Meyokumin Neighbourhood Renewal

URBAN DESIGN ANALYSIS REPORT

July 2022 | FINAL





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# Neighbourhood Background and Context



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# **Neighbourhood Context**

We acknowledge that the Meyokumin neighbourhood is located within the traditional land of Treaty Six Territory and the Traditional Métis Homeland of Region IV. For centuries, the footsteps of ancestors of First Nations, Métis, and Inuit marked this territory.

Meyokumin is located in the south-central portion of Mill Woods, within a cluster of 27 neighbourhoods in southeast Edmonton. The land that Mill Woods encompasses was part of the Papaschase Indian Reserve. To relocate the Métis-Cree away from Fort Edmonton and the highly valued North Saskatchewan River, negotiations were made to create the Papaschase Indian Reserve in 1877. People were forcibly removed from the reserve and by 1889 the band was disbursed.

The Papaschase Indian Reserve was later sold to early white settlers and much of the land in the Mill Woods area was in agricultural production until the late 1960s. As a reminder of the complicated history of the area, the neighbourhoods in south and east Mill Woods, including Meyokumin, were given names that are Cree in origin. Current practices have evolved from this era. Today our naming practices would involve indigenous engagement and gifting of a name.

Located in Edmonton's southeast, Mill Woods was originally conceived as a social planning effort to counter escalating land and housing prices due to inflation and dwindling supply of available land. Within the concept plan for Mill Woods, the neighbourhood structure was to orient eight smaller neighbourhood units around a town centre mixed-use urban core with a significant number of parks and open spaces throughout. Each of the neighbourhood units was divided into smaller communities, each intended to have its own central focus point, either a commercial node or school site. Being one of the smaller communities within the Millhurst neighbourhood unit, Meyokumin was established in the late 1970s with most initial residents moving to the neighbourhood in the late 1970s and early 1980s.

Meyokumin is bounded by 23 Avenue, Mill Woods Road South, 66 Street and 50 Street. At about one square kilometre, it is a medium–sized neighbourhood with a mix of single–family houses, semi–detached houses, duplexes, row houses and a handful of low–rise apartment buildings. Meyokumin has two elementary schools located in the centre and at the south boundary of the neighbourhood. They are connected through school fields and Meyokumin Park. This central green space is also host to the Millhurst Community Hall, of which Meyokumin is a member along with the Sakaw neighbourhood to the south. There is a small commercial node located centrally, north of Meyokumin School, and a larger one at the northeast corner of the neighbourhood that includes a grocery store. Meyokumin is located directly south of the Mill Woods Town Centre, a large commercial and transit node.

## **Study Area**

The study area map shows the extent of the area included in the Meyokumin Neighbourhood Renewal. This includes all the public streets and alleys that are contained within the neighbourhood boundary of 23 Avenue (north), 50 Street (east), Mill Woods Road South (south) and 66 Street (west), as well as City-owned open spaces. The key local destinations are shown for reference.

Community destinations located outside the boundaries of the neighbouhood but within the neighbourhood's area of influence are also considered in this study. These destinations are addressed in detail in the Neighbourhood Analysis portion of this document.

# Did you know?

Meyokumin comes from the Cree word meaning "good water"

Map 1: Renewal Area



# **Neighbourhood Statistics**

# Population

Around 3,000 people live in Meyokumin according to the 2016 Federal Census. The population declined slightly by 1.1% between 2011 and 2016, whereas the population increased by 15.0% across Edmonton during the same period.

The distribution of the population by age differs noticeably from the City of Edmonton as a whole. The neighbourhood has a higher proportion of school–aged children and young adults up to 24 years old (33.5% compared to 30.5% city– wide), and of adults 55 to 64 years old (14.1% compared to 11.7% city–wide). Adults 25 to 54 years of age as well as seniors (people over 65) make up a slightly lower proportion of Meyokumin's population than Edmonton's as a whole (42.2% and 10.3% as compared to 45.7% and 12.1% city– wide).

# **Socioeconomic Characteristics**

Socioeconomic characteristics of a neighbourhood can be used as indicators of the strength of the community's "social fabric". The City of Edmonton created a Social Vulnerability Map using 2016 Federal Census data that included nine indicators:

- Education
- Employment
- Government Transfer Payments
- Home Ownership
- Immigration
- Income
- Language
- Lone Parent
- Mobility

The City of Edmonton identified Meyokumin as a neighbourhood with a social vulnerability of medium, which means the neighbourhood is likely to be less cohesive and less resilient when confronted by external stresses such as natural disasters or unfavourable human-induced events. A few key socioeconomic indicators from which a social vulnerability assessment of medium likely stems, includes the high proportion of new immigrants to the neighbourhood who may not feel connected to other residents, the high proportion of households with household incomes less than \$49,000 per year, and the greater percentage of people without post-secondary education. A few positive socioeconomic indicators include the high percentage of household ownership, the high percentage of people who know English or French and speak English as a first language, and that 73% of the Meyokumin population aged 15 years and older is in the labour force and of that population, 93.1% is employed.

# Age, Income and Education

Although adults aged 25 to 54 make up a slightly lower proportion of Meyokumin's population than Edmonton's, 73% of the population aged 15 years and older is in the labour force and of that population, 93.1% is employed. 64.4% of Meyokumin households earn incomes of \$49,000 or less as compared to 55.1% of households across the City of Edmonton as a whole. In particular, the proportion of households with incomes between \$10,000 and \$60,000 is markedly higher (73.9%) than the overall Edmonton population (63.5%), while the proportion with higher incomes, particularly above \$100,000, is lower. However, based on the "prevalence of low-income measure," which considers household size in the evaluation of the lowincome status of a household, the proportion of low-income households are slightly lower in Meyokumin (9.1%) than in Edmonton (10.9%).

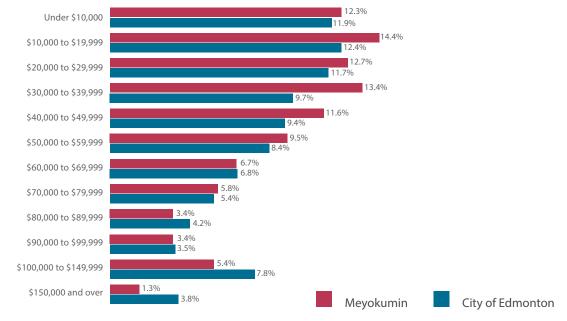
As shown over the page, 57.4% of Meyokumin residents have a post-secondary education, 30.6% of residents have earned a high school diploma or equivalent and 12% of residents have no certificate or diploma. This is lower than the City of Edmonton as a whole as 90% of the city-wide population has earned a high school diploma or certificate while 66.1% of the city-wide population attained a postsecondary certificate, diploma or degree. Additionally, of the Meyokumin residents who have attained post-secondary education, a significantly lower percentage have a university certificate, diploma or degree (18.4%) as compared to citywide (32.5%).

#### Figure 1: Population By Age And Gender



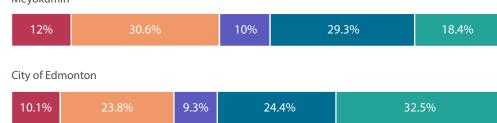
Meyokumin

#### Figure 2: Household Income



#### Figure 3: Highest Educational Attainment

Meyokumin



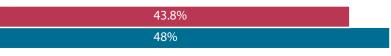
No certificate, diploma or degree	High school diploma or equivalency certificate	Apprenticeship or trades certificate or diploma	condary te, diploma or ty degree	University Certificate, Diploma or Degree

# **Housing, Home Ownership** and Mobility

Census data shows that the most common household size in Meyokumin is a 2-person household (43.8%). Meyokumin sees slightly more 3-person households than the City of Edmonton average and has more 5 or more person households (13%) than the City of Edmonton average (9.2%). The most frequent dwelling type in Meyokumin is single-detached houses with over 56.5% of all dwellings. However, a distinctive feature in Meyokumin is the comparatively high proportion of row houses. At 30% of dwellings, the proportion of row houses is three times higher than in the City of Edmonton at large. Over two-thirds of Meyokumin residents own their home (68.9%), which is slightly higher than the city-wide home ownership of 64.3%.

Figure 4: Private Households by Household Size

#### 2 persons



#### 3 persons

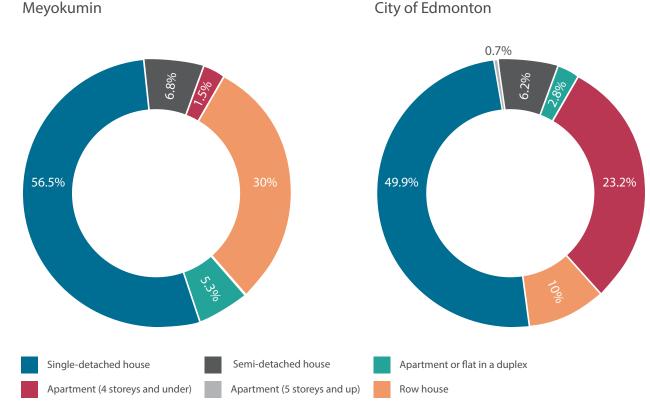
9.2%



Meyokumin

City of Edmonton

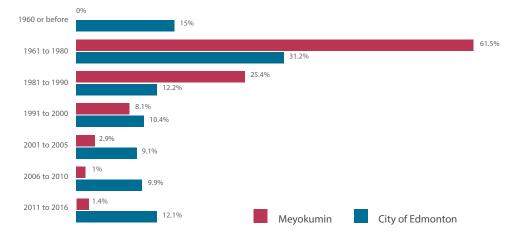
#### Figure 5: Occupied Dwelling By Structure Type



#### Meyokumin

Meyokumin was established in the late 1970s with most initial residents moving to the neighbourhood in the late 1970s and 1980s. This is reflective in the private dwelling construction data shown, with most private dwellings constructed between 1961–1980 (61.5%). Housing construction reduces from this period up until the most recent available data (2016). Most occupied private dwellings are owner households (68.9%); this is slightly higher than the City of Edmonton average (64.3%). Approximately 37% of the residents in Meyokumin moved between 2011-2016, this is substantially lower than the Edmonton Average (49%).

#### Figure 6: Private Dwellings by Period of Construction

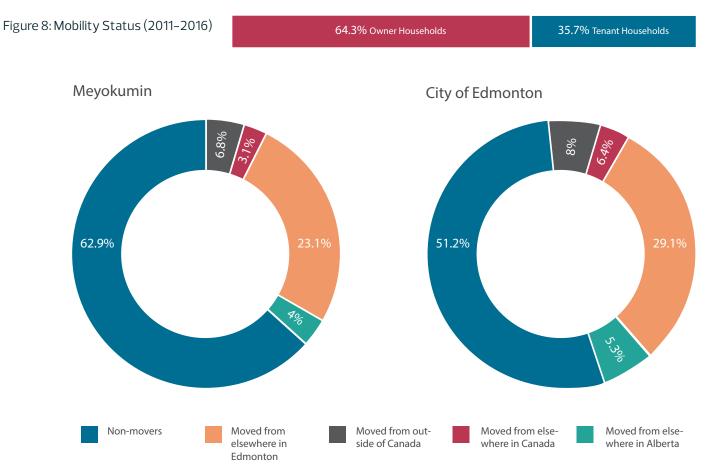


#### Figure 7: Occupied Dwellings By Tenure

Meyokumin

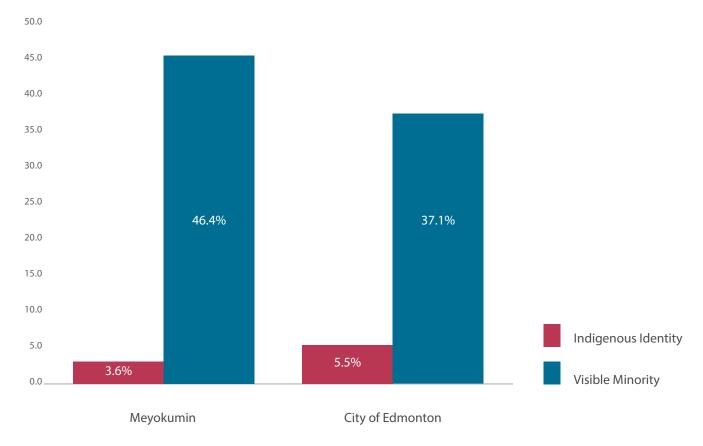
68.9% Owner Households	31.6% Tenant Households

#### City of Edmonton



#### **Indigenous Identity and Visible Minorities**

The proportion of people who identify as Indigenous is slightly lower in Meyokumin (3.6%) compared to the City of Edmonton as a whole (5.5%). Statistics Canada defines Visible Minorities as people who are not white or Caucasian other than Indigenous people. In Edmonton 37.1% of people self-identify as a visible minority, a proportion that is low compared to Meyokumin, where 46.4% of residents self-identify as a visible minority.



#### Figure 9: Indigenous Identity and Visible Minorities in Meyokumin and Edmonton

#### Immigration and Language

Based on the 2016 Census data, approximately 34% of Meyokumin residents identify as immigrants. Approximately 47% of the immigrants in Meyokumin immigrated between 2006 and 2016. The ethnic origins of the Meyokumin population are diverse with the majority of people reporting British Isle origins (15.5%), other North American origins including Caribbean (13.1%), Western European origins except French origins (11.9%), East and Southeast Asian origins (11.3%), South Asian origins (9.8%) and Eastern European origins (8.5%). Most Meyokumin residents know one or both official languages, with only 1.8% of the population or about 55 residents knowing neither English nor French. Slightly less than two thirds of Meyokumin residents speak English as their mother tongue, with the most common mother tongues aside from English being Tagalog, Spanish and Punjabi.

#### Figure 10: Knowledge of Official Languages in Meyokumin and Edmonton

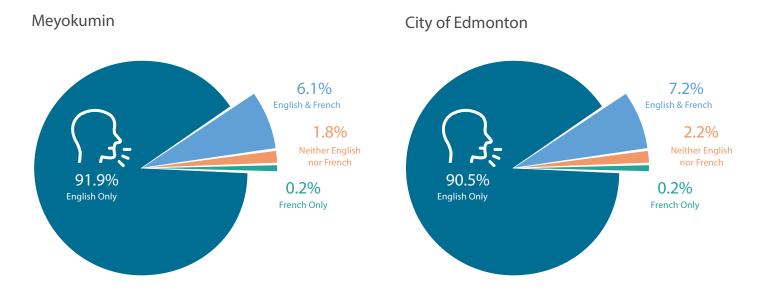
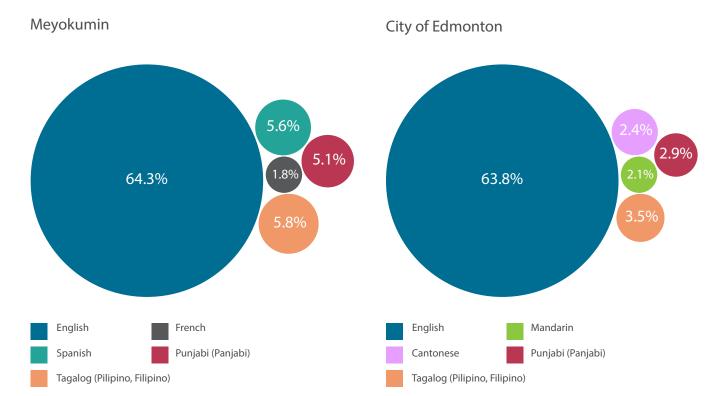


Figure 11: Top 5 Mother Tongues in Meyokumin and Edmonton



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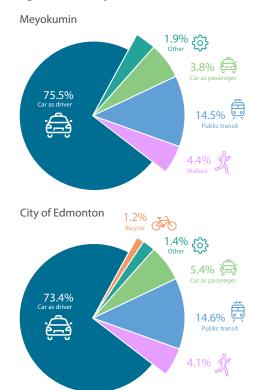
#### **Transportation Mode**

Understanding how people get from one place to another is a critical aspect of neighbourhood renewal planning. While transportation is not included in the Social Vulnerability Map, modal split (how people get around) can indicate the transportation opportunities and preferences of residents.

The commute to work only captures a subset of mobility patterns in a neighbourhood, but it nonetheless provides some insight into the use of different modes of transportation by neighbourhood residents. Meyokumin residents have a very similar mode share profile to the Edmonton population, with the use of personal motorized vehicles, either as driver or passenger, as the most prevalent mode. Transit usage is also very similar, as is walking, while commuting by bicycle is low in Meyokumin.

Understanding local travel patterns through public engagement will be important for the project to better identify and meet the present and future mobility and accessibility needs of the community.

#### Figure 12: Journey to Work





**Photo Above** Transit in Meyokumin

# **GBA+ Analysis**

# What is GBA+?

Gender-based Analysis Plus (GBA+) is an analytical tool often used with the intention of advancing gender equality. The "plus" in the name highlights that Gender-based Analysis goes beyond gender and includes the examination of a range of factors such as age, education, race, language, disability, culture and income, and their intersectionality. The goal of GBA+ is to ensure that gender and other diversity characteristics are properly considered in all government programs and policies that affect citizens.

When analyzing Meyokumin and developing design recommendations, it is important to remember that all neighbourhoods are made up of diverse people with varying ages, abilities and social factors. These differences must be considered in order to create solutions that work for all residents. This analysis is intended to provide a high-level equity lens on the existing infrastructure analysis to assist in developing design recommendations. It is not intended to be exhaustive.

# **Analysis Criteria**

Based on the GBA+ range of factors and the demographics of the Meyokumin neighbourhood, the analysis for GBA+ in Meyokumin has been broken down into four user groups:

- Children and Youth (19% of residents are under 15)
- Women and gender minorities
- Racial, cultural and language minorities
- Income and educational minorities

And the GBA+ will analyze four conditions that vary depending on the user group:

- Physical ability
- Personal comfort
- Physical infrastructure
- Safe roadway crossings

## **Physical Ability**

Physical ability varies based on factors such as age and presence of mobility impairments. The following are factors to consider when analyzing how these factors impact one's mobility in their neighbourhood:

- Typical five minute walk for an able bodied adult 400– 500 metres
- Typical five minute walk for a senior or person with a walker or cane 275–300 metres
  - In addition to a shorter walkshed, seniors and people with impaired mobility require more spaces to rest along their walking journey.
- Typical distance travelled independently by children over the age of 10 about 500 metres
  - That distance can increase depending on age and mode of transportation (i.e. a child on a bike will travel further). Children under the age of 10 are typically accompanied by an adult or older sibling.

# Did you know?

50% of residents in Meyokumin identify as Indigenous or a visible minority

#### **Personal Comfort**

Personal comfort in public spaces impacts how people will move and use spaces. The following are perceived personal comfort and safety barriers:

- Children travelling independently in their neighbourhood

   traffic volumes, speed of traffic, directness of routes and
  whether safe infrastructure is available
- Women and gender, racial and cultural minorities lack of proper sightlines (i.e., hidden or winding walkways and walkways obscured by overgrown vegetation), adequate lighting and other people around

#### **Physical Infrastructure**

The provision and condition of infrastructure is important to the equitable use of the public realm. Lack of appropriate infrastructure is not only a comfort and safety concern, but it also encourages illegal usage of infrastructure, such as riding bicycles on the sidewalk or crossing where no crosswalk exists. This often exposes users to the possibility of law enforcement, which has radically different consequences for racialized individuals as compared to non-racialized individuals. The following are some important considerations when analyzing physical infrastructure:

- Lack of appropriate infrastructure for modal uses
- Inadequate sidewalk widths for strollers, wheelchairs, walkers passing or walking side-by-side
- Lack of protection from fast moving traffic or high-traffic volumes
- Inappropriate vehicle speed for local context
- Missing or inappropriate curb ramps
- Lack of places to rest
- Too frequent or poorly constructed driveway crossings

#### **Safe Roadway Crossings**

The type of roadway crossings available impact the safety and comfort for seniors, children, and people with impaired mobility. The following are some factors to consider when analyzing roadway crossings:

- Length of roadway crossing (i.e., can a user make it across relatively quickly or should additional infrastructure, such as a refuge island, be provided?)
- Appropriate crossing control type (i.e., overhead flasher, pedestrian activated signal, stop control, uncontrolled)
- Distance between safe crossings (i.e. are crossings provided at the right locations, are there missing crossings?)

# **Policy and Standards Review**

# **Guiding Plans and Strategies**

# The City Plan (2020)

The City Plan charts out how we will get to a future city, a city that has the benefits we enjoy today with new opportunities for the future. The City Plan is about our spaces and places and how we move around the city. It is about our community and what we need to do together to grow, adapt and succeed.

The City Plan combines a Municipal Development Plan and Transportation Master Plan, and sets strategic direction for the way Edmonton grows, its mobility systems, open spaces, employment and social networks, generally touching on most aspects of life in Edmonton. The City Plan is a statutory plan providing policy direction that must be followed.

he Building Great Neighbourhoods approach to the Neighbourhood Renewal Program aligns with numerous City Plan targets numerous City Plan targets and strategic measures – renewal provides a tangible opportunity to bring The City Plan to life on our streets and in our public realm.

#### **Big City Moves**

The City Plan includes 5 Big City Moves. These are ambitious targets that aim to transform our city to support a future population of 2 million people. NRP projects directly contribute to several of the "Moves".

Big City Move	NRP Action
Greener As We Grow Two million new urban trees planted	Plant new trees in boulevards and neighbourhood open spaces
Rebuildable City 600,000 additional residents will be welcomed into the redeveloping area	Rebuild infrastructure in neighbourhoods to support and anticipate changing use by residents over the next 50 years Make improvements to the public realm and active transportation network to support and anticipate increased sidewalk activity and improve quality of life as redeveloping areas densify and public infrastructure is more heavily used
A Community of Communities <b>50% of trips are made by transit and active transportation</b>	Add missing links in the active transportation network and all ages and abilities infrastructure to support transit and active transportation as a convenient, safe and cost-effective choice
A Community of Communities <b>15-minute districts that allow people to easily complete their daily needs</b>	Add missing links in the active transportation network and all ages and abilities infrastructure to provide safe and direct connections to district destinations Add amenities such as seating, lighting and wayfinding to support all seasons, all ages and abilities use of the active transportation network
Inclusive and Compassionate Less than 35% of average household expenditures are spent on housing and transportation	Add missing links in the active transportation network and all ages and abilities infrastructure to support transit and active transportation as a convenient, safe and cost-effective choice Seek equity in project decision making by applying a GBA+ lens and ensure neighbourhoods that are less engaged still receive quality infrastructure and amenities

#### **Guiding Values and Policy Statements**

The City Plan Guiding Values are described through a number of desired outcomes which the NRP can use to help guide and align project decisions. The outcomes are high level aspirational statements, similar in style and content to the neighbourhood vision and guiding principles developed for each project and were developed based on extensive city–wide public engagement.

Big City Move	NRP Action
Belong (page 42), Live (page 50), Thrive (page 62), Access (page 70), Preserve (page 77), Create (page 85)	The neighbourhood vision and guiding principles developed as part of NRP projects should align with, and not contradict, The City Plan Guiding Values and Outcomes

Each outcome is part of a policy statement, followed by more detailed intentions and more specific directions for actions. Through these policy statements, the City Plan speaks to activating redevelopment in the city by investing in infrastructure upgrades as well as the role equity plays in city building, both of which align with the retrofit scenarios we see in neighbourhoods. Specific intentions and directions related to the NRP include:

Themes	Guiding Value	Related Policy Statement		
Truth & Reconciliation	BELONG	<b>1.2.3.1</b> Acknowledge Treaty Six and recognize the First Nation, Metis and Inuit peoples and their connection to this land		
	THRIVE	3.1.1.1 Commemorate and celebrate Indigenous history and culture through the planning and design of civic spaces		
Public	BELONG	I.2.2.1 Incorporate needs and voices of children, youth and those around them into plans, programs and amenities that serve and impact them		
Engagement	THRIVE	<b>3.1.2.1</b> Include representatives and seek out views of diverse communities in city building processes		
		1.1.4.3 Integrate age-friendly design to connect seniors and reduce social isolation		
	BELONG	<b>1.2.1.1</b> Enable publicly accessible spaces that invite exploration and support interaction and learning for people of all ages		
Universal		1.2.1.2 Design and integrate formal and informal play spaces into the built environment		
Access		1.2.1.4 Design public spaces that are safe and easy to navigate for people with disabilities		
Child Friendly		<b>1.2.2.2</b> Design open space and play space to accommodate intergenerational use		
Age Friendly	LIVE	2.1.1.5 Develop and retrofit publicly accessible spaces and facilities to incorporate safe access for all Edmontonians		
	ACCESS	<b>4.2.2.4</b> Design transportation infrastructure that is intuitive and user friendly		
		<b>1.1.3.1</b> Create safe opportunities for women, girls and gender minorities to meet, connect, participate in and enjoy community and civic life		
Public Engagement	BELONG	<b>1.2.2.5</b> Apply a gender-based equity lens in the design and application of City infrastructure, policy, programs and services		
		<b>1.3.3.2</b> Address equity in the delivery of policies, programs, investment and infrastructure delivery		
Equity GBA+ Personal Safety	LIVE	2.1.2.1 Incorporate health outcomes into strategy, planning and design of the built environment		
	ACCESS	<b>4.1.2.3</b> Design, operate and maintain the mobility system so people are safe and secure		
	PRESERVE	<b>5.11.7</b> Enhance Edmonton's open space network to be inclusive and equitably accessible through planning and infrastructure improvements in consideration of the surrounding environment		

Themes	Guiding Value	Related Policy Statement				
Environment Climate Change Mitigation	BELONG	1.4.2.3 Expand and enhance a healthy and sustainable urban forest				
	LIVE	2.1.2.4 Incorporate nature and natural systems into the built environment 2.4.2.6 Prioritize and enable green infrastructure including low impact development solutions				
	PRESERVE	<ul> <li>5.1.2.2 Expand and diversify Edmonton's urban tree canopy and native vegetation</li> <li>5.4.1.1 Manage stormwater runoff and improve water quality through the design and development of the built environment.</li> <li>5.4.1.2 Improve flood resilience through ongoing risk management, infrastructure planning and operation, financial analysis and stakeholder engagement</li> </ul>				
	BELONG	1.3.1.2 Provide opportunities for people to easily connect to and experience open space and features within districts				
	LIVE	<ul> <li>2.1.1.3 Design public spaces that are easy to navigate and explore for Edmontonians and visitors</li> <li>2.1.2.2 Provide safe, comfortable and direct active transportation connections between neighbourhoods, community facilities and schools</li> </ul>				
Connectivity	THRIVE	3.2.2.2 Provide pedestrian connections, amenities and facilities to support employees in non-residential areas				
Wayfinding	ACCESS	4.1.1.3 Respond to gaps in the mobility system to improve accessibility and safety 4.1.1.4 Enhance street design through building and renewal to improve connectivity, amenity space and beauty				
	PRESERVE	<ul> <li>5.1.1.1 Provide opportunities for people to access, enjoy and connect to open space and the river valley and ravine system</li> <li>5.1.1.4 Provide wayfinding support and improved connections within and between open spaces and natural areas</li> </ul>				
All Seasons Use	BELONG	<ul> <li>1.2.1.3 Encourage and support the use of public space in formal and informal ways throughout the year</li> <li>1.3.2.2 Increase opportunities for Edmontonians to be physically active throughout all seasons</li> <li>1.3.2.4 Improve and integrate winter city design through the development of buildings, the public realm and open spaces</li> </ul>				
	LIVE	2.1.1.2 Design, build, maintain and operate public infrastructure to facilitate movement and universal accessibility in all seasons				
Active Transportation Traffic Safety	BELONG	<ul> <li>1.3.3.5 Prioritize transportation investments and operations for people experiencing vulnerability</li> <li>1.4.1.2 Design and deliver mass transit and active transportation network infrastructure to enable energy efficient mobility</li> </ul>				
	ACCESS	<ul> <li>4.1.2.1 Provide safe streets and convenient pedestrian crossings that appropriately serve the context of the area</li> <li>4.2.1.2 Plan and design active transportation and transit networks in support of nodes and corridors</li> <li>4.2.3.2 Provide opportunities for universal accessibility within the active transportation network</li> <li>4.2.3.3 Develop and maintain safe, high quality cycling infrastructure and facilities</li> </ul>				
Future Use Adaptability Intensification	LIVE	<ul> <li>2.2.1.1 Design and retrofit street layouts to facilitate intensification and ongoing adaptability</li> <li>2.2.1.2 Improve local open space and public amenities to support density increases</li> <li>2.4.2.4 Design roadways and manage road rights-of-way to be adaptable to future mobility and land use needs</li> <li>2.2.3.4 Enable the development and redevelopment of small commercial sites and centres to support mixed use local nodes city-wide</li> </ul>				
	ACCESS	4.3.1.2 Accept levels of congestion in different contexts to ensure an efficient use of resources				

Themes	Guiding Value	Related Policy Statement
	BELONG	<b>2.3.3.5</b> Collaborate with private developers, utility providers and communities on innovative and creative solutions for temporary and permanent infrastructure and amenities that support the public realm
Partnering THRIVE Innovation		<ul> <li><b>3.2.1.3</b> Partner to align placemaking initiatives with infrastructure and renewal projects</li> <li><b>3.3.1.2</b> Align resources and partner with business improvement areas and similar groups to attract, retain and expand businesses</li> </ul>
	CREATE	<ul> <li>6.1.1.6 Use City land, buildings and equipment to pilot innovative ideas and solutions</li> <li>6.1.2.1 Encourage community led park redevelopment through coordination, planning and design</li> <li>6.1.2.2 Encourage activation of public rights-of-way to allow formal and informal gathering spaces</li> <li>6.1.2.4 Encourage activation of underutilized public space through urban design and programming</li> </ul>
Public Art	CREATE	<ul> <li>6.1.2.5 Partner to align public art programs and resources with infrastructure and renewal projects</li> <li>6.2.1.3 Use art and heritage interpretation to tell the story of Edmonton and this land</li> <li>6.2.1.4 Integrate public art as a means of activating open space and public facilities throughout the city</li> </ul>

## **CONNECTEDMONTON (2019–2028)**

CONNECTEDMONTON is Edmonton's Strategic Plan for 2019 – 2028. It sets the direction for our future and outlines where we need to change today to realize our vision for Edmonton in 2050. The four strategic goals are the focus areas that require transformational change in the next ten years to achieve our vision. The goals will be achieved through strategic actions, partnerships and collaboration.

- **Healthy City**: Edmonton is a neighbourly city with community and personal wellness that embodies and promotes equity for all Edmontonians
- **Urban Places:** Edmonton neighbourhoods are more vibrant as density increases, where people and businesses thrive and where housing and mobility options are plentiful
- **Regional Prosperity:** Edmonton grows prosperity for our Metro Region by driving innovation, competitiveness and relevance for our businesses at the local and global level
- **Climate Resilience:** Edmonton is a city transitioning to a low-carbon future, has clean air and water and is adapting to a changing climate

The BGN approach to renewal aligns well with the above goals. In addition to the replacement of aging sidewalks, streetlights and roadways, the NRP includes the addition of new infrastructure to support connectivity and livability for people of all ages and abilities in all seasons. NRP projects help achieve these goals by building new infrastructure, by seeking partnerships internally and externally and through the BGN approach to public engagement. Some specific examples include:

Safe <b>bike infrastructure</b> for all ages and abilities	Healthy City Climate Resilience
Improvements to existing or creating new neighbourhood gathering spaces	Healthy City Urban Places
BGN approach to <b>public</b> <b>engagement</b> helps build community	Healthy City
Adding in <b>missing links</b> in the biking and walking networks	Urban Places
Partnering with <b>Business</b> Improvement Areas and Corner Store Program	Regional Prosperity
Adding <b>trees</b> in boulevards and open spaces, <b>reallocating</b> <b>paved road</b> as open space or boulevard	Climate Resilience
Adding <b>traffic calming</b> <b>measures</b> slows traffic, which reduces pollution and improves the experience for people biking and walking	Healthy City Climate Resilience

# Climate Resilient Edmonton: Adaptation Strategy and Action Plan (2018)

The Climate Resilient Edmonton: Adaptation Strategy and Action Plan focuses on understanding the climate impacts due to ongoing climate change and provides insight into how the City can build resilience around those impacts. The plan highlights a number of predicted changes to the Edmonton area:

- Temperatures: Edmonton can expect average temperatures to increase in the future, across all seasons, with the largest increases happening in the winter.
- Precipitation: Edmonton can expect precipitation to increase in some seasons but change very little in others. On average, we can expect more rain-heavy events in the spring.
- Weather Extremes: Atmospheric conditions will be more conducive to producing more frequent and intense extreme weather events.
- Ecosystems: Changes can be anticipated to area ecosystems, such as a longer frost-free season and reduced snowpacks.

The NRP has a number of opportunities to support climate adaptation in Edmonton. Neighbourhoods should be designed to reduce the impacts of urban heat island effect (Action 9) through elements such as **preserving and increasing the tree canopy** and by implementing **climatesensitive designs for roads and sidewalks**. This can be accomplished, for example, by **decreasing impervious surface area** and increasing surface reflectivity of the paving materials. A GBA+ approach includes additional **consideration for the impacts that climate change will have on diverse groups of people**, such as the higher need for heat island reduction in areas with a high proportion of unhomed individuals.

Climate adaptation also encourages us to embrace potential opportunities that may come with a changing climate. The warmer weather may encourage more people to use active modes of transportation more frequently. The NRP can support this opportunity through the **development of enhanced biking, walking and rolling networks**.

# Edmonton's Community Energy Transition Strategy & Action Plan (2021)

The Community Energy Transition Strategy is the City

of Edmonton's path forward for a low carbon city transforming how energy is generated, how people move around the city, how buildings are constructed, all through the lens to ensure a just and equitable transition. The plan includes four pathways to support limiting the rise of global average temperature increase to 1.5 degrees Celsius:

- 1. Renewable and Resilient Energy Transition
- 2. Emission Neutral Buildings
- 3. Low Carbon City and Transportation
- 4. Nature Based Solutions and Carbon Capture

Pathway #3, Low Carbon City and Transportation, represents 28% of total emission reductions required in the city to achieve the mitigation goals. This pathway will see Edmonton with city districts that are carbon neutral by 2050, 50% of growth occurring as infill development, and the complete build-out of the active transportation network by 2030. This pathway will see 50% of trips made by transit and active transportation by 2040, development and redevelopment that creates 15-minute communities with a nodes and corridor approach, and a city with a completed zero emission vehicle charging network by 2030.

To limit global warming to 1.5 degrees Celsius, actions that actively remove carbon from the atmosphere are also needed. Pathway #4, Nature Based Solutions and Carbon Capture sees Edmonton protecting and restoring significant ecosystems by 2030 and planting an additional 2 million trees by 2040. Nature based solutions help support attractive, healthy urban places.

The NRP directly supports pathways #3 and #4 through implementation of the following strategies:

- Strategy 14: Ensure sustainable urban planning practices to become a carbon neutral city
- Strategy 17: Ensure a safe, accessible and comfortable active transportation system that enhances walking and cycling
- Strategy 20: Support the changing transportation needs of a low carbon city
- Strategy 23: Promote Investment in natural carbon storage and sinks such as tree planting, ecosystem conservation and restoration
- Strategy 24: Promote the acceleration of nature-based solutions to achieve climate resilience goals

## **Economic Action Plan (2021)**

The Edmonton Economic Action Plan (Action Plan) is a 10– year roadmap to building a vibrant, inclusive and sustainable economy. This Action Plan is one of the key elements of the City Plan and is aimed at creating jobs, attracting investment and strengthening our economy.

The NRP directly supports **Action 10: Develop tools and strategies to attract commercial, residential and mixed–use development in nodes and corridors** by partnering with the Corner Stores Program and Business Improvement Areas.

This action includes repositioning existing or new grants to incentivize redevelopment, increase commercial activity and increase densification in existing employment areas within nodes, corridors and the Centre City. It includes exploring further investments in public places that provide enhanced economic and social connection. It also involves exploring creative ways to provide incentives for property owners to attract tenants to vacant properties and to encourage development of vacant or underutilized land such as surface parking lots in order to increase commercial activity in nodes and corridors. It considers utilizing both private and public assets and partnerships that will spur economic, cultural and community growth.

# The Bike Plan (2020)

The Bike Plan provides a strategic planning framework to support the implementation of The City Plan's intentions and directions related to cycling and the aim to support cycling for people of all ages and abilities in all seasons and for all types of trips (i.e., all reasons). The plan outlines three route types that form the future bike network:

- 1. District connector routes act as cycling arteries connecting multiple neighbourhoods
- 2. Neighbourhood routes provide local access to community destinations and opportunities for recreational cycling
- 3. River Valley district connector routes and shared pathways provide cycling routes along the North Saskatchewan river valley and ravine system for longer distance commuter trips and recreational rides

Six principles outlined in the plan are intended to guide the planning and design of all network elements:

- Health and comfort, which grounds design in safety principles
- Connectivity, which aims to provide a complete network without gaps or missing links

- Directness, which aims to provide routes without undue detours
- Network density, which ensures the spacing of routes matches demand
- Attractiveness, which relates to the pleasing aesthetics of routes
- Integration, which aims to ensure bike routes fit into the local context and area

## Safe Mobility Strategy (2021–2025)

The Safe Mobility Strategy's purpose is to achieve Vision Zero through safe and livable streets in Edmonton. Vision Zero is the internationally endorsed long-term goal of zero traffic-related fatalities and serious injuries. The City of Edmonton adopted Vision Zero in 2015 and its first strategy, the Road Safety Strategy 2016–2020, made significant progress in reducing serious injuries and fatalities by targeting hotspot locations for infrastructure improvements and enforcement. The Safe Mobility Strategy builds on this momentum by evolving from a hotspot approach to a combination of location-based and systemwide approaches that will help tackle widespread issues that contribute to crashes, including street design and the deep-rooted cultural norms around traffic and mobility. The strategy directly ties traffic safety to The City Plan and ConnectEdmonton to reflect the interdependence between safe mobility and other City goals such as mixed land use, climate resilience, and health. Neighbourhood renewal presents an opportunity to realize many of the objectives sought out through the Strategy's Key Actions, notably by designing safe crossings and implementing additional countermeasures around schools.

# Breathe: Edmonton's Green Network Strategy and Edmonton's Urban Parks Management Plan (2017)

Breathe: Edmonton's Green Network Strategy and the Urban Parks Management Plan calls for an integrated system of open spaces throughout the city. These open spaces include parks, plazas, pedestrian-friendly streets, natural areas, green ways and green infrastructure. The driving principles of these documents ensure that development of open spaces is done in a way that supports community celebration and socialization, provides ways for residents to recreate and live healthier lifestyles and preserves and enhances the ecological capital within our city, with strategic directions that include safety, inclusivity, equitable distribution, vibrancy, collaborative planning and other important goals. The open spaces within Meyokumin fall under these two important directives and the principles and strategic directions have been used to analyze the existing open spaces and will be considered in the proposal of any enhancements to these spaces.

# Winter Design Policy, Policy No. C588 (2016)

The Winter Design Policy encourages designing year-round spaces with a winter lens. The policy includes the following five winter design principles across neighbourhoods, streets, sites and open spaces that will:

- 1. Incorporate design strategies to block prevailing winds and downdrafts
- 2. Maximize exposure to sunshine through orientation and design
- 3. Use colour to enliven the winterscape
- 4. Create visual interest with lighting, while being mindful of density, spread and colour
- 5. Design and provide infrastructure that supports desired winter life and improves comfort in cold weather

### Winter Design Guidelines

The Winter Design Guidelines build on the five design principles of the Winter Design Policy by providing a number of goals and outcomes to improve the outdoor experience in winter, championing active winter living. Investments in the public realm and transportation network, along with private sector investment, is encouraged. Specifically, the guidelines speak to ensuring neighbourhoods are designed with winter comfort, safety, access and aesthetic appeal in mind, considering all ages and abilities. These considerations, along with the objective of providing opportunity for winter programming and designing elements to attract residents outside during everyday winter life, will be reviewed through the analysis of Meyokumin and contemplated when proposing open space and active transportation network enhancement opportunities.

# Mill Woods Station Area Redevelopment Plan

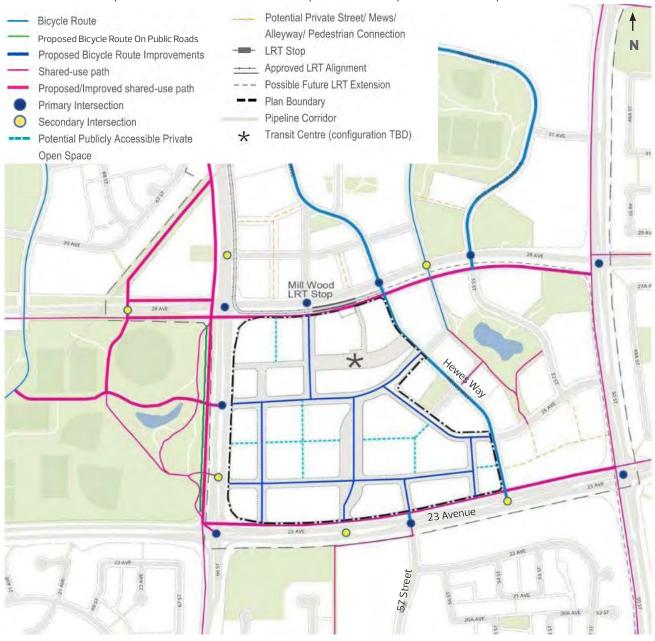
The Mill Woods Station Area Redevelopment Plan (ARP) provides a clear vision and planning framework for future development within the plan area over the next 25–50 years. Its goal is to locate and design higher density, transit– oriented development and supporting infrastructure around the future Mill Woods LRT station in a manner that respects, enhances, and strengthens the area's local character, urban lifestyle, and sense of place.

The Mill Woods area is therefore set to see an intensification of mixed– uses and will strengthen as a node for activity and transport hub. As a result, connections between Meyokumin and Mill Woods will be important to maximize Meyokumin residents' access to the retail, services and employment opportunities.

The Mill Woods Station ARP proposes an active transportation network to help increase sustainable access to the transforming area. Importantly, the ARP identifies the following cycling connections that interface with Meyokumin neighbourhood:

- 1. East-west routes: shared pathway along 23 Avenue
- 2. North-south routes: Bicycle routes that link with the breezeway (a sidewalk between lots) in north Meyokumin, at 57 Street and Hewes Way
- A map of the routes is shown on the next page.

Map 2: Mill Woods Station Area Redevelopment Plan – Proposed Active Transportation Network



# **Design Standards**

# **Complete Streets Design and Construction Standards (2018)**

The Complete Streets Design and Construction Standards (CSDCS) integrate best practices in design guidance to support the planning, design and construction of complete streets in Edmonton. The intent is to develop streets that are safe, attractive, comfortable and welcoming to all users in all seasons while also considering operations and maintenance challenges. The CSDCS provides direction on how elements like street type (building orientation, land use, roadway classification) and modal priority need to be considered in the design.

#### **Complete streets process**

The CSDCS provides guidance to create a transportation network that is safe for all modes and context sensitive. To achieve this,

some streets will prioritize certain modes over others. Each street or corridor should be reviewed to determine appropriate modal priority to inform which trade offs are more acceptable. For example, a street that has cycling or a walking priority may accept trade offs such as reducing design speed, diverting traffic or removing parking to allow for better walking and cycling facilities.

#### **Retrofit lens**

The CSDCS addresses designing with a retrofit lens, where designers need to consider constrained rights-of-way, locations of existing buildings, mature trees, utilities, private landscaping as well as ongoing operation and maintenance costs. Retrofit situations like neighbourhood renewal typically require trade offs, which can include:

- Reducing the design speed
- Removing the parking lane on one or both sides of the street
- Removing medians and turning lanes
- Removing vehicle lanes
- Reducing sidewalk widths
- · Acquiring additional land
- Removing trees
- Other relevant guidance specific to the neighbourhood renewal context includes:
- Wider minimum sidewalk widths
- Changes to the design of curb ramps to improve the safety of people walking and rolling
- Guidance on the flexible and alternative uses of the ancillary zone (e.g., patios, parklets, parking and curb extensions)
- Direction for the selection of traffic calming measures
- Design guidance for shared streets and shared alleys

In cases where the CSDCS cannot be met, there is a formal design exception process that is used to document the rationale and grant approval.

# Light Efficient Community Policy No. C576 (2013) and Residential Neighbourhood Street Lighting Renewal Policy No. C564 (2021)

These two policies guide the street and open space lighting that is part of the NRP. The Light Efficient Community Policy provides direction for roadway and outdoor lighting that includes proper lighting for people walking, biking, rolling and driving to ensure safety while minimizing light pollution, power consumption and greenhouse gas emissions. The Residential Neighbourhood Street Lighting Renewal Policy establishes design, construction and equipment guidelines and standards intended to assist the City of Edmonton in achieving proper residential street lighting in neighbourhood reconstruction projects and residential infill projects.

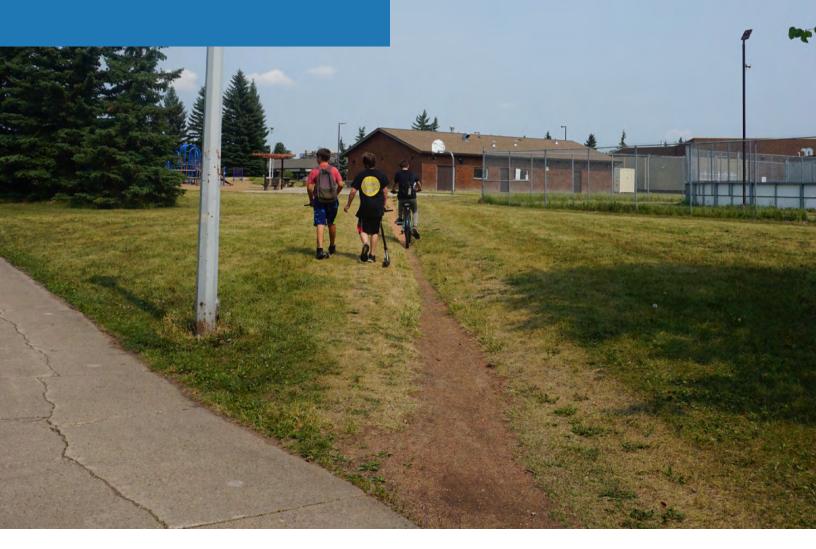
# Parkland Bylaw (Bylaw 2202) and Corporate Tree Management Policy C456C (2020)

The City–owned parkland in Meyokumin falls under the City of Edmonton's Parkland Bylaw and Corporate Tree Management Policy. Any work for open space upgrades that includes work around existing trees or removal of existing trees requires review by the City of Edmonton's Urban Foresters. All trees to remain are to be protected during construction in accordance with the Corporate Tree Management Policy.

#### **Development Permit**

Through the Corner Stores Program on private property and work in Meyokumin's open spaces (City-owned and privately-owned) may require a development permit through Development Services, Urban Form and Corporate Strategic Development. Any variances to the Zoning Bylaw regulations will require a justification letter to indicate if there are unnecessary hardships or practical difficulties to meeting the requirements of the zoning and will include any solutions to reduce the impact of the variance.

# 2 Neighbourhood Analysis



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# **Analysis Approach**

The approach to Neighbourhood Analysis and the creation of concepts for streets and places is based on the philosophy that design needs to reflect the context – current and future.

The purpose of this analysis is to understand the existing conditions and context of the community and identify opportunities, constraints and gaps which are then targeted with design options and analysis of tradeoffs.

The Neighbourhood Analysis is supported with public engagement where analysis findings are shared with the community and their input is sought. The input from the community provides information on their lived experiences that identify areas where the quantitative data from the Neighbourhood Analysis may not be telling the whole story.

The Neighbourhood Analysis was completed through desktop review of geospatial, sociodemographic, and transportation data as well as site visits where notes and photos were used to capture observations. The following areas were analyzed:

- Land ownership and development opportunities
- Commercial nodes and community destinations
- Built form and character areas
- Open space network
- Complete Streets analysis
- Mobility networks
- Infrastructure

In addition, different lenses were also used to analyze the neighbourhood including a Design lens, Gender–Based Analysis Plus (GBA+) lens, and a Winter lens. The following sections present the findings of the analysis and icons associated with each of these noted lenses are included to denote how the opportunities, constraints and gaps can be addressed and/or support each of the design, GBA+ and winter lenses.

### **Analysis Considerations**



#### **Design Consideration**

A Design Consideration represents a finding from the analysis where a design solution may be used to address identified issues, constraints, opportunities and gaps.



#### **GBA+** Consideration

A Gender-Based Analysis Plus (GBA+) Consideration represents a finding from the analysis where addressing the identified issues, constraints, opportunities and gaps would support a more inclusive community.



#### Winter Consideration

A Winter Consideration represents a finding from the analysis where addressing the identified issues, constraints, opportunities and gaps would support a more winter-friendly community.

# Land Ownership and Development Opportunities

Land ownership within the Meyokumin neighbourhood consists mostly of privately-owned residential lots with a cluster of commercial properties along 23 Avenue toward 50 Street and a neighbourhood commercial plaza located on the northwest corner of 57 Street and 19A Avenue. The latter of the commercial areas may be eligible under the City of Edmonton Corner Store Program for interior and exterior improvements.

While the neighbourhood has not changed significantly since it was originally constructed, there has been a small number of permits approved over the past five years for secondary suites, many of which already existed and are being improved to be considered legal suites. There have also been a very small number of new infill developments. As of February 2022, there were no proposed or in-progress rezonings or subdivisions.

As shown in the Municipal Holdings map, parcels owned by the City of Edmonton are a mix of school and open space, pathways, parks and two development sites. The large school and open space area extends along the centre of the neighbourhood from 19A Avenue to Mill Woods Road South. There are two city-owned park sites in the neighbourhood including Meyokumin Park, located in the northwest corner of the school and open space and a small park located along 55 Street. There are two city-owned development sites in the neighbourhood including a residential development consisting of subsidized townhomes and one site which is zoned for low rise apartment buildings but is currently developed as a place of worship. There are linear pathways that extend from 23 Avenue through Meyokumin Park to Mill Woods Road South as well as linear connections in key locations that provide pedestrian access through larger neighbourhood blocks.

While most city-owned properties are parks, open spaces and pathways, there are two properties (identified as Municipal Use Property on the map) that have redevelopment potential. The residential development located at the southeast corner of 57 Street and 22 Avenue (identified as Site 1 on the Municipal Holding Map on the next page ) is approximately 400 metres from the Mill Woods Town Centre, 700m from the Mill Woods Transit Centre, which provides LRT and Bus service, and adjacent to the 23 Avenue and 57 Street commercial nodes. While the property has been developed under the current RF5 (Row House Zone), due to its proximity to the Mill Woods Transit Centre node, there is an opportunity to redevelop the site as a low to mid-rise multi-family development once the existing development has reached the end of its life. In addition, the site located at the northeast corner of 55 Street and 19A Avenue (identified as Site 2 on on the Municipal Holding Map on the next page) has the potential to be developed under its existing RA7 zoning as a low-rise multi-family development. Alternatively, this site could be sold to the current tenants or to an interested developer.

# Land Ownership and Development Considerations:

• Explore opportunities to participate in the City of Edmonton's Corner Stores program with owners of commercial sites



• Evaluate sidewalk conditions in transportation parcels (breezeways) for potential upgrades and improvements to connectivity



 Review relationship between schoolowned lands and public park space



Map 3: Municipal Holdings



# **Commercial Nodes and Community Destinations**

Commercial nodes and community destinations are found centrally and in the north part of Meyokumin. Most destinations can be reached within a 15-minute walk from all parts of the neighbourhood. This includes two elementary schools, two spiritual sites, Meyokumin Park, the Millhurst community hall, a larger commercial area (Meyokumin Retail Centre) and the smaller Meyokumin Shopping Centre.

# Local Community Destinations

# Schools:

#### 1. Meyokumin Elementary School

 The school hosts kindergarten through grade six. Approximately 580 students attend the school, with approximately one-third of these students residing in Meyokumin. Access is provided along 19A Avenue; there is an all-way stop at 57 Street that provides a crossing for people walking, biking and rolling. The school also has a yellow bus service from four fixed routes and public transit stops in close proximity. There is a parking lot which is designated for staff use; parents are encouraged to park elsewhere in the neighbourhood and walk students to school.

#### 2. St Richard Catholic Elementary School

 The school hosts kindergarten through grade six. Access is provided along Mill Woods Road South. For people walking, biking or rolling to school, there is a zebra crossing with overhead flashers to the west of the school, as well as signalized crossings at 54 Street and 62 Street. The school serviced by a single yellow bus service and the nearest public transit stops are provided near the 54 Street and 62 Street intersections with Mill Woods Road South. There is a parking lot next to the school that is designated for staff use.

# **Retail Services:**

#### 3. Meyokumin Retail Centre

• The retail centre is located in the northeast corner of the neighbourhood and hosts a large grocery store, including a pharmacy, a dentist, banks and various retail and restaurants. The retail centre is only accessible from the neighbourhood on the northern section of 57 Street, near 23 Avenue. People travelling from outside the neighbourhood can access the centre from 23 Avenue and 50 Street.

- A berm and wooden fence are located on the property boundary of the Retail Centre. This runs along 22 Avenue which blocks access to the area from the neighbourhood. People walking and rolling to access the retail centre therefore must access via 23 Avenue or 50 Street, creating a trip that can be significantly longer and will deter people from using active modes. A hole in the fence was observed to allow people to shortcut to the commercial centre.
- Bus stops are located on 57 Street, 23 Avenue and 50 Street and provide transit access.

#### 4. Meyokumin Shopping Centre

• This small commercial centre is located at 19A Avenue and 57 Street. The shopping centre hosts a smaller number of services including a pharmacy, laundromat, loan agency, gas station, day care and a mix of retail and restaurants. There is limited space for people walking and rolling when moving within the shopping centre and the environment is oriented towards people driving with vehicle parking dominating the space. Accessible parking is provided in front of the pharmacy.

# **Spiritual Sites:**

#### 5. Hope City Church

 Hope City Church is located in the northwest corner of the neighbourhood. Access is primarily provided along 66 Street and 23 Avenue. There are two connections from the neighbourhood: a small unpaved connection from 65 Street and a breezeway connecting 19A Avenue and 23 Avenue. Both these connections lead directly into the parking lot and do not provide universal access to the church building. The church has large amounts of vehicle parking which reinforces that this is a location to be accessed using a vehicle.

6. South Asian Church Edmonton & Concordia Lutheran

#### Church

• These churches share a building located at the corner of 19A Avenue and 55 Street. There is a parking lot for the spiritual site to the east of the building, with access from 20 Avenue and the adjacent alley. The nearest transit stop is located on 19A Avenue at 55 Street.

#### **Community League:**

#### 7. Millhurst Community Hall

• The Millhurst Community Hall is located directly west of Meyokumin Elementary School and has a capacity of 70 people. The Millhurst Community League serves residents of Meyokumin and Sakaw. The area around the community hall includes a parking lot, outdoor skating rink, playground and a basketball hoop.



# **Community Destinations**

As explained in Edmonton's City Plan (2021), a livable city is one that allows people to easily complete their daily needs within a 15-minute travel time by walking, rolling, biking or transit. The numerous local community destinations and other destinations within a 15-minute travel time of Meyokumin means that residents are not required to travel great distances to access essential services and amenities. The Key Community Destinations Map shows the 15-minute district major destinations, which includes the following:

#### Commercial and Retail

- 1. Mill Woods Town Centre
- 2. Mill Woods Main Street
- 3. Millhurst Plaza
- 4. Kameyosek Shopping Centre

#### Health and Professional Services

- 5. Tawa Professional Centre
- 6. Grey Nuns Community Hospital

#### Community Centre

- 7. Mill Woods Recreation Centre
- 8. Mill Woods Library & Multicultural Centre

#### **High Schools**

- 9. J Percy Page
- 10. Holy Trinity

#### Transit Centres

- 11. Lakewood Transit Centre
- 12. Mill Woods Transit Centre
- 13. Grey Nuns LRT Stop

#### Other Services

14. Edmonton Police Service Southeast Division

# Elementary and Junior High Schools – these are not shown on the map due to the large number of schools

- Ekota Elementary
- St. Clement Elementary/Junior High
- Menisa Elementary

# Commercial Nodes and Community Destinations Considerations

 Review local community destinations and neighbourhood active transportation connections using GBA+ criteria to determine equitable access



 Investigate the addition of a dedicated student drop-off at Meyokumin Elementary School to improve access and increase safety during busy drop-off times



• Consider the addition of missing amenities, such as an off-leash dog park, in or near Meyokumin



- Dan Knott Junior High
- Sakaw Elementary
- Crawford Plains Elementary
- Pollard Meadows Elementary
- Holy Family Elementary/Junior High
- TD Baker Junior High
- Weinlos Elementary
- Kate Chegwin Junior High
- Kameyosek Elementary
- Meyonohk Elementary
- École Frère Antoine Elementary



#### Map 5: Community Destinations in 15-Minute District

# Built Form and Character Areas

Mill Woods was originally conceived as a social planning effort to counter escalating land and housing prices due to inflation and dwindling supply of available land. The neighbourhood was not only to be developed as an independent community but also establish a Land Bank that would provide the means for the City to acquire more land in the future. Annexed by the City of Edmonton from Strathcona County in the 1970's, the City acquired nine square miles for the future neighbourhood that would sensitively integrate single–detached with multi–family housing, ecological systems and transportation systems.

Mill Woods was the first neighbourhood in Edmonton to embrace curvilinear street design, based on the Radburn model from New York which broke free of the traditional grid-system to prevent shortcutting through neighbourhoods. Mill Woods was designed on a foundational principle of "people first," meaning a neighbourhood designed for people, at the human scale and as a priority over vehicles. Within the concept plan for Mill Woods, the neighbourhood structure was to orient eight smaller neighbourhood units around a town centre mixed-use urban core with a significant number of parks and open space throughout. Each of the neighbourhood units was divided into smaller communities which were intended to have their own central focus point, either a commercial node or school site.

Millhurst is one of the eight neighbourhood units, which includes the smaller communities of Meyokumin and Sakaw. Like the other smaller communities within the eight neighbourhood units, Meyokumin is orientated around a school site and has a small commercial plaza in the centre and a larger commercial corridor along the neighbourhood edge. Overall, the neighbourhood has been designed as a curvilinear street network with five points of vehicular access and a central neighbourhood circulator. Smaller local streets with a few cul-de-sacs make up the balance of the street network, with a series of alleys and pedestrian pathways throughout. Most of the neighbourhood is characterized by wide streets and wide, well-manicured lots with mature vegetation. It is evident that most houses were constructed during the same period as there is very little differentiation between the architectural styles. The overall architectural style is minimal traditional suburban split-level development. Permit data suggests there is some development activity, but the vast majority are deck and garage permits with a small number for secondary suites and building expansions.

There is a mix of single-family houses, row houses, semi-detached houses and duplexes. There are also a limited number of low-rise apartment buildings. A distinctive feature in Meyokumin is the comparatively high proportion of row houses. At 30% of dwellings, the proportion of row houses is three times higher than in the City of Edmonton at large. The most frequent dwelling type remains single-detached houses with

# **Built Form Examples:**





Institutional



Low Density (1-2 Storeys)



Townhouse (1-2 Storeys)



over 56% of all dwellings. While the majority of those single-detached houses were developed under more traditional zoning regulations, a portion of the northeast corner of the neighbourhood was developed under "planned lot residential" zoning regulations which allow lot widths to be half (25 feet versus 50 feet) of those under the more traditional zoning regulations.



# **Open Space Network**

Open spaces and open space networks are critical elements of healthy, complete communities. Open spaces provide places to gather, opportunities to practice healthy lifestyles and ecological wellness. Open space networks provide linkages for people to safely and comfortably navigate through their neighbourhood and the city, while also providing habitat corridors to sustain wildlife and important ecological environments.

Meyokumin has several open spaces throughout the neighborhood, varying in size, type and function. The Open Space Map identifies these open spaces, as well as illustrates a 400m access buffer surrounding the open spaces. The open spaces have been separated into three categories based on aspects such as form, function and ownership. An additional section related to street trees has also been included.

- 1. Open spaces owned by City of Edmonton
- 2. Publicly accessible school sites
- 3. North Open Space Walkway
- 4. Street Trees

### Access to Open Space and Universal Accessibility

The open space map included with this section identifies a 400 metre "as the crow flies" access zone around the open spaces in Meyokumin. This zone represents the residents that may have access to park space within a 400-metre walking distance. Both Breathe: Edmonton's Green Network Strategy and The Urban Parks Management Plan (UPMP), as well as best practices, identify 400m as the appropriate walking distance for open space access.

As the open space map illustrates, most residents of the Meyokumin neighbourhood have an open space within a 400m walking distance. The City of Edmonton's Accessibility for People with Disabilities Policy states that an accessibility lens will be applied to all City–owned infrastructure, which includes open spaces, though it should be noted that the UPMP caveats that while open spaces are accessible, it doesn't imply that all elements of all open spaces accommodate the needs of all users. Within the Meyokumin neighbourhood, Meyokumin Park as well as the playground east of St. Richard School and the open space walkway are accessible for all users. While the 55 Street Pocket Park has sidewalks surrounding the open space, they do not connect to sidewalks along the roads or curb ramps, so users with mobility aids cannot easily access the open space.

#### **Open Spaces in Winter**

Open space functionality in winter is an important consideration. Comfort and safety are as important in the winter months as they are in the summer, and factors such as wind exposure, large amounts of shade and lack of access and amenities are factors that deter people from using spaces in the winter. When analyzing the open spaces in Meyokumin, the following elements were reviewed with a winter lens:

- Accessibility and amenities
- Microclimate (shelter from wind and access to sunlight)
- Lighting
- Interest and activities

Map 7: Open Space Network



## Open Spaces Owned by City of Edmonton

#### **Meyokumin Park**

Meyokumin Park is located in the centre of the neighbourhood at the intersection of 19A Avenue and 62 Street. The open space is owned by the City of Edmonton. There are several amenities in the park space, including the Millhurst Community League building (a facility shared by the Meyokumin and Sakaw neighbourhoods), skating rink, basketball hoops, playground, furnishings, open space, paved walkways, parking and mature tree and shrub plantings.

The playground and basketball sites are located about 30m back from the roadway frontage and there are many mature coniferous trees planted between the road and the playground as well as around the playground itself. This obscures the sightlines to these play spaces. The skating rink is located to the south of the playground and there are two large open spaces, one west of the playground along 19A Avenue / 62 Street and one to the south of the skating rink. The west open space has many mature deciduous and coniferous trees but maintains adequate visibility from the sidewalk frontage. The open space to the south of the skating rink includes a paved sidewalk and has many mature deciduous and coniferous trees. It has limited visibility from the west and south sides and adequate visibility from the east and north sides. The sidewalk is enclosed by fences on the west and heavy mature planting on the east, completely obscuring sightlines into and out of the space. Lighting exists along the sidewalk and at the playground and basketball sites and is a mix of high-pressure sodium and LED luminaires. There are concrete sidewalks through the open space and to the playground and community league building, making the open space accessible for all users.



### **Mill Woods Sports Park**

Nill Woods Sports Park is not located in the Meyokumin neighbourhood, however, is an important community destination. This district level park has many activities for both summer and winter, including a spray park, toboggan hill, picnic sites, a small lake, trails and sports fields. People walking from Meyokumin to the Mill Woods Sports Park can use the shared pathway on the west side of 66 Street or the sidewalk on the south side of 23 Avenue while people biking can only access via the shared pathway on the west side of 66 Street. Perceived safety of the crossing point at 19 Avenue could be a barrier to people accessing Mill Woods Sports Park by foot or by bike.



#### **55 Street Pocket Park**

Pocket parks are small parks that are intended to ensure residents have a park opportunity a 10-minute walk from their home. There is one pocket park in Meyokumin located at the intersection of 20A Avenue and 55 Street. This open space is 0.2 hectares and has plenty of mature deciduous and coniferous trees, a small tot playground, some site furnishings and a small hill.

This pocket park has one road frontage on the west side and is lined by houses on the north, east and south sides. Because of the coniferous tree plantings and small hill along the road frontage, sightlines into the park are partially obscured. There is hard surface access into the space from many directions, however all the sidewalks leading to the open space connect to road frontages with no sidewalk or curb ramps, making it difficult for people with mobility challenges to access the space from the west. Additionally, it appears the pathways on the north, east and south edges are in the road right-of-way and may have previously been alleys. There is an existing chain bollard system on the southwest entry and evidence that there were once bollards in place at the other three entries, but they have been removed over the years. There is one light at the playground space and one streetlight on 55 Street that faces away from the open space; there is no lighting in the accesses leading to the open space.



#### **Publicly Accessible School Sites**

There are two publicly accessible school sites in Meyokumin. These open spaces provide additional value to the residents of Meyokumin and to the greater Edmonton sports community. Meyokumin and St. Richard school fields offer a variety of soccer and baseball facilities, and St. Richard also has a playground, mini pump track and site furnishings. Except for the playground at St. Richard school, the publicly accessible school sites are not universally accessible.



### North Open Space Walkway

The north–south walkway is a wide corridor with an existing sidewalk and mature trees. This walkway is an important route to connect Meyokumin residents to internal and external open spaces, but also provides open space value itself due to its size and proximity to residences. The open space walkway has a paved sidewalk, mature tree plantings and lighting. There are fences on the east and west sides of the open space walkway except for the west side at the north end, which is open to the church parking lot. At the entry to the open space walkway on 19 Avenue, there are coniferous trees which partially obscure the sightlines into the space. The lighting along the sidewalk is a mix of high-pressure sodium and LED luminaires.

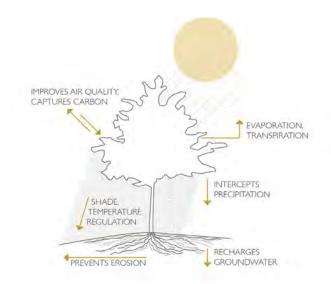


#### **Street Trees**

Street trees are considered the ultimate green infrastructure by the American Society of Landscape Architects. Green infrastructure is a way of designing with nature to mimic the important role that natural areas have in mitigating the impacts of climate change. While typically tied to discussions and interventions related to stormwater management, green infrastructure is also about reducing atmospheric temperature increases by providing transpiration (the release of water vapour from plant material leaves), reducing the reflection of heat off paved surfaces and increasing carbon capture. Together, these efforts help to increase the social and environmental health of our city.

Because much of the focus of green infrastructure is on the capture and slow release of storm water, trees are often overlooked in the multiple benefits they provide in stormwater management, temperature regulation and noise pollution.

The Meyokumin neighbourhood is profoundly lacking in street trees. This is a result of the dedication of much of the road right-of-way to vehicle space or the presence of narrow rights-of-way in the neighbourhood. Given this, there is very little opportunity for water to be captured prior to reaching the impermeable road surface which puts a great strain on the traditional stormwater collection system and hinders the natural infiltration of water.



#### **Open Space Considerations:**

• Consider opportunities to honour the Indigenous history of the land within the public spaces

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 Review spaces through a Crime Prevention Through Environmental Design (CPTED) lens to ensure spaces offer natural surveillance and feel safe for all users.



• Ensure open spaces meet the accessibility needs of all users within the neighbourhood.

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• Explore safe routes and crossings to popular open spaces and recreation resources inside and outside of the community boundary

## **()**

• Consider the frequency and placement of furnishings to address the varying needs of users and to optimize winter use.



• Review the locations of plant material and structures in open spaces to evaluate natural surveillance and wind breaks to enhance the feeling of safety and comfort.



• Review winter maintenance and amenities, such as seasonal lighting, to support safe and comfortable winter use.

\*

 Explore ways to include boulevards and street trees as part of green infrastructure implementation to reduce the amount of impermeable surfaces in the neighbourhood



# **Complete Streets Analysis**

The Complete Streets Design and Construction Standards (CSDCS) are used to aid designers and decision makers in the creation of streets that are safe, welcoming, attractive, comfortable and functional for all users in all seasons. These streets are intended to support and enhance the unique characteristics of the neighborhoods and districts they serve.

The City of Edmonton uses a set of principles to help guide the planning, design and operation of streets and aid in the evaluation of possible designs. These principles are described in the CSDCS and include:

- The network of streets, transitways and off-street pathways accommodates all users and allows for efficient and high-quality travel experiences
- The transportation network provides travel options for users of all ages and abilities that are safe, universally designed, context sensitive, and operable in all seasons (including winter)
- Streets are adaptable by accommodating the needs of the present and future
- Streets contribute to the environmental sustainability and resiliency of the city
- Both direct and indirect costs are considered, as well as the value of the public right of way and the adjacent real estate
- Streets are vibrant and attractive people-places in all seasons to contribute to an improved quality of life

Understanding and describing the context in which a street is located is important in providing direction for the planning, design, and reconstruction of Meyokumin roads. The CSDCS uses three elements to describe the context of a street:

- land use
- relationship of the building to the street
- functional classification

The sub-categories within these three elements are shown in the table below, and those that are relevant to Meyokumin's Neighbourhood Renewal are shown in **bold text.** 

### **Meyokumin Street Typology**

The typology for each street that is included in the scope of work for the neighbourhood renewal is shown in the Complete Streets Analysis map.

Table 1: Street Typologies	
Typology Element	Typology Sub-Category
Land Use Context	Residential
	Community Destinations and Open Spaces
	Commercial / Mixed Use
	Industrial
Relationship of the Building to the Street	Street Oriented
	Non-Street Oriented
Functional Classification	Freeway
	Arterial
	Collector
	Local (including service roads)
	Alley
	Shared Street

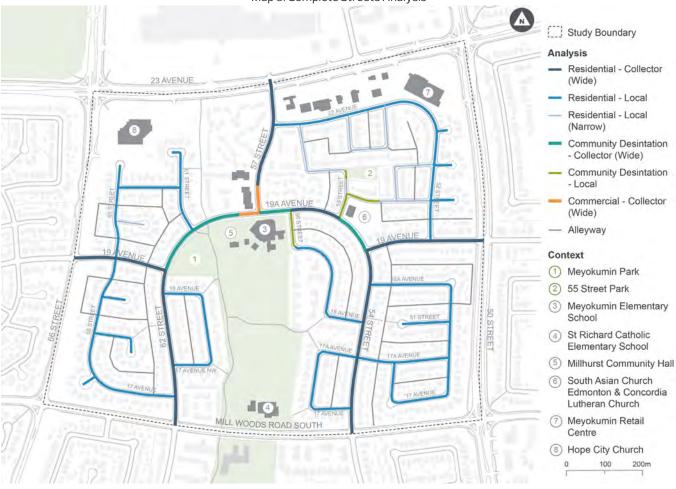
The typology that represents the **Land Use Context** of the neighbourhood is predominantly Residential, but some streets adjacent to parks, open spaces and community destinations would be both Residential and Community Destinations & Open Spaces typologies. This includes 19A Avenue around Meyokumin Elementary and Millhurst Community Centre to the west, as well as 19A Avenue next to South Asian Church Edmonton & Concordia Lutheran Church to the east. There is one small section of commercial street where Meyokumin Shopping Centre is located on 57 Street.

Pedestrian Only Street

The **Street Orientation** category speaks to the relationship that the adjacent buildings have to the street and whether the primary access and accommodation is towards access on foot versus that of a person driving. The building relationship to the street in the neighbourhood is primarily street oriented. However, there are several; non-street-oriented sections in the neighbourhood, this includes:

- 20 Avenue the section of the street north of the South Asian Church and Concordia Lutheran Church is focused on vehicle access, with a parking lot facing the street
- 22 Avenue 22 Avenue south of Meyokumin Retail Centre is lined with a fence. This blocks access to the retail centre from the south for people walking and rolling

Map 8: Complete Streets Analysis



- 57 Street

   there are sections along the street that have large building setbacks, as well as blank frontages and vehicle parking lots at the Meyokumin Shopping Centre
- It should be noted that the arterials and collectors that surround the neighbourhood (66 Street, 23 Avenue, 50 Street, and Mill Woods Road South) can be considered to be non-street oriented but are outside of the scope of work for this Neighbourhood Renewal and not considered in this analysis.

The third typology element is **Functional Classification** and is limited to collector, local and alley in the neighbourhood:

- The collector streets in the neighbourhood are 57 Street, 19 Avenue, 62 Street and 54 Street and provide links with the exterior of the neighbourhood
- Several alleys are found in the study area. They provide a utility function, with access to the rear of properties and private garages. People walking and rolling are expected to share the road with people driving along alleys
- The remaining streets in the study are local classification and provide primary access to residential areas

Standard drawings exist to aid in the design and decisionmaking for all street types and provide right-of-way (ROW) and roadway width, in Meyokumin:

- Collector streets have a 24.4m ROW and 11.5m road width (noted as "wide" on the Complete Streets Analysis Map)
- Local streets, which encompass much of the neighbourhood, vary in ROW with most sections being 18 – 20m and have 9.0m roadway width
- There are some and some narrower local streets which have a 15m in ROW and a 9.0m roadway width. These narrower local streets are only found in the north–east of the neighbourhood, along 20 Avenue, 21 Avenue and 53 Street (noted as "narrow" on the Complete Streets Analysis Map)

The predominantly wide streets in the neighbourhood reinforces that these streets are currently oriented towards vehicle travel. This introduces longer crossing distances for people walking and rolling and encourages people to drive at higher speeds.

# **Mobility Networks**

Meyokumin has a curvilinear street layout, with collector roads dividing the neighbourhood into five sections. A wide collector road, Mill Woods Road South, separates Meyokumin from the adjoining neighbourhood of Sakaw to the south. All other neighbourhood boundaries for Meyokumin, 66 Street, 23 Avenue and 50 Street, are arterial roads.

Walking, rolling and transit connections are found throughout the internal neighbourhood street network. Alleys and breezeways are also located throughout the neighbourhood, providing some opportunity for shortcutting on foot or bicycle to access local destinations and bus stops. The north–south breezeway that connects 23 Avenue to Mill Woods Road South provides a key separated connection for people travelling on foot around the neighbourhood.



## **Walking and Rolling Network**

Sidewalks are provided on both sides of the street in Meyokumin in most areas however there are several areas where there are gaps, as shown on the Walking and Rolling Network map. All sidewalks are curbside walks with the 1.5-metre-wide sidewalk directly adjacent to the travelled way.

There are several breezeways (sidewalks between lots) and walkways in the neighbourhood. These paved connections shorten the walking distance for residents to local destinations.

While the core walking infrastructure is present through most of the neighbourhood, curb ramps, which allow people using mobility aids, pushing strollers or children on bikes to transition from the sidewalk onto the road, are sometimes missing.

Crossings in the neighbourhood are mostly unmarked and no crossings within Meyokumin are signalized, as is typical in residential neighbourhoods. People are therefore expected to travel longer distances to reach a marked crossing or cross at unmarked crossings. There are two marked crossings, one all-way stop with parallel bars at the intersection of 19A Avenue and 57 Street and one pedestrian crossing with zebra markings across 19A Avenue east of 61 Street. Externally, there are 12 intersections that facilitate crossing major roads to exit or enter the neighbourhood: 8 which are fully signalized, 2 with half signals and 2 with overhead flashers. The two half signals on Mill Woods Road South also include transit priority devices.



#### Map 10: Walking And Rolling Network

In addition to appropriate infrastructure and location of services, permeability of a neighbourhood is important to encourage people to use active modes of transportation for daily activities. The permeability of Meyokumin is limited to seven points; this includes a mixture of streets and breezeways.

There are several **barriers to neighbourhood permeability**, including:

- Northeast a wooden fence marks the property boundary of Meyokumin Retail Centre. This is positioned along the northern side of 22 Avenue and prevents access for people walking and rolling between the northeast quadrant of the neighbourhood. The desire to access this area more directly is made evident by the hole in the fence and well-worn path in the grass. Additionally, the alley north of 19 Avenue deadends at 50 Street with no connection to the shared pathway. While walking is possible through the bollards and across the grassed area, this creates a barrier for universal accessibility and neighbourhood permeability.
- Northwest a wooden fence marks the property boundary of Hope City Church and creates a barrier to movement in and out of the northwest quadrant. There is a narrow opening in the fence at the end of the 65 Street cul-de-sac that enables passage for pedestrians on foot that leads into the church parking lot. Additionally, there is an alley that connects with 65 Street near the edge of the 66 Street right-of-way. This connection could be used to increase connection to 66 Street, however, there are no sidewalks that connect to the alley and there are no sidewalks on the east side of 66 Street south of the Hope City Church parking lot access.
- Southeast there are no breezeways along the east side of the neighbourhood that provide access from the interior of the neighbourhood with the exterior walking network (50 Street). An alley connects with 51 Street near 50 Street however, there is no sidewalk that connects the alley to the shared pathway. Additionally, the alley west of 54 Street dead-ends at Mill Woods Road South with no connection to the sidewalk. While walking is possible through the bollards and across the grassed area, this creates a barrier for universal accessibility and neighbourhood permeability
- Southwest similarly, there are no breezeways in the southwest quadrant. An alley connects with 65 Street near the edge of the 66 Street right–of–way. However, there are no sidewalks that connect to the alley and there are no sidewalks on the east side of 66 Street south of the Hope City Church parking lot access.

#### **Permeability Barrier Examples:**



Northeast - Wooden Fence





Southeast - Lack of Exterior Connections



Southwest – Lack of Exterior Connections

Map 11: Walking & Rolling Permeability



### **Bike Network**

There is a shared pathway on the east side of 50 Street that is directly accessible by Meyokumin residents, as shown on the Bike Network map. Another shared pathway is also located on the east side of 66 Street, which requires crossing the arterial road to access the facility. Both these shared pathways provide connections north and south of the neighbourhood and to other paths throughout Mill Woods.

There are no designated bike routes within the Meyokumin Neighbourhood. However, there is a breezeway and path network that runs through the central open space and connects the northern and southern boundaries of the neighbourhood. Despite not being designed specifically for biking due to its narrow width, the connection is likely used by people biking through the neighbourhood. The southern boundary of the neighbourhood, Mill Woods Road South, is also designated as a shared roadway with higher traffic. This is likely to provide an unwelcoming environment for people biking due to the high volumes of vehicle traffic (see Driving Network Section).

The Edmonton Bike Plan provides a strategic planning framework to support the implementation of The City Plan's intentions and directions related to cycling and the aim to support cycling for people of all ages and abilities in all seasons and for all types of trips. It identifies 23 Avenue, the northern boundary of the neighbourhood, as a future district connector route. Based on the placement and type of other biking infrastructure east and west, it is anticipated that the future facility will likely be a shared pathway running along the north side of 23 Avenue. The Bike Plan does not identify any other future routes within Meyokumin, but it specifically identifies Neighbourhood Renewal as an opportunity to add other neighbourhood bike routes if community needs are identified.



### **Transit Network**

Meyokumin residents have direct access to two local/community routes. Route 514 runs one-way through Meyokumin and Sakaw on the central collector roads, connecting both neighbourhoods to the Mill Woods Transit Centre. Routes 509A/B work in tandem, one running clockwise and the other counterclockwise along the ring formed by Mill Woods Road East, South and West, and 38 Avenue. These paired routes also connect to the Mill Woods Town Centre and the Mill Woods Recreation Centre. As they run directly on 28 Avenue to access these destinations, they will also provide direct connection to the Valley Line's Mill Woods LRT Station once the line starts to run. Route 514 runs directly through the Mill Woods Town Centre rather than on 28 Avenue and would require a short walk to access the LRT stop. To the north, route 56 provides connections between Mill Woods and the Century Park Transit Centre, connecting to the Capital LRT Line.

Bus stops are located around the neighbourhood and are near to key community destinations including both elementary schools, spiritual sites, open space and retail areas. Most bus stops have seating and shelters along 57 Street. There are less bus stops with facilities along 62 Street and no facilities along 54 Street.



#### Map 13: Transit Network

### **Driving Network**

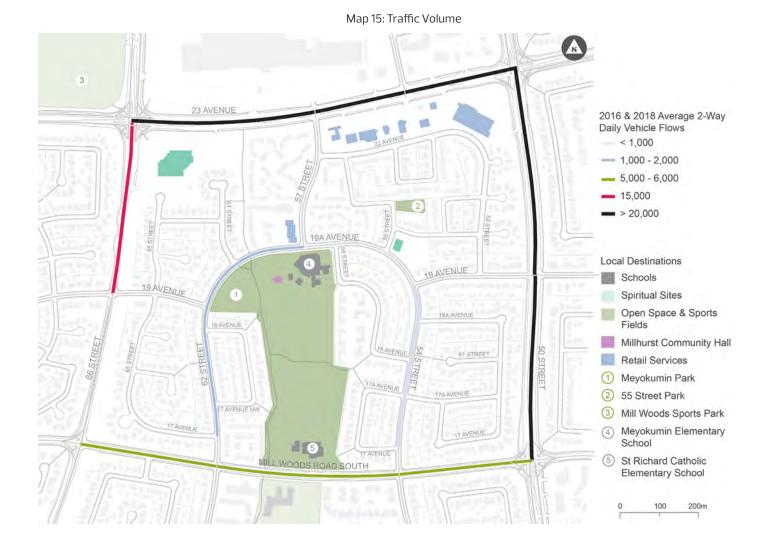
Meyokumin has a curvilinear street layout, with collector roads dividing the neighbourhood in five sections. None of these collector roads allow people driving to directly cross the neighbourhood from boundary to boundary without making a turn. A wide collector road, Mill Woods Road South, separates Meyokumin from the adjoining neighbourhood of Sakaw to the south. All other neighbourhood boundaries for Meyokumin, 66 Street, 23 Avenue, and 50 Street, are arterial roads. These vehicle-oriented streets have limited crossing points and are a barrier to movement for people walking and rolling.



The 2016 and 2018 average 2-way daily vehicle traffic flows are shown in the Traffic Volume map. It shows that the arterials and the collectors that surround the neighbourhood see the highest vehicles flows:

- North 23 Avenue, 20,000 23,000 vehicle flows
- East 50 Street, 25,000 30,000 vehicle flows
- South Mill Woods Road South, 5,000 6,000 vehicle flows
- West 66 Street, 15,000 vehicle flows

There is limited traffic data collected within the neighbourhood, only two surveys were completed: 62 Street noted to experience 1,000–2,000 vehicle flows and 54 Street receives reduced vehicle flows (<1,000). These traffic volumes are consistent with the classification of the roadways.



### **Traffic Safety**

The Edmonton Safe Mobility Strategy 2021–2025 draws a path to eliminate severe traffic injuries and fatalities. As part of this effort, a High Injury Network, where a disproportionate number of severe crashes occur was identified for each of four modes: walking, biking, motorcycling and driving. In Meyokumin, 23 Avenue east of 57 Street adjoining Meyokumin is identified as part of the High Injury Network for driving.

#### **Crash Location**

The crashes within the neighbourhood were reviewed for 2016–2020 and are shown on the Injury Crashes map. During this period, 89% of the crashes in this neighbourhood were property damage only (PDO) crashes. The injury crashes across the neighbourhood were analyzed and mapped for 2016–2020, PDO crashes were excluded. The analysis shows that most injury crashes are located on the arterials and collectors that surround Meyokumin, with crash hotspots at 23 Avenue / 50 Street, 23 Avenue / 66 Street, 66 Street / Mill Woods Road South and 50 Street / Mill Woods Road South. Seven fatal and major crashes account for the total 75 injury crashes. These occurred at the surrounding roads noted above.

Within the neighbourhood street network, a small number of injury crashes are noted. These have taken place at and were minor injuries:

- 19 Avenue / 54 Street
- 18 Avenue / 56 Street
- 19 Avenue / 62 Street
- Mid block of 19 Avenue

The injury crash location data was disaggregated by injury type only, not by mode (people walking, cycling and driving). The following can be inferred:

- No fatal or major injury crashes have occurred within the neighbourhood. These crashes only occurred outside the neighbourhood on the surrounding arterial and collector network.
- In total, there were two fatal and major pedestrian injury crashes, and one minor pedestrian injury crash. These occurred outside of the neighbourhood along these boundary roads.
- 23 Avenue is on the High Injury Network map for bicycle

crashes (1 serious injury, 4 minor injury crashes), but it is unclear if these crashes took place along the section of 23 Avenue near to Meyokumin.

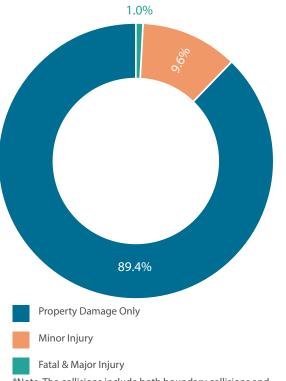
• From the data analysis, no fatal or major cyclist injury crashes were recorded within the neighbourhood, with only one minor crash occurring. However, it should be noted that there is a lack of cycling provision in the neighbourhood and this likely means very few people cycle.

### **Crash Cause**

Among all the crashes (2016–2020), the top causes for driver–at–fault were following too closely, left turns across the path, failing to observe traffic signals and changing lanes improperly. For vulnerable road users the following road user crash analysis is provided:

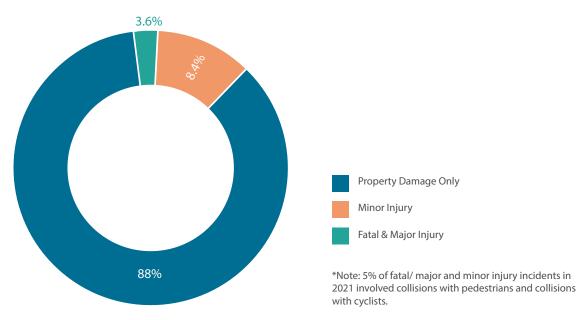
- Mill Woods Road South & 50 Street:
  - The person cycling was recorded to run a red light
  - Both pedestrian crashes involved left turning vehicles, where pedestrians had right-of-way
- Mill Woods Road South & 54 Street:
  - Pedestrian in crosswalk with right-of-way was struck by left turning vehicle

#### Figure 15: Crash Severity – Number of Incidents 2016 – 2020

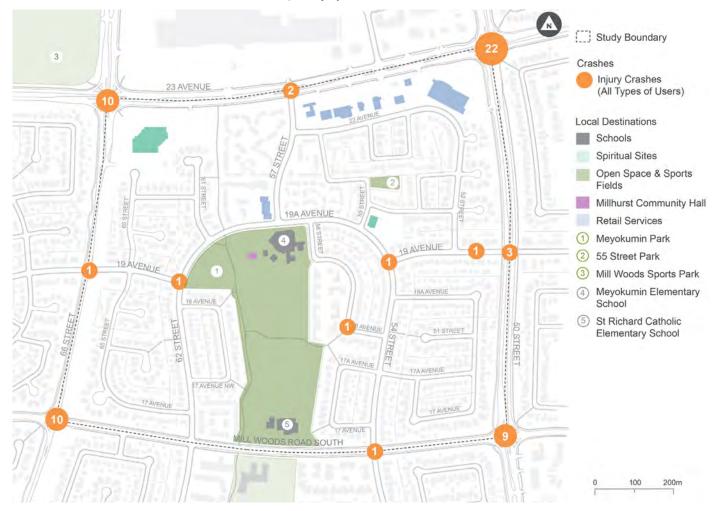


\*Note. The collisions include both boundary collisions and collisions within the neighbourhood.

#### Figure 16: Crash Severity - Number of Incidents 2021 - 2016



Map 16: Injury Crashes 2016–2020



#### Speeding

Speed surveys were conducted at three locations within Meyokumin between 2016 and 2020. Due to the lack of speed surveys conducted within the neighbourhood itself, it will be critical to collect public engagement data on lived experiences from the residents of Meyokumin, and what they have perceived in regards to traffic volumes and speeds.

The Vehicle Speed map shows the locations where speeds were measured and differences between the 85th percentile speed and the speed limit at the time of measurement. The 85th percentile indicates that 85% of people driving travel at this speed or slower. If the 85th percentile speed is higher than the speed limit (indicated by a yellow, orange and red line on the map), it is generally considered that there is a speeding issue at that location.

Most notable difference in posted speed limit and actual operating speed occurs along 50 Street and Mill Woods Road South. People driving on 50 Street and the middle section of Mill Woods Road South often exceed the speed limit by 10 to 15 kilometres per hour in both directions. It is important to note that speeding along Mill Woods Road South occurs outside of St Richard Catholic Elementary school.

Within the neighbourhood, speeding 5–10km/h occurs along 62 Street and 54 Street. Closer to Meyokumin Elementary school, speeding occurs within 0–5km/h.

Posted speed limits in Meyokumin along the neighbourhood streets (locals and collectors) was changed in 2021 to be 40km/h except at playground/school areas where the speed limit is 30km/h.



Map 17: Speed Survey

### Mobility Networks Considerations:

 Review the minimum width of sidewalks in context with current standards, diverse GBA+ needs of the community and the impact of snow and ice removal policies on the functionality of a given sidewalk design



• Explore ways to add boulevards with street trees to provide room for snow storage, support traffic calming and more comfortable places for people to walk, bike and roll



• Review street crossings and access to transit stops within the neighbourhood and at surrounding intersections, particularly at locations with a history of crashes, to ensure crossing treatments and available infrastructure promote safe and comfortable use for all users



 Investigate ways to provide traffic calming in the neighbourhood to slow vehicle speeds and create a safer environment for people of all ages and abilities to use active modes of transportation



 Review barriers to permeability in the neighbourhood and investigate solutions to better connect people walking, biking and rolling to transit stops, schools and other community destinations



• Investigate the potential to provide dedicated biking infrastructure in the community based on principles outlined in the Bike Plan and community input



 Evaluate bike network connections within the neighbourhood and to the surrounding bike and pathway network to ensure safe, comfortable connections are available from within Meyokumin to bike routes and destinations outside the neighbourhood for all ages and abilities in all seasons



 Review bus stop locations and incorporate improved bus stop infrastructure into the streetscape design



 Consider the connections to transit facilities outside the neighbourhood, including the Mill Woods Transit Centre and Valley Line LRT connection, and identify improvements in walking, biking and rolling infrastructure and wayfinding



 Use evidence-based industry design best practices aligned with Edmonton's Vision Zero policy and Safe Mobility Strategy to develop street and intersection designs that improve safety for Meyokumin residents and visitors



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# Infrastructure

## Existing Infrastructure Analysis

The neighbourhood infrastructure within Meyokumin includes underground utilities such as gas, water, power, telecom and separated sanitary and storm lines. Above ground infrastructure includes lighting, power infrastructure and street furnishings such as seating areas in parks and open spaces.

Meyokumin has a separated storm and sanitary system throughout the neighbourhood. There is also a large storm line that runs along the west side of the neighbourhood in the 66 Street road right-of-way and outfalls into Mill Woods Sports Park.

The location of the storm and sanitary sewers varies throughout the neighbourhood but is typically located near the curb line or in the centre of the back alley.

In some locations, the storm line runs within walkways lots or, in one case, along the back of the adjacent sidewalk (at the intersection of 19A Avenue and 62 Street).

The water mains are mostly located close to the curb line under the roadway or occasionally in the alley. On 57 Street, the water line runs outside of the roadway, along the east side property line. Power and telecom services are provided at the front of the properties with gas is provided through the rear of properties from the back alleys. Main gas distribution lines are present on some streets to connect to service branches located in the back alleys. ATCO gas has plans to complete valve replacements throughout the neighbourhood however the scope and timelines are yet to be determined.

Power lines are buried in Meyokumin and are located at the front of the properties behind the existing sidewalk. Above ground power infrastructure, such as switching cubicles and transformers, is also located behind the existing sidewalks or in the existing streetlight bases. There are high-power transmission lines located around Meyokumin in the road rights-of-way for 66 Street (east side), 23 Avenue (north side), 50 Street (west side) and Mill Woods Road South (south side).

Lighting is an important aspect of safety and comfort along roadways and in open spaces. Street and open space

lighting is present along all roadways, along many of the neighbourhood breezeways and in some of the open spaces. High pressure sodium and LED luminaires are used in the lighting within the neighbourhood.

There are also several community mailboxes built into the streetscape, these are positioned on the edge of the sidewalks, as shown on the Community Mailboxes map.

#### Infrastructure Considerations:

• Assess utility impacts and potential relocations in conjunction with options development



• Confirm depths of utilities through hydrovac where impacts from design will require excavation



• Evaluate lighting levels at crossing locations, major intersections and in open spaces to determine the need for upgrades to the existing overhead lighting

• Explore the incorporation of community mailbox locations into community gathering nodes

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Map 18: Community Mailboxes

