K			\$265K	\$346K	\$428K				\$293K	\$330K							
Beverly Heights	\$67K	\$212K	\$221K	\$292K	\$431K	\$520K	\$381K			\$328K	\$316K	\$332K				\$610K	\$900K	
Bonnie Doon	\$80K	\$890K	\$347K	\$393K	\$664K	\$727K	\$733K			\$613K	\$436K	\$504K	\$525K			\$405K	\$417K	
Calder	\$63K	\$202K	\$200K	\$257K	\$311K	\$395K	\$410K			\$319K	\$519K	\$326K	\$332K		\$178K	\$164K		
Delton	\$73K		\$179K	\$251K	\$294K	\$408K	\$373K			\$377K	\$401K	\$347K	\$337K			\$606K		
Delwood	\$91K		\$191K	\$317K	\$299K					\$296K		\$330K	\$328K		\$174K			
Dovercourt	\$98K		\$272K	\$323K	\$366K							\$394K						
Duggan	\$90K			\$400K	\$402K											\$219K		
Elmwood	\$88K			\$333K	\$391K						\$369K							
Empire Park	\$62K			\$353K						\$306K							\$357K	
Evansdale	\$81K			\$357K	\$333K						\$159K					\$171K		
Forest Heights_ED.	\$98K		\$302K	\$408K	\$470K	\$672K	\$787K			\$505K	\$398K	\$479K	\$509K		\$590K	\$265K	\$413K	
Glenarry	\$66K			\$311K	\$313K					\$226K					\$196K			
Glenwood_EDMO	\$60K		\$321K	\$295K	\$371K	\$424K	\$473K			\$423K	\$380K	\$377K	\$412K			\$302K	\$335K	
Gold Bar	\$88K			\$372K	\$633K													
Hazeldean	\$85K		\$294K	\$371K	\$436K	\$621K	\$694K			\$528K	\$488K	\$472K				\$417K	\$571K	
High Park_EDMO	\$85K		\$272K	\$294K	\$388K	\$507K	\$475K			\$445K	\$400K	\$418K						
Highlands	\$94K	\$450K	\$393K	\$382K	\$393K	\$598K	\$685K			\$435K				\$505K				
Hollywood	\$91K		\$392K	\$587K	\$631K	\$717K				\$628K		\$432K			\$318K			
Idylwyld	\$69K		\$357K	\$344K	\$434K					\$608K	\$513K	\$448K	\$462K					
Jasper Park	\$75K		\$265K	\$310K	\$361K	\$550K	\$745K			\$300K	\$287K	\$337K	\$420K			\$294K		
Kenilworth	\$87K			\$366K	\$406K	\$618K	\$596K			\$315K	\$292K				\$335K			
Kennington	\$70K			\$313K	\$383K	\$436K				\$262K	\$265K				\$171K			
Kildare	\$62K			\$320K	\$293K					\$266K	\$281K	\$314K				\$321K	\$365K	
Kilkenny	\$80K			\$324K	\$353K					\$195K					\$165K	\$156K	\$295K	
Killarney	\$61K	\$220K	\$205K	\$295K	\$370K					\$338K	\$429K	\$324K	\$325K			\$160K	\$295K	
King Edward Park	\$76K	\$330K	\$312K	\$347K	\$454K	\$677K	\$735K			\$465K	\$360K	\$495K	\$477K		\$640K	\$613K	\$372K	\$410K
Lansdowne	\$88K			\$555K	\$698K	\$1,100K	\$1,093K											
Lauderdale	\$61K		\$278K	\$283K	\$300K	\$372K				\$367K	\$530K	\$375K			\$197K			
Lynnwood	\$73K			\$382K														
Malmö Plains	\$79K			\$437K														
Mayfield	\$76K			\$301K						\$222K					\$207K			
McKernan	\$99K	\$450K	\$396K	\$447K	\$534K	\$862K	\$1,004K				\$613K	\$638K			\$379K	\$396K		
McQueen	\$91K			\$347K	\$358K													
Meadowlark Park_ED.	\$93K			\$354K	\$528K													
Montrose_EDMO	\$65K	\$203K	\$185K	\$238K	\$322K	\$325K	\$402K			\$265K	\$231K	\$315K	\$322K		\$782K	\$267K		
Newton	\$74K	\$257K	\$181K	\$270K	\$348K	\$356K	\$403K				\$343K	\$289K	\$353K	\$236K		\$263K	\$230K	
North Glenora	\$93K			\$397K	\$485K	\$901K												
Northmount	\$83K			\$332K	\$338K										\$166K	\$177K		
Ottewill	\$94K			\$383K	\$354K	\$650K				\$303K								
Patricia Heights	\$98K			\$479K	\$836K	\$1,174K										\$149K		
Pleasantview_EDMO	\$83K		\$316K	\$408K	\$574K	\$933K	\$1,187K			\$359K					\$214K		\$366K	
Prince Charles	\$67K		\$259K	\$275K	\$370K	\$449K				\$295K	\$309K	\$393K	\$377K			\$325K	\$400K	
Prince Rupert	\$64K			\$328K		\$441K				\$555K								
Rideau Park_EDMO	\$77K			\$352K	\$443K							\$388K					\$248K	
Ritchie	\$73K	\$348K	\$312K	\$353K	\$449K	\$673K	\$717K			\$475K	\$438K	\$487K	\$529K			\$406K	\$443K	
Rosslyn	\$64K		\$225K	\$294K						\$290K					\$208K			
Royal Gardens_ED.	\$81K			\$397K	\$427K					\$275K					\$263K			
Rundle Heights	\$68K			\$315K	\$363K	\$500K				\$193K	\$208K				\$148K	\$119K		
Sherbrooke	\$85K		\$180K	\$313K	\$360K	\$475K						\$395K	\$360K				\$248K	
Sherwood	\$74K			\$274K	\$390K	\$506K	\$568K			\$516K		\$400K	\$543K				\$395K	
Spruce Avenue	\$73K		\$261K	\$317K	\$402K	\$380K						\$400K	\$472K					
Strathearn	\$63K		\$403K	\$402K	\$777K	\$855K	\$938K											
Terrace Heights_ED.	\$69K		\$250K	\$385K	\$309K	\$720K	\$728K			\$445K	\$275K							
Virginia Park	\$66K		\$356K	\$383K	\$749K	\$660K												
Wellington	\$70K			\$301K		\$447K	\$447K				\$255K							
West Meadowlark P.	\$74K		\$542K	\$457K	\$416K	\$569K	\$823K	\$893K	\$395K		\$236K				\$196K	\$176K		
Westmount	\$74K			\$336K											\$456K	\$511K	\$486K	\$603K
Woodcroft	\$72K			\$350K						\$300K								
York	\$76K			\$311K	\$330K	\$374K				\$271K					\$180K			
Oliver	\$63K		\$576K	\$497K	\$931K	\$283K				\$589K		\$607K			\$289K	\$363K	\$466K	\$590K
Riverdale	\$75K		\$407K	\$413K	\$560K	\$551K	\$706K	\$811K			\$456K	\$582K	\$605K			\$464K	\$560K	
Strathcona	\$87K	\$474K	\$507K	\$458K	\$456K	\$588K	\$898K	\$900K		\$500K	\$462K	\$690K	\$618K		\$615K	\$296K	\$376K	

Figure A39: 2012–2017 Supply and Demand Deficit by Household Income; Single-Detached (Neighbourhoods with Average Incomes from \$60k–\$100k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ALLENDALE	-34	-58	130	-11	-1	-26
ARGYLL	-9	-12	42	-4	-10	-7
ATHLONE	-28	-16	97	-21	-15	-17
AVONMORE	-28	-41	93	-6	-2	-16
Alberta Avenue	-180	157	106	-42	-19	-23
BALWIN	-63	-11	96	-10	-7	-5
BEACON HEIGHTS	-46	22	65	-20	-11	-11
BELLEVUE	-19	-6	62	-9	-11	-16
BERGMAN	-9	-10	42	-8	-6	-9
BEVERLY HEIGHTS	-84	-50	150	-5	-3	-7
BONNIE DOON	-60	-53	94	12	18	-10
CALDER	-88	58	82	-24	-16	-11
DELTON	-37	24	39	-11	-7	-8
DELWOOD	-42	-65	167	-27	-13	-20
DOVERCOURT	-15	-31	96	-21	-11	-17
DUGGAN	-34	-50	137	-14	-16	-22
ELMWOOD	-22	-49	99	-16	-6	-6
EMPIRE PARK	-2	-5	8	-1	0	0
EVANSDALE	-39	-59	118	-10	-6	-5
FOREST HEIGHTS_EDMO	-52	-61	128	18	1	-34
GLENGARRY	-43	-30	97	-13	-5	-7
GLENWOOD_EDMO	-54	-29	97	-5	-5	-5
GOLD BAR	-25	-40	116	-14	-13	-24
HAZELDEAN	-21	-50	111	-12	-10	-19
HIGH PARK_EDMO	-25	-13	71	-17	-8	-8
HIGHLANDS	-27	-27	112	5	-19	-44
HOLYROOD	-21	-47	122	2	-20	-36
IDYLWYLDE	-33	-32	87	-9	-5	-9
JASPER PARK	-26	-22	64	-6	-4	-5
KENILWORTH	-18	-47	93	-6	-8	-14
KENSINGTON	-41	-49	127	-17	-10	-10
KILDARE	-26	-42	83	-7	-4	-4
KILKENNY	-47	-70	172	-25	-16	-15
KILLARNEY	-35	-34	90	-12	-6	-3
KING EDWARD PARK	-44	-71	155	-10	-4	-27
LANSDOWNE	-6	-11	-1	17	12	-12
LAUDERDALE	-26	-8	60	-12	-6	-7
LYNNWOOD	-21	-47	97	0	-9	-20
MALMO PLAINS	-13	-39	59	18	-8	-18
MAYFIELD	-23	-28	99	-19	-13	-15
MCKERNAN	-29	-27	91	30	-12	-54
MCQUEEN	-16	-15	49	-6	-4	-8
MEADOWLARK PARK_EDMO	-32	-78	164	-27	-12	-16
MONTROSE_EDMO	-56	60	36	-23	-6	-10
NEWTON	-59	-1	114	-23	-18	-14
NORTH GLENORA	-18	-29	86	-1	-14	-24
NORTHMOUNT	-18	-34	85	-16	-7	-10
OTTEWELL	-63	-100	288	-18	-41	-66
PATRICIA HEIGHTS	-4	-11	19	6	2	-11
PLEASANTVIEW_EDMO	-52	-48	85	18	0	-3
PRINCE CHARLES	-22	-2	50	-15	-5	-5
PRINCE RUPERT	-16	-9	40	-2	-5	-8
RIDEAU PARK_EDMO	-13	-15	23	12	-2	-4
RITCHIE	-41	-66	128	-14	15	-22
ROSSLYN	-57	-30	124	-23	-10	-4
ROYAL GARDENS_EDMO	-20	-33	76	-6	-5	-11
RUNDLE HEIGHTS	-17	-51	77	-3	-3	-2
SHERBROOKE	-22	-25	86	-17	-10	-12
SHERWOOD	-10	-4	37	-10	-7	-6
SPRUCE AVENUE	-26	-10	52	-6	-4	-6
STRATHEARN	-51	-29	76	7	1	-4
TERRACE HEIGHTS_EDMO	-25	-25	73	-4	-4	-14
VIRGINIA PARK	-24	-1	19	4	1	0
WELLINGTON	-32	-44	112	-16	-10	-9
WEST MEADOWLARK PARK	-15	-27	63	-11	-6	-4
WESTMOUNT	-43	-68	85	37	11	-22
WOODCROFT	-40	-20	76	-4	-4	-7
YORK	-21	-40	92	-13	-9	-9

Figure A40: 2012–2017 Supply and Demand Deficit by Household Income; Duplexes
(Neighbourhoods with Average Incomes from \$60k–\$100k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ALLEDALE	-9	-15	1	33	-3	-7
ATHLONE	-1	0	2	0	0	0
Alberta Avenue	-7	-5	16	-2	-1	-1
BALWIN	-10	2	11	-2	-1	-1
BEACON HEIGHTS	-2	2	2	-1	0	0
BERGMAN	0	-1	2	0	0	0
BEVERLY HEIGHTS	-1	0	1	0	0	0
BONNIE DOON	-15	-12	9	29	-1	-10
CALDER	-14	-6	29	-4	-3	-2
DELTON	-7	-5	17	-2	-1	-2
DELWOOD	-4	-1	9	-2	-1	-2
DOVERCOURT	0	-1	1	0	0	0
EMPIRE PARK	-2	-6	9	-1	0	0
FOREST HEIGHTS_EDMO	-8	-8	10	16	-2	-7
GLENGARRY	-5	8	1	-2	-1	-1
GLENWOOD_EDMO	-7	-7	17	-1	-1	-1
HAZELDEAN	-3	-7	2	14	-3	-3
HIGH PARK_EDMO	-2	-3	8	-2	-1	-1
HOLYROOD	0	0	1	0	0	0
IDYLWYLDE	-2	-2	2	2	0	0
JASPER PARK	-2	-2	6	-1	-1	-1
KENILWORTH	-2	-4	10	-1	-1	-1
KENSINGTON	-7	-2	15	-3	-2	-2
KILDARE	-2	-2	5	-1	0	0
KILKENNY	0	1	0	0	0	0
KILLARNEY	-10	-5	22	-4	-2	-1
KING EDWARD PARK	-9	-17	14	27	-6	-8
LAUDERDALE	-4	-3	10	-2	-1	-1
MAYFIELD	0	1	0	0	0	0
MCKERNAN	-4	-4	-2	8	13	-12
MONTROSE_EDMO	-7	-6	18	-3	-1	-1
NEWTON	-2	-2	7	-1	-1	-1
NORTHMOUNT	0	0	1	0	0	0
OTTEWELL	-4	-2	15	-3	-3	-4
PLEASANTVIEW_EDMO	-5	-5	12	-1	-1	-1
PRINCE CHARLES	-5	-2	13	-4	-1	-1
RIDEAU PARK_EDMO	-1	-1	2	0	0	0
RITCHIE	-6	-10	15	8	-2	-5
ROSSLYN	-5	1	6	-2	-1	0
ROYAL GARDENS_EDMO	-2	0	3	-1	0	-1
RUNDLE HEIGHTS	-1	3	-1	0	0	0
SHERWOOD	-1	-1	4	-1	0	0
SPRUCE AVENUE	-3	-4	9	-1	-1	-1
STRATHEARN	-1	-1	2	1	0	0
TERRACE HEIGHTS_EDMO	-1	0	1	0	0	0
WELLINGTON	-1	1	1	-1	0	0
WEST MEADOWLARK PARK	-1	2	1	-1	-1	0
WESTMOUNT	-5	-7	21	0	-3	-6
WOODCROFT	0	0	1	0	0	0
YORK	-1	3	-1	-1	0	0

Figure A41: 2012–2017 Supply and Demand Deficit by Household Income; Townhomes
(Neighbourhoods with Average Incomes from \$60k–\$100k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ALLENSDALE	-2	-4	6	-1	0	0
ATHLONE	-1	-2	4	-1	0	-1
Alberta Avenue	-3	1	4	-1	0	0
BALWIN	-5	6	-1	0	0	0
BEACON HEIGHTS	-3	5	-2	2	-1	-1
BEVERLY HEIGHTS	0	0	0	0	1	0
BONNIE DOON	-4	-3	11	0	-1	-3
CALDER	-2	5	-2	-1	0	0
DELTON	-1	-1	1	0	0	1
DELWOOD	-3	10	-4	-2	-1	-1
DUGGAN	-3	15	-5	-3	-2	-2
EMPIRE PARK	0	-1	2	0	0	0
EVANSDALE	-12	27	-9	-3	-2	-2
FOREST HEIGHTS_EDMO	-2	-1	5	-1	0	-2
GLENGARRY	-6	14	-4	-2	-1	-1
GLENWOOD_EDMO	-9	-10	22	-2	-1	-1
HAZELDEAN	-1	-2	4	-1	-1	-1
HIGH PARK_EDMO	-1	-1	2	0	0	0
HIGHLANDS	0	0	0	1	0	0
JASPER PARK	0	0	1	0	0	0
KENSINGTON	-4	-2	10	-2	-1	-1
KILDARE	-23	64	-27	-7	-4	-4
KILKENNY	-14	46	-16	-7	-5	-4
KING EDWARD PARK	-3	-5	8	-1	-1	1
MAYFIELD	-1	3	-1	-1	0	0
MCKERMAN	-1	-1	9	-1	-1	-4
MONTROSE_EDMO	-2	2	0	-1	0	1
NEWTON	-1	2	-1	0	0	0
NORTHMOUNT	-10	50	-21	-9	-4	-6
PATRICIA HEIGHTS	0	2	-1	0	0	-1
PLEASANTVIEW_EDMO	-14	25	-2	-3	-2	-4
PRINCE CHARLES	-1	-1	4	-1	0	0
RITCHIE	-3	-6	15	-1	-2	-3
ROSSLYN	0	0	1	0	0	0
ROYAL GARDENS_EDMO	-2	2	3	-1	-1	-1
RUNDLE HEIGHTS	-13	45	-23	-4	-3	-2
SHERWOOD	-1	1	1	-1	-1	0
STRATHEARN	0	0	1	0	0	0
WEST MEADOWLARK PARK	-13	53	-21	-10	-5	-4
WESTMOUNT	-2	-3	3	3	0	-1
YORK	-11	49	-20	-8	-5	-5

Figure A42: 2012–2017 Supply and Demand Deficit by Household Income; Apartments
(Neighbourhoods with Average Incomes from \$60k–\$100k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ATHLONE	0	1	-1	0	0	0
AVONMORE	-5	-7	18	-2	-1	-3
BALWIN	1	5	-4	-1	-1	-1
BEACON HEIGHTS	12	-2	-6	-2	-1	-1
BONNIE DOON	-23	36	20	-10	-7	-16
CALDER	4	1	-3	-1	-1	0
DUGGAN	-3	12	-4	-2	-1	-2
EMPIRE PARK	-13	6	20	-8	-2	-1
EVANSDALE	0	1	0	0	0	0
FOREST HEIGHTS_EDMO	-4	7	3	-2	-1	-3
GLENGARRY	-2	12	-6	-3	-1	-1
GLENWOOD_EDMO	-22	41	-6	-7	-3	-3
HIGHLANDS	-1	5	-1	-1	-1	-1
IDYLWYLDE	-10	11	7	-4	-1	-3
JASPER PARK	-2	9	-2	-2	-2	-2
KENSINGTON	-3	4	1	-1	-1	-1
KILKENNY	-2	6	-2	-1	-1	-1
KING EDWARD PARK	-4	30	-13	-5	-4	-5
LAUDERDALE	-1	2	-1	0	0	0
MALMO PLAINS	-2	-4	13	-2	-2	-3
MAYFIELD	2	10	-6	-3	-2	-2
MEADOWLARK PARK_EDMO	-12	-2	36	-11	-5	-6
MONTROSE_EDMO	0	2	-1	0	0	0
NEWTON	-1	4	-2	-1	0	0
OTTEWELL	2	12	-6	-3	-2	-3
PATRICIA HEIGHTS	-2	24	-7	-4	-3	-8
PLEASANTVIEW_EDMO	-23	15	22	-6	-3	-6
PRINCE RUPERT	-3	9	-2	-1	-1	-2
RIDEAU PARK_EDMO	-11	7	12	-3	-2	-3
RITCHIE	-27	-17	101	-18	-16	-22
ROYAL GARDENS_EDMO	-12	50	-22	-7	-3	-6
RUNDLE HEIGHTS	6	2	-6	-1	-1	-1
SHERBROOKE	0	1	0	0	0	0
SHERWOOD	-1	4	-1	-1	-1	-1
SPRUCE AVENUE	0	1	-1	0	0	0
STRATHEARN	-2	3	-1	0	0	0
TERRACE HEIGHTS_EDMO	-4	15	-4	-2	-1	-3
VIRGINIA PARK	-4	5	0	0	0	0
WELLINGTON	-2	9	-4	-1	-1	-1
WEST MEADOWLARK PARK	-9	37	-15	-7	-4	-2
WESTMOUNT	-43	137	13	-25	-24	-58
WOODCROFT	-11	14	2	-2	-1	-2

Figure A43: 2012–2017 Average Sales Price by Dwelling Type and Construction Year (Neighbourhoods with Average Incomes from \$100k–\$150k)

Community	average income	SF						Dplx				TH		
		Urban Growth (1905-1913)	The War Years (1914-1945)	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill	City Modern (1971-1989)	New Era (1990-2017)	Infill
Aspen Gardens	\$132K			\$507K	\$665K									
Capilano	\$114K			\$432K	\$702K	\$806K	\$830K							
Greenfield	\$121K			\$408K	\$493K			\$295K						
Grovenor	\$117K		\$353K	\$354K	\$542K	\$703K	\$720K	\$550K	\$348K	\$409K	\$437K	\$443K	\$462K	\$478K
Lendrum Place	\$105K			\$431K				\$534K						
Parkallen_EDMO	\$100K		\$287K	\$422K	\$558K	\$744K	\$768K	\$587K		\$446K	\$434K			
Rio Terrace	\$138K			\$501K	\$591K									
Westbrook Esta..	\$144K			\$944K	\$1,248K	\$1,088K	\$3,595K		\$487K			\$492K		
Mature Area Rossdale	\$112K	\$370K	\$299K	\$400K	\$609K	\$760K	\$938K						\$491K	

Figure A44: 2012–2017 Supply and Demand Deficit by Household Income; Single–Detached (Neighbourhoods with Average Incomes from \$100k–\$150k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ASPEN GARDENS	-6	-14	15	27	-1	-21
CAPILANO	-13	-36	82	10	-10	-33
GREENFIELD	-18	-45	125	6	-22	-46
GROVENOR	-24	-36	90	-6	-8	-17
LENDRUM PLACE	-9	-16	55	17	-14	-33
PARKALLEN_EDMO	-16	-40	75	10	-1	-27
RIO TERRACE	-5	-22	34	35	-4	-38
ROSSDALE	-3	-7	-3	1	10	2
WESTBROOK ESTATE	-5	-9	-9	0	6	18

Figure A45: 2012–2017 Supply and Demand Deficit by Household Income; Duplexes
 (Neighbourhoods with Average Incomes from \$100k–\$150k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
GREENFIELD	-1	-2	9	-2	-1	-3
GROVENOR	-3	-6	16	0	-2	-5
PARKALLEN_EDMO	0	-1	2	0	0	-1
WESTBROOK ESTATE	-1	-1	3	2	1	-3

Figure A46: 2012–2017 Supply and Demand Deficit by Household Income; Townhomes
 (Neighbourhoods with Average Incomes from \$100k–\$150k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
GROVENOR	-3	-5	8	6	-3	-3

Figure A47: 2012–2017 Supply and Demand Deficit by Household Income; Apartments
 (Neighbourhoods with Average Incomes from \$100k–\$150k)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
ASPEN GARDENS	-3	23	2	-4	-5	-13
GROVENOR	-1	-1	4	-1	-1	-1
PARKALLEN_EDMO	-4	6	16	-6	-4	-8
ROSSDALE	-5	-6	35	-5	-4	-14

Figure A48: 2012–2017 Average Sales Price by Dwelling Type and Construction Year
 (Neighbourhoods with Average Incomes of \$150k+)

Community	average income	SF						Dplx			TH		
		Urban Growth (1905-1913)	The War Years (1914-1945)	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)	Infill	The Post-War years (1946-1970)	New Era (1990-2017)	Infill	The Post-War years (1946-1970)	City Modern (1971-1989)	New Era (1990-2017)
Belgravia	\$197K			\$600K	\$769K	\$1,191K	\$1,144K		\$622K	\$610K	\$571K		\$497K
Crestwood	\$228K			\$633K	\$961K	\$1,674K	\$1,520K	\$420K	\$360K	\$493K			\$740K
Mature Area	Glenora	\$219K	\$1,150K	\$827K	\$610K	\$809K	\$1,086K	\$1,212K		\$730K	\$645K		
	Grandview Heig..	\$262K			\$794K	\$1,190K	\$1,775K	\$1,815K					
	Laurier Heights	\$151K			\$625K	\$902K	\$951K	\$1,353K					
	Parkview	\$152K			\$569K	\$967K	\$1,095K	\$1,171K				\$263K	
	Quesnell Heights	\$290K			\$824K	\$1,007K							
	Windsor Park_E..	\$218K		\$1,052K	\$789K	\$1,071K	\$1,837K	\$1,190K					
	Mature Area	Cloverdale	\$158K		\$380K	\$411K	\$666K	\$894K	\$893K		\$608K	\$630K	

Figure A49: 2012–2017 Supply and Demand Deficit by Household Income; Single–Detached
 (Neighbourhoods with Average Incomes of \$150k+)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELGRAVIA	-24	-19	-7	39	19	-8
CLOVERDALE	-2	-4	6	-1	5	-4
CRESTWOOD	-17	-28	-3	33	21	-5
GLENORA	-24	-39	2	46	17	-2
GRANDVIEW HEIGHTS_EDMO	-3	-6	-6	-3	24	-7
LAURIER HEIGHTS	-11	-33	15	28	29	-27
PARKVIEW	-21	-47	66	26	12	-37
QUESNELL HEIGHTS	0	-1	-3	4	2	-2
WINDSOR PARK_EDMO	-5	-6	-15	-5	22	8

Figure A50: 2012–2017 Supply and Demand Deficit by Household Income; Duplexes
 (Neighbourhoods with Average Incomes of \$150k+)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELGRAVIA	-1	-1	1	1	2	-2
CLOVERDALE	0	0	-1	1	1	-1
CRESTWOOD	0	-1	1	1	0	-1
GLENORA	0	-1	-1	0	2	0

Figure A51: 2012–2017 Supply and Demand Deficit by Household Income; Townhomes
 (Neighbourhoods with Average Incomes of \$150k+)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELGRAVIA	0	0	0	2	0	-1
CLOVERDALE	-1	-2	18	-2	-4	-9
CRESTWOOD	-1	-1	-1	2	3	-2
PARKVIEW	-1	1	5	-1	-1	-3

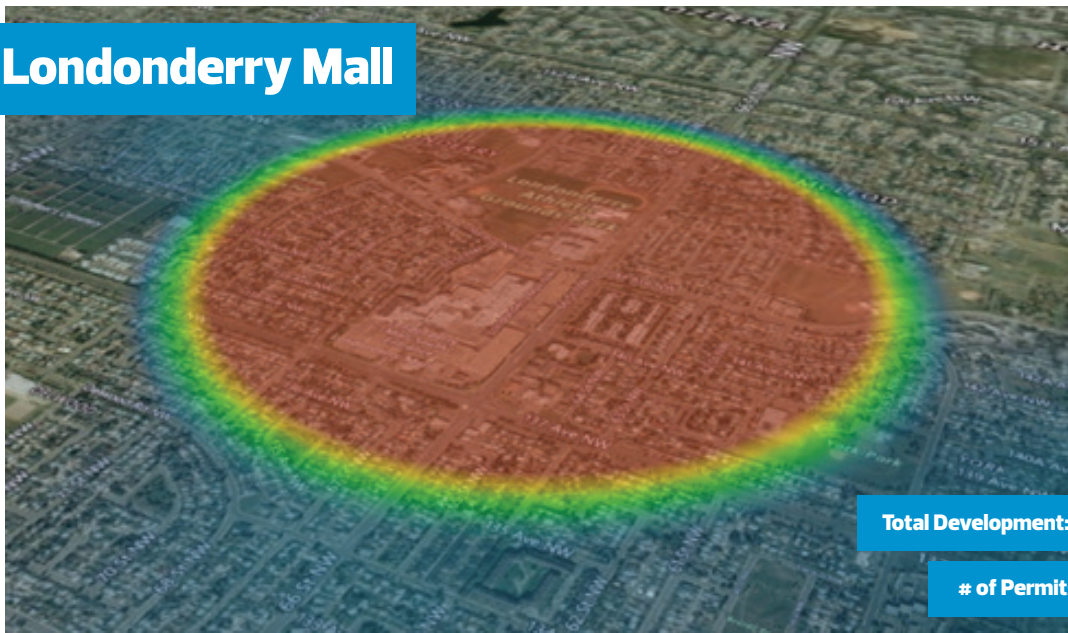
Figure A52: 2012–2017 Supply and Demand Deficit by Household Income; Apartments
 (Neighbourhoods with Average Incomes of \$150k+)

	\$0-\$29k	\$30-\$59k	\$60-99k	\$100-\$124k	\$125-149k	\$150k+
BELGRAVIA	-7	-1	21	4	-3	-15
CLOVERDALE	-5	-5	67	-12	-12	-32
CRESTWOOD	-1	-1	4	-1	0	-2
GLENORA	-8	77	-14	-10	-9	-36
WINDSOR PARK_EDMO	0	0	-1	0	2	-1



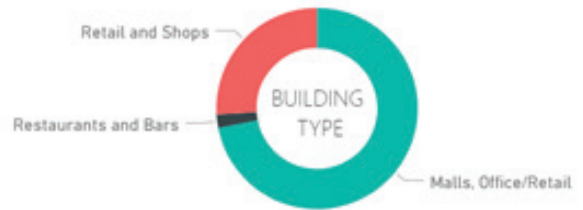
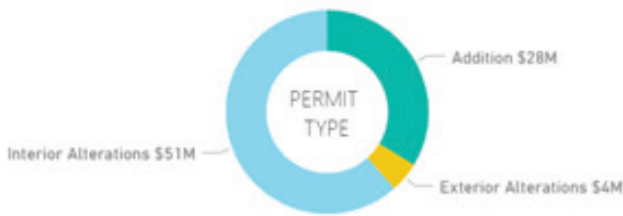
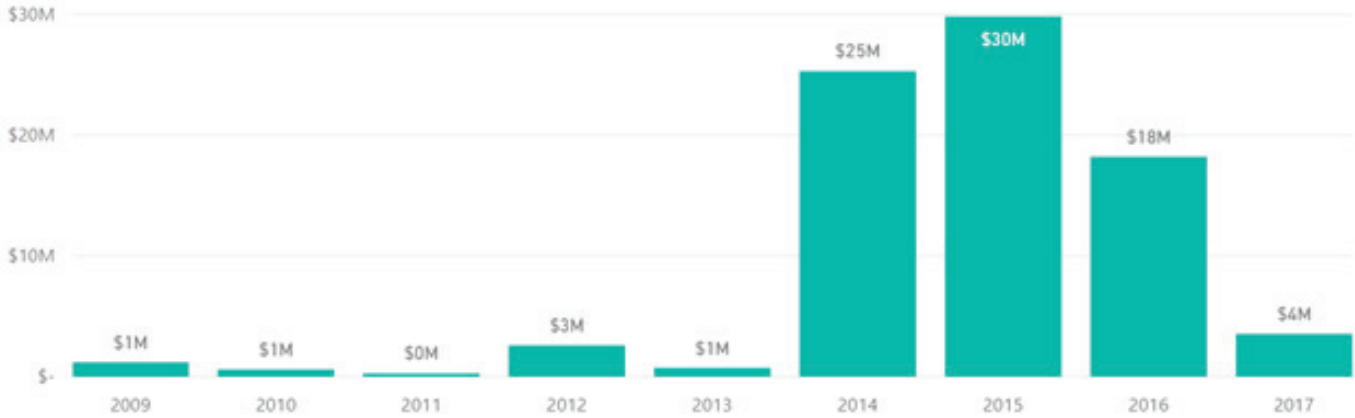
COMMERCIAL APPENDIX

C9: Londonderry Mall



Total Development: \$82M

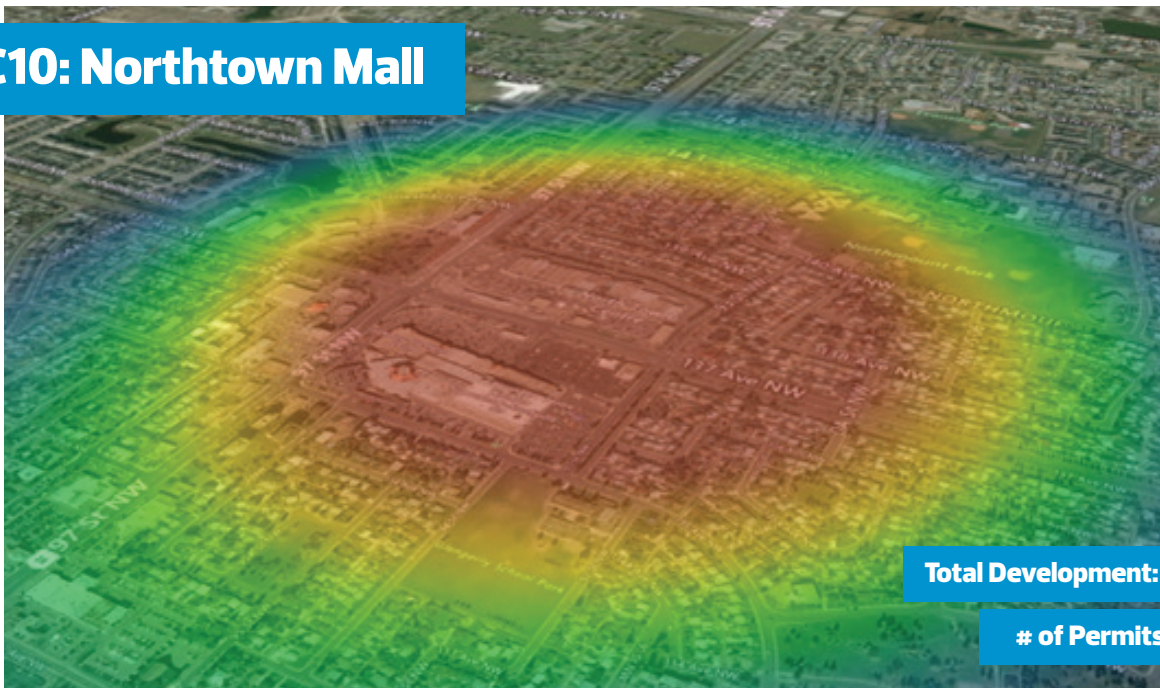
of Permits: 113



Notable Developments

Job Description	Construction Value
Construction of an addition, interior (including the construction of a second floor food court) and exterior Modifications to an existing mixed Commercial Use Buildi...	\$27,500,000
Construction of interior Modifications to Londonderry Mall -- Phase 1(main/second floor corridor remodel, Misc. Unit retrofit, see BP condition)	\$21,550,000
Construction of interior Modifications at Londonderry Mall ("Simons").	\$9,985,587
Construction of exterior Modifications (facade and footprint revisions) to an existing mixed use commercial building (Londonderry Mall Renovation - Simons phase).	\$3,075,715

C10: Northtown Mall



Total Development: \$22M

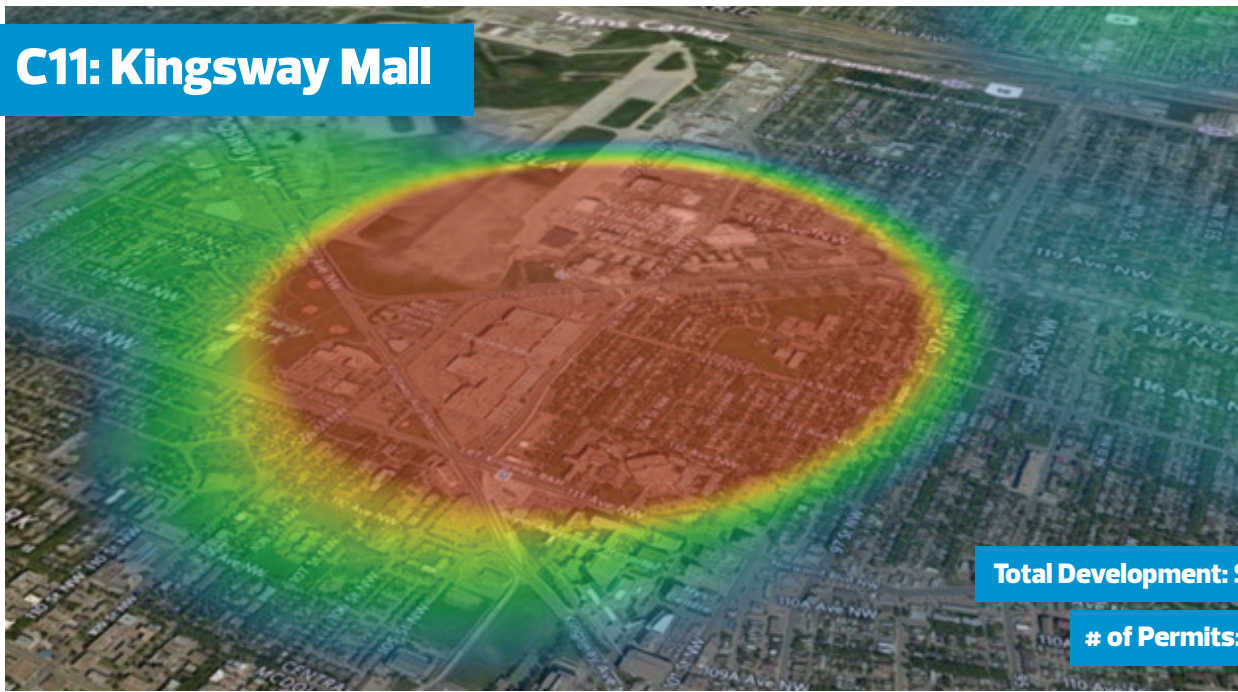
of Permits: 71



Notable Developments

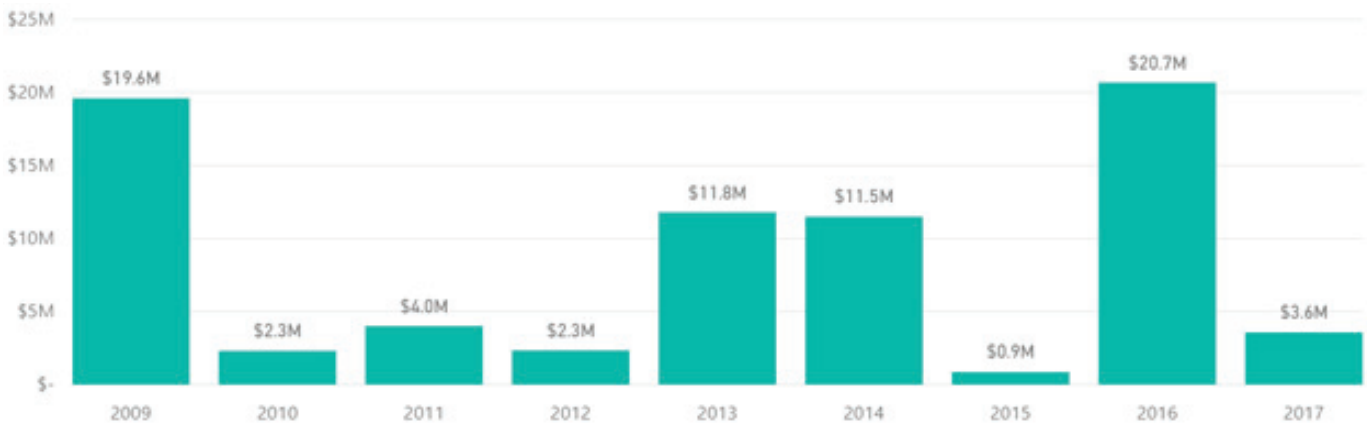
Job Description	Construction Value
Phase 2 of Shopping Centre Site Redevelopment (North Towne Mall): Demolition of portions of the main General Retail / Professional, Financial, Office Support Servi...	\$7,400,000
Construction of interior Modifications to Northgate Mall - Zellers being converted to a Walmart.	\$2,407,790
Construction of interior Modifications to 194, 9450 - 137 Ave (Bed, Bath and Beyond in Phase 2 of North Towne Centre) and to add 97 sq.m of floor area (second floo...	\$1,250,000

C11: Kingsway Mall



Total Development: \$77M

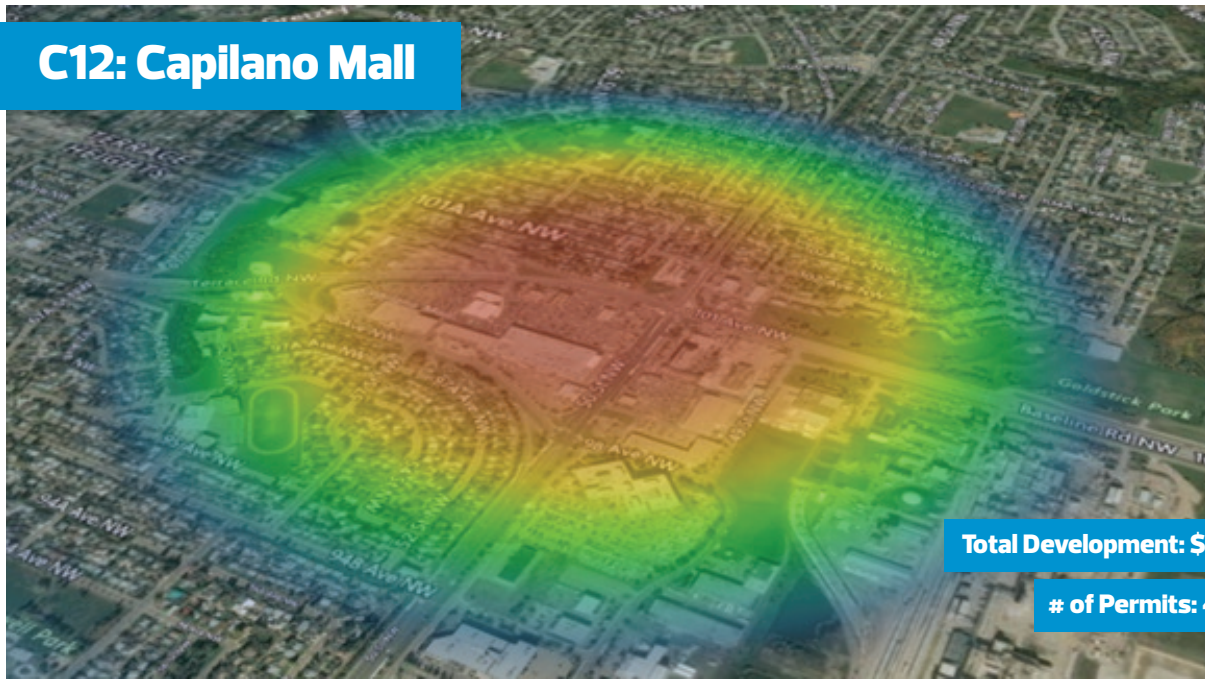
of Permits: 182



Notable Developments

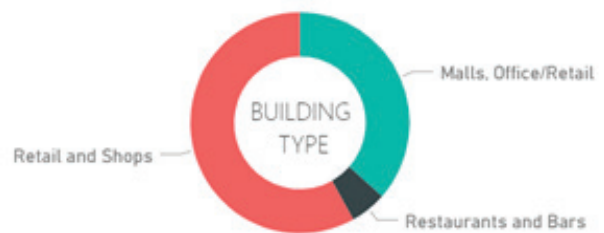
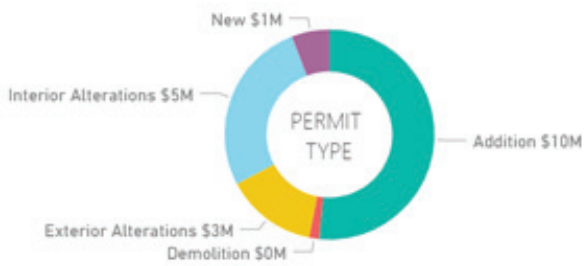
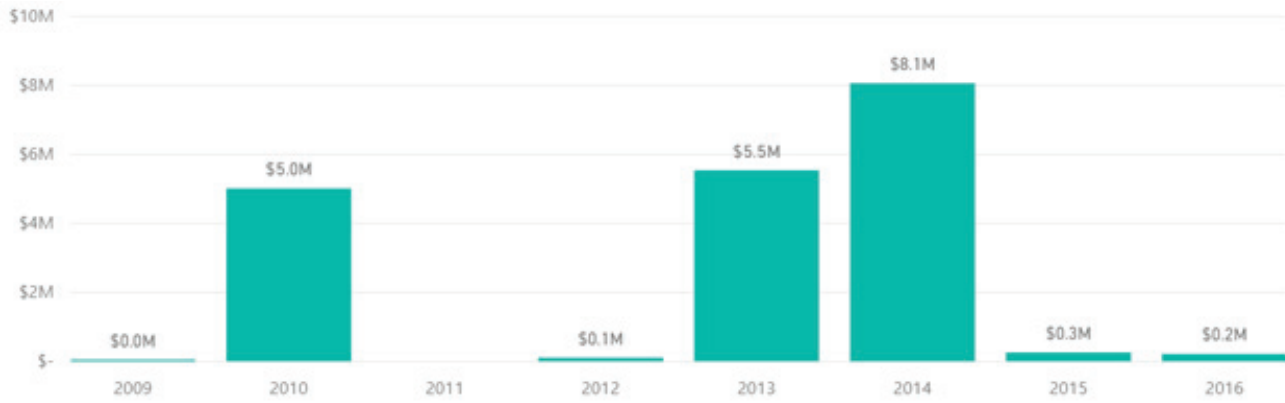
Job Description	Construction Value
Construction of exterior (facade improvement) / interior (demising walls for new CRU's), an addition (loading dock along a portion of west side of building) and reco...	\$14,831,200
Construction of an addition to a shopping mall -retail SHELL ONLY-no w/r(Kingsway Mall -Target) (final sprinkler, vertical transportation and guard drawings to be s...	\$9,709,400
Construction of interior and exterior alteration to a retail building(replace guards, create food court skylight, etc Grid 17-22 x H-O)	\$9,119,164

C12: Capilano Mall



Total Development: \$19M

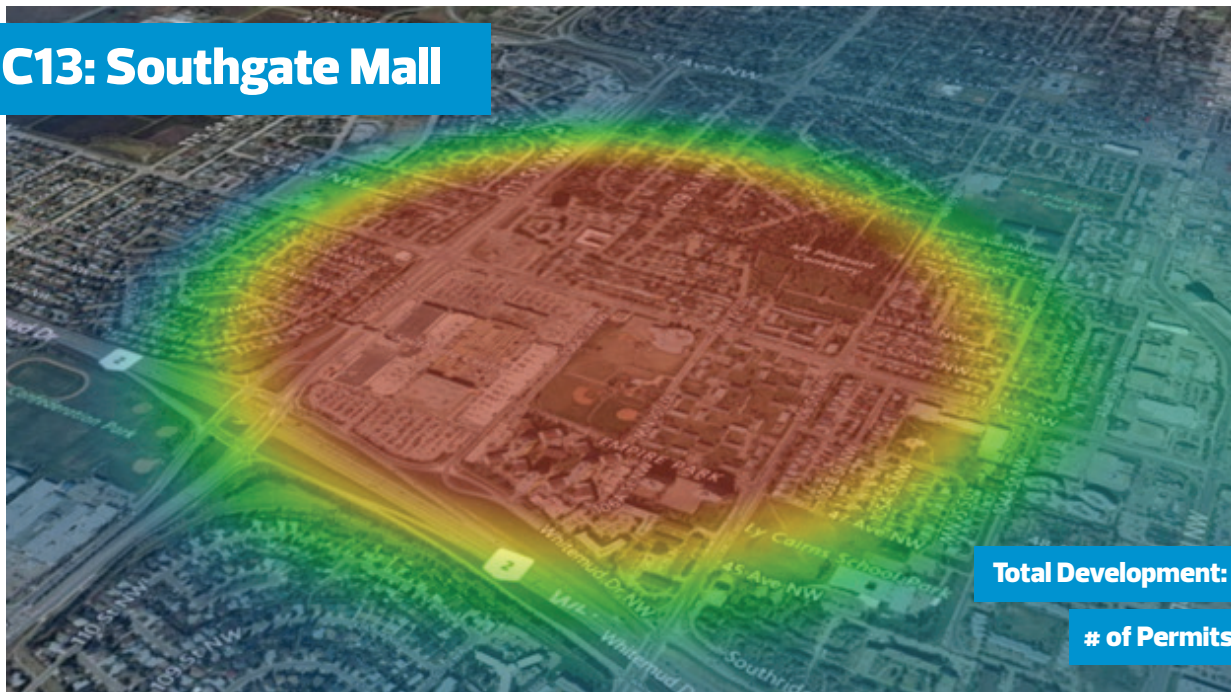
of Permits: 42



Notable Developments

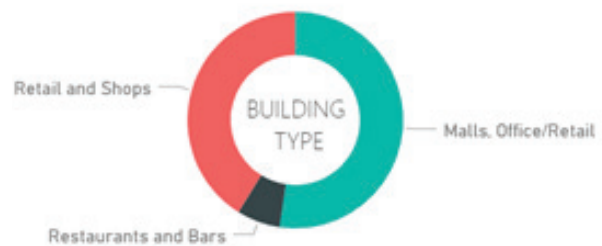
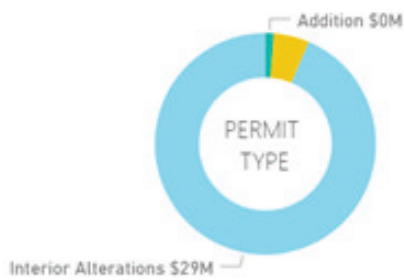
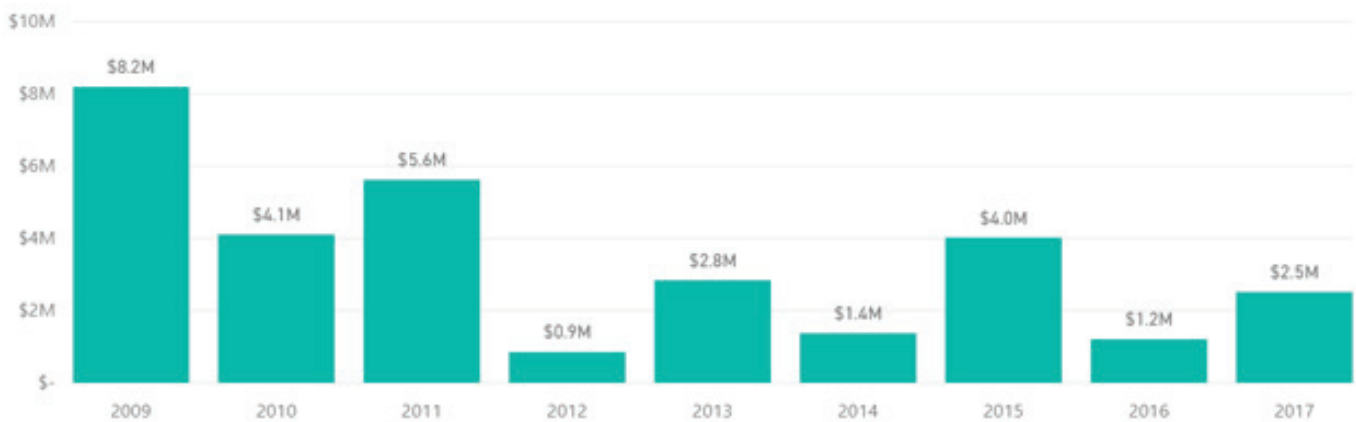
Job Description	Construction Value
Construction of additions, exterior and interior Modifications to a general retail building (Capilano Mall, Wal-Mart).	\$5,000,000
Construction of an addition (CRU 2, A through H - Bldg 2) to Capilano Mall (Walmart/Winners bldg) Shell Building with (4) demising walls and RTU's, No washroom	\$2,777,935
Construction of Exterior Modifications to Capilano Mall (Facade Improvements to Safeway/Winners & CRU 5 Office building. Interior Modifications to CRU 5 Office ...	\$2,665,000
Construction of one General Retail Store Use addition(CRU3 #180, #185 total 1970 sqm) SHELL ONLY/8 RTU's to Capilano Mall (Safeway).	\$1,637,064
Construction of an assembly/retail building (BLDG #4) las part of the Capilano Mall site. Shell only, 5 CRU's, 4 demising walls, no washrooms (RL only), 5 RTU's. NO ...	\$1,121,600

C13: Southgate Mall



Total Development: \$31M

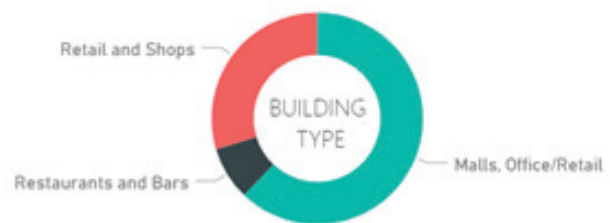
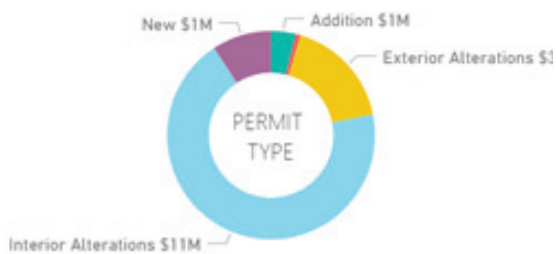
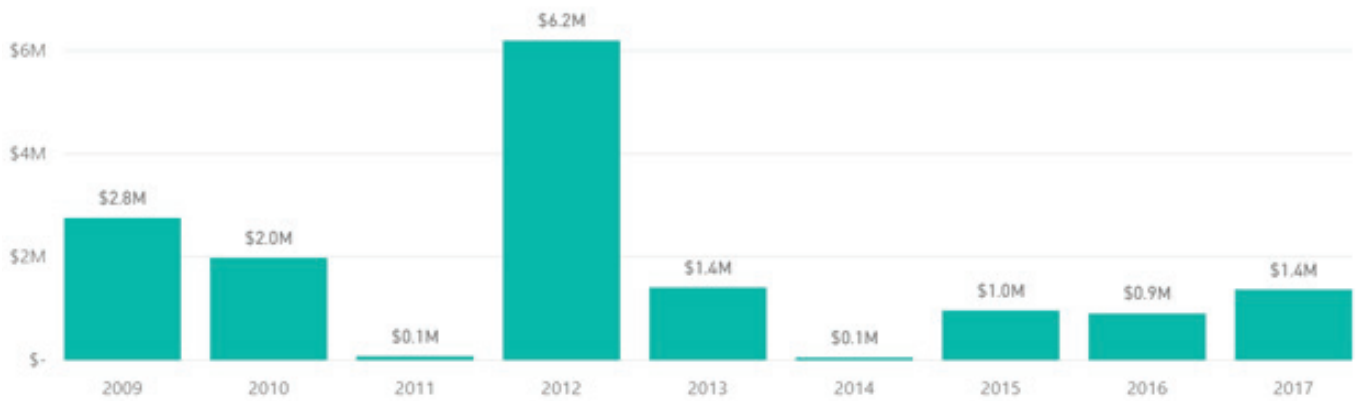
of Permits: 179



Notable Developments

Job Description	Construction Value
Construction of interior and exterior Modifications to a general retail, "Southgate Shopping Centre".	\$2,250,000
Construction of interior Modifications to a general retail, cru# 836 "Crate & Barrel" Southgate Centre.	\$1,652,360
To change the use from assembly (specialty food - food court) to operate general Retail and interior Modifications (Demolition of an existing food court and Constr...	\$1,328,672
Construction of interior alterations to an existing mall CRU. Apple store at Southgate Shopping Centre, CRU #409.	\$1,000,000

C14: Westmount Shopping Centre



Notable Developments

Job Description	Construction Value
To continue to operate a General Retail Store and construct interior Modifications (WAL-MART, Westmount Shopping Centre).	\$1,998,100
Construction of interior / exterior Modifications to an existing building for the purpose of creating multiple Commercial Use tenant spaces on the main floor and co...	\$1,778,995
Construction of exterior Modifications to an existing shopping centre (facade improvements / Modifications @ Westmount Shopping Centre).	\$1,508,947
Construction of a BASE BUILDING for a General Retail Store building (Rexall)	\$1,450,000
To continue to operate Professional, Financial and Office Support Services and construct interior Modifications (convert one tenant space to 4 tenant spaces) ADDIN...	\$1,150,000



QUALITATIVE RESEARCH SUMMARY

Intelligence House & City of Edmonton
Fall 2017 Infill Focus Groups

Summary Report
Banister Research & Consulting Inc.

November 14, 2017



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1.0 PROJECT BACKGROUND

Banister Research & Consulting Inc. ("Banister Research") was contracted by Intelligence House Ltd. (Intelligence House) to support the City of Edmonton with a series of four (4) focus groups related to the City's Evolving Infill project. The objective of the focus groups was to understand the perceptions and opinions of Edmontonians regarding housing development and infill in the City. The findings from the focus groups will be used to corroborate the separate market study conducted by Intelligence House.

1.1 Methodology

In support of the focus group research, the Project Team delivered a mail-out in summer 2017 to approximately 2,400 residences in Edmonton that were classified as either:

- "Infill" properties (new dwelling purchases in mature and established areas);
- "Custom Infill" properties (older dwelling purchases by homeowners of new properties; data correlated with subsequent demolition and construction permits, and title transfer); and
- "Resale" properties (resale property purchases).

Those who were interested in participating in the focus groups were invited to sign up via URL as provided in the letter. A total of 240 residents signed up via the online form, through which they provided their contact information and demographics. Those who signed up were subsequently followed up with by Banister Research recruiting staff to confirm their interest and availability; participants were selected to ensure a mix of age, gender, and household composition, where possible.

Groups 1 to 3 were populated using the form sign-ups, while Group 4 participants were recruited from Banister Research's focus group database. The composition of the focus groups was as follows:

- **Group 1** (October 19, 2017) – Homeowners of a resale single family home (n=10).
- **Group 2** (October 19, 2017) – Homeowners of a resale attached-wall home (including duplexes, row housing, low-rise, and high-rise apartments) (n=11).
- **Group 3** (October 24, 2017) – Homeowners of an infill home (n=12).
- **Group 4** (October 24, 2017) – Renters (n=12).

Each individual recruited received a notice prior to the session that provided the details of the groups, including time, date, and location. Ultimately, forty-five (n=45) homeowners or renters participated in the four (4) focus group sessions on October 19th and 24th, 2017.

The focus groups lasted for up to two (2) hours each and were facilitated by Tracy With, Vice President of Banister Research. The focus groups were based on a moderator's guide, developed by Banister Research in conjunction with the Client Team. The moderator's guide and a participant handout are available in Appendices A and B, respectively.

Please Note: Readers should use caution when interpreting results obtained from the focus group process. Focus groups provide qualitative data, and, while valuable insights were gained through this process, **the results cannot be considered statistically representative**. Moreover, the language used in the report is subjective in nature and should be read as indicators of key themes, rather than quantifiable measures. For example, a few respondents would indicate that two (2) or three (3) respondents (per group or overall, depending on the context) responded in a particular way. In contrast, the usage of the words "majority," "typically," or "mostly" indicate that approximately three-quarters or more of the participants felt similarly about a topic or theme. Quotes have been edited for clarity and brevity.

2.0 FOCUS GROUP FINDINGS

2.1 Participant Profile

All of the focus group participants considered themselves key decision-makers in the home-buying process. The first three focus groups were all conducted with homeowners, while the fourth group was held with a selection of renters:

2.1.1 Group 1: Homeowners of a Resale Single Family Home

Participants in this group lived in a variety of sectors in the City, including Southwest (Terwillegar, Aspen Gardens, Hadow, Blackmud Creek, and Rutherford), Central (Glenora, Grandview Heights, and Laurier Heights), and Northwest Edmonton (Carlton). Participants also represented a variety of neighbourhoods, including mature, established, and developing neighbourhoods. Participants' homes were built anywhere from 1962 to 2008, with an average of 2,273 square feet (ranging from 1,274 to 3,692 square feet). Market prices ranged from \$495,000 to \$995,000, with a mean of \$693,480. All of the homes had, at minimum, double garages (most of which were attached). All of the participants had moved into their home within the last 2 years.

In terms of their household, participants were of mixed age and gender, and all of the participants were married or cohabitating; most of them had children in the household. Most of the participants reported a household income of at least \$100,000 in the previous year (3 participants reported \$200,000 or more).

2.1.2 Group 2: Homeowners of a Resale Attached-Wall Home

Attached-wall homeowners lived throughout the City, including Central (Forest Heights, Oliver, Riverdale, Garneau, and King Edward Park), West (Sherwood), and Southwest Edmonton (Twin Brooks, Ramsay Heights). Their homes were located in mature (including central core) and established neighbourhoods. Participants had a variety of dwelling types, including low-rise and high-rise apartments, duplexes, and townhomes, which ranged in square footage from 893 to 1,853 square feet (mean of 1,322 square feet). The average age of the home was 20 years, with years of build ranging from 1988 to 2008. Market prices ranged from \$272,000 to \$688,000, with a mean of \$388,173. Approximately half of the participants had underground parking, while the others tended to have attached garages.

There was a mix of age, gender, and household composition amongst participants. Most of the participants reported a household income of at least \$100,000 in 2016, with 4 participants reporting \$150,000 to less than \$200,000.

2.1.3 Group 3: Homeowners of an Infill Home

All of the infill homeowners lived in Central Edmonton, in mature neighbourhoods including: Riverdale, Parkdale, Ritchie, Allandale, Oliver, Bonnie Doon, Strathcona, Eastwood, and Alberta Avenue. All of their homes were built within the last 5 years, and all of the participants had moved there within the last 2 years. Participants lived in a variety of housing types, including detached single family homes, duplexes, and high-rise and low-rise apartments. Total square footage ranged from 732 to 2,535 square feet (mean 1,527 square feet), and the market price ranged from \$285,000 to \$859,000 (mean \$545,617). Most of the homes had single or double detached parking.

The participants included a mix of gender, age, and household composition. Approximately half of the participants reported a household income in 2016 of \$50,000 to \$100,000, with 2 respondents reporting an income of \$200,000 or more.

2.1.4 Group 4: Renters

Finally, the renters also included a mix of participant age, gender, and household composition, although this group had more single participants than any other (approximately half of the participants). The renters typically lived in apartments or condos, although a few lived in single detached homes. Neighbourhoods included Mill Woods, Century Park, Oliver, Strathcona, Skyrattler, Oxford, The Meadows, and Parkdale. The majority of the participants had moved into their home within the last 5 years, although a couple had moved into their home more than 10 years ago. Half of the participants reported a household income of \$50,000 to less than \$100,000, while just under half made \$100,000 to less than \$150,000 in 2016.

2.2 Motivation and Decision-Making

2.2.1 Starting the Search

To begin the discussion, participants were asked how far prior to moving they had started searching for their current home. The homeowners typically started looking anywhere from a few months to 3 years in advance, with more than one-third starting their search about 2 to 4 months in advance. A few participants reported beginning their search as early as a few weeks in advance of moving (e.g., due to sudden job changes). Conversely, a couple of participants described themselves as long-term house hunters, who spend up to 8 or 9 years casually looking at the market.

Renters, on the other hand, all started their search within 3 to 4 months of moving, with more than half beginning their search 1 to 2 months in advance.

2.2.2 Search Tools and Methods

Most often, participants started their search by choosing an area or neighbourhood that they liked, then searching online for MLS listings (the most popular site being <https://www.realtor.ca/>). Homeowners were also likely to employ real estate agents for their search, and sometimes relied on word of mouth from friends and family. Online tools were also popular with renters, who used websites such as [RentFaster](#) and [Kijiji](#), in addition to word of mouth, and surveying neighbourhoods in person. Only a couple of respondents reported using newspapers to look at listings (to purchase or rent).

2.2.3 Reasons for Moving

When asked what motivated them to move, homeowners reported typically upgrading or downsizing – often due to a change in the family composition (e.g., having children; aging parents or in-laws; recent separation from a spouse or partner, etc.). Proximity to schools (and school capacity) was a major factor for families with younger children.

Other reasons for moving included moving for work (or because of a job loss); being able to afford a nicer, newer, and/or bigger home (for some, this included a budget for renovations); or just a general desire to change locations – whether from outside of Edmonton or from another neighbourhood. For many, their neighbourhood choices were based on proximity to schools, work, or other family and overall walkability (e.g., to nearby amenities, parks or green spaces, etc.). A couple of renters also indicated that they had to move due to a rent increase, or that they were moving out of their parents' home.

2.2.4 Dwelling Type

Homeowners of a resale single family home tended to fit into two categories: those who were upgrading tended to move from a bungalow or bi-level to a 2-story home, whereas those downsizing tended to move from a 2-story or bi-level to a

bungalow – often thinking ahead to future health concerns (e.g., difficulty climbing stairs as they age). One participant built their home, in order to customize it to their liking.

Homeowners of a resale attached-wall home most often moved into low-rise apartments or condos, having previously come from something similar. A few attached-wall homeowners lived in high-rise condos or apartments, with one participant describing a co-op living situation. A couple of others moved to a duplex or townhouse.

Those living in an infill home most often desired a single detached home, although one participant settled for a duplex (the top choice for a couple of others). A few infill homeowners had searched for an apartment, condo, or row housing/town housing. The majority of infill homeowners lived in a new home, which participants generally felt would require less maintenance and general upkeep. None of the infill owners were interested in building a home, and only one participant was determined to purchase a resale (conversely, all of the single family homeowners preferred a resale home). Approximately one-third each of the renters reported moving to a high-rise apartment (6 stories or higher) or a single-detached home.

When asked if they had searched for a form of housing that did not seem to exist in Edmonton, such as a certain kind of townhouse, brownstone, duplex, or other house that was creatively designed, participants typically felt that this had not been the case, although a few reported that there is an appeal to brownstone, and more “architecturally interesting” homes, in general. Some participants cited examples of more unique types of housing they had seen elsewhere, such as “deep carriage houses” in Kelowna, or condos or triplexes with exterior staircases to allow for more interior square footage.

2.2.5 Renting vs. Owning

For the most part, renters reported making a conscious choice to rent as opposed to buying a home; this was often due to uncertainty over their future (e.g., family, jobs, etc.) a desire to travel more often, and lack of affordable housing. One participant also explained that rental buildings sometimes include desired amenities in their monthly rent, such as fitness centres and swimming pools.

When asked if they had ever considered buying a home, half of the renters indicated that they had, and approximately three-quarters would consider buying a home in the future (most often within 3 to 5 years). A couple of renters indicated a preference for continuing to rent long-term (20 years or more) in order to have the flexibility to travel and move around. Those who would buy a home in the near future were most likely to look for a single detached home (just under half), followed by a semi-detached (a few respondents). A few respondents also expressed a preference for a high-rise apartment or condo, while a couple indicated they would look for a duplex or a townhome. In terms of pricing, renters felt that they would be likely to look for a home ranging anywhere from \$250,000 to \$300,000 on the low end, to \$600,000 to \$750,000 on the high end. On average, renters anticipated spending approximately \$429,000 on a home (median \$400,000). Just under half indicated they would purchase a home with someone else (spouse or partner, etc.), while the same number would be likely to purchase on their own.

Similar to the renters, all homeowners were asked why they decided to buy their home, as opposed to renting. The single family homeowners had not even considered renting, while a few of the attached-wall homeowners considered it (a few had rented their previous home). One of the homeowners who was opposed to renting explained that rental prices are quite high in or around Edmonton, and that the quality and value for money is not as good. Another participant explained that renting can make one "vulnerable" to rent increases, which is of particular concern to those who are retired or elderly. Overall, pricing was a major factor for single family homeowners, who felt it was better value to purchase their home.

Considering that 30% of ones' income is a figure often used to determine whether housing costs are affordable, renters were asked to estimate how much of their income they currently spend on rent (including utilities and parking). Participants reported anywhere from 15% to 40% of their income, with a mean of 29% and a median of 25%. Renters were also asked about the maximum percentage they could afford: participants reported anywhere from 20% to 50%, with a mean of 34% and a median of 35% of their income. When asked, the infill owners all reported spending anywhere from 0% (mortgage paid off) to 33% on monthly housing costs, with an average of 19% and a median of 20%.

Some renters felt that there was a "stigma" against them. A few of the participants felt that rental homes tend to be more "distinguished" (i.e., unkempt or in need of repairs) or that there is a general attitude that "renters don't care for their places," and it was suggested that these sentiments automatically bias neighbours against renters who move in to a community. A couple of renters also described situations in which they had wanted to join their community leagues or condo boards, but were not permitted. Despite these concerns, the renters still felt that there were plenty of options during their search.

2.2.6 Affordable Options

Generally, the single family homeowners felt that there were affordable options during their search, although a few participants – like some renters – felt that housing prices are quite high in the local area. Whereas some were willing to spend a little more for "comfort," others had a fairly strict budget. While most of the homeowners acknowledged and accepted the trade-off of lower cost versus desired features and/or neighbourhood, one participant was "shocked" at the prices in their desired neighbourhood for a home with similar features to their current home.

Single family homeowners also acknowledged the trade-off between finding the "perfect" or "ideal" home (price point, features, neighbourhood, etc.) and the desire or need to purchase quickly – i.e., those who were willing to search for longer were typically more likely to find their ideal – or close to – home.

Infill homeowners tended to be less likely to have felt there were affordable options during their search, although most still felt that there were some options available. Most of the infill homeowners spent what they expected or more on their home, and those who paid less – similar to the single family homeowners – had to compromise on neighbourhood or desired features such as ensuite bathrooms. Just under half of the infill homeowners ended up in their desired neighbourhood, while a few found themselves slightly outside of their targeted radius. Attached-wall homeowners were the least likely to have felt there were affordable options during their search: they tended to feel that the homes at lower (affordable) price points were of worse quality. For these respondents, the trade-off was whether they were willing to pay more upfront and pay less in repairs and renovations, or pay less upfront and ultimately spend more on repairs. Whether they preferred to do the repairs themselves or not was a matter of personal preference.

2.3 Desired Home Features

2.3.1 Desired Features – Unaided Responses

Participants were asked, top-of-mind, to elaborate on the features they wanted when searching for their home. In addition to proximity to work, schools, amenities, and green spaces/walking trails (including the River Valley), participants also mentioned the following:

- **Homeowners of a resale single family home:**
 - Privacy from neighbours or personal space (the biggest factor for single family homeowners);
 - Large yard (front and back);
 - Ability to make exterior changes without having to consult with neighbours;
 - Attached garage (minimum 2- or 3-car);
 - Central air system;
 - Basement suite or similar (e.g., for extended family); and
 - More space, in general.
- **Homeowners of a resale attached wall-home:**
 - A home without a need for additional repairs or upgrades;
 - Heated garage;
 - High-efficiency appliances or newer appliances; and
 - Specific layout (e.g., 2 bedrooms plus den).
- **Homeowners of an infill home:**
 - Yard (a desired feature for approximately two-thirds of the participants);
 - Finished basement;
 - More current or updated design;
 - Trees;
 - Proximity to transit;
 - Pet-friendly (e.g., for condo owners);
 - Underground parking;
 - Mud room;
 - Double sinks in an ensuite;
 - Large garage; and
 - Secondary suites (this was a desired feature for one participant, while another wished to avoid it).
- **Renters:**
 - Pet-friendly (most frequently mentioned);
 - Patio or deck;
 - Access to LRT;
 - Fitness centre;
 - Upgraded or stainless steel appliances;
 - Specific layout (e.g., one bedroom with loft and balcony);
 - In-suite laundry;
 - Underground parking;
 - Storage space; and

- Proximity to bike paths.

One of the resale single family homeowners specifically mentioned that they did not want a "skinny home," as they found them aesthetically unappealing, too small, and generally felt that prices are unreasonable for the amount of space. A few others in this group were not necessarily opposed to the idea of a skinny home, but agreed that it comes at a cost (e.g., sacrificing a large yard or deck).

2.3.2 Desired Features – Aided Responses

For the next part of the discussion, participants were provided with a list of various amenities or features (some of which may have previously come up) and were asked to comment on each, in terms of their overall importance and whether they were included on the original "wish list":

- **Type of neighbourhood and neighbourhood "character."** All except for one participant indicated that this was important, with most preferring to live in a mature neighbourhood.
- **Parking.** The majority of the participants agreed that parking was very important and a major consideration when looking for a home.
- **Proximity to amenities.** The vast majority felt that this was important, emphasizing that communities and neighbourhoods should be walkable (generally within 5 minutes). Popular walkable destinations would include coffee shops, bars or pubs, restaurants, stores and other retail, and green spaces (e.g., the River Valley).
- **Proximity to important destinations.** Approximately half of the participants felt this was important, citing destinations such as work, school, other family, major roads or highways, downtown Edmonton (particularly amongst infill homeowners), and gyms or fitness centres.
- **Proximity to other transportation choices** (e.g., LRT, bike lanes, bus routes). Some of the infill homeowners, attached-wall homeowners, and renters felt this was particularly important; the single family homeowners were the least likely to indicate this was important.
- **Interior design.** Renters, in particular, felt that interior design is important. They cited a preference for features such as new, modern appliances, large kitchens, an open concept design, and/or overall "character" in their home.
- **Architectural style.** Architectural style was a major consideration for many, with participants generally expressing a preference for avoiding "cookie-cutter" style homes (this was of particular concern for most single family homeowners). Approximately three-quarters of the infill homeowners reported that they picked their current home based on its style.
- **Functionality.** In terms of functionality, participants in the single family and infill homeowner groups gave preferences for main floor laundry; open concept designs; additional rooms for visitors or growing families; and ensuite bathrooms (the latter two unique to the single family homeowners).
- **Pre-existing (resale) vs. new build.** Most of the single family homeowners (who all purchased resale) did not consider building their home, due to concerns over price. One respondent compared building a new home to buying a new car: it is better to buy a slightly used car at a discounted rate, as opposed to buying it new and having it depreciate immediately in value. A few of the renters, as mentioned before, explained that they would consider buying, while another few would be more inclined towards a resale property (the rest were unsure). Interestingly, some single family homeowners felt that lot-splitting on infill developments has contributed to higher prices on newer builds: one participant explained that sellers anticipate that builders will tear down certain homes to build two in their place, and consequently raise their selling prices knowing that the buyer will get "double the profit" on the home.
- **Proximity to infill.** Some of the single family homeowners considered proximity to infill housing when searching for their home; these respondents had a desire to avoid infill housing due to concerns over eventual spacing between their homes ("we didn't want to have someone building a split home next to our home, because of how close to the land border they can excavate"). One of the participants indicated that they kept their old home with a possibility of tearing it down and rebuilding. A couple of the participants in the attached-wall group indicated that infill housing does not necessarily detract from a neighbourhood, and is sometimes preferred to "houses that are very old in in very poor shape."

- **Access to a front or rear yard.** The majority of the participants felt that having a yard was important, although some indicated that it may not be necessary if they have proximity to other nearby green space (park, etc.).

When asked if they had considered secondary suites or garden suites in their search, a few participants from each group (single family, attached-wall homeowners, and renters) indicated they had and would consider it again in the future. A couple of the single family homeowners explained that they did not see any options that they liked on the market and/or felt that they were poorly constructed. One participant felt that secondary suites should not be built on busy streets, as that makes them less attractive to retired homebuyers who are often looking for a quieter lifestyle. Some participants were also unclear as to what a secondary or garden suite is.



2.3.3 Nice-to-Have

In consideration of all of the above – as well as taking into consideration budget constraints – participants were asked to picture their ideal home, and think about how it might differ from their current home (the home they ended up choosing). Approximately half of the participants (single family and attached-wall homeowners) felt that they got most of what they wanted. Those who did not get everything on their original wish list reported “sacrificing” on the following:

- Price (i.e., paid more than expected or hoped for – a top response amongst renters);
- Location;
- Parking (e.g., settled for a 2-car garage instead of a 3-car garage);
- Number of bedrooms and/or bathrooms;
- Overall architectural style (e.g., wanted a “craftsman style”);
- Overall square footage or lot size;
- Developed basement;
- Interior aesthetics (e.g., backsplash, tile, flooring, overall finish, etc.);
- Front porch or deck;
- Balcony;
- Ensuite bathroom;
- Desired laundry (e.g., main floor);
- Proximity to LRT;
- Dwelling type (e.g., purchased a duplex instead of a single detached home);
- Swimming pool;
- Air conditioning; and
- Additional rental suite.

2.3.4 Need-to-Have

When asked what they were *not* willing to sacrifice – i.e., the “deal-breakers” or “need-to-haves” – participants felt the following were the most important:

- Big yard or nice yard (mentioned by a few respondents);
- Recently updated or renovated;
- Pet-friendly;
- Parking (e.g., minimum 2-car garage);
- Ensuite bathroom;
- Location;
- Well-managed property (for condo owners); and
- Dwelling type (e.g., bungalow for elderly residents).

2.4 Expectations: Desired vs. Actual

During the sessions, participants were provided a handout that asked them to think back to when they had started the search for their current home, and think about what they had considered their “ideal home” at the time. Participants were then instructed to do the following:

- (A) Provide details on their desired traits or features for 6 housing aspects (new or resale home; location; dwelling type; budget or price; square footage; and pricing or garage);
- (B) Indicate the overall importance of each, using a scale of 1 to 5, where 1 meant “not at all important” and 5 meant “very important”;
- (C) Comment on each of the 6 with regards to their current home (i.e., how did this change from what they originally desired); and
- (D) State whether the item exceeded, met, or did not meet their expectations (e.g., if a participant paid more than they had originally wanted, this would have failed to meet their expectations).

2.4.1 Overall Importance

Participants rated each item (scale of 1 to 5) in terms of their importance during the housing search:

- **New or resale.** The mean rating was 2.58 out of 5; infill homeowners provided the highest importance ratings (3.25).
- **Location.** The mean rating was 4.71 out of 5; single family homeowners provided the highest importance ratings (5.00).
- **Dwelling type.** The mean rating was 4.07 out of 5; single family homeowners provided the highest importance ratings (4.60)
- **Budget/price.** The mean rating was 4.02 out of 5; attached-wall homeowners provided the highest importance ratings (4.27).
- **Square footage.** The mean rating was 3.48 out of 5; attached-wall homeowners provided the highest importance ratings (4.00).
- **Parking/garage.** The mean rating was 3.81 out of 5; infill homeowners provided the highest importance ratings (4.17).

Other important considerations that participants noted on their handouts included the following (most of which had previously arisen during the discussion):

- Private yard or garden (particularly amongst single family and attached-wall homeowners);
- Proximity to green spaces, parks, or the ravine/River Valley (infill and attached-wall homeowners);
- Pet-friendly (renters and attached-wall homeowners);
- Number of bedrooms or bathrooms (single family homeowners);
- Laundry preferences (e.g., on main floor; in-suite, etc.) (renters);
- Proximity to public transportation (renters);
- Walkable community and/or walking trails (single family homeowners);
- Ensuite bathroom (single family homeowners); and
- Kitchen style or features (e.g., open concept) (single family homeowners).

It should also be noted that safety or security was of particular concern to infill homeowners.

2.4.2 Expectations

Participants most often felt that their expectations for location were exceeded. Other areas in which expectations were exceeded (more often than they were met) included: square footage; dwelling type; new versus resale; and parking. With the exception of attached-wall homeowners (whose expectations were typically exceeded), participants tended to feel that their expectations were *not* met with regards to pricing (i.e., the price was more than expected).

Overall, single family homeowners were the most likely to have indicated that their expectations were *not* met, while attached-wall homeowners were the most likely to have indicated that their expectations were exceeded. Renters were also likely to have reported that their expectations were exceeded, while infill homeowners generally felt that their expectations were simply met.

2.5 Infill Housing (Non-Infill Homeowners)

For the next part of the discussion, participants were read the following information:

*For the purposes of this discussion, **residential infill** is the development of new housing in older neighbourhoods. This new housing can take any form, including secondary suites, garden suites, duplexes, semi-detached and detached houses, row houses, apartments, and other residential and mixed-use buildings. Infill housing usually gets developed in these ways:*

- *An existing homeowner decides to tear down and rebuild their home, either to live in or sell; or*
- *A builder or developer buys an old home, tears it down, and builds a new home to sell.*

2.5.1 Considering Infill

In consideration of this, participants (excluding infill homeowners) were then asked if an infill home was something they had considered during their search. Most of the single family homeowners had considered infill, although one participant expressed concerns about "living with somebody that close to me," a misconception that they were unable to overcome for the duration of the focus group. A couple of others who had not considered it explained that "in theory, there is no issue with it, but in practice, nothing is available." Another explained that they had expanded their neighbourhood search to find a single detached infill home, but could not find anything that met their criteria.

Approximately one-third of the renters had considered infill, or would for their next property, explaining that they tend to be focused more on neighbourhood than dwelling type. A few of the renters had been inside "skinny houses," and approximately one-third had positive perceptions of infill homes.

With regards to an infill home from scratch – i.e., tearing down and rebuilding their home – a couple of the single homeowners indicated they would consider this. Some of the renters also reported that they would, although they felt that this was too expensive an option for them. Aside from one participant, none of the attached-wall homeowners felt that this was an appealing option.

Interestingly, after hearing the definition, a few of the attached-wall homeowners realized that they had unknowingly purchased an infill home. For the majority of this group, infill was not on their radar during their home search, but no one was opposed to the idea either. Overall, many of the participants in the focus groups admitted that they did not realize infill could be so broad a definition, as they had previously considered infill to be "skinny homes" or lots always split into two (or more) properties.

2.5.2 Benefits to Infill

Participants mentioned the following as potential benefits to having an infill home:

- Having a new house in a mature neighbourhood;
- Landscaping, including trees and other greenery;
- Potential to live close to the city centre;
- Less upkeep or maintenance (e.g., recently re-built);
- Proximity to amenities;
- Bringing in new people and demographics to a neighbourhood;
- "Modernizing" a neighbourhood; and
- Replacing "derelict" homes.

2.5.3 Barriers to Infill

Participants (excluding infill homeowners) also mentioned a number of concerns or barriers that would prevent them from considering an infill home, including:

- High cost or lack of affordability;
- Perception that infill homes have lower values;
- Perception that infill homes do not fit, aesthetically, into more mature neighbourhoods;
- Perception that developers are "more interested in flipping than they are in quality" and/or that new homes are of lower quality; and
- Security reasons (e.g., one respondent cited an example in which fire trucks had difficulty accessing Terwilligar Towne).

The impact on the neighbourhood was the biggest concern for those opposed to infill. They often felt that infill homes "change the nature, character, and look" of the neighbourhood. However, a few participants acknowledged that this could be preferable to run-down or unkempt homes ("my daughter lives in an infill, and some of the homes nearby are in a pretty awful condition, such as rental properties that have been neglected; my daughter's home is a tall building that outsizes the others, but it looks fabulous"). Overall, those who were opposed to infill for the purposes of not fitting into the neighbourhood felt that infill developers should make more of an effort to fit a neighbourhoods' existing character.

Similar to previous comments, some renters also felt that neighbours can be "pre-biased" against an infill tenant, because "if the neighbours don't like the house, they won't like who moves in."

To help overcome these concerns or barriers, participants strongly about ensuring that infill homes fit the overall character and feel of a community. In order to do this, participants suggested that developers take into consideration the architectural style of adjacent homes (e.g., windows, rooftop, decks); match the height of other houses or buildings; ensure adequate separation from neighbours to maintain privacy; and take into consideration the overall demographics (and future demographics, based on socioeconomic trends) of the area.

Additionally, many of the infill homeowners and a few of the renters and single family homeowners felt that infill can sometimes look better when there is more in the neighbourhood, so that, for example, a single infill home does not "stick out like a sore thumb."

2.6 Infill Homeowners

Infill homeowners were asked a separate line of questioning with regards to their home purchases. Only a couple of the participants in this group described their home, top-of-mind, as an infill property, although most were aware that they had purchased an infill (other phrases they used to describe their homes included "new duplex" and "modern duplex in an improving area"; many of the participants later agreed they would describe their exterior as "modern"). These participants most often explained that they decided to purchase their homes because of their newer construction, mature trees in the area, "a different look than other homes on the street," and a higher property value.

One participant built their home from spec, although they felt the process was "hectic" and reported facing "a lot of resistance from neighbours...who had issues with the City approving the construction." Others reported that cost is a major barrier to tearing down and re-building a home.

2.6.1 Perceptions of Infill

A couple of the infill homeowners felt that there were negative connotations to the word "infill," for similar reasons as cited by other groups (e.g., neighbours "feel that infill houses don't respect the character of the community;" are intrusive or overshadow adjacent homes; give less privacy; and that there can be issues with developers, such as long-term construction or stop-and-start projects). Interestingly, many of the infill homeowners felt that their property does fit with the character of the neighbourhood.

A few other misperceptions that infill homeowners recalled included that infill developments take away from existing green spaces and that infill always means lot splitting. One participant suggested that some concerns might be attributed to a "quick pace": "people aren't used to infill homes going up so fast, and there being so many of them." As previously mentioned, some participants faced negative reactions from their neighbours, with some even reporting that their neighbours rallied the

community against them, even going so far as to have neighbours sign petitions to stop construction. Overall, many infill owners reported general unfriendliness from their neighbours.

2.6.2 Warranties

All of the infill homeowners bought their home with a warranty that is still active. When asked to rate the importance of the warranty to their decision to purchase an infill home, participants provided a range of responses from 2 to 5 out of 5 (1 being "not at all important"; 5 being "very important"), with the mean rating being 3.36 out of 5 (median 3.5). Those who provided higher ratings explained that their warranty was required by the government or that it provided peace of mind. Those who provided lower ratings explained that their inspection went well and left no concerns, or that they had simply not considered it.

2.6.3 Lessons Learned

Finally, taking the discussion and their previous experiences into consideration, participants were asked if there was anything they would do differently in the future. A few of the infill homeowners reported that they would have more carefully researched or considered the home developer (including the degree to which their plans would impact the surrounding community), as well as find out more information on "architectural standards or controls."

2.7 Future of Infill

2.7.1 Likelihood to Consider Infill

When asked how likely they would be to consider buying infill in the future, single family homeowners provided a range of anywhere from 1 out of 5 ("not at all likely") to 5 out of 5 ("very likely"), with a mean rating of 2.6 out of 5. For some, it largely depended on the type of dwelling, and ensuring that there was some sort of "guarantee that the home would be in keeping with the aesthetics of the neighbourhood, like architectural controls." One participant indicated that their opinion on infill had changed for the better as a result of learning more during the focus group. Most of the attached-wall homeowners reported that they would consider infill in the future, provided the home met their criteria and, again, that it fit the neighbourhood.

2.7.2 Advice to the City of Edmonton

One of the biggest pieces of advice that participants had for the City of Edmonton as they move forward on Evolving Infill was to have a plan: "If you're going to put something in, it has to be planned and methodical, and account for things like parking and oversight." Many participants acknowledged that infill housing is a form of "rejuvenation" and "progress," and that Edmontonians should not reject it outright, even if they "don't want change." However, this led back to the discussion of "doing it right" and ensuring that neighbours' concerns are addressed, particularly with regards to overall aesthetics, building height, and the impact of construction on the community.

To alleviate concerns, participants felt that it was important to continue to engage and consult with the community so their concerns are heard and addressed, including ensuring there is a process in place for concerned community members to contact the City (e.g., 311 line). Infill homeowners suggested that the City should highlight the benefits of removing derelict homes and the "economic and ecological win" for the City, while those in other groups suggested that the City needs to "be stricter, but also have reasonable limits" and ensure they are enforcing bylaws. One participant suggested that the City continue to explore other cities with successful infill development to understand how they made it work.

One infill homeowner suggested that the City could use a portion of property tax increases (i.e., from an increase in infill property values) to offer new services to help with infrastructure issues, such as transportation (particularly further out in the suburbs). Similarly, one renter suggested a financial incentives, such as tax deductions.

Renters also suggested working to change overall awareness of infill, in addition to including educating residents as to what infill is and is not (e.g., changing perceptions of infill as "skinny homes"); ensuring there are affordable options and/or making infill more accessible to younger residents; and communicating the value proposition to potential homeowners or renters.

APPENDIX A – MODERATOR'S GUIDE

MODERATORS'S GUIDE – COE INFILL FOCUS GROUPS

Introduction

Hello, my name is _____ from Banister Research and Consulting. Thank you for this opportunity to speak with you. The intent of this focus group is to explore your perceptions and opinions of housing and development in the City of Edmonton.

As you might recall, the City is currently working on Evolving Infill, a project aimed at identifying the best ways we can welcome more people and new homes into our older neighbourhoods.

Explain process:

- It is an informal discussion that will be about 2 hours in length.
- There are no "right" or "wrong" answers.
- You don't have to agree with the others in the room – we want to know what you think.
- There is a recording to help me complete the report and a note taker. Everything is anonymous – no names will be associated with any specific comment and you won't hear your voice as part of a testimonial.
- The client is in the back room observing and learning, behind but will not participate in the discussion.

Ground Rules:

- Turn off your cell phone/put on silent.
- Respect each other's opinions.
- Everyone's opinion is valued.
- Listen carefully to one another (no side conversations).
- No interruptions. Raise your hand and the discussion leader will note that you will speak next.
- Facilitator reserves the right to "direct traffic".

Participants Introduce Themselves:

- Quickly go around the table/room to capture everyone's name;
- What neighbourhood you live in and;
- How long you've lived at your current residence.

Motivation

1. How long ago did you move into your current home?
 - a) How far in advance of moving did you start looking for your home?
 - b) How did you formally start your search? What tools did you use?
2. What motivated you to move?
 - a) What is your household composition? How did this factor into the decision?
3. What type of home were you looking for?
 - a) Single-detached home
 - b) Semi-detached home (including duplex)
 - c) Low-rise apartment/condominium (4 stories or less)
 - d) Mid- or high-rise apartment/condominium (5 stories or higher)
 - e) Row housing/town housing
4. What kinds of features or amenities?
5. Why were you looking for this type of home?
6. **[RENTERS ONLY]** Why did you decide to rent?
 - a) Was it a lifestyle or a financial choice?
 - i. How much are you currently paying in rent?
 - ii. 30% of one's income is a figure often used to determine whether housing costs are affordable – is your rent more than 30% of your income? What is the maximum % of your income that you would be able to spend on your rent?
 - b) Have you ever considered buying a home?
 - i. **If yes** – why didn't you? What were the barriers preventing you from buying a home?
 - ii. **If no** – why not?
 - c) When – if ever – are you planning to buy a home?
7. **[OWNERS ONLY]** Why did you decide to buy?
 - a) Did you own your previous home?
 - b) Why didn't you rent instead?

8. [IF NOT ALREADY COVERED, ASK:] How did affordability factor into the decision?
- a) What is "affordable" to you?
 - b) How many affordable options were there during your search?

9. What was on your wish list when you started looking?

PROBES – READ LIST:

- a) Type of neighbourhood and neighbourhood "character" – core, established, mature, mature trees, types of homes in the area, etc.
 - b) Parking
 - c) Proximity to amenities
 - d) Proximity to important destinations – **what are they?**
 - e) Proximity to other transportation choices – e.g., LRT, bike lanes, bus routes
 - f) Interior design
 - g) Architectural style
 - h) Functionality
 - i) Pre-existing (resale) vs. new build
 - j) Proximity to infill
 - k) Cost
 - l) Access to a front or rear yard
 - m) Other?
10. Did any of you consider secondary suites or garden suites in your search?
- a) If so, how important was this? (1 to 5 scale)

Desired vs. Actual

Taking into consideration what we've discussed, picture your ideal home... OR the home you wanted when you started your search, considering your budget constrains etc. This is NOT an exercise of unlimited budget...

11. Did anybody end up with their ideal home? Tell us about that...
12. Those of you who didn't end up with your ideal home – how is your current home different?
13. What did you end up sacrificing or what were the trade-offs? What ended up being "nice to have" versus "need to have"?
- a) What were the deal-breakers or the things you weren't willing to sacrifice?

Handout – Expectations (Desired vs. Actual)

On the handout we gave you earlier, we asked you to write down in Column A what you were looking for in terms of new vs. resale, location, dwelling type, budget or price, square footage, garage, etc. In Column B you were asked to rate the importance of each on a 1-5 scale, and in Column C, we asked you to write down what you ended up with in those same areas. Now I want to discuss what happened between A and C – as in, what were the trade-offs you had to make and why you made the decisions that you did.

14. For those of you who had something different in Columns A and C, what changed?
15. In the blank shaded column between B and C, write down the trade-offs you had to make.

Now let's go to Column D. For each item (#1-5), put a check mark in the appropriate box to indicate whether what you ended up with exceeded, met, or did not meet your expectations. For example, if you paid a lot more than what you wanted, this probably did not meet your expectations.

16. Were there any other considerations or trade-offs that we didn't cover?

Infill

READ VERBATIM: Now I want to talk about infill housing. For the purposes of this discussion, **residential infill** is the development of new housing in older neighbourhoods. This new housing can take any form, including secondary suites, garden suites, duplexes, semi-detached and detached houses, row houses, apartments, and other residential and mixed-use buildings.

Infill housing usually gets developed in these ways:

- An existing homeowner decides to tear down and rebuild their home, either to live in or sell; OR
 - A builder or developer buys an old home, tears it down, and builds a new home to sell
17. **[ALL EXCEPT GROUP 3/INFILL OWNERS]** Is an infill home something you considered during your search? Was it on your radar at all?
 - a) What about infill from scratch – tearing down and rebuilding your home?
 - b) Would you consider it? Why or why not? What would make infill something you would consider?
 - c) What about infill in neighbourhoods with fewer amenities or less proximity to shopping (i.e., less desirable neighbourhoods) – what would get you to consider infill in these areas?

18. [GROUP 3/INFILL OWNERS ONLY] Why did you decide to purchase an infill home?
- a) Were you aware that you had purchased an infill?
 - b) Why did you decide to purchase this particular home?
 - c) Why infill instead of a resale (pre-existing home)?
 - d) Some of the common perceptions about infill are that infill homes shadow other homes in the neighbourhood, that they don't take into consideration their neighbours, or that they don't fit the "feel" of the neighbourhood. Do you agree with these statements? Why or why not?

****FACILITATOR TO GO TO BACK ROOM/NEW QUESTIONS TO BE WRITTEN DOWN****

19. During your search, did you ever find yourself wanting a form of housing that just didn't seem to exist in Edmonton? For example, a certain kind of townhouse, brownstone, duplex, or other home that was creatively designed?
20. [RENTERS] What were your perceptions of the availability and diversity of rental options when you were looking?
- a) Did you come across any constraints? What were they?
21. [RENTERS] Do you think that renters are treated differently than homeowners?
- a) e.g., Renters don't take care of their homes; don't contribute to neighbourhoods; increase crime levels or make areas more dangerous; "second-class citizens," etc.

Final Comments

22. With everything all said and done –
- a) What went well during the process?
 - b) What would you have changed?
 - c) What will you do differently next time?
- PROBE: neighbor conflicts, etc.
23. Now that you have bought your new home, and now that you have learned more about infill, would you consider buying infill in the future? (Scale 1 to 5 – not at all to very likely)
- a) If unlikely – What would need to change for you to consider infill in the future?
24. Do you have any specific advice for the City of Edmonton?
- a) What could the City do to make infill more accessible to folks like yourself?
25. Thinking about everything we have covered today, did you have any other comments or suggestions?

APPENDIX B – PARTICIPANT HANDOUT
