

NORTH END PLAN BACKGROUND STUDY

POLICY & PLANNING DEPARTMENT
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We acknowledge that our community is located on the traditional, ancestral, unceded territory of the syilx/Okanagan people.

01

BACKGROUND



Introduction

Executive Summary

Kelowna's North End is a truly unique neighbourhood in a rapidly growing and evolving city. It's home to a large proportion of industrial lands, two residential neighbourhoods with historical roots, a collection of major recreational activities and an organically emerging and exciting brewery district. While adjacent to Kelowna's Downtown and other neighbourhoods, it seems at times separate, with major roads and topography making it feel distinct from the rest of the city. As much of Kelowna transitions into a more urban community, the North End is experiencing a unique form of change, and that change is expected to accelerate into the future.

The closure of the rail line – once a key factor in the success of North End industries – and its conversion to the

Okanagan Rail Trail changes the employment landscape of the neighbourhood. The closure of the Tolko mill site, a large parcel in the North End positioned on Kelowna's waterfront, raises questions about the neighbourhood's industrial future. Growing demand for housing, amenities and commercial services in Kelowna, especially in the city's Core Area, is expected to put pressure on redevelopment in the North End. The Brewery District continues to grow, making the North End a more popular regional destination. These and many other factors have necessitated the creation of a North End Plan that will guide the future of the neighbourhood.

This background study for the North End Plan is being undertaken to inform this larger process to manage growth and change in this rapidly evolving neighbourhood. Given the uniqueness and complexity of the North End, it is crucial to have in-depth knowledge of the neighbourhood's

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MOVING FORWARD

characteristics, its history, and existing policy guidance before developing a vision that guides development and investment moving forward.

With this in mind, the North End Background Study provides an understanding of:

- The history of the area and how it contributed to the current state;
- Land use, transportation network, utilities, parks and public spaces, heritage assets and amenities that exist today and how they are functioning;
- Improvements already planned for the area and how they will address anticipated growth, as well as any short-comings and problems identified; and
- The City's existing policies and plans for the area and their guidance for moving forward.

Some of the major themes identified in this study are outlined below:

The People

- North End residents tend to be younger, less likely to belong to a visible minority and earn less than the Kelowna average.
- North End residents tend to live in smaller households and are more likely to rent.

Industrial Land and Employment

- The North End continues to be a major employment destination, with 165 businesses employing about 3,300 people. In addition, nearly 80 home-based businesses operate in the North End.
- These North End businesses include, but are not limited to, manufacturing, storage and warehousing, contracting, automobile sales, rentals and repair services.
- A new North End Brewery District has emerged, focused on Richter Street, Clement Avenue and Vaughan Avenue.

Residential Neighbourhoods, Parks, and Recreation

- Over 95% of the North End's two residential neighbourhoods is composed of single and two dwelling

housing – a far higher proportion than the city as a whole.

- Improvement ratios suggest a high likelihood that many residential properties will be explored for redevelopment by the private sector in the next 20 years.
- Recreation Avenue Park and nearby sports facilities are a destination for the city as whole, but the North End remains deficient in other forms of park space that serve the immediate and surrounding neighbourhoods.
- A Historical Context Statement has identified a number of heritage resources in the North End and included a number of recommended actions for consideration as part of the planning process.

Transportation

- North End residents walk, and bike more to get to work than the city as a whole, but less than residents of Downtown and other nearby neighbourhoods.
- North End residents take transit less frequently than the city as a whole.
- The North End is isolated from the rest of the city by Clement Avenue, making overall connectivity and transit network planning challenging.
- Existing and planned Active Transportation infrastructure is expected to improve access to Downtown and neighbourhoods to the south and east of the North End.
- An estimate of the future transportation network carrying capacity has indicated that the network could support additional development in the North End.

Utilities

- Given the age and materials of existing water and sewer infrastructure, upgrades will be needed to accommodate both existing development and anticipated growth. The 20 Year Servicing Plan has identified many of these projects, but growth beyond 2040 will require further evaluation.
- Stormwater management will need to account for and integrate with an updated Downtown Drainage Plan.

Policy Context

- Many existing policy documents, such as the Official Community Plan, the Transportation Master Plan and other key documents will provide guidance for the North End Plan process. Using their guidance, key areas for consideration will include:
 - Housing diversity, supply and affordability;
 - Industrial land protection and employment intensification;
 - Downtown and Civic Precinct context;
 - Parks and public space expansion and improvements;
 - Cultural and community facilities;
 - Inclusivity, equity and community health;
 - Heritage protection;
 - Application of an Indigenous lens in the planning process;
 - Improvements to community connections;
 - Transportation diversity, choice and safety;
 - Environmental protection and climate resiliency; and
 - Incorporation of 10 Year Capital Plan improvements.
- A clear process to identify and deliver on community needs will need to be established as part of the planning process. This process should be fair, transparent, responsive, flexible and feasible.

While this Background Study identifies these and other key themes, it is important to note that it does not aim to provide detailed recommendations on how the North End Plan will respond. That process will form the future phases of the North End Plan's development.

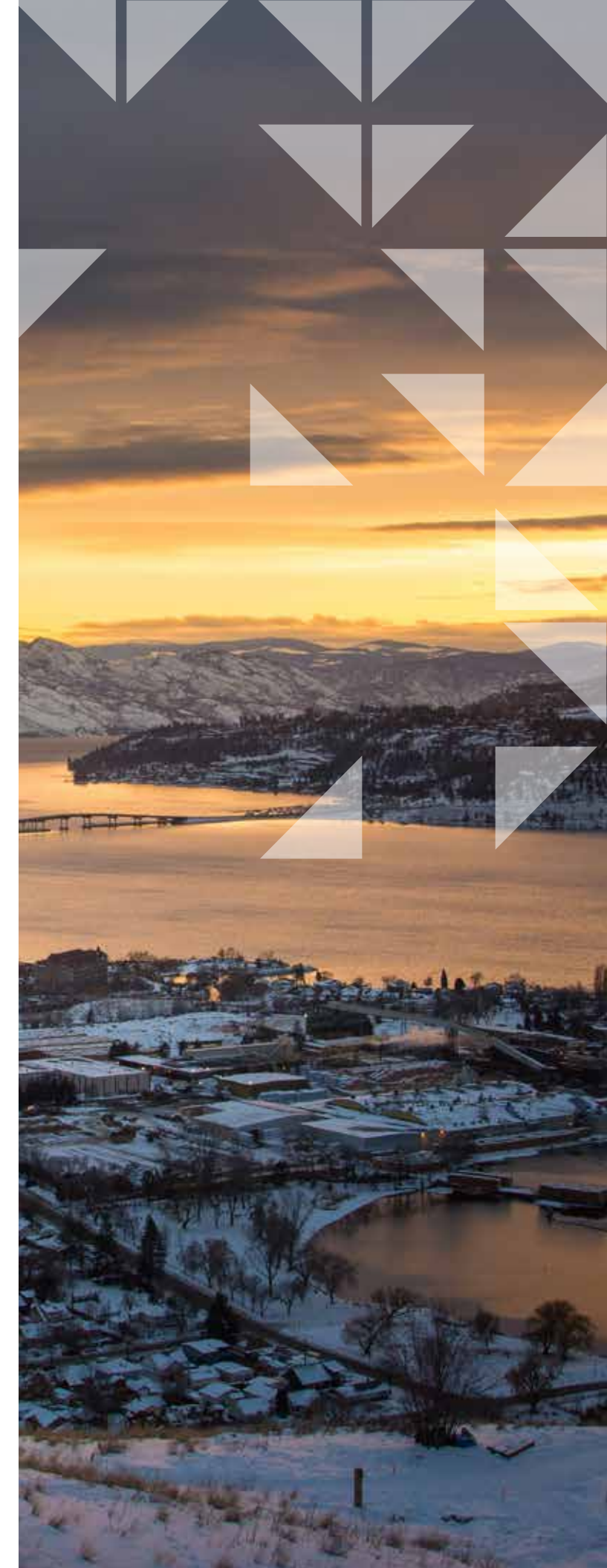


Figure 1.1 North End Context Map

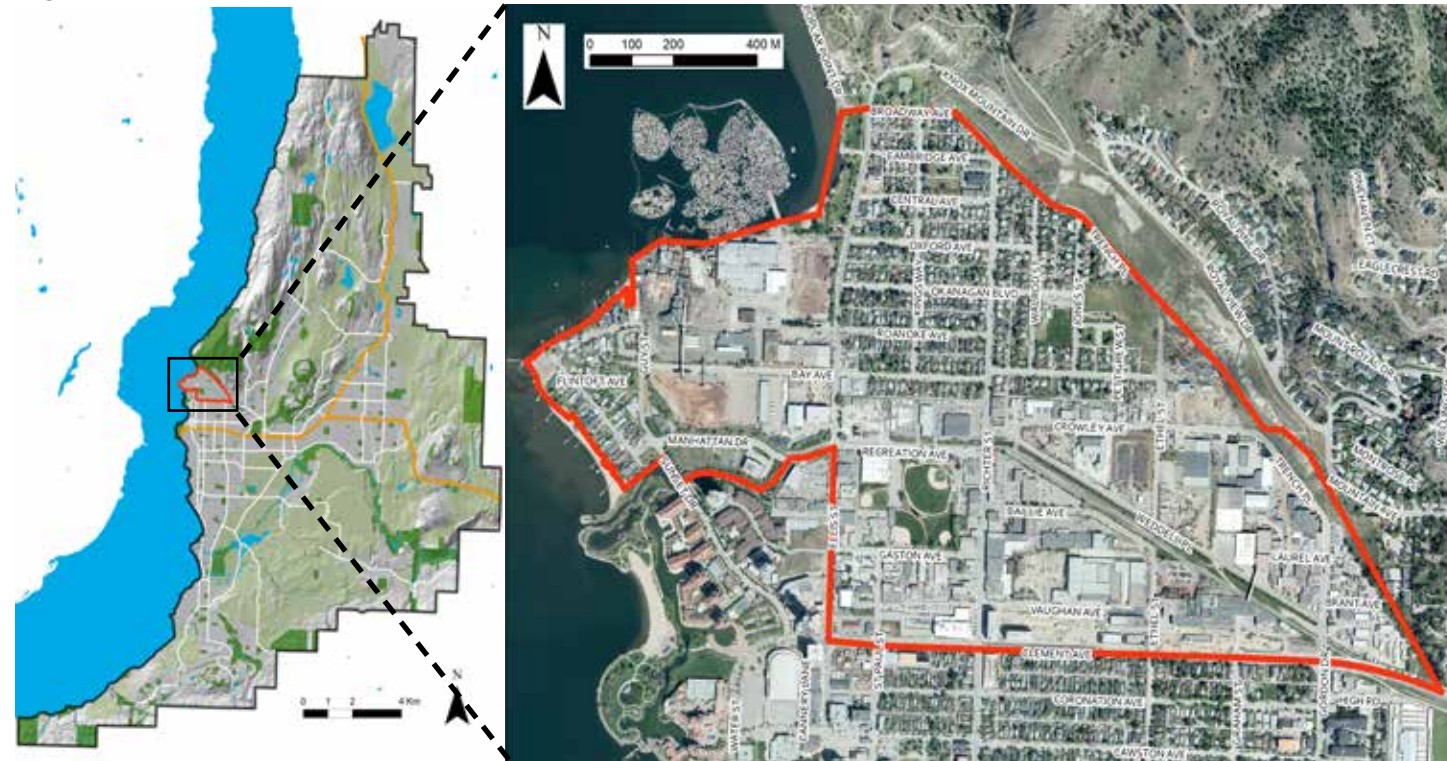
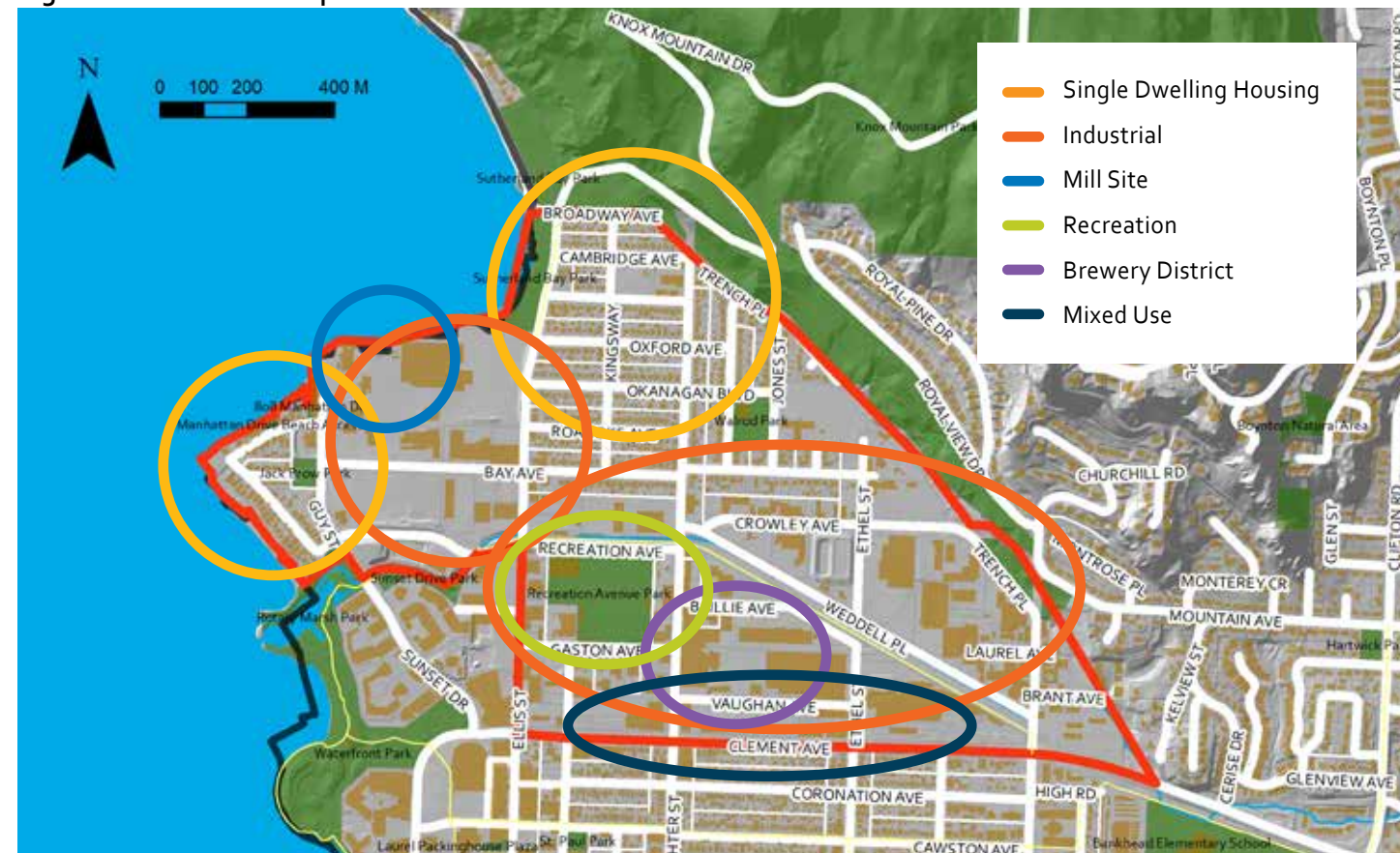


Figure 1.2 North End Map



The North End

The North End is a unique and dynamic neighbourhood located just north of Kelowna’s Downtown Urban Centre. Bounded by Clement Avenue to the south, Knox Mountain to the north and east, and Okanagan Lake to the west (Figure 1.1), the North End contains a wide range and mix of uses organized into distinct areas (as illustrated in Figure 1.2), including:

- Pockets of primarily single and two dwelling neighbourhoods against Knox Mountain and along the lake (illustrated in yellow);
- A long-established industrial area that is home to some of the Okanagan’s most recognizable brands, including Sun-Rype and BC Tree Fruits (illustrated in orange);
- A decommissioned lumber mill site owned by Tolko (illustrated in blue);
- A cluster of City and privately owned recreational facilities, including baseball diamonds, a curling club and a badminton club, centred around Recreation Avenue Park (illustrated in green);
- An emerging brewery district centred on Richter Street and Vaughn Avenue (illustrated in purple); and
- New mixed residential and commercial uses residential along Clement Avenue (illustrated in navy).

Residents from all over Kelowna and beyond are drawn to the neighbourhood for a variety of reasons. The area boasts a strong employment base, the new and evolving Brewery District, and established recreational facilities, all of which bring people to the area daily. In addition, the city-wide lakefront park and boat launch at Sutherland Bay, and the very popular Knox Mountain Park to the north of the neighbourhood, are major attractions.

The North End Is Changing

The North End has experienced significant change in recent years, and started to evolve from its historical industrial and residential character due to some recent significant changes including:

- Replacement of the railway with the Okanagan Rail Trail, one of the region’s busiest Active Transportation Corridors;

- The closure of the Tolko mill site;
- Development of some of the City’s highest density development Downtown, adjacent to the North End boundary;
- Transformation of Clement Avenue over the past five years, which now offers hundreds of new apartment units in a mix of tenures;
- The appearance of higher density residential development in certain locations in the interior of the North End—most notably the Pleasantvale development at the corner of Richter Street and Central Avenue; and
- Competition for industrial space by commercial and food and beverage uses, shaping former industrial sites into the emerging Brewery District.

In addition to these changes experienced in recent years, even more change is on the horizon for the North End in the future. Industrial land demand is expected to continue to shift to parts of the community with more convenient highway access, while high demand for housing in Kelowna’s Core Area, of which the North End is a part, will put greater redevelopment pressure on these areas. The Tolko mill site is likely to be a major focus of this development pressure due to its closure, but this demand is expected to impact the entirety of the North End.

Managing the Change: The North End Plan

Given the significant change that has already occurred and is expected to continue, a neighbourhood plan for the North End is needed to help manage this rapid change. Without a proactive neighbourhood plan in place, planning and development will continue without a clear vision, leaving the City and the community to struggle to harness the benefits of this growth and ensure that residents feel adequately engaged in shaping their neighbourhood. The result would be a neighbourhood full of uncertainty: uncertainty for existing and prospective residents and businesses alike.

A neighbourhood planning process provides the opportunity to identify the preferred land use mix and development scenario for the North End. It also identifies the transportation network improvements, utilities, parks and public spaces, and community amenities needed to ensure the neighbourhood evolves in a deliberate and orderly way—allowing the North End neighbourhood to flourish well into the future.

History

syilx/Okanagan History

Kelowna is located on the traditional, ancestral, and unceded territory of the syilx/Okanagan peoples, who have lived here since time immemorial. While the 2040 Official Community Plan includes a revised Community History section that speaks to the syilx history on these lands, it will be critically important to engage with indigenous governments, including Westbank First Nation and Okanagan Indian Band, on the history of the North End lands in particular.

The Historical Context Statement, included as Appendix 1 of this document, indicates that a full understanding of the historical context of the North End lands will require detailed engagement with syilx/Okanagan people. As such, this will form part of the planning process as part of future phases.

Settler History

While more engagement will be needed to understand the syilx/Okanagan history in the North End, an extensive settler history is provided in the Historical Context Statement. Excerpts from that document, edited, are included below to give a general understanding of the settler history of the North End. For a more extensive understanding of the history of the North End, see the Historical Context Statement in Appendix 1.

The settler history of the North End neighbourhood began with early mixed uses such as farming and ranching, recreation and industry such as Kelowna Brickworks (now the site of Knox Mountain Metal works), along with early pockets of residential development. One such pocket, the Manhattan Point neighbourhood, today consists of about 70 properties, about half of which are on the waterfront. The earliest homes on the point were summer cottages for the more well-off Kelowna families.

The North End, with its expansive undeveloped flat marshes, was the location of early sports games and recreation events including polo, rugby, horse races, rodeos and ice skating. A formal civic recreation area was created in 1909 on today's Recreation Avenue Park known as the Exhibition Grounds.

The grounds included the Kelowna Exhibition Hall (opened in 1913, destroyed by fire in 1957) and a horse racetrack, followed by the badminton hall, a baseball diamond, and ultimately a curling rink.

Industrial development was sparked by the arrival of the Canadian Northern Railway (CNR) line from Kamloops in 1925. The introduction of the CNR shifted Kelowna's industrial district north and east, away from the waterfront where lake transportation had sited it until that time, to a new centre in the North End, around the yards and spurs of the rail line.

By 1930, twenty-two packing houses, four commercial canneries, and numerous other industrial facilities were clustered along the line, creating a North End industrial area. An expansion of the industrial lands occurred in 1948 as a loop of the rail line was introduced in the area on a northwest angle along Brandt's Creek, then coming down west of Ellis, which sparked new investment and a new cohort of industrial buildings and businesses mostly concentrated along Weddell Place.

A sawmill, veneer plant, and box plant were constructed at the entrance to Manhattan Point in the early 1930's by S.M. Simpson Ltd. to respond to the increasing demand for fruit shipping crates, but it produced a diversity of lumber products. The sawmill was expanded and changed ownership over the years, and was the Kelowna division of Tolko Industries Ltd. The mill permanently closed in 2020.

Many of the neighbourhood street names, including Broadway, Cambridge, Central, Kingsway, Okanagan, Oxford and Roanoke, were chosen by the Grand Trunk Land Company Ltd., an early BC real estate company which acquired and sold large parcels of land in the early 1910s, including in Kelowna.

A working-class subdivision, consisting predominantly of modest-sized houses built immediately after the Second World War and the two decades following, dominate the north edges of the neighbourhood. The majority of houses are 'Wartime Houses,' built by Wartime Housing Ltd. in response to veterans' housing needs following the Second World

War, part of a national project to address potential housing shortages and unemployment following the demobilization of soldiers and to help promote post-war economic stability.

A local school, Gordon Elementary, was built on Walrod Street in the late 1950s to serve the large, new community of families in the Wartime Houses. The City purchased the school building from School District #23 in May 2005 for future park purposes. The Justice Institute of British Columbia has occupied the property since 2006. Today, Bankhead Elementary School is the school in closest proximity to the North End.

As a consequence of highway development in the region, the CNR ceased passenger service on its Kelowna-Kamloops line in 1967 but a commercial/ industrial rail service and yards were in use until 1997. The surviving 1926 station building at the corner of Ellis Street and Clement Avenue continued to function as its freight and express depot.

Brandt's Creek runs through the northern industrial area, which was a low marshland prior to development. During the depression, a camp of men who arrived riding the train in search for work grew along Brandt's Creek and near the lake. Due to changes in railway operations in Kelowna, the lands west of Ellis Street between Water Street and Manhattan Drive were no longer needed as a rail yard after 1997. These lands were redeveloped by the Canada Lands Company. The redevelopment included removal of contaminated soils from the site, and restoration of Brandt's Creek, which was formerly confined to culverts and ditches across the site.



Development Timeline 1900-1925



Kelowna Public Archives #3590
Killkare Kottage circa 1920. The summer cottage known as Killkare Kottage was built for Frank DeHart's family in 1910.



Kelowna Public Archives #10083
Manhattan Pt. circa 1910. Early summer cottages can be seen on the Point. The area to the east of Manhattan Pt. would later be developed as the S.M. Simpson sawmill site. The site can be seen here in its natural state, pre-development.



Kelowna Public Archives #6448
Laurel Packing House

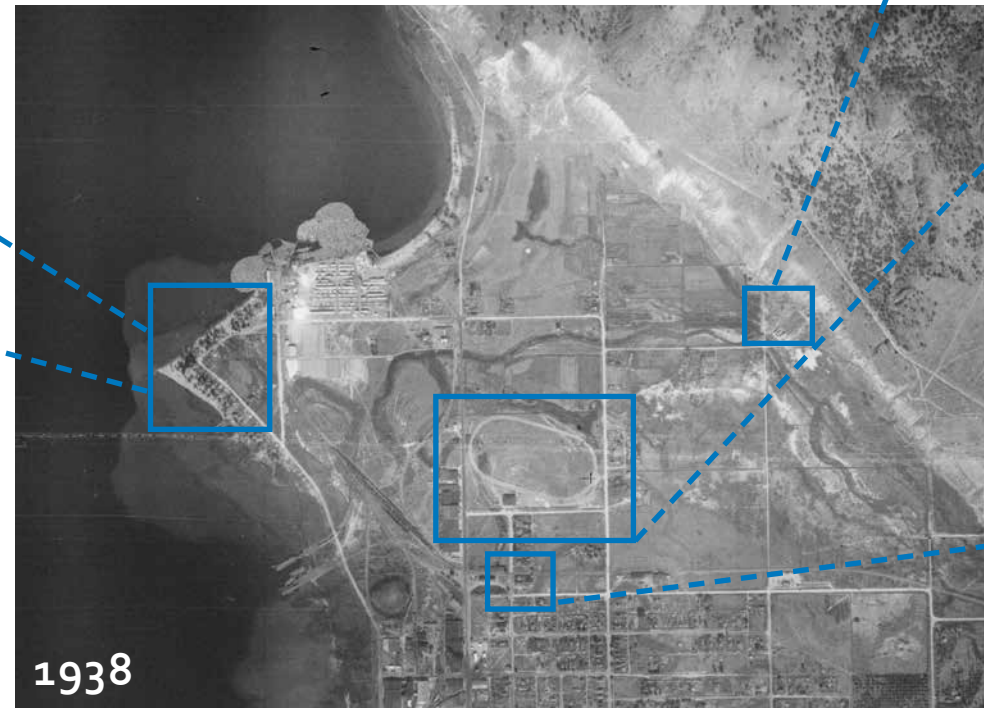


Kelowna Central School

Kelowna Brick Works ca 1928. Some of Kelowna's most prominent historic buildings were built with bricks from the Kelowna Brick Works. Examples include the United Church at the corner of Bernard Ave. and Richter St. (1909); the school house at the corner of Richer St. and DeHart Ave. (1913); the BNA Tobacco Company Factory on Ellis St. (1912); and the Laurel Packing House (1917).



Kelowna Public Archives #3877
Horse race track ca. 1912.



1938



Kelowna Public Archives #5924
Rugby team ca. 1910



Kelowna Public Archives #1461
Polo match ca. 1910



Kelowna Public Archives #4390
Exhibition Hall ca. 1920. Exhibition Hall was built in 1913 to house the Fall Fair. At other times of the year the hall was used as a gymnasium for basketball games and roller skating.



Kelowna Public Archives #3580
Canadian Northern Railway Rail Station ca. 1929. Exhibition Hall can be seen in the background.

1900-1910

1 Summer cottages for Kelowna's wealthier families are being developed along the waterfront at Manhattan Point.

1905

2 Kelowna Brick Works is established at the foot of Knox Mountain

Early 1910's

3 A horse racing track and exhibition hall are established on the site of the present day Recreation Avenue Park. Lands surrounding the horse race track are also used as sports fields for polo and rugby, among other sports.

1925

4 The Canadian Northern Railway (CNR) line from Kamloops is completed. The rail line is the first to directly serve Kelowna. Previously, rail cars from Okanagan Landing were loaded onto ships and brought to Kelowna via Okanagan Lake and off-loaded at a wharf near the present day downtown boat launch.

Development Timeline 1926-1950



Kelowna Public Archives #4546

Downtown and the North End ca. 1940's. Older industrial buildings that had been served by the downtown wharf are still present (foreground), but are increasingly moving to the North End for better access to the rail line.



Kelowna Public Archives #10899

S.M. Simpson Sawmill ca. 1940's. One of the industrial businesses to take advantage of the new rail line is the S.M. Simpson sawmill. S.M Simpson had previously run his operation out of a site on Abbott St. south of Bernard Ave.

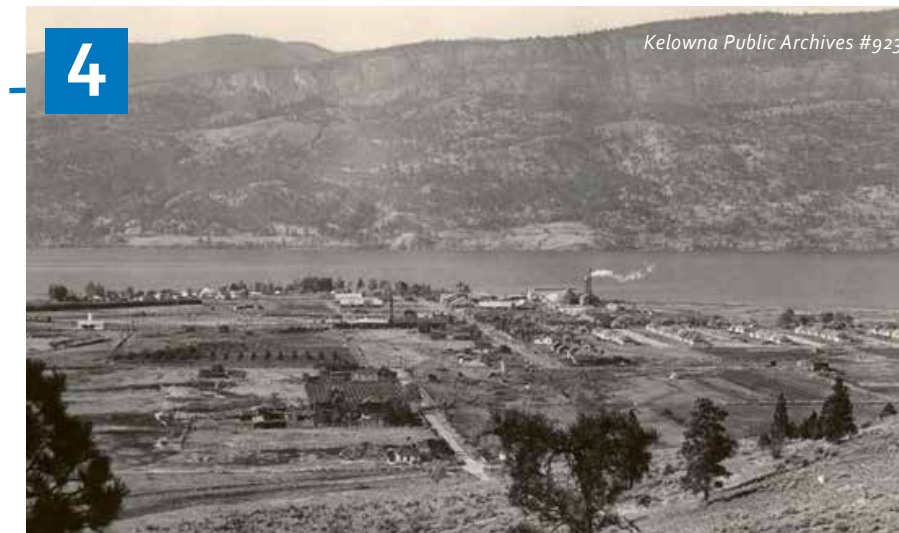


Kelowna Public Archives #9758

The North End ca. 1940's. New industrial buildings can be seen emerging around the Rail Station and rail yards to the west (top right of photo).



1950



Kelowna Public Archives #923

Kelowna's North End date unknown. Newly built wartime housing can be seen at the far right of the image. In the background is the S.M. Simpson sawmill. In the foreground farms remain.

1926-1948

1 The new CNR rail line draws numerous industries to the north end and away from the area surrounding the downtown wharf.

1932

2 S.M. Simpson sawmill is constructed.

Late 1930's

3 Kelowna Brick Works closes. By 1950 Knox Mountain Metals is located on the former site. Knox Mountain Metals can be seen in the orthophoto from 1950.

1945-1950

4 Wartime housing begins developing at the far north end, east of the Mill Site.

1948

5 A loop of the rail line is introduced along Wedell Pl. Brandt's Creek is channelized and located next to the rail line as part of the project.

Development Timeline 1951-Present



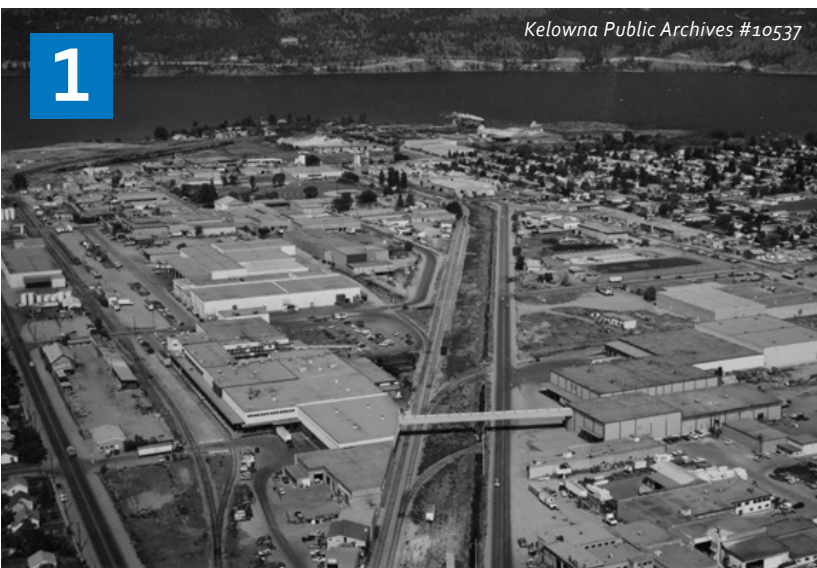
2 **Brandt's Creek 2021.** A section of Brandt's Creek, naturalized in 1997.



3 **Downtown and North End 2021.** New high-density construction in the Water Street / Sunset Drive area.



4 **Okanagan Rail Trail 2021**



Kelowna Public Archives #10537

1 **The North End date unknown.** The original rail line can be seen to the left of the image. The new rail line along Wedell Pl. can be seen running through the middle of the photo. The two rail lines are connected by a loop to the west (near the top of the image). Note the additional industrial businesses that have been constructed near the new rail line along Wedell Pl. The residential area against Knox Mountain that began with wartime housing has by this time developed out to meet the industrial area growing from the south (shown at the right of the image).



2020



5 **Mill Site 2021.** The mill, having changed ownership numerous times over the years, and most recently operated by Tolko, was permanently closed in 2020.

1948-1975

1

The new looped rail line draws more industrial businesses along Wedell Pl. expanding the original industrial area. Meanwhile, the residential area against Knox Mountain continues to develop out to the west and south.

1997

2

The rail yards between Manhattan Dr. and Water St. are shut, leaving the land open for redevelopment. To prepare the land for redevelopment, contaminated soils are treated, wetlands are managed, and a portion of Brandt's Creek is naturalized.

1997-Present

3

The former rail yards are redeveloped with high-density residential, tourism and mixed uses.

2013

4

The rail line is shut permanently and is eventually sold to local municipalities to build the Okanagan Rail Trail.

2020

5

The Mill Site is permanently shut, leaving the site open for redevelopment.

02

EXISTING CONDITIONS & ANALYSIS



This section provides an exploration and overview analysis of the people and built environment of the North End. Sub-sections cover demographics, land use—including residential land use, commercial and industrial land use, parks and heritage—the transportation network, and municipal utilities, including water, sewer and stormwater management. The overview analysis includes a preliminary investigation of gaps in public amenities, heritage protection and infrastructure in the North End—both today and moving forward. The overview analysis is meant to inform future stages of the North End planning process.

Demographics¹

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Population, Age and Family Status

The North End is home to an estimated 1,565 residents, representing 1.1 per cent of Kelowna’s total population. North End residents are distributed across 839 residences, giving an average household size of 1.87 people, 25.2 per cent less than the Kelowna average of 2.41.

The smaller household size is likely due in part by the fact that North End residents are more likely to live without a partner or children than Kelowna residents generally. 36.4 per cent of North End residents live without a partner or children compared to 29.2 per cent citywide. In addition to more people living alone, those people in the North End who do live in a family situation (residents with a partner and/or children) are more likely to have a smaller family. A greater proportion

of North End families have only one child when compared with Kelowna as a whole. Furthermore, a smaller proportion have two or more children than the rest of the city. Single-parent families are also over-represented in the North End (21.3 per cent vs. 15 per cent citywide).

This is consistent with the younger population overall in the North End, as the neighbourhood has a larger proportion of residents aged 25 to 29 through to 55 to 59; however, it is under-represented in every age cohort over 60. Among youth-age cohorts, North End residents are over-represented in the 0-4 cohort, and under-represented in all other cohorts up to 20-24.

¹ All data in the Demographics section provided by Environics Analytics © 2021.

Figure 2.1 Per Cent of Population by Age Group

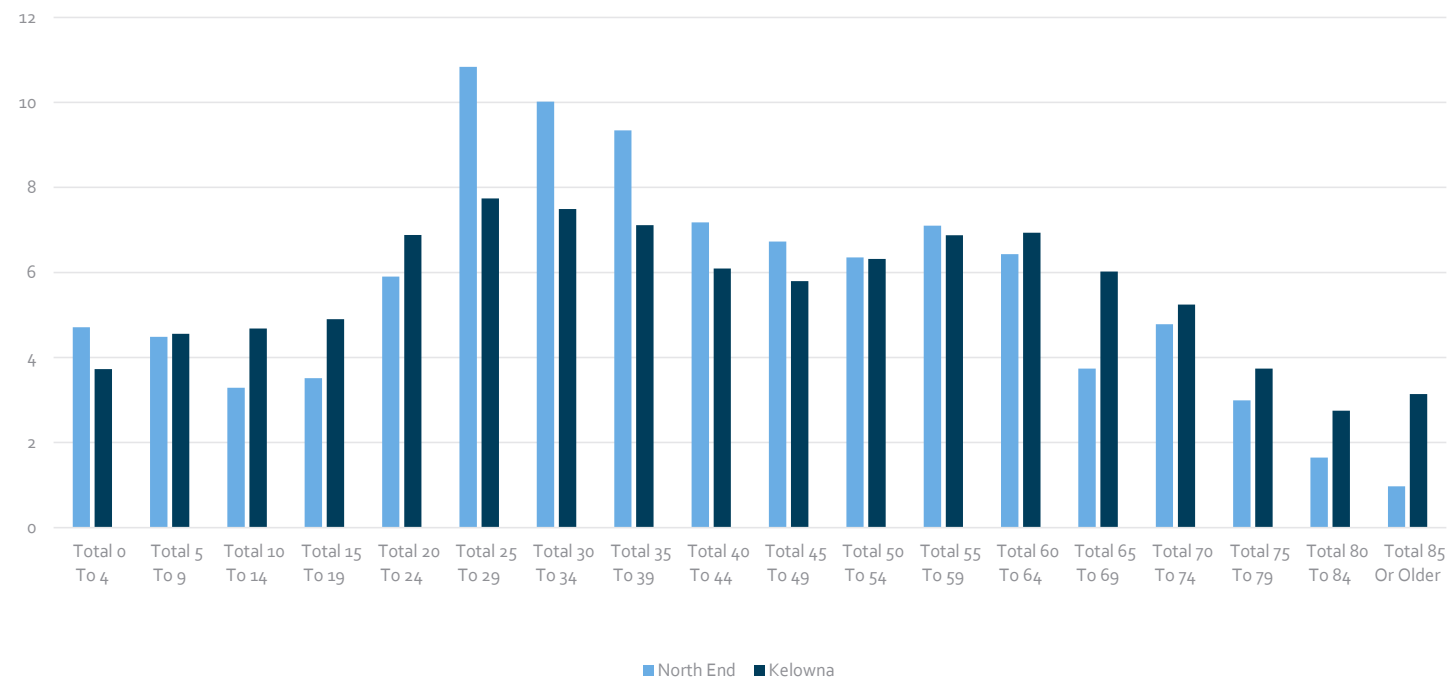
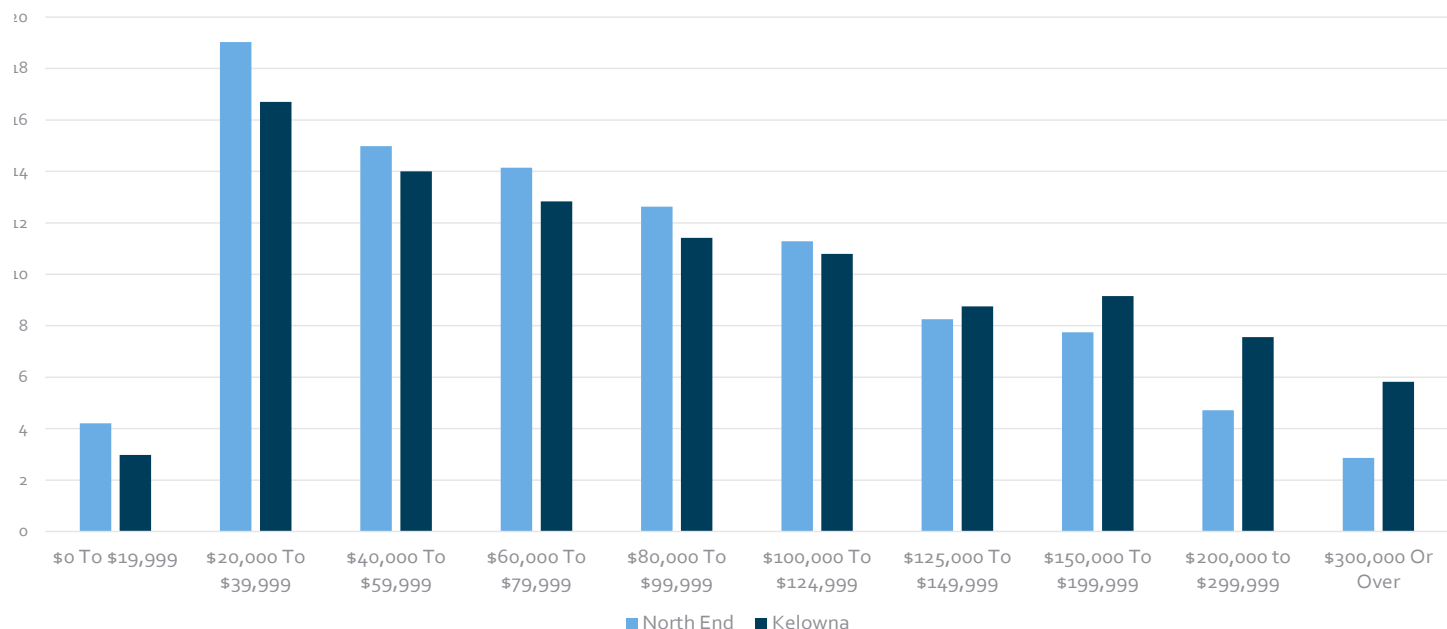


Figure 2.2 Per Cent of Households by Income Range (Current Year \$)



Employment, Income & Education

In addition to North End residents being younger than the general population, North End households also earn less, despite having a greater percentage of the adult population in the work force - 78 per cent compared to an average of 67 per cent citywide. On average, the household income is 19 per cent less for North End households compared with Kelowna households (the average household income in Kelowna is \$114,331 whereas the average for North End households is \$94,786).

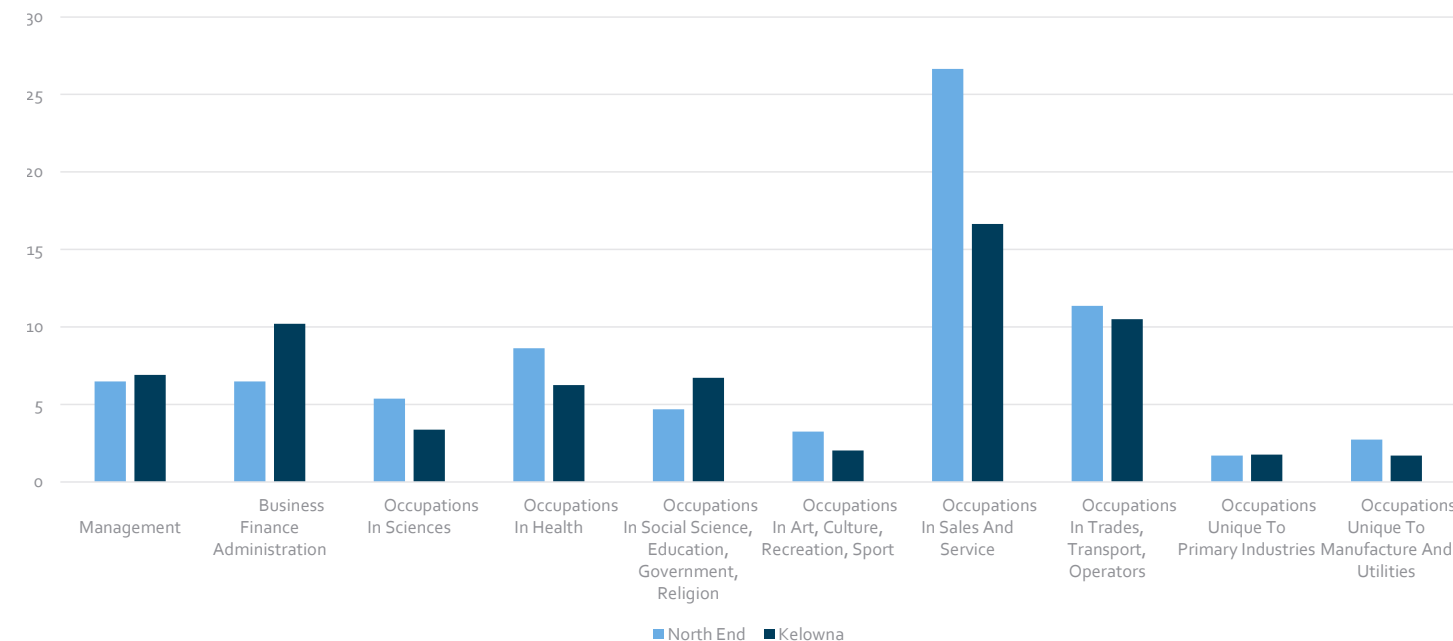
With smaller, younger and less wealthy households, it is understandable that a smaller proportion of households in the North End own their residence (36 per cent) when compared with the general population (67.1 per cent).

When it comes to occupation, North End residents are over-represented in each of the following: science; health; art, culture, recreation and sport; sales and service; trades,

transport and operators; and manufacturing and utilities. Meanwhile, North End residents are under-represented in management; business administration; social science, education, government and religion; and primary industries. The most prominent statistic here is in the sales and service category. While this is the occupation category which is most prevalent among both North End residents and Kelowna residents on the whole, 26.6 per cent of North End residents are occupied in this category compared to 16.6 per cent for Kelowna.

21.5 per cent of North End residents have a university-level education, which is marginally less than the city as a whole (26.5 per cent). However, North End residents are over-represented in post-secondary accreditations earned outside of the university setting (35 per cent vs. 27.1 per cent in the rest of Kelowna).

Figure 2.3 Per Cent of Labour Force by Occupation



Diversity, Immigration & Language

The North End has marginally fewer residents of visible minority (8.5 per cent) than Kelowna as a whole (10.5 per cent). However, the North End has a greater proportion of individuals that identify as aboriginal with 7.0 per cent compared to 5.8 per cent for Kelowna.

9.5 per cent of North End residents are foreign-born compared with 15.7 per cent in Kelowna broadly.

For interprovincial migration, 39.2 per cent of North End residents and 36.7 per cent of Kelowna residents were born in Canada but outside of the province.

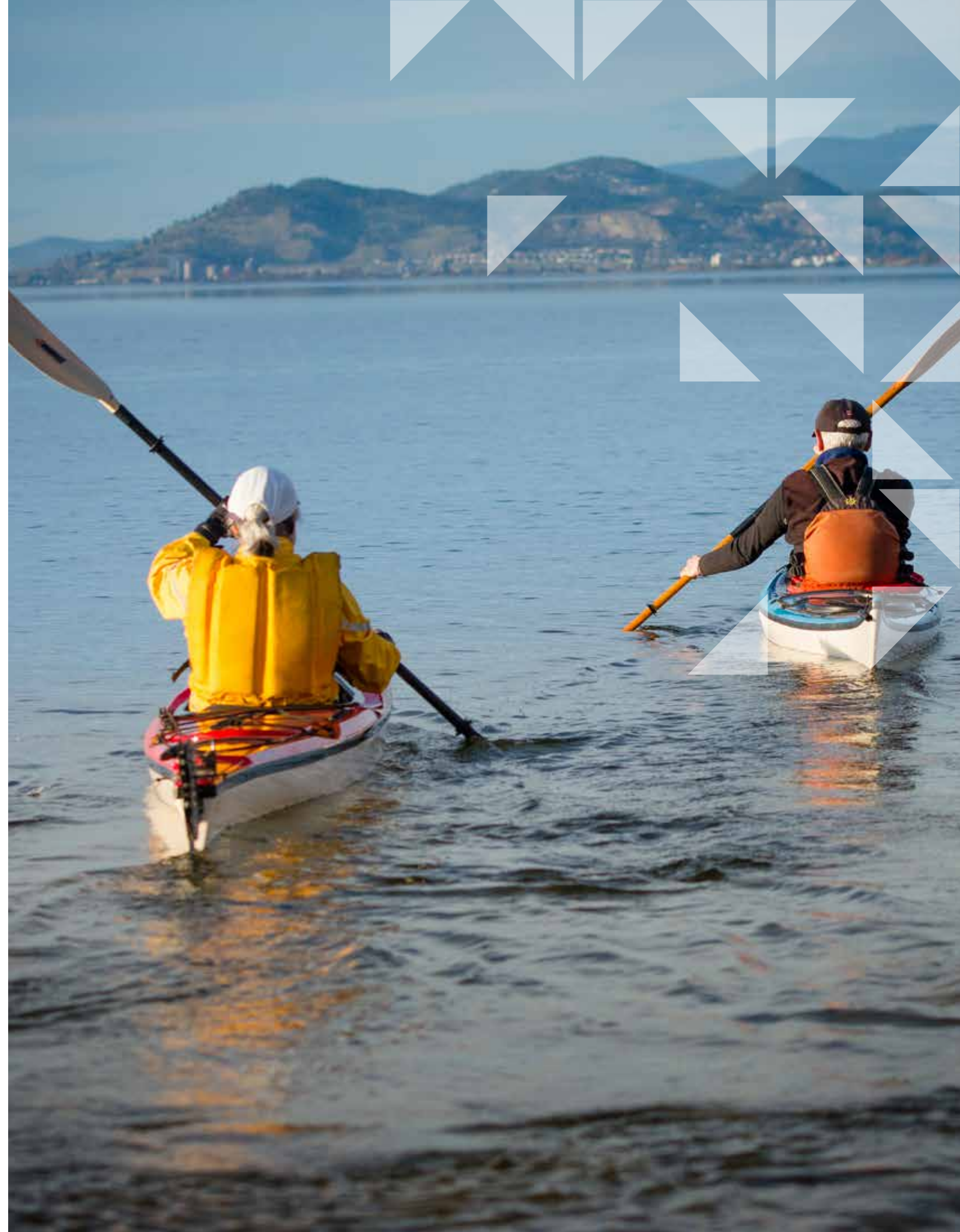
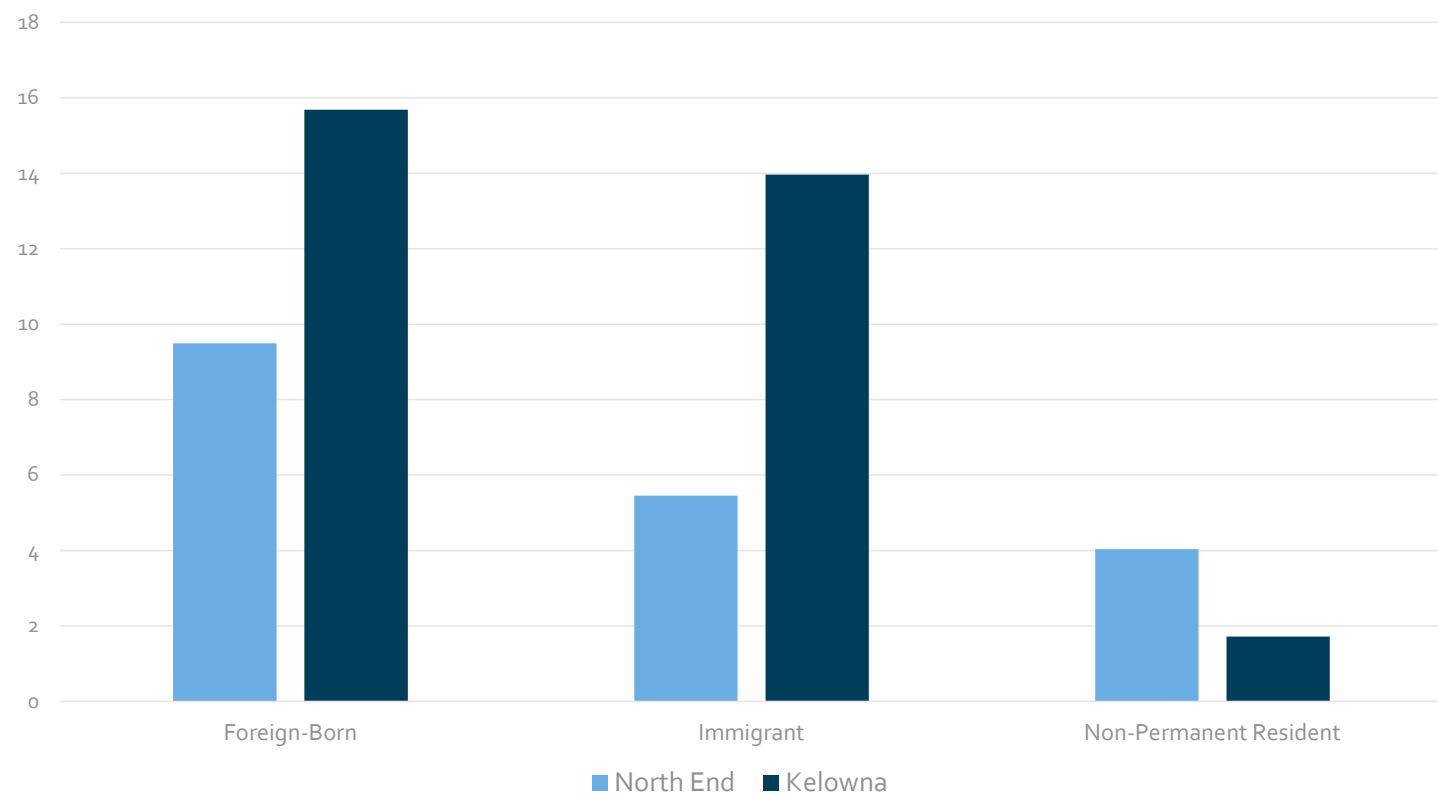
88.5% of North End residents speak English as their first language, similar to 84.8% in Kelowna. Also, 8.6% of North End residents speak a non-official language as a first language compared with 12.5% in Kelowna.

Summary

On the whole, North End residents are younger than the general population and their households are smaller and less wealthy. While North End residents are less likely to be university-educated than the general population, they nonetheless have a high degree of education outside the university setting. North End residents are also far more likely to rent than to own their residence as compared with the general population. Finally, there is somewhat less of an immigrant population and ethnic diversity in the North End as compared with Kelowna as a whole.

“ North End residents are younger than the general population and their households are smaller

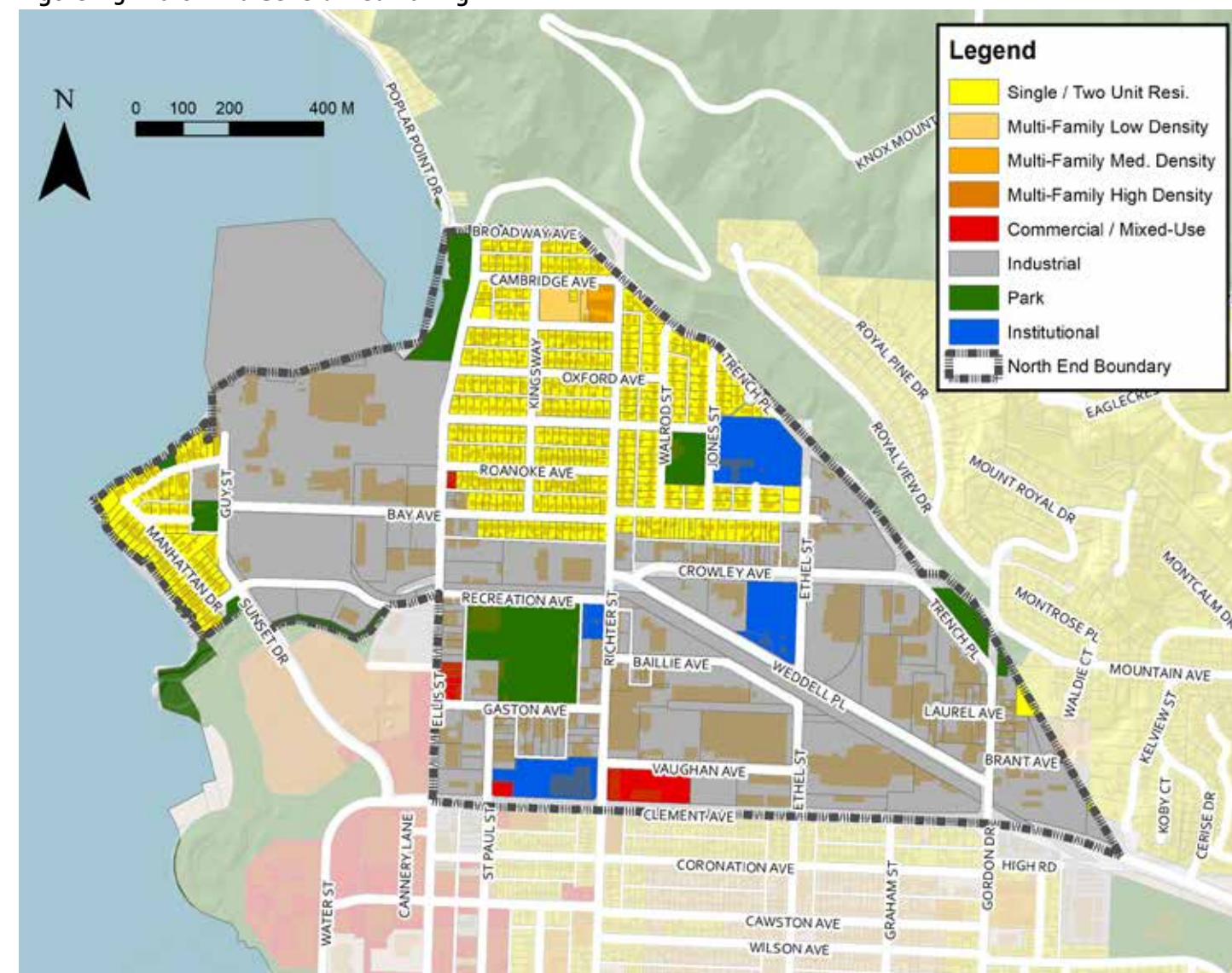
Figure 2.4 Per Cent of Population Foreign-Born



Land Use



Figure 2.5. North End Generalized Zoning



The land base of the North End is dominated by industrial (61.6 per cent) and single / two / unit residential (22.9 per cent) development, as illustrated in Figure 2.6.

When comparing the land base of the North End with that of the city as a whole (Figure 2.7 including agriculture, Figure 2.8 excluding agriculture and rural residential uses), several observations can be made:

- The North End contains an industrial land base (61.6 per cent). In the North End, industrial development plays a much larger role than in the rest of the city;
- The city overall has a much larger percentage of parks (31.8 per cent) than does the North End (7.7 per cent). This does not include consideration of the easy access that North End residents have to Knox Mountain Park.

“ In the North End, industrial development plays a much larger role than in the rest of the City. ”

Figure 2.6 North End Land Use

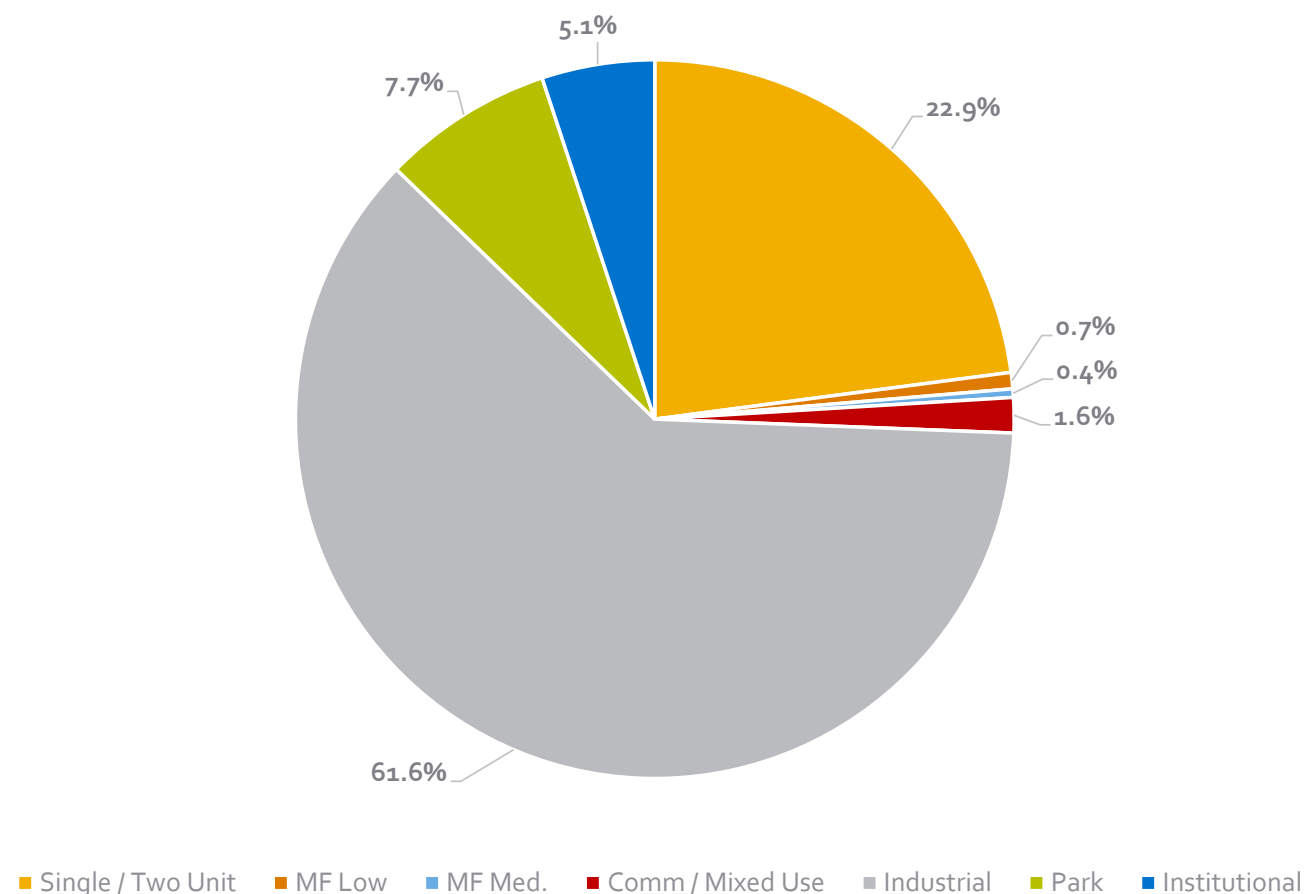


Figure 2.7 Kelowna Land Use

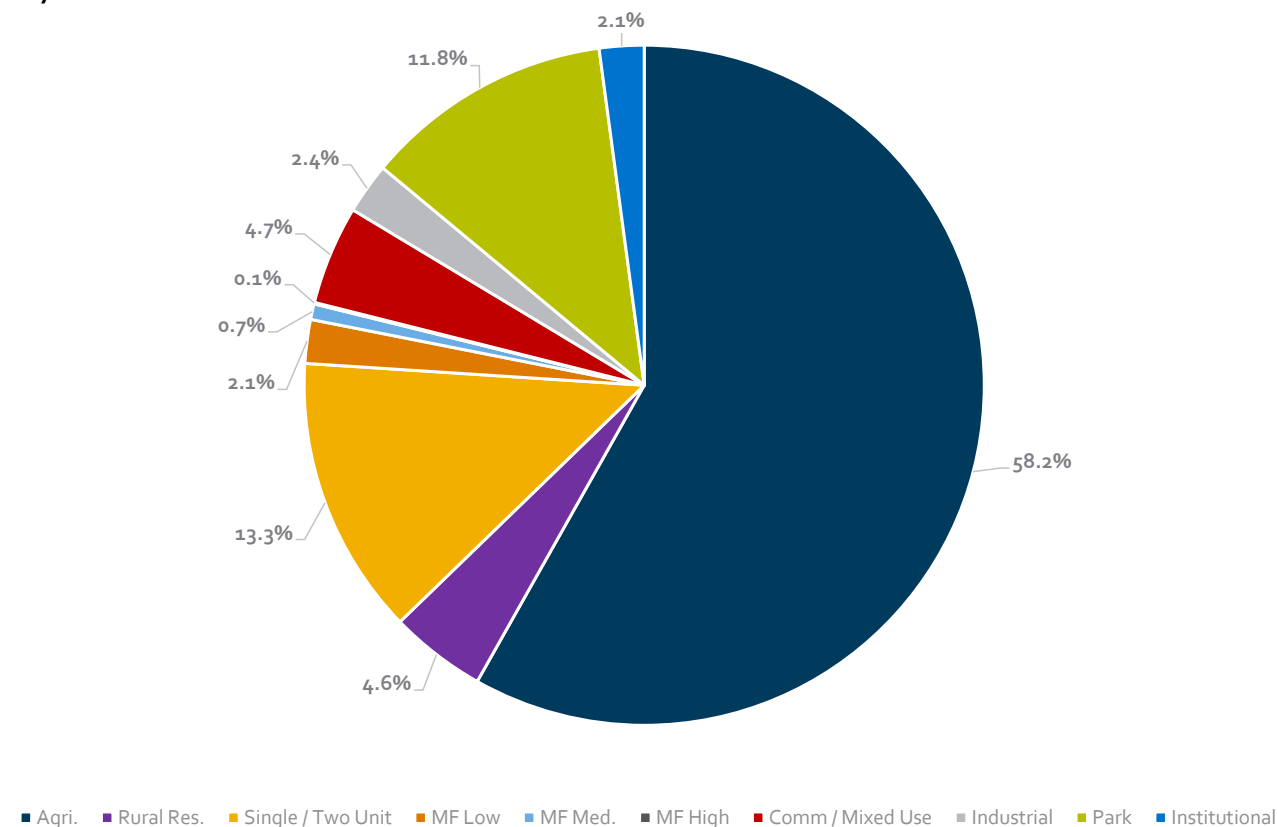
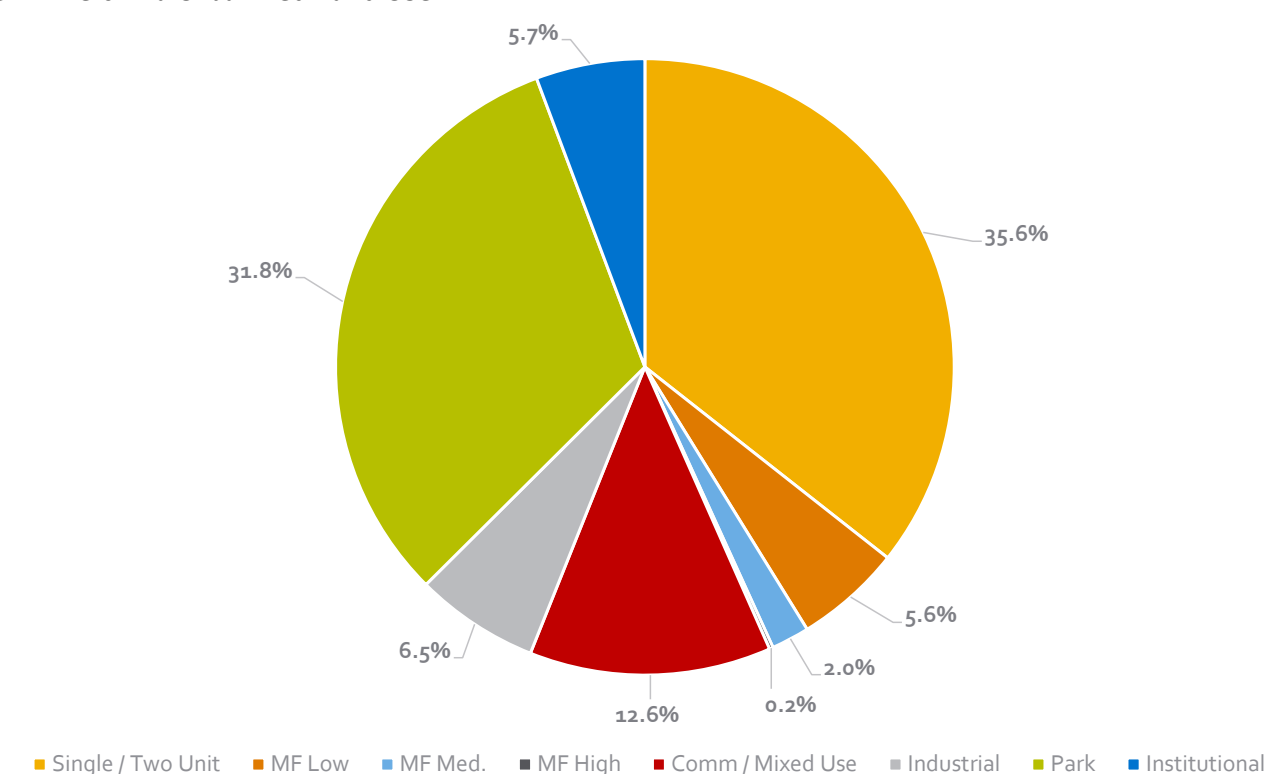


Figure 2.8 Kelowna Urbanized Land Use



Residential Land Use

Residential land use in the North End is dominated by single / two-unit development (95.4 per cent), with the remainder of the residential land use in the form of multi-family low density (3.1 per cent) and multi-family medium density (1.6 per cent) development. Compared to the city as a whole, the North End contains a far higher proportion of single / two-unit development and a much smaller proportion of multi-family development, as shown in Figure 2.9.

Residential Unit Count by Housing Typology

The North End contains a total of 839 residential units and 406 single / two-unit residential lots, including 10 vacant lots. These 406 lots are zoned RU6 – Two Dwelling Housing, meaning all are eligible to develop a second unit on the lot in some form,

such as a secondary suite, a carriage house, a semi-detached unit, or a second single-family home. To date, 151 (38.1 per cent) of these lots have developed a second unit, for a total of 302 units, representing 36 per cent of all residential units in the North End. That leaves 246 units in the North End provided through single-family homes on a single lot—29.3 per cent of the total units in the neighbourhood.

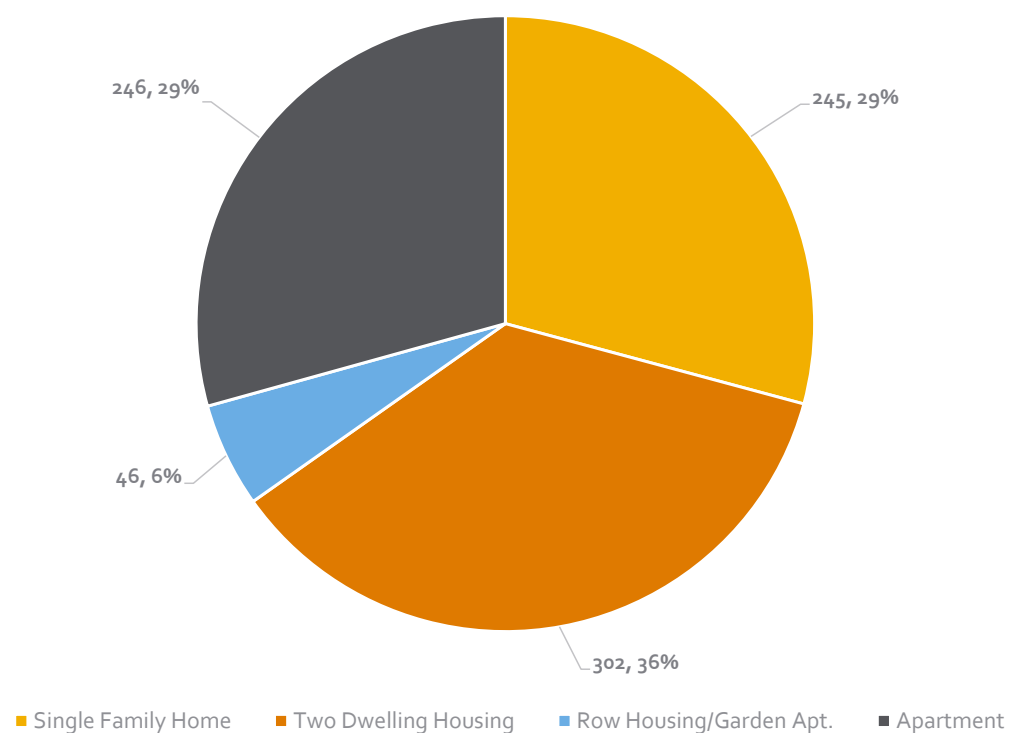
46 units are provided through multi-dwelling low density housing in the form of row housing and garden apartments with 3 storeys or less (6 per cent of the total); and 246 units are provided through multi-family medium density housing in the form of mid-rise apartments at 4-6 storeys (29 per cent of total)¹.

¹ This includes the 158 residential units in the new mixed-use development at the intersection of Richter St. and Clement Ave. (dubbed 'The Lodges'), as well as the 38 units in the new, supportive housing development Ellis Place.

Figure 2.9

Land Use	North End (%)	City-wide (%)
Single / Two Unit	95.4	82.1
Multi-Family Low Density	3.1	12.9
Multi-Family Medium Density	1.6	4.6
Multi-Family High Density	0	0.5 ¹

Figure 2.10 North End Dwelling Units by Housing Type



¹ The multi-family medium and high density categories do not include the medium and high density residential featured in mixed-use developments, as these are developed under mixed-use zoning. There is one such case of mixed-use development in the North End: the new, 2-building, 6-storey PC Urban development at the corner of Clement Ave. and Richter St. (dubbed 'The Lodges'). Though this development is not captured under the land base for multi-family medium density, the units are captured in the Residential Unit Count by Housing Typology.

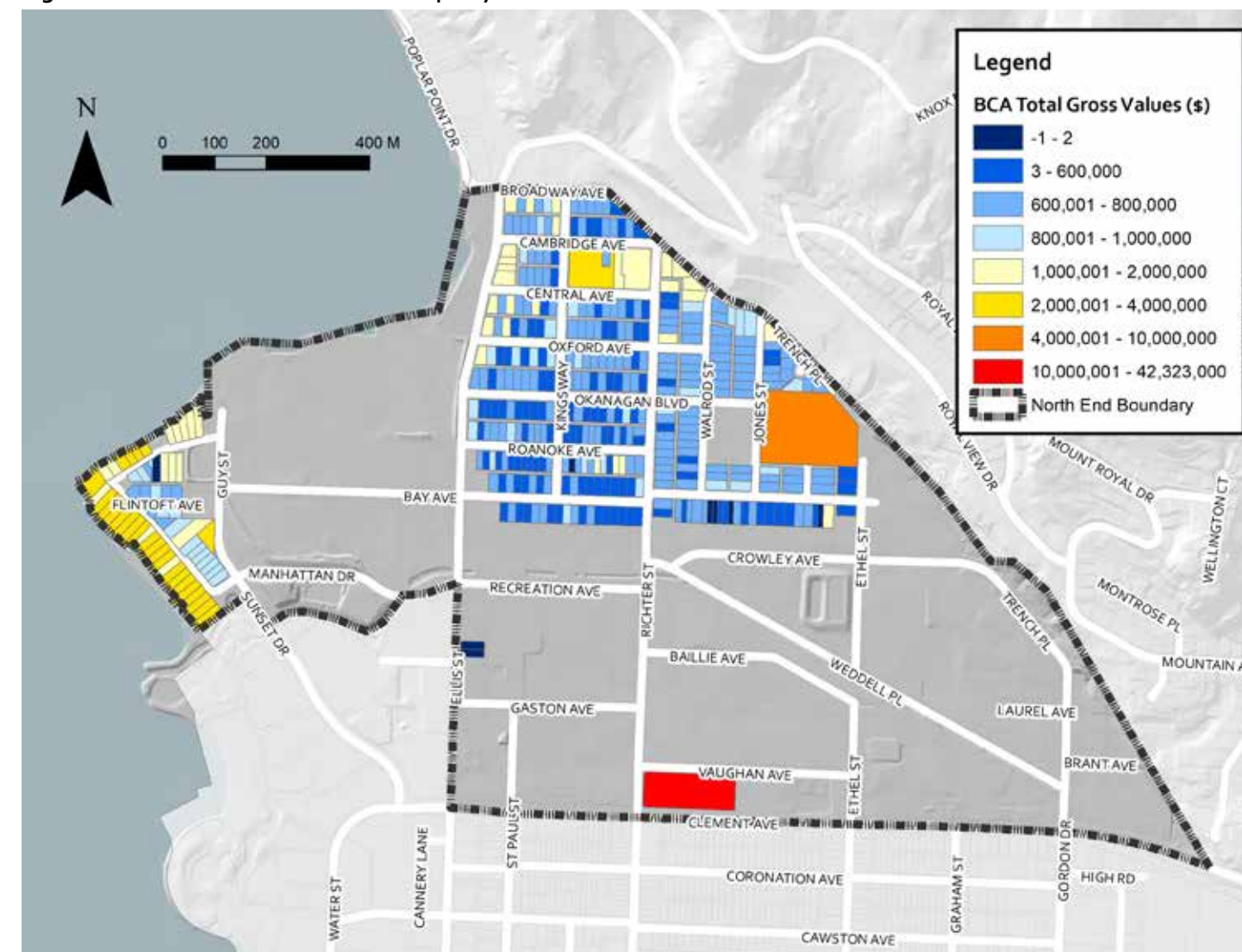
Subsidized Housing & Journey Home

A significant proportion of multi-dwelling units in the North End are made up of partially or fully-subsidized housing. Okanagan Manor on Jones Street, and Pleasantvale Phase I on Richter Street provide partially subsidized housing (for seniors in the case of the former, and seniors and lower-income families in the case of the latter). These two developments together make up 30.1 per cent of the multi-family units in the North End².

² At time of publication a rezoning and development permit application has been submitted for the vacant lot to the west of Pleasantvale Phase I to be developed as Pleasantvale Phase II. If approved, Phase II will be similar to Pleasantvale Phase I, partially-subsidized residences intended for seniors and lower-income families.

The newly completed Ellis Place on Ellis Street is a fully-subsidized housing project, and accounts for 13 per cent of all the multi-family units in the North End. The temporary shelter on Richter Street remains open to serve people experiencing homelessness, hosting approximately 40 to 50 people per evening. In addition, there is a designated outdoor camping area along the Okanagan Rail Trail that hosts an estimated 15 to 30 people per night. Many people experiencing homelessness are still sheltering outside this area.

Figure 2.11 North End Residential Property Value



Residential Property Value, Municipal Tax Contribution and Improvement Ratio

The 2020 assessed property value of residential real estate in the North End was \$398,727, 890³. As outlined in Figure 2.11, there is a wide range of single / two-dwelling residential property values at different locations in the North End. Predictably, lakefront lots are generally most expensive, followed by lots adjacent to Knox Mountain Park and Sutherland Park (the latter of which also have lake views).

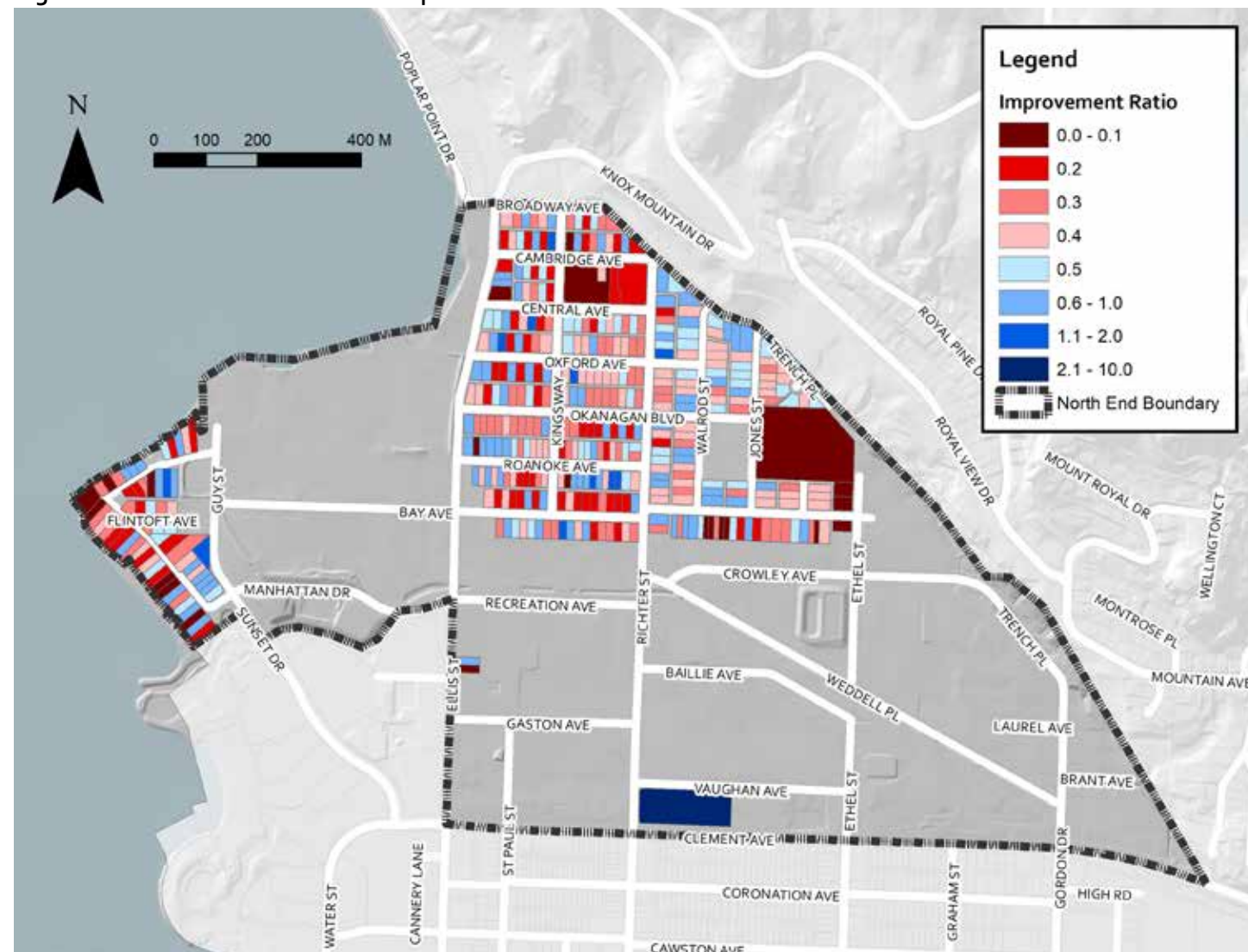
In 2020, the city collected \$1,004,713 in tax revenue from North End residential properties⁴.

³ Based on BC Assessment 2020 property assessments
⁴ The Lodges at the corner of Clement and Richter was not yet occupied in 2020, so this figure does not include any tax revenue from that development.

Improvement ratios in the North End suggest that many properties may be considered for redevelopment in the future. The improvement ratio of a lot represents the value of improvements, such as buildings, divided by the value of the land. The improvement ratio⁵ is an indicator of redevelopment likelihood: as the ratio falls, the likelihood of redevelopment tends to increase. In Kelowna, the likelihood of a residential property redeveloping increases markedly with an improvement ratio below 0.3. This being the case, it is notable that the average and median improvement ratio of residential properties in the North End is 0.41 and 0.34 respectively. Figure 2.12 displays how improvement ratio is distributed across individual residential properties in the North End.

⁵ The improvement ratio is sometimes referred to as the 'teardown index'

Figure 2.12 North End Residential Improvement Ratio

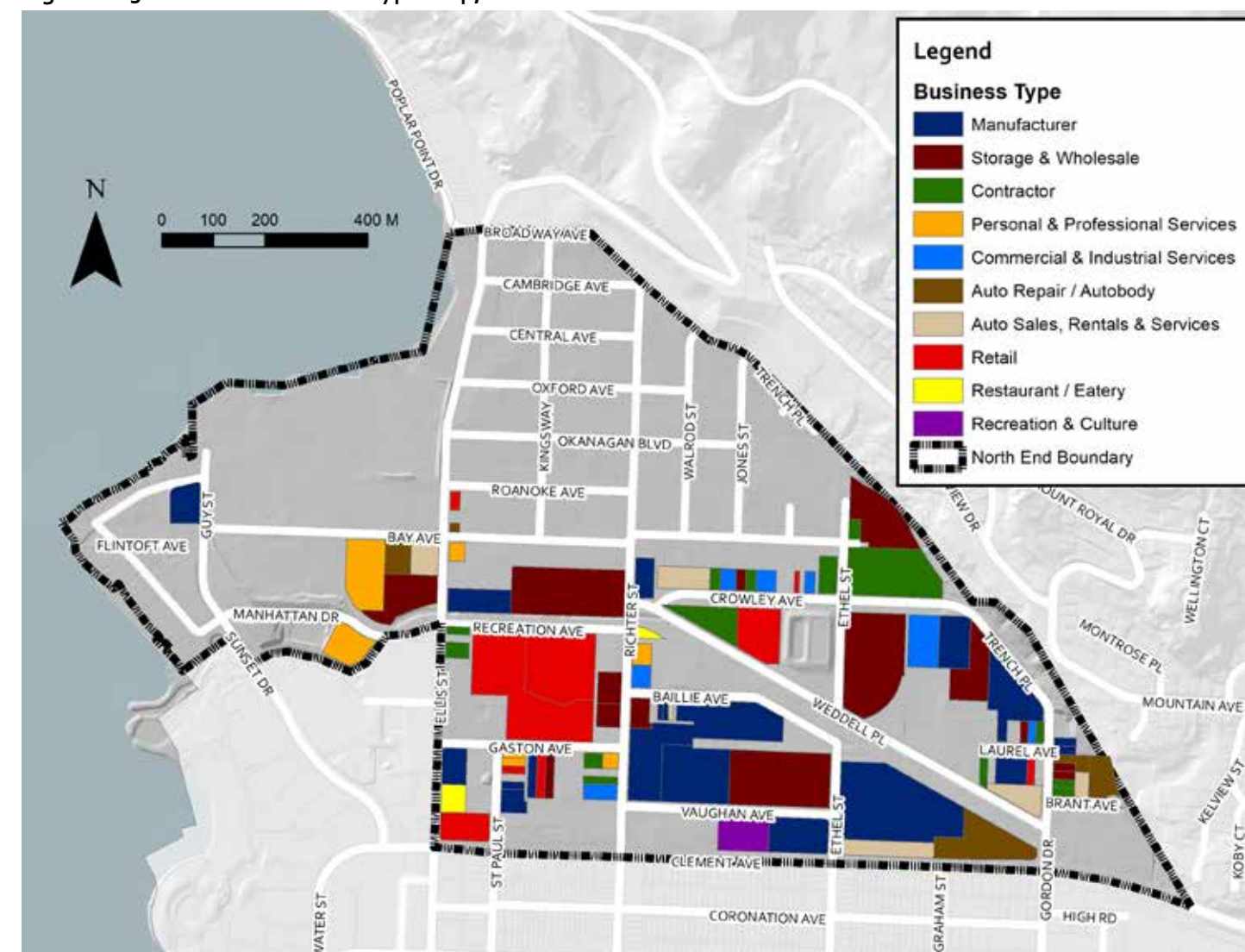


Commercial & Industrial Land Use

61.6 per cent of the land base in the North End is zoned for industrial use. This constitutes 15.5 per cent of all the industrial zoned land in the city--in an area that represents just 0.7 per cent of the city's total area. Industrial zoned land in the North End is predominantly zoned I4, Central Industrial, a zone designed specifically for the North End with its unique location at the fringe of the Downtown Urban Centre. There are also a small number of properties zoned I1, Business Industrial; I2, General Industrial; and I3, Heavy Industrial. In addition, there are a small number of properties zoned for commercial and/or mixed use (C1, Local Commercial; C4, Urban Centre Commercial; and C7, Central Business Commercial) along Clement Ave. and Ellis St.



Figure 2.13 North End Business Type Map, 2021



*Note the map is somewhat simplified as only one business type is shown per lot even though many lots contain more than one business, and / or more than one business type. Also note that many of the business types shown in the map are an amalgamation of numerous sub-categories.

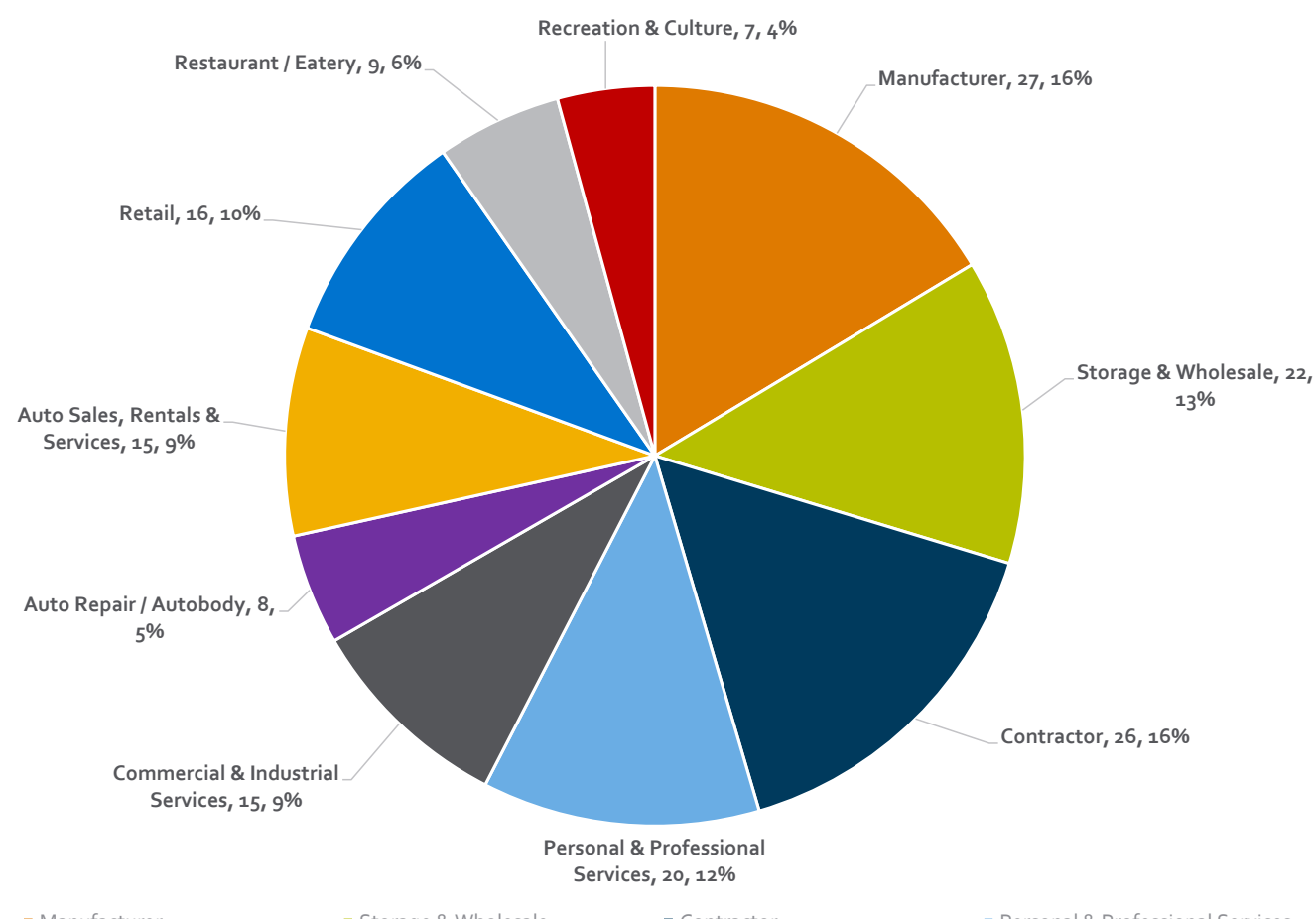
North End Business

According to the City's Business License data base, 165 businesses were operating in the North End as of September 2021. This is in addition to 79 home-based business, for a total of 244 businesses, or 2.2 per cent of all Kelowna businesses. When excluding home-based businesses, the North End employs an estimated 3,300 people, 4.3 per cent of the estimated total for the city¹.

A wide range of businesses operate in the North End, ranging from manufacturing to recreation & culture, as shown in figure 2.13.

¹ Based on estimates from the Household Travel Survey and data from Canadian Business Points.

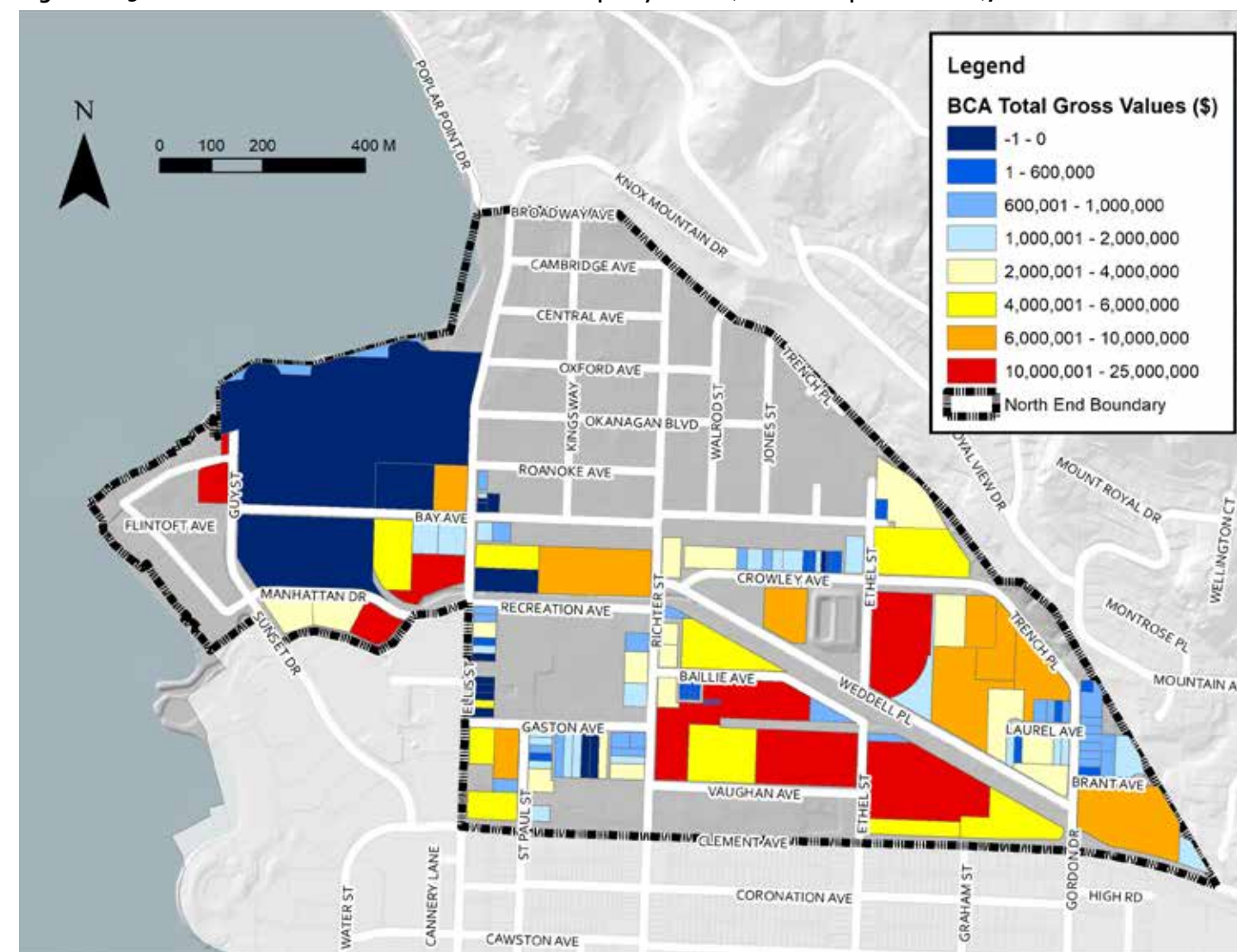
Figure 2.14 North End Business Type Breakdown



North End Brewery District

One of the more prominent trends in the North End is the emergence of a craft brewery district, categorized under Manufacturer business type in Figures 2.13 and 2.14. These businesses have tended to gravitate to locations along major traffic corridors, including Clement Avenue and Richter Street. At last count, nine breweries are now located in the North End. Other alcohol production facilities in the North End include a wine production facility and a cidery. This emerging brewery district has evolved organically in the absence of neighbourhood plan, and has quickly become a major destination for residents of and visitors to Kelowna.

Figure 2.15 North End Commercial and Industrial Property Value (Land & Improvements), 2021



Note: Several properties are identified as having net zero property value. For properties where a single business includes multiple parcels, the property values are aggregated and applied to one single parcel.

Property Value & Municipal Tax Contribution

The 2020 assessed property value of commercial and industrial real estate in the North End was \$595,897,096². This is split into \$303 million in land value and \$293 million in building value. North End commercial and industrial properties contributed \$3,692,917 in municipal taxes in 2020³.

A more detailed review of commercial and industrial development in the North End is underway and its conclusions will be incorporated into the next phase of the North End Plan process.

² Based on BC Assessment 2020 property assessments
³ Based on 2020 City of Kelowna tax reports

“ A wide range of businesses operate in the North End, ranging from manufacturing to recreation and culture

Parks

Existing Parks & Analysis

The North End hosts a variety of parks. The area benefits from legacy parks including Recreation Avenue Park and Sutherland Bay Park. To the north of the study area is Knox Mountain Park, and the Okanagan Rail Trail Runs through the area. Existing parks are listed in Figure 2.17.

The North End is currently well-served with Recreation Parks, but is deficient in Neighbourhood Parks, as reflected in Figures 2.19 and 2.20. Recreation Avenue Park, as well as the Curling and Badminton Clubs, are highly specialized in

their use, servicing residents from all over the city. Unlike Neighbourhood Parks, which serve the local neighbourhood, these facilities are not available to residents on a day-to-day basis to offer the peace and tranquility that parks provide.

Expanding the scope to the Central City Sector more broadly (of which the North End is a part), this area of the city is also deficient in parks—and particularly in Neighbourhood Parks. The current parkland is only 37% of the acquisition standard of the 2030 OCP, where the target acquisition rate is 1.0 hectare for each 1000 residents (Figure 2.20). This gap is expected to widen with the increased density expected in the Central City Sector over the next 20 years.

Figure 2.16 North End Parks Map



Figure 2.17 North End Parks by Type

Name of Park	Park Type	Area	Status
Recreation Avenue	Recreation	3.825 ha	Developed
Jack Brow	Neighbourhood	0.26 ha	Developed
Manhattan Beach # 1	City-wide	0.04 ha	Developed
Manhattan Beach # 2	City-wide	0.05 ha	Developed
Sutherland Bay	City-wide	1.5 ha	Developed
Walrod Park	Neighbourhood	0.98 ha	Undeveloped

Figure 2.18 North End Recreation Facilities

Name of Facility	Facility Type	Area	Status
Curling Club	Curling	0.69 ha	Developed
Badminton Club	Badminton	0.14 ha	Developed

Figure 2.19 North End Existing Parks by Type

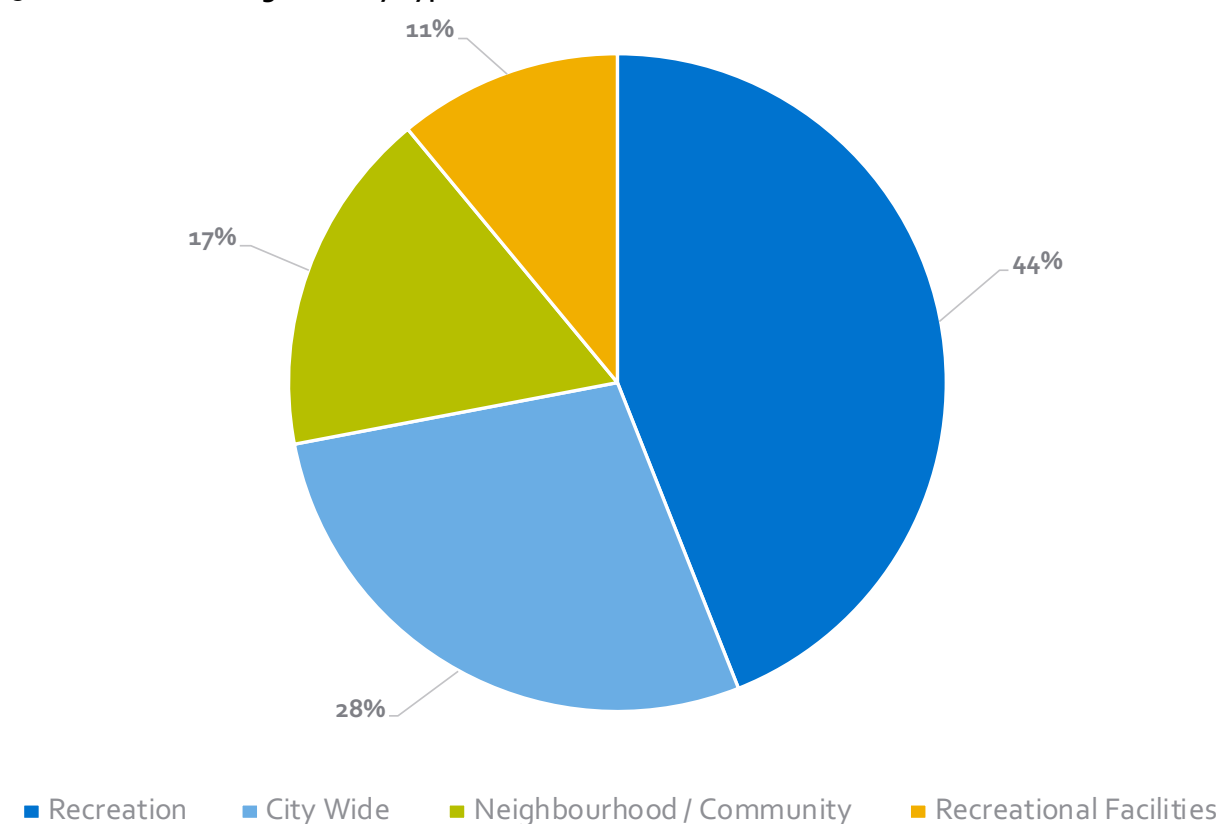


Figure 2.20 Central City Gap in Neighbourhood Parks

Sector Name	Current Population	Parkland	2030 Target Rate	Deficiency	Rate of Target
Central City	22,366	8.38 ha	22.37 ha	13.99 ha	37%

North End Parks to 2040

The 2040 OCP signals additional parks in the plan area, as noted in the figure 2.21.

The park type distribution for the North End addressed through the 2040 OCP is more balanced than what we see today, but Recreation parks will remain over-represented. This also carries implications for the overall deficiency of Neighbourhood Parks in the Central City Sector more broadly—where the city is deficient by more than 33% of the target area for this park class when adding the projected growth to 2040. As these areas see more infill and redevelopment envisioned by the 2040 OCP, this gap will become more pronounced. In fact, the park deficit accelerates even with the DCC Acquisition Plan. As shown in Figure 2.22, the parkland deficit in the Neighbourhood Park type for the Central City Sector is 13.55 hectares from target.

Neighbourhood Parks must occur in close proximity to where residents live if they are to contribute to a high quality of life, especially in the Urban Centres and Core Area, where

predominately multi-unit housing units with smaller private open spaces are anticipated. As the Central City Sector is expected to grow by over 20,000 residents in the next 20 years, the provision of these park types is critical.

“ **Neighbourhood Parks must occur in close proximity to where residents live if they are to contribute to a high quality of life** ”

Figure 2.21 North End Park Additions – 2040 OCP

Name of Park	Park Type	Area	Status
Recreation Avenue - Addition	Recreation	0.75 ha	Yet to acquire
Jack Brow - Addition	Neighbourhood	0.42 ha	Yet to acquire
Manhattan Point - Addition	City-wide	0.07 ha	Acquired
Manhattan Beach Access # 1	City-wide	0.05 ha	Yet to acquire
Manhattan Beach Access # 2	City-wide	0.16 ha	Yet to acquire
Manhattan Beach Access # 3	City-wide	0.11 ha	Yet to acquire
Manhattan Beach Access # 4	City-wide	0.11 ha	Yet to acquire
Kingsway Linear Park	Linear	0.17 ha	Yet to acquire

Figure 2.22 Central City Neighbourhood Parks to 2040 (with Acquisition Standards)

Sector Name	Population Growth	Population Total	Existing Parkland	Growth 1 ha / 1000	2040 DCC Acquisition Plan	Parkland Target 2040	Parkland Deficit
Central City	20,412	42,778	8.38 ha	20.41 ha	5.17 ha	13.55 ha	32%

Linear Parks

Linear parks are important to neighbourhoods, as they provide an opportunity for the recreational activities of walking, biking and enjoying nature, while linking parks together in a way that facilitates active transportation. Additionally, they provide important ecological functions such as stormwater management, ecosystem preservation, air pollution filtration, and they also mitigate the heat island effect of urban areas. The most prominent linear park in the North End is the Okanagan Rail Trail, which runs east-west through the neighbourhood along Brandt’s Creek. The Rail Trail provides a critical active transportation corridor as well as a recreation amenity for the neighbourhood, the city and the region.

Policy 10.2.2. of the 2040 OCP speaks to the objective of ‘Parks on Streets’. The approach seeks to provide additional amenity park space in underutilized public road right of way. Kingsway, running north-south through the northern part of the plan area, has been identified as having potential for this transition for increased tree canopy, boulevards, and potential greater use for recreation. Additionally, the corridor along the

Okanagan Lake foreshore has been identified as a Linear Park Priority¹.

Linear Park opportunities include:

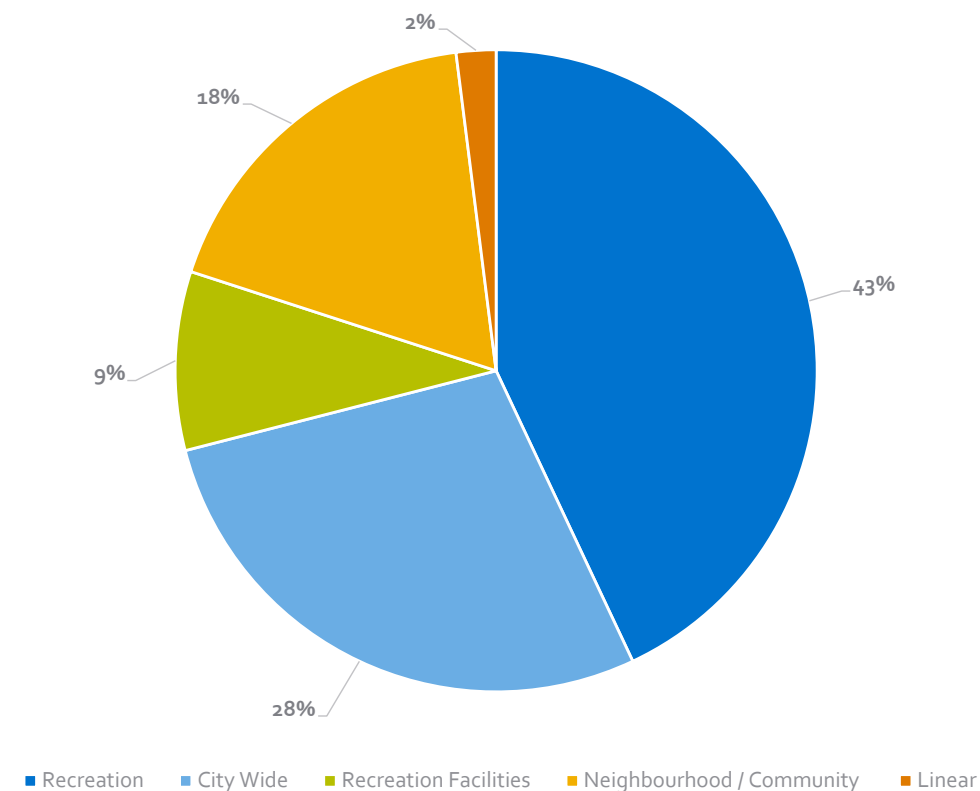
1. Okanagan Lake Foreshore Linear Corridor
2. Kingsway ‘Park on Street’
3. Connections to the Okanagan Rail Trail
4. Connections to Knox Mountain Park

North End Parks – Gaps and Priorities

Following the objectives of the 2040 OCP, and the park deficiencies in the Central City Sector, the following are priorities for provision through the North End Plan:

1. City-wide Parks - Waterfront Parks and Linear Park Access
2. Neighbourhood / Community Parks
3. Connecting Parks, including linear parks, parks on streets and connections to existing linear parks

Figure 2.23 North End Parks to 2040 by Park Type



¹ City of Kelowna, 2021. Draft 2040 OCP – Chapter 10 Parks. Policy 10.4.2 Linear Park Priorities.




Heritage





As part of the North End Plan Background Study, an Historical Context Statement was commissioned and completed by a Certified Heritage Professional and is provided in Appendix 1. An historical context statement is “a document used in planning for a community’s heritage resources. It identifies the broad patterns of historic development in the community and identifies historic property types, such as buildings, sites, structures, objects, landscapes, districts, and intangible features which represent these patterns of development. An

historic context statement provides direction for evaluating and protecting significant heritage resources. As a planning document, it is meant to be a dynamic work, evolving as a community changes over time” (North End Neighbourhood HCS, p.4).

Provided below are a few examples of North End heritage resources identified in the Historical Context Statement, as well as a summary of its recommendations.

Figure 2.24 North End Neighbourhood Heritage Resources Identified

Heritage Resource	Year	Significance	Image
Canadian National Railway (CNR) Train Station <i>520 Clement Ave.</i>	1926	Primary and last surviving feature of the CNR in Kelowna.	
Wartime Housing Type #1 - Kennedy House <i>567 Okanagan Boulevard</i>	1946	One of three Wartime Housing Ltd. standardized affordable housing patterns for returning veterans.	
Kelowna Brick Works (now Knox Mtn. Metals) <i>930 Bay Avenue</i>	1905	Surviving part of a collection of masonry structures that were the main supplier for Kelowna’s downtown brick buildings.	

Heritage Resource	Year	Significance	Image
Sun-Rype <i>1165 Ethel Street</i>	1946	Originally owned by Okanagan Fruit Juices Ltd., was bought in 1948 by Sun-Rype to make profitable use of sub-grade cull apples.	
Newton’s Grocery (now Knox Mt. Market) <i>857 Ellis Street</i>	1936	The historic neighbourhood grocery store shows there were enough farm and summer residences in the area to justify a local shop.	
Dal Col Farm Houses <i>603 and 621 Roanoke Ave</i>	around World War 1	Likely earliest residential property in the neighbourhood. Associated with early Italian immigrants that settled along Bay and Roanoke Ave. in the 1920s and 1930s.	
Calona Wines <i>1125 Richter Street</i>	1951	Originally located on the waterfront, moved to North End in 1951. Founded by Ghezzi, Cappelletti and Bennett, it was Kelowna’s first commercial winery.	

Recommended Actions from North End Neighbourhood Historical Context Statement

The North End Neighbourhood Historical Context Statement provides nine recommendations to help conserve the North End’s history (provided in Appendix 1). Recommendations include updating the Kelowna Community Heritage Register to add new properties and remove properties that have had significant changes. As the North End contains perhaps the largest and most intact surviving collection of Wartime Housing Ltd. Homes in BC, the Context Statement provides several recommendations to preserve these affordable

homes that were built for returning veterans. Additional work is also suggested that will help to ensure that change and development in the neighbourhood respects established heritage assets and values. Further, to raise awareness of the area’s history, the Context Statement recommends expanded interpretative signage. These recommendations will be considered during the development of the North End Plan and through its implementation.

Transportation

Transportation Connections to and from the North End

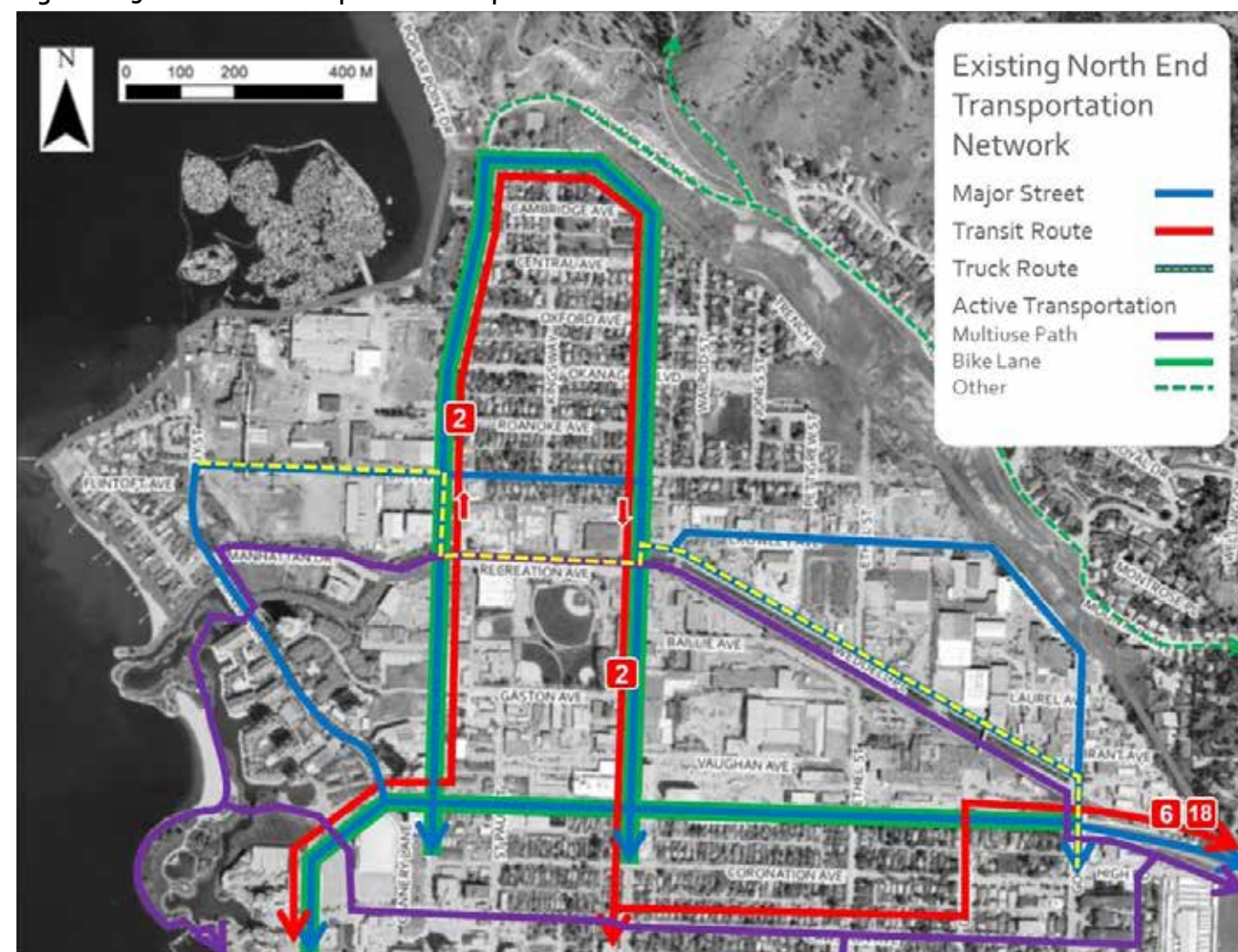
The North End is characterized by a number of unique transportation opportunities and challenges compared with other Kelowna neighbourhoods.

Access to the neighbourhood is largely limited to its south boundary at Clement Avenue as there are no thru vehicle connections to the north, east or west. Just four major streets (Sunset Drive, Ellis Street, Richter Street, and Gordon Avenue) cross the Clement Avenue corridor linking the North End to the rest of the City, carrying vehicles, trucks, transit and active transportation trips in and out of the neighbourhood.

Existing active transportation links include the Okanagan Rail Trail from the east and bike lanes on Ellis and Richter streets to the south. Access into Downtown for those uncomfortable riding in traffic can also be made via the less direct Waterfront Walkway. A future link to the Ethel Street Active Transportation Corridor (ATC) is also planned. While there are active transportation connections to the north, they cross challenging topography within and adjacent to Knox Mountain.

Transit access to the North End is challenging. The neighbourhood's isolated street network means transit cannot easily route through the neighbourhood on its way to other destinations. As such, service is provided via Route 2, a local 30-60 minute frequency service, that circulates in a one-way loop from the Queensway Exchange. Access to other transit routes requires a transfer at the Queensway Exchange or a significant walk to Clement or Cawston avenues to access Route 18 – Glenmore, Route 6 – UBCO via Glenmore and Route 5 – Gordon Dr. The extra time needed to make these connections erodes the attractiveness of transit to and from the North End.

Figure 2.25 North End Transportation Map



2, a local 30-60 minute frequency service, that circulates in a one-way loop from the Queensway Exchange. Access to other transit routes requires a transfer at the Queensway Exchange or a significant walk to Clement or Cawston avenues to access Route 18 – Glenmore, Route 6 – UBCO via Glenmore and Route 5 – Gordon Dr. The extra time needed to make these connections erodes the attractiveness of transit to and from the North End.

North End Travel Choices & Mode Split

Transportation choices are directly related to the proximity of employment and services to homes. In the North End, these choices are influenced by employment within the neighbourhood (0.5-1.5km) and nearby employment in Downtown (1.5-2.0km) – both at distances comfortable for walking, and biking. With limited employment to the north, west and east, access to jobs further afield generally involves travel by car or transit.

The North End's proximity to Downtown also provides access to the services offered there, most within comfortable biking, and, in some cases, walking distances. Continued adoption of small electric vehicles such as e-bikes and e-scooters are expected to make access to these services easier for more North End residents. Data from the ongoing shared scooter pilot indicates similar, but slightly lower levels of use, relative to other Downtown adjacent neighbourhoods. With continued

growth Downtown, and the potential for additional services, these patterns are likely to strengthen.

This context contributes to a greater uptake in active modes of transportation like walking and cycling, but lower uptake of transit. In the latest census, 21% of North End residents reported walking or biking to work—significantly higher than Kelowna's average of 10%. Notably however, this is still lower than other nearby neighbourhoods, such as Downtown, for example. Transit use is lower, at 2% compared to 4% for the city overall, and much lower than neighbourhoods to the south of Downtown at 14%.

In addition to making fewer trips by car than Kelowna residents generally, when North End households do drive, they tend to drive shorter distances. This is reflected in lower vehicle kilometers travelled (VKT) per day per household, relative to city-wide averages. Lower VKT reduces both congestion during peak travel periods and transportation impacts over the rest of the day, including GHG emissions and collisions.

As a result of the North End's location and connections to adjacent or nearby employment and services, residents of the North End have a smaller impact per capita on the transportation network relative to city averages, but not quite as low as other neighbourhoods within and adjacent to Downtown.

Figure 2.26 Travel Modes to Work (2016) for Downtown and Surrounding Neighbourhoods

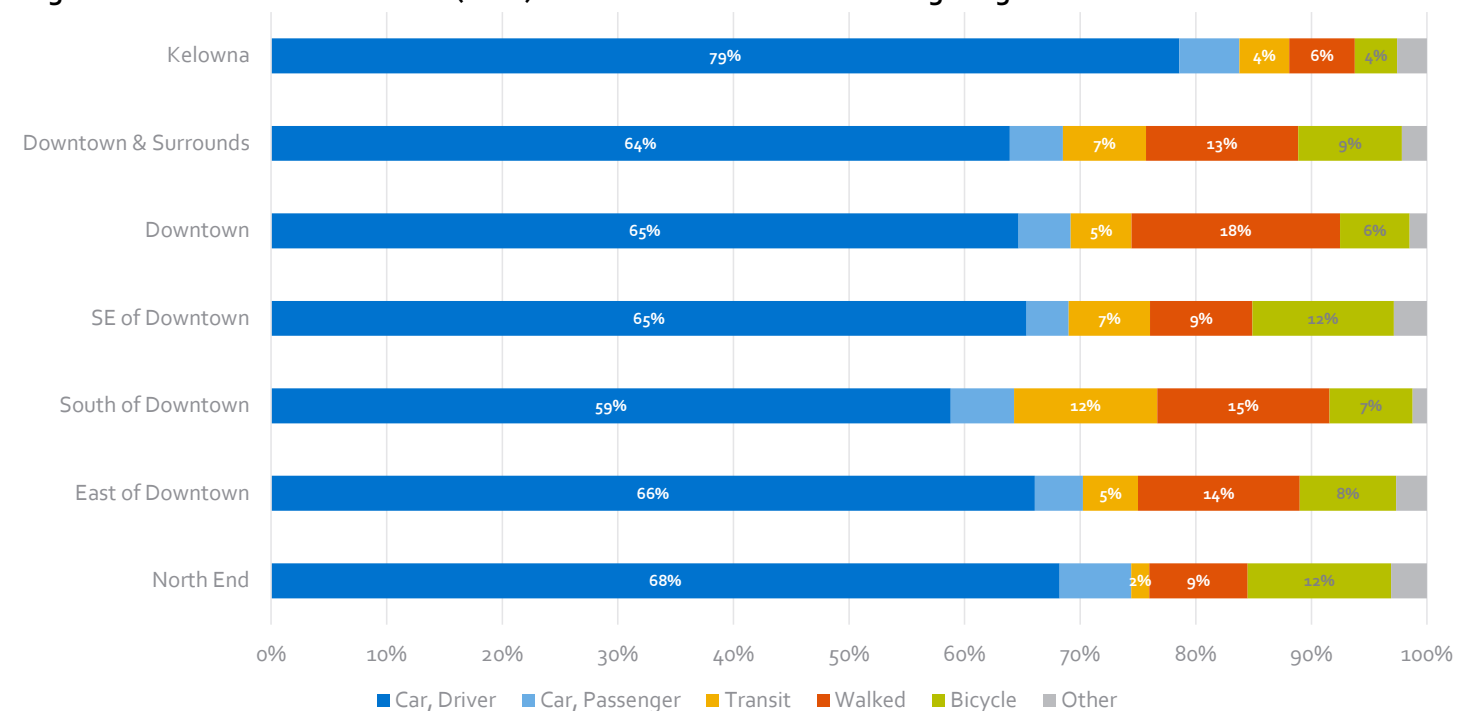
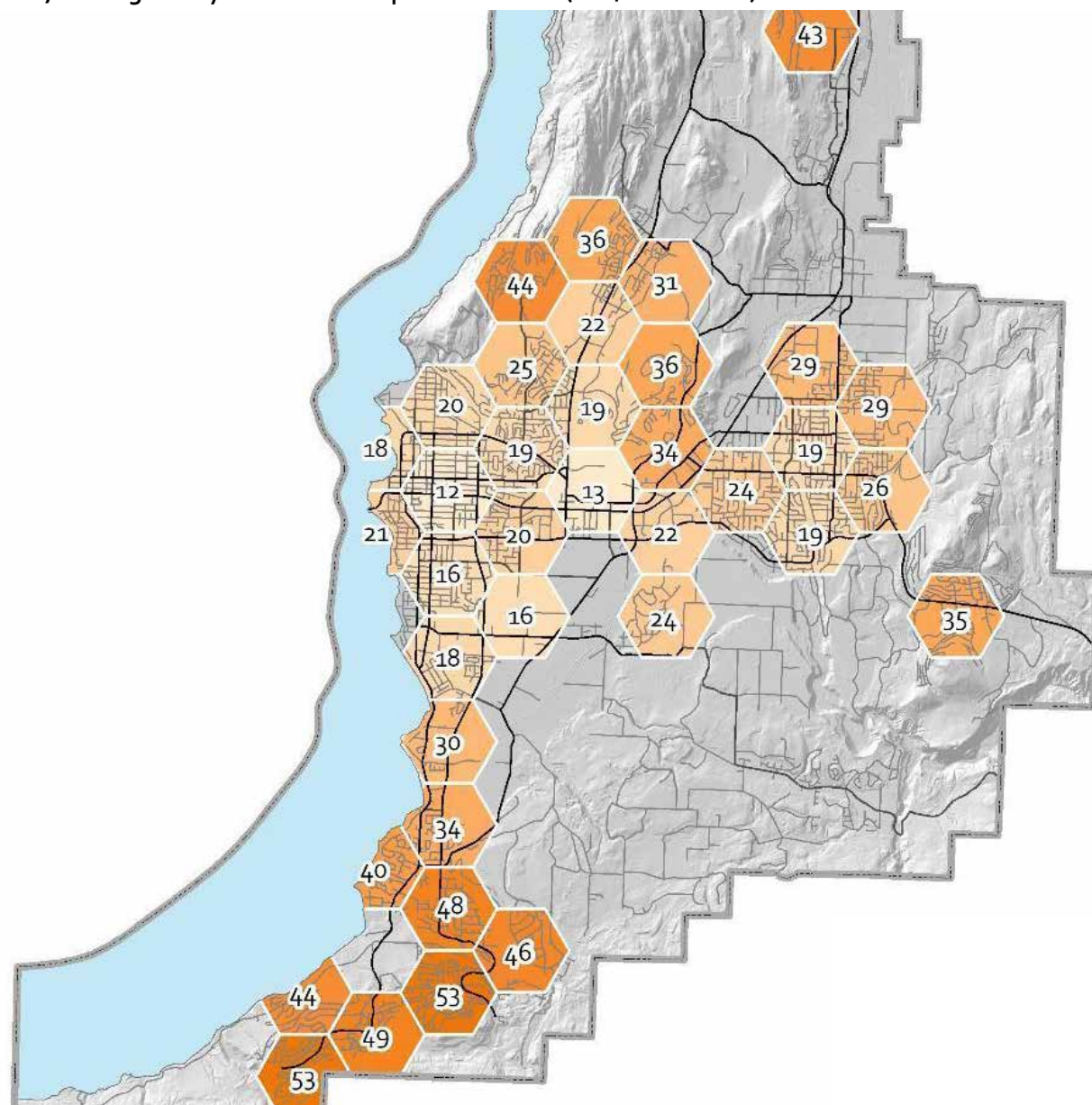


Figure 2.27 Average Daily Vehicle Travel per Household (km / household)



North End Neighbourhood Transportation Network

Existing major north-south streets within the North End include Sunset Drive, Ellis Street, Richter Street and Gordon Dive while Bay Avenue, Crowley Avenue, Broadway Avenue, and Weddell Place provide east-west connectivity. These designations are influenced by historical land uses, including the mill site, and some are designated truck routes. Clement Avenue is also an important part of the neighbourhood's street network—it is a major arterial and has been widened to five lanes over the last several years.

North-south travel by active transportation is facilitated by bike lanes on Richter and Ellis Streets. The recently completed Okanagan Rail Trail provides access to the east and south via the Waterfront Walkway. Sidewalks are generally available on most streets, often only on one side, and are older with minimum widths. Most streets are not, or only partially urbanized. Where recent changes in land use have significantly increased pedestrian activity (such as the increasing number of breweries along Richter Street), interim infrastructure has been implemented to address emerging issues. Transit service is provided via Route 2, with 30-60min service to the Queensway Exchange.

North End Transportation Network Carrying Capacity Study

To support the North End Neighbourhood Plan process, an estimate of future transportation network capacity and potential development scale was undertaken. Projecting future travel demand requires detailed information on the location, type and scale of development, as well as an understanding of changes in travel behaviors and future infrastructure. Given that the nature of the development is to be determined through this North End Plan process, a variety of land use mixes and a series of basic assumptions were used to estimate a range of future development scales that would be likely supportable by the transportation network. This provides a realistic starting point for the neighbourhood planning process. A more comprehensive transportation assessment will form part of the planning process to confirm these results using the more detailed type, location and scale of development identified in future phases. These results, combined with feedback, policy and information gathered through the planning process will inform the transportation components of the North End Neighbourhood Plan.

The following sections describe the approach undertaken to develop this estimate. The transportation network capacity study considered both current travel behavior and anticipated travel trends into the future. Projections considered comparable communities, trends within Kelowna and the characteristics of the North End Neighbourhood.

The study recognized that the capacity of intersections along Clement Avenue will constrain future vehicle access to and from the North End and that much of Clement's capacity will be consumed by future growth in Downtown and the extension of Clement Avenue eastward to Highway 33. Expansion of most intersections along Clement Avenue is limited, with intensification and redevelopment along the corridor.

Assumptions were also made about future improvements to the transportation network, including limited-scale improvements to intersections along Clement Avenue, larger scale improvements at the intersection of Clement and Gordon, and strengthening of Weddell / Recreation / Manhattan corridor as an east-west connection. Understanding that many adjacent destinations are beyond a comfortable walk, expanded active transportation links were assumed to support bicycling, including e-bikes and

scooters, linking to the Waterfront Walkway, Ethel Active Transportation Corridor, and proposed Bertram Active Transportation Corridor. Better transit connections to Downtown, KGH, Pandosy and Glenmore/UBCO were also assumed. Taken together, these represent substantial investments in the North End's transportation network that will need to be accommodated.

Based on these assumptions, the study concluded that the future transportation network could likely support additional development in the North End. The inclusion of some employment in the land use mix was identified as a benefit, as jobs and services reduced trips to outside the neighbourhood. However, there are limits on using land use mix to reduce impacts on the transportation network, and at a certain point, additional employment will increase impacts on the network.

It is important to note that, while this analysis may inform the land use planning process, it should be considered in the context of results of the remainder of the planning process and input from stakeholders.



Utilities

This section focuses on identifying the current condition of the City underground infrastructure that services the North End, including the water distribution system, sanitary sewer system, and stormwater management system.

Development in the North End began at the turn of the 20th century, and this long history is reflected in the existing utility infrastructure that services the area. From existing “rural-like” local road cross-sections lacking curb and gutter that rely on gravel shoulders to manage stormwater run-off, to a wide range of materials used throughout the different systems, to underground infrastructure installation dates that go back to the 1930s, underground utility systems in the North End are a patchwork of materials and approaches developed in increments over almost a century.

Water Distribution System

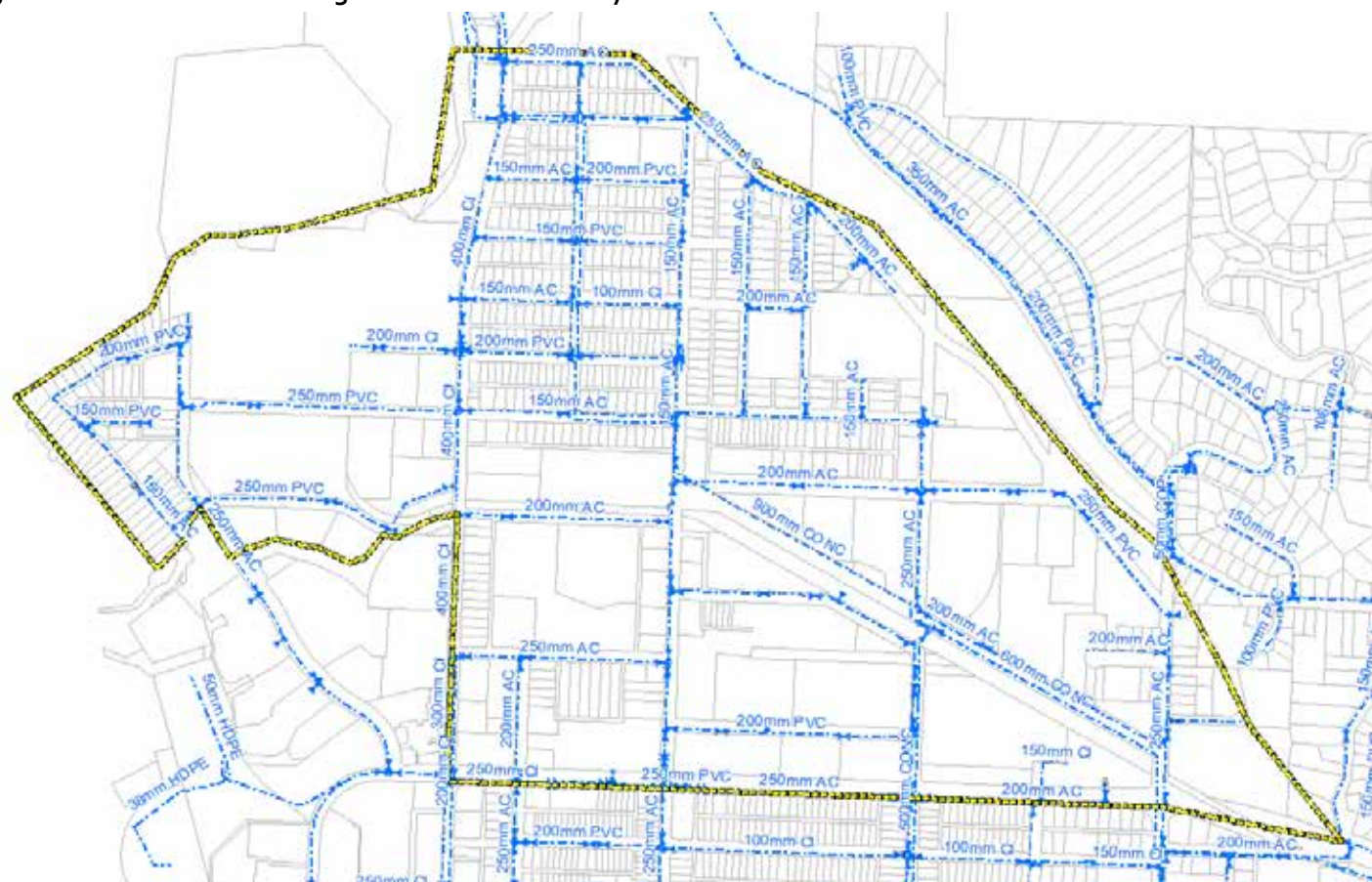
There are approximately 18.8 km of water main within the North End Plan boundary. Overall, the system is well-looped and properly sized to service the existing demands adequately in accordance with the current zoning¹.

Of note, approximately 50 per cent of the of water distribution mains in the North End are 50 years old or older—quite old by industry standards.

Apart from the overall advanced age of the system, some of the materials used throughout the years—such as Ductile Iron (DI) and Cast Iron (CI)—represent a high risk of degradation. These materials depend on outstanding installation and

¹ with the exception of 179 m of 100 mm diameter main that will soon be replaced

Figure 2.28 North End Existing Water Distribution System



are more susceptible to abrasive soils and high water table conditions, which are common in this area.

Given the age and materials of existing water infrastructure in the North End, storage and transmission upgrades are needed to accommodate existing development as well as growth anticipated through to 2040. The necessary upgrades have been identified and are included in the 20-Year Servicing Plan.

Additional growth in the North End beyond that anticipated by the 2040 OCP will need to be evaluated to identify further improvements and upgrades needed to accommodate the growth. This effort will occur as the North End Plan progresses.

Sanitary Sewer System

The North End sanitary collection needs are serviced by approximately 12.6 km of gravity sewer. Additionally, the area is serviced by three sanitary lift stations: Guy Street Lift Station, Brandt’s Creek Lift Station and Jones Lift Station.

Figure 2.29 North End Water Mains by Age

Install Year	Length (m)	Age (Years)	% of Total
1948	387	73	2%
1949-1960	2,176	60+	12%
1961-1970	6,719	50+	36%
1971-1980	4,000	40+	21%
1981-1990	735	30+	4%
1991-2000	2,819	20+	15%
2001-2010	1,072	10+	6%
2011-2020	971	Less than 10 Years	5%
Total	18,879		100%

Figure 2.30 North End Existing Sanitary Sewer Collection System

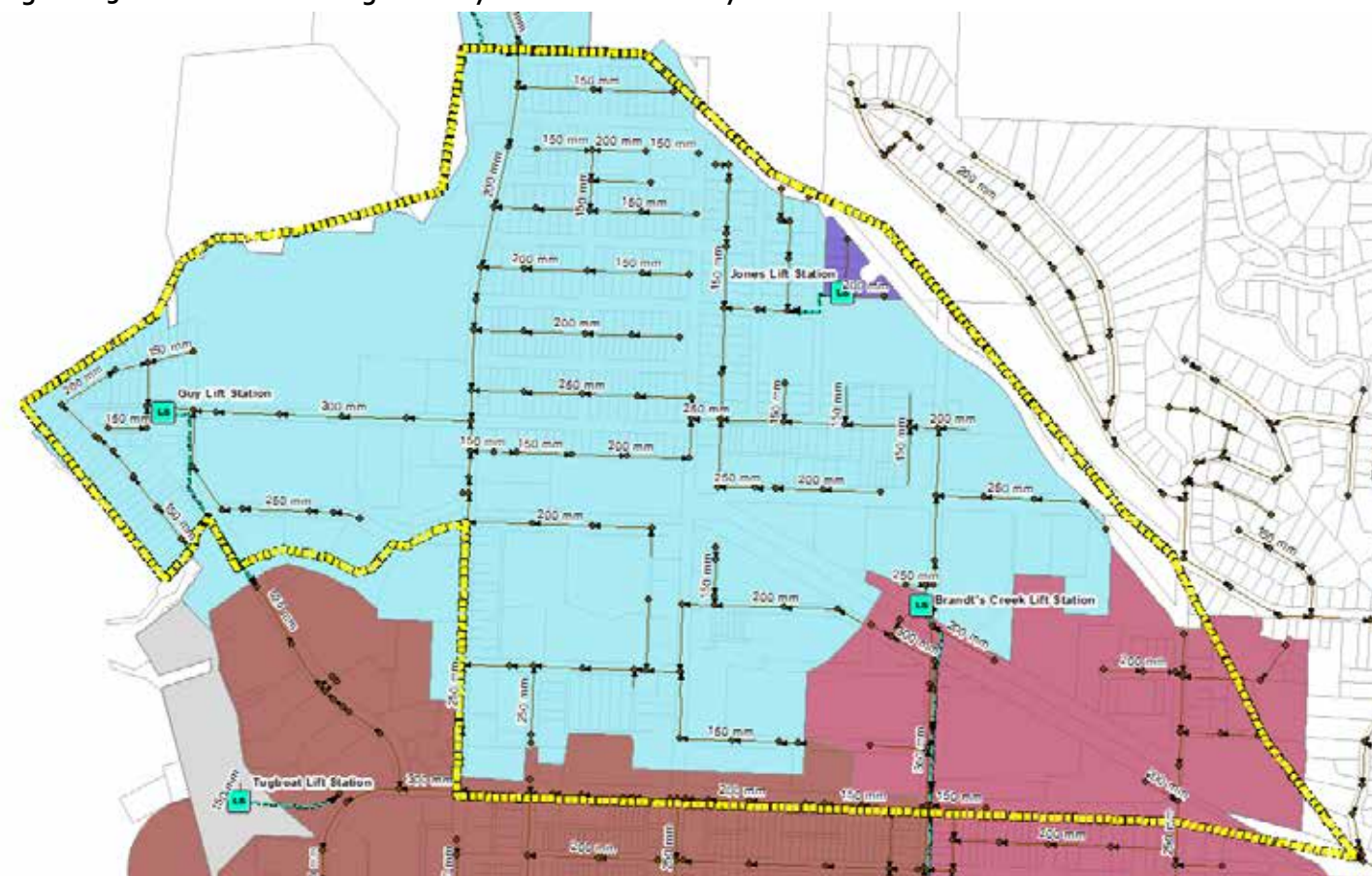


Figure 2.31 North End Existing Sanitary Sewer System by Age

Install Year	Length (m)	Age (Years)	% of Total
1949	4,391	72	35%
1950-1960	2,946	60+	23%
1961-1970	1,236	50+	10%
1971-1980	1,706	40+	14%
1981-1990	69	30+	1%
1991-2000	928	20+	7%
2001-2010	1,055	10+	8%
2011-2020	295	Less than 10 Years	2%
Total	12,625		100%

Due to the natural flat topography of the North End and its proximity to Okanagan Lake, the local sewer collection system suffers from shallow grades and poor cleansing velocities which causes debris buildup, requiring more frequent flushing.

Like the water infrastructure in the area, much of the sanitary sewer system is aging and made up of materials no longer in use. To give an indication of this, 58 per cent of the infrastructure in the system is 60 years old or older. The age of the sanitary sewer infrastructure in the North End is represented below. The overall age of the system has been identified as a substantial reason for concern.

To address the advanced age and materials of the sanitary sewer infrastructure in the North End, a series of improvements have been identified and are included in the 20-Year Servicing Plan. Two of the major improvements include the renewal of the Guy Street Lift Station, and the renewal of the collection infrastructure along Manhattan Drive to the west of the lift station—both works planned to occur over the winter of 2021 and 2022.

The planned improvements in the 20-year servicing plan cover existing development in the North End as well as that anticipated out to 2040. As with water infrastructure, additional growth in the North End beyond that anticipated by the 2040 OCP will need to be evaluated to identify further improvements and upgrades needed to accommodate the growth. This effort will occur as the North End Plan

progresses.

Stormwater Management System

The underground storm sewer system in the North End is sporadic, and the management of both the quantity and quality of stormwater run-off relies heavily on infiltration—mainly captured by the existing gravel soak-away systems alongside the local roadways, and the occasional drywell.

Brandt’s Creek serves as the main over-land drainage route for the North End. However, the area north of Okanagan Blvd. drains into a secondary direct outfall along Central Avenue.

In addition to infiltration and over-land capture, the North End is served by close to 9km of storm sewer infrastructure. Unlike the water and sanitary sewer systems in the North End, the underground storm sewer infrastructure is relatively young. The oldest installation year is 1965 and only 18 per cent of the system is 50 years old or older. Figure 2.33 provides a breakdown of the storm sewer collection system by installation year.

The vast majority of the North End is covered by the Downtown Drainage Plan—a long-term plan meant to address the management of stormwater in the downtown area.

The original plan is now 20 years old, and Utility Planning Staff are currently working with consultants to update the plan. The new plan is intended to address stormwater management holistically, in a way that effectively and efficiently captures stormwater while being respectful of the environment and ecology. The plan is to incorporate new best management practices, including the use of green infrastructure.

One project to be included in the new Downtown Drainage Plan is the Mill-to-Brandt’s Creek secondary flood diversion—and Staff have already engaged consults to provide a detailed design of this project. The project will not only address flood mitigation measures required to protect Downtown but will also aim at enhancing the overall condition of Brandt’s Creek.

The North End Plan will need to account for and integrate with the Downtown Drainage Plan, including the Mill-to-Brandt’s Creek secondary flood diversion.

Figure 2.32 North End Existing Stormwater Management System

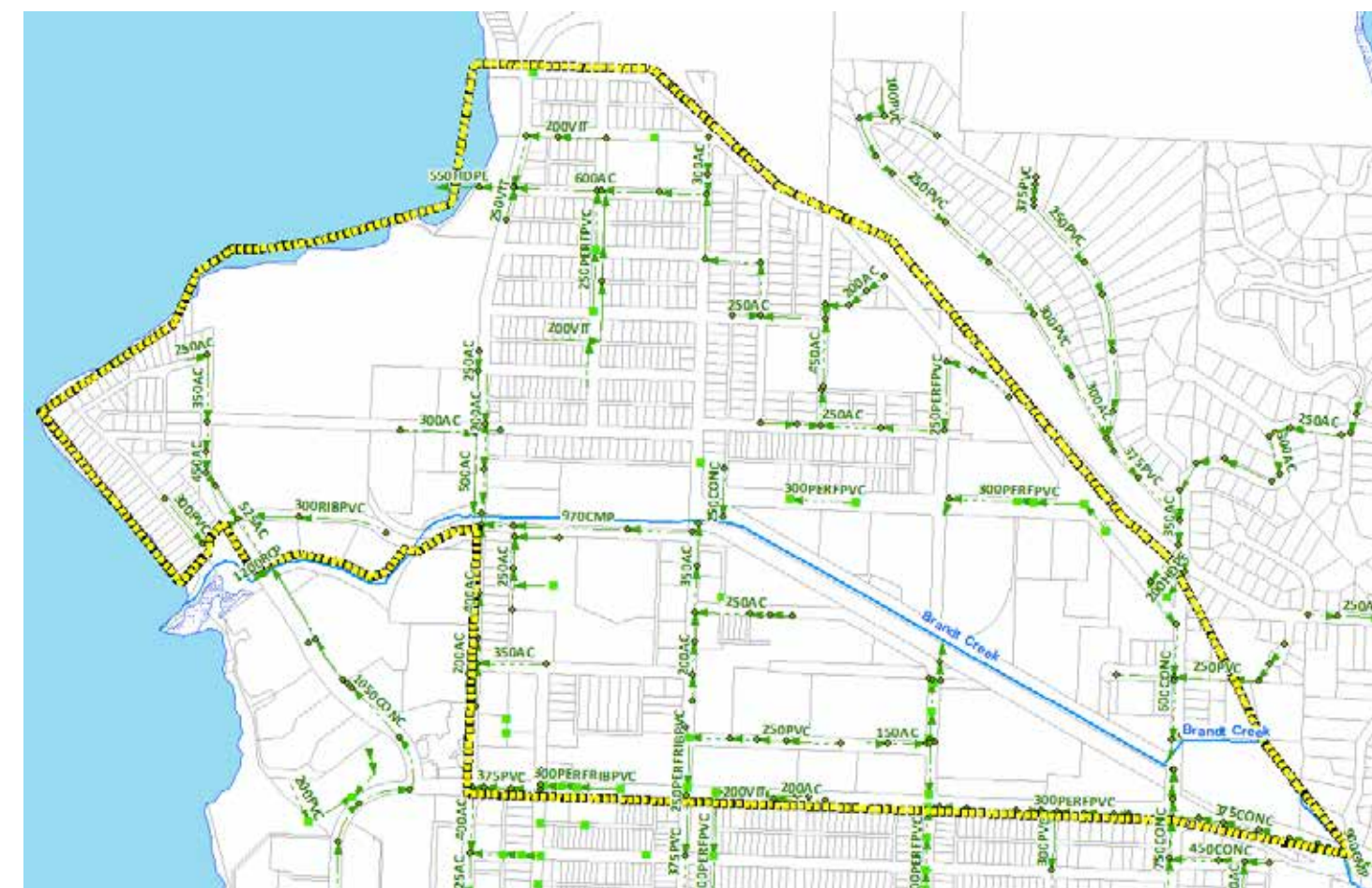


Figure 2.33 North End Existing Stormwater Sewer Collection System by Age

Install Year	Length (m)	Age (Years)	% of Total
1965-1970	1,594	50+	18%
1971-1980	3,563	40+	40%
1981-1990	286	30+	3%
1991-2000	816	20+	9%
2001-2010	2,023	10+	23%
2011-2020	691	Less than 10 Years	8%
Total	8,973		100%



03

MOVING FORWARD

BACKGROUND

EXISTING CONDITIONS

MOVING FORWARD



Beyond understanding the people and place of the North End, it is recognized that numerous other factors and considerations should play a role in informing the North End Plan as it proceeds. To begin with, the plan must be consistent with and take direction from existing City plans and policies. Second, the plan should be informed by and incorporate the learnings of case studies from other communities that have addressed similar neighbourhoods and situations. Finally, the

plan should have a well-thought-out strategy for achieving the neighbourhood and city-wide needs to properly serve local residents and the city more broadly. This section approaches these factors and considerations in a preliminary and broad manner. More work will need to be done on these topics as the North End Plan proceeds.

Existing City of Kelowna Plans & Policies Review

A review of relevant City documents was undertaken to inventory existing policies that impact the North End. These existing plans and strategies provide a preliminary policy framework for the detailed planning process of the North End Plan.

The Official Community Plan¹ provides high-level guidance and is supported by a suite of other City of Kelowna plans and strategies developed over the past two decades. These documents incorporate numerous goals, guiding principles and specific policies, and identify physical, social, and policy gaps for future consideration. Some plans, specifically the 10-Year Capital Plan: 2020-2029, provide for specific planned infrastructure improvements and strategic projects in the neighbourhood.

Most of the policy documents reviewed do not address the area of the North End neighbourhood specifically, but provide guidance and key directions for development across the city. A summary of the key directions to consider in the North End Plan's development include (a complete list of policies can be found in Appendix 2):

- Ensure the provision of a diverse supply of housing of different typologies and affordability;
- Improve community connections across and between age groups within the neighbourhood through supportive programming;
- Identify new park locations and improvements to existing parks, including rehabilitation and public access along the Okanagan Lake foreshore;
- Incorporate 10 Year Capital Plan improvements to existing streets and parks;
- Identify opportunities for new cultural facilities and for the integration of cultural facilities into other public/ community spaces;

¹ The draft 2040 Official Community Plan provided guidance rather than the 2030 OCP, as at the time of writing it was nearing adoption.

“ Existing plans and strategies provide a preliminary policy framework for the detailed planning process of the North End Plan

- Guide multi-modal transportation planning and infrastructure improvements to achieve the objectives of the draft 2040 Transportation Master Plan², while ensuring mobility and safe streets for all through individual developments and capital projects;
- Incorporate climate resiliency (both mitigation and adaptation) into new policy and development plans specific to the North End;
- Incorporate the planning priorities of the Civic Precinct and the Downtown Urban Centre, particularly where they meet and overlap with the North End Neighbourhood Boundary along Ellis Street and Clement Avenue;
- Ensure ongoing planning for industrial lands to protect and buffer their uses, to promote employment intensification, and to support specialized employment; and
- Provide for inclusivity, equity, and health through public realm improvements, civic facility design, and ongoing

² At the time of writing, the Draft 2040 Transportation Master Plan was nearing completion.

community engagement.

The following City of Kelowna policies, plans, strategies, and documents were reviewed:

- North End Neighbourhood Area Structure Plan (1994)*
- Downtown North Area Structure Plan (1999)*
- Shore Zone Plan (1997/2005)*
- Parks Linear Plan (2009)*
- Parkland Acquisition Guidelines (2011)*
- OCP 2030 (2011)*
- Downtown Plan (2012)*
- Civic Precinct Plan (2016)*
- Urban Centres Roadmap (2016)*
- Regional Floodplain Management Plan (2016)*

- 2030 Infrastructure Plan (2016)*
- Housing Needs Assessment (2017)*
- Community Climate Action Plan (2018)*
- Healthy Housing Strategy (2018)*
- Community for All Plan (2018)*
- Imagine Kelowna (2018)*
- Commercial Demand Study (2018)*
- Regional Housing Needs Assessment (2019)*
- Council priorities (2019 – 2022)*
- 2020 – 2025 Cultural Plan*
- 10 Year Capital Plan: 2020-2029*
- DRAFT Transportation Master Plan*
- DRAFT OCP 2040*
- DRAFT Cultural Facilities Master Plan*
- Council Policies*



Case Study and Precedent Review

A scan of comparable sites throughout BC and Alberta was undertaken to identify unique practices, lessons learned, and opportunities to follow in the footsteps of successful projects with similarities to the North End plan area—including the mill site. A group of City Staff visited several of the case study

sites to gather additional information. Key takeaways from the best practice review are noted below, with a more detailed summary of each case provided in Appendix 3. Case study sites include:

Name	City	Area	Type
The Shipyards	North Vancouver	12.5 acres	Mixed use residential/commercial/public realm brownfield waterfront redevelopment
Olympic Village	Vancouver	23 acres	Mixed use brownfield waterfront redevelopment; sustainable neighbourhood design
River District	Vancouver	128 acres	Mixed use residential/commercial brownfield redevelopment, 'complete community'
Dockside Green	Victoria	15 acres	Mixed used brownfield redevelopment; sustainable neighbourhood design
False Creek Flats	Vancouver	450 acres	Existing industrial lands
Garrison Woods	Calgary	175 acres	Residential 'new urbanist' greenfield redevelopment with commercial component.
Granville Island	Vancouver	38 acres	Industrial brownfield repurposing

“ A scan of comparable sites throughout BC and Alberta was undertaken to identify unique practices, lessons learned, and opportunities to follow in the footsteps of successful projects

Precedent review insights applicable to the North End and/or Mill Site include:

- Carefully consider urban design elements of brownfield redevelopment sites to create a pleasing and functional urban realm. This includes attention to street width to building height ratio, public access to and view of waterfront amenity, and pedestrian connectivity;
- Clearly identify public benefits and community needs during the planning phase and incorporate these requirements during development. The provision of such benefits need to accommodate the site development schedule alongside project finances;
- Identify affordability criteria and requirements early in the planning process. Specific regulations (such as housing agreements) are necessary to ensure affordability thresholds are met in perpetuity and not overcome by market demand/appreciation;
- Allow flexibility in the allotment of density across development sites to aid in flexibility for future unknown development events;
- Require waterfront public realm improvements continuity beyond the site development to ensure success;
- Achieve urban realm and street design continuity through area specific guidelines/requirements ;
- Consider retention of heritage early in the planning process. Heritage buildings provide unique opportunities for adaptive re-use, neighbourhood character, and novel destination sites;
- Pay attention to livability and project phasing for brownfield redevelopment sites;.
- Consider industrial area integration; including appropriate residential uses;.
- Consult stakeholders for industrial land planning;
- Investigate project economics for large scale mixed-use developments; and
- Utilize economic analysis of the industrial sectors relative to land use regulation to assist in land use planning for industrial lands.



Approaching Community Needs

Introduction

Great neighborhoods and communities are not simply collections of housing units, employment and commercial spaces. They offer a wide array of services and facilities that help meet the full spectrum of residents' needs, all with the aim of delivering a high quality of life. These 'community needs'—everything from parks, public spaces, recreation facilities, heritage conservation, public art, affordable housing, community spaces, and more—work together to create desirable, livable communities in which residents can thrive over their lifetimes.

As the North End Plan explores how growth might best be accommodated, those essential community needs must receive careful consideration and a clear plan. They will play an integral role of the North End for the benefit of residents today and for years to come.

Defining 'Community Needs'

For the purposes of this planning process, **community needs** are understood to be the facilities and amenities that contribute to the living experience of residents¹. **Community needs** are the building blocks that help make a neighbourhood or community truly livable – the aesthetic features (i.e.: public art), parks, public spaces, and facilities to meet a range of social, cultural, recreational and enhanced infrastructure needs of the community.

Types of Community Needs

Community needs include a broad range of services and facilities and must be customized to meet the unique circumstances of the community in which they are being considered. Nevertheless, a selection of common community needs has been listed below and grouped into broad categories. This is by no means an exhaustive list, but it provides a snapshot of common community needs.

- **Parks and recreation:** publicly accessible walkways, trails, paths, parks on streets, shared streets, neighbourhood parks, community parks, recreation facilities
- **Arts and culture:** public art, studio/maker's spaces, gallery and performance spaces, storage/practice/preparation spaces, Indigenous cultural facilities, heritage preservation
- **Infrastructure:** enhanced pedestrian (e.g.: widened sidewalks, more street trees), transit (e.g.: higher-quality bus shelters), or cycling facilities
- **Social and housing:** childcare space, non-market housing, affordable housing, housing co-ops, community gardens and community centres,

Public vs. Private

A community's needs can be met through both public and private means. Attractive outdoor spaces and public art, and even some recreational facilities, can all be provided through private development. Often, these spaces are linked to minimum requirements in a local government's zoning bylaw. These spaces, whether provided within an individual unit, or shared within a larger project, play an important role. They help meet the needs of residents for private and semi-private space.

The primary source for meeting community needs is public. Whether parks, trails, community centres, libraries, public art or cultural facilities, these needs are most often satisfied on public land that is fully publicly accessible. These are the spaces where residents from around the neighbourhood and community can come together and share public life.

Other important community needs may straddle both public and private lands. Affordable housing, for instance, is a need that can be met through public development on public land, or through innovative partnerships that involve both private and public sectors. Energy efficiency and climate resiliency are other examples of these community needs that may be addressed in both private and public means.

Neighbourhood Needs or City-Wide Needs?

Specific needs will vary depending on the community: its size, culture, and preferences. Particular needs identified through a planning process could be generated from a neighbourhood, or more broadly from the City at large, or from somewhere in between. This helps us understand from where the need is generated and the scale of the response. The need for a neighbourhood park or small daycare space, for instance, is likely coming directly from the neighbourhood and immediate surrounding area. Contrast that with the broader need for a community centre or major recreation facility that would serve a much larger catchment than the neighborhood. These considerations help us account for scale and the broader community's input and resources—whether through local government or other means—that may need to play a greater role.

Public Space: Quality vs. Quantity

As communities densify, living spaces tend to get smaller and have fewer private spaces—both indoor and outdoor—and when they are at a premium, the demand for access to public spaces increases. As development is considered in the North End, this trend can be expected. An example is older single-family developments (with extra rooms and backyards for their residents) being replaced with 1 and 2 bedroom apartment buildings (which typically have limited extra space). In this case, the demand for public spaces may increase.

It is vital to not overlook the quality of the public and private community needs being planned and delivered. High-quality, engaging community spaces can ensure not only the longevity of the services and facilities provided, but can also ensure they meet the needs of the greatest number of residents.

Identifying and Delivering Community Needs

The identification and delivery of community needs is a critical component of the North End Plan process. It is important to establish a process early in the plan's development to not only identify what community needs are required to successfully deliver on the vision, but also to establish an approach to deliver them.

There is a wide variety of approaches that can be used to guide the identification and delivery of community needs for

the North End. As such, it is important to first identify the core principles that would frame the approach(es) selected. In keeping with the Imagine Kelowna goals, which include building a fair and equitable community, fostering resident driven solutions, and providing opportunities for all, the process for identifying and delivering community needs for the North End Area Plan will be based on the following core principles:

- **Fairness.** Community needs should be provided in a way that strikes a balance between developer and City contributions, recognizing some types of community needs will likely provide a benefit to new development in the North End while others will provide a broader, city-wide benefit.
- **Transparency.** The process to identify community needs should be undertaken in a manner that is transparent to the public.
- **Responsiveness.** The identification of community needs should respond to and reflect input provided by community members and stakeholders.
- **Flexibility.** Recognizing that neighbourhood planning is an iterative process, the plan should respond to new input and changing conditions with a lens of flexibility for community needs.
- **Feasibility.** Community needs should only be identified where the ability to deliver them is realistic and feasible.

Identifying Community Needs

While core principles are important, guidance is still needed to identify what the community needs are for the North End. These community needs will be informed by three sources:

- **Existing Plans and Strategies.** The North End Plan process is to be informed by other endorsed plans, including the 2040 Official Community Plan, the Transportation Master Plan and other plans and strategies. As these plans were developed with significant public engagement, using them as a starting point reflects the core principles of responsiveness and feasibility.
- **North End Area Community Engagement Process.** The North End Plan includes a robust community engagement process that will assist in identifying the needs of North End residents as well as the Kelowna

¹ Allen, Natalie. 2015. Understanding the Importance of Urban Amenities: A Case Study from Auckland. Buildings, 2015, volume 5, p. 86. Accessed on September 3, 2021.

community at large. In keeping with principles of transparency and responsiveness, input from this process will be used in conjunction with the guidance offered by existing plans and the results of the technical analysis. The process will also seek ways to incorporate equity into city building, in keeping with the pillars of the Official Community Plan.

- **North End Area Plan Technical Analysis.** The technical analysis that will form part of the plan's development will also play a large role in determining the community needs within the plan area. In keeping with the principle of feasibility and fairness, this analysis will see to align community needs with those that would arise from proposed land uses and densities within the plan area, as well as those in surrounding neighbourhoods and the city at large.

Delivering Community Needs

Identifying the community needs for the North End neighbourhood is a critical step in developing the vision for the neighbourhood. To bring that vision into reality however, the plan will require the exploration of tools available to local governments to deliver those important components.

While it is too early in the planning process to identify which tools would be most effective, the following options are available and may be considered to deliver on these important community needs:

- **Expansion of the Development Cost Charge Program** to include new projects identified in the neighbourhood;
- **Density Bonusing**, where additional densities are supported for projects that contribute to community needs that align with the plan's vision;
- **Local Area Service Program**, where, with the consent of a majority of property owners, community needs are funded through a charge levied on each property;
- **Inclusionary Zoning**, where some community needs are identified and/or required as uses for a specific zoning district;
- **Community Amenity Contribution Program**, where community amenities are identified and negotiated during the development process; and
- **Neighbourhood Plan Negotiation**, where community needs are negotiated as part of the development of the vision for the neighbourhood.

Selection of appropriate tools must be guided by the core principles, particularly those of fairness, flexibility and feasibility.

There are many ways to identify ways community needs would be required as a neighbourhood develops. For some projects, it involves the identification of a series of specific amenities or facilities early in the process to guide more detailed planning work and negotiation. In other projects, there may be a dollar amount that is associated with the number of units and/or floor space that contribute to the provision of these facilities.

Regardless of which approaches are taken, these discussions require a common understanding of what is considered a fair balance between the contributions from a developer or landowner and the City. In terms of developer responsibility, this is often tied to the land lift that comes with increased density and scale or new, more desirable uses. City responsibility often lies where the benefits of these community needs are enjoyed by the city at large. This process will also require application of the core principle of flexibility for all partners to land a successful approach.

Community needs are not delivered all at once. Rather, they are typically phased in throughout the neighbourhood as it develops. This will be incorporated in the North End Plan to ensure the City, the community and stakeholders all share the same expectations as to when they would be provided.

Conclusion

This Background Study is meant to provide the basic understandings needed to inform the North End planning process from the outset. In it, we have explored the history of the North End, the demographics of the neighbourhood, and the land use as it currently exists. In addition, we have explored the housing stock, parks, heritage assets, and infrastructure—including transportation and utilities—that exist in the North End today. As part of this exploration, we have given a brief and preliminary overview of the issues and gaps identified with respect to various City-owned assets, infrastructure and facilities in the neighbourhood. Over and above our exploration of the North End neighbourhood, we have identified additional factors and considerations that should be taken into account during the planning process. These factors include a consideration of existing plans and policies; the teachings of previous plans addressing similar neighbourhoods and contexts. The Background Study also recommends an approach to secure the kinds of neighbourhood and city-wide needs to ensure the plan is a success and a truly great neighbourhood is achieved.

The next stage of the North End planning process will take the learnings from the Background Study—in addition to the feedback and input of residents and stakeholders—to develop the vision and objectives for the neighbourhood. The vision and objectives will then provide the starting point for what to include in the Plan.

“ This Background Study is meant to provide the basic understanding needed to inform the North End planning process from the very outset

