MEYONOHK

NEIGHBOURHOOD AND ALLEY RENEWAL

URBAN DESIGN ANALYSIS | CHAPTER 1: BACKGROUND ANALYSIS

MARCH 2024 - FINAL

Edmonton

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SECTION 1 INTRODUCTION

1.1 Project Background

Meyonohk is a mature neighbourhood in the Mill Woods Area of southeast Edmonton. In 2023, the City of Edmonton began the Meyonohk Neighbourhood and Alley Renewal project.

The City of Edmonton's Neighbourhood and Alley Renewal program, part of the Building Great Neighbourhood (BGN) initiative, outlines cost-effective and long-term strategic approaches to renew and rebuild infrastructure within mature neighbourhoods and along collector roads. The scope of work for Neighbourhood and Alley Renewal typically includes the following elements:

- Replacement of sidewalks, local roads and collector roads
- Upgrading street lights
- Construction of curb ramps (drops in the curb at crosswalks) and other intersection improvements

- Replacement of alleys
- Addressing missing links in the sidewalk and bike networks
- Opportunities to improve other City–owned areas, such open spaces and parks, will be reviewed
- The Neighbourhood and Alley Renewal program also offers the opportunity for two types of cost-sharing Local Improvements: sidewalk reconstruction and decorative street lights

The intention is to make desired upgrades and enhancements in coordination with the Neighbourhood and Alley Renewal program and leverage other funding sources.





1.2 Project Approach and Process

Designing the community's public spaces in a way that enhances the livability of the neighbourhood includes how public spaces function, look and feel. The Project Team will focus on how streets, parks, pathways and open spaces are organized, function and connect with larger citywide networks.

When conducting an Urban Design Analysis (UDA), the Project Team looks at the neighbourhood through the eyes of someone who lives there. The existing urban context, character areas, design aesthetics, access to day-to-day community destinations and connectivity with other parts of the city are all reviewed. The team also considers public safety, accessibility (the ease of all people to move through or use spaces) and Crime Prevention Through Environmental Design (CPTED), a design practice focused on creating spaces that minimize crime and safety issues.

The key objectives of the UDA include:

- Identifying gaps and opportunities within the neighbourhood from different lenses, such as walkability, connectivity and universal design
- Presenting concepts developed based on City policies and programs, and considerations for technical requirements and public input. Concepts will inform Neighbourhood and Alley Renewal efforts and develop a community plan to inform future City initiatives in the neighbourhood



Meyonohk Neighbourhood, looking northeast towards Meyonohk Park

The Project Team will use the UDA to support decision making throughout the Neighbourhood and Alley Renewal process (concept/design/build). Concepts selected for implementation will require detailed design before construction and consideration of appropriate funding sources.

The Meyonohk UDA is part of the Concept Phase to align with the Neighbourhood and Alley Renewal Road Map (refer to previous page) and the public feedback collected. The key UDA steps in the Concept Phase are:

- Gathering background information needed to build an in depth understanding of the neighbourhood and its context to inform planning and design activities
- Building a neighbourhood vision for livability and transportation with the community and generate ideas to achieve this vision and address issues
- Developing options to realize the community vision by analyzing neighbourhood urban design features
- Developing a refined set of draft designs that bring the community vision to life

The draft design recommended within the UDA will inform the development of construction drawings.

Roads and Open Space in Project Scope

This is a map showing the Meyonohk roads that are within the Neighbourhood and Alley Renewal project. Open space shown on the map is also within the project scope.

MAP LEGEND







SECTION 2 NEIGHBOURHOOD BACKGROUND AND CONTEXT

2.1 Neighbourhood Background

STUDY AREA

This Neighbourhood and Alley Renewal project includes the southeast Edmonton neighbourhood of Meyonohk in Mill Woods. The neighbourhood is bounded by 28 Avenue to the north, 23 Avenue to the south, 91 Street to the west and Mill Woods Road to the east.

The project scope includes the local and collector roads within the neighbourhood. The arterial roads on the perimeter of the neighbourhood are not included, though the project will consider road and sidewalk connections to the arterials. The wide naturalized trail corridor (road right-of-way) along the west boundary (along 91 Street) is not included in the project scope.

Alleys are also included in the scope of the project and have been reviewed as part of this document.

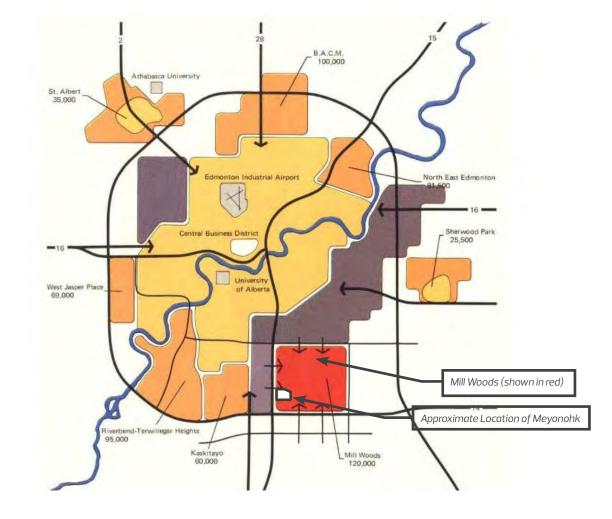
2.2 Neighbourhood Context

HISTORY OF NEIGHBOURHOOD

Meyonohk is one of 27 neighbourhoods of Mill Woods and is one of three neighbourhoods in the community of Lakewood. Meyonohk is within the Mill Woods and Meadows District and in the Karhiio ward. This land is traditional Treaty 6 Territory and within the Métis Nation of Alberta Region 4. For centuries, the area has been home to many First Nations (including the Cree, Dene, Anishinaabe, Nakota Sioux and Blackfoot) as well as Métis and Inuit communities.

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.

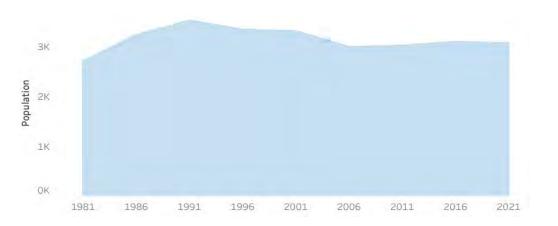
The Mill Woods land bank was assembled in 1970 by the Government of Alberta because of concern over the rising cost of serviced residential land in the Edmonton area. Mill Woods was named for Mill Creek which crossed it and the groves of parkland forest trees that stood there. By 1971, a development plan had been prepared by the City of Edmonton. The City began to purchase the land, subdivide it and sell residential and commercial building lots. Residential development in Meyonohk began in 1975 and most development was completed by the early 1980s.

As a reminder of the complicated history of the area, the neighbourhoods in south and east Mill Woods, including Meyonohk, 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. At the time of its naming, Meyonohk was believed to be mean "an ideal spot" in the Cree language. This name was selected because it was considered to be reflective of the neighbourhood's good access to the recreational facilities of nearby Mill Woods Park and to the major areas of employment in the industrial areas to the west and north.

Mill Woods Pre-Development Context, From Mill Woods Development Concept, 1971



Age Distribution



MEYONOHK URBAN DESIGN ANALYSIS-FINAL | 7

2.3 Neighbourhood Statistics

The following sections provide an abbreviated summary of the demographic statistics for the neighbourhood. Data has been obtained from the 2021 Federal Census.

AGE DISTRIBUTION

In Meyonohk the largest demographic is the working age group (25 – 54 years old) with just under 40% of the population. The next two largest demographics are children (0–14 years old) with almost 19% of the population and youth (15–24 year old) with 14% of the population. Meyonohk's age distribution is similar to the rest of Edmonton with a slightly greater percentage of seniors (3% above city average).

POPULATION CHANGE OVER TIME

The population of Meyonohk has remained relatively stable since its full development and has ranged between 3,000 and 3,500 since the 1990s.

City of Edmonton average

66.2%

Non-Visible

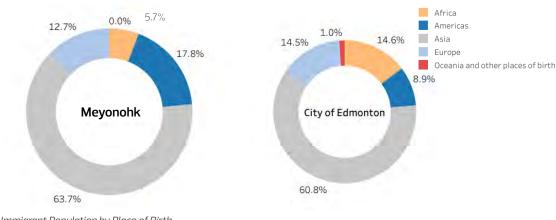
Minority

Meyonohk

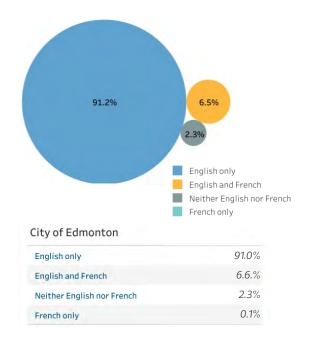
33.8%

Visible

Minority



Immigrant Population by Place of Birth



Indigenous and Visible Minority Populations

Non-Indigenous

Identity

9.6%

Indigenous

Identity

90.4%

LANGUAGE AND DIVERSITY

A large number of Meyonohk residents (91.2%) have knowledge of the English language and roughly 73% identify English as their mother tongue language.

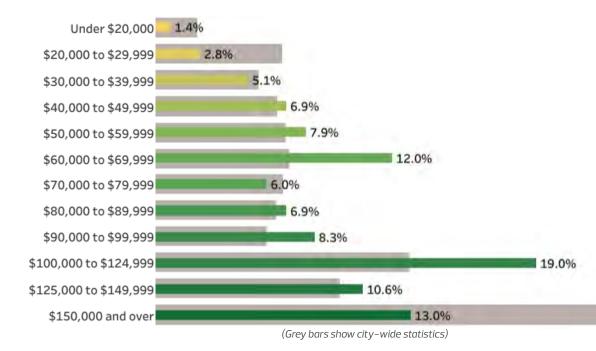
Approximately 10% of residents identify themselves as Indigenous and approximately 34% identify as being a visible minority. According to the federal census, approximately 300 people in Meyonohk identify as urban Indigenous peoples.

Knowledge of Official Language



(Grey bars show city-wide statistics)

Meyonohk Highest Level of Education (population 15 years and over)



EDUCATION AND EMPLOYMENT

Around a quarter (24.1%) of households in Meyonohk earn under \$60,000 per year. Most residents have completed education after high school (8% diploma or trade certificate, 19.3% with a non–university diploma, and 17.9% with a bachelor's degree or higher).

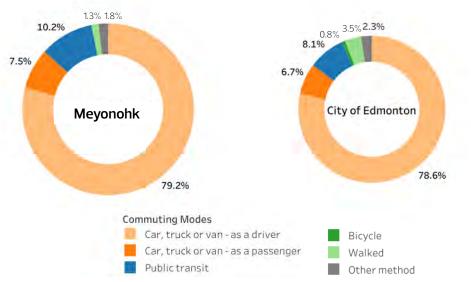
Of the people who work in Meyonohk, the majority of people are employed in sales and service occupations (26.3%), trades, transport and equipment operators and related occupations (25.3%), or business, finance and administrative occupations (14%).

The prevalence of Low-Income Measure, After Tax (LIM-AT) in Meyonohk is 10%, which is the same for the City of Edmonton. The LIM-AT is a way to assess income levels and identify low-income households. It represents a fixed percentage (50%) of the median adjusted after-tax income of private households by taking into account that households have different needs based on their size.

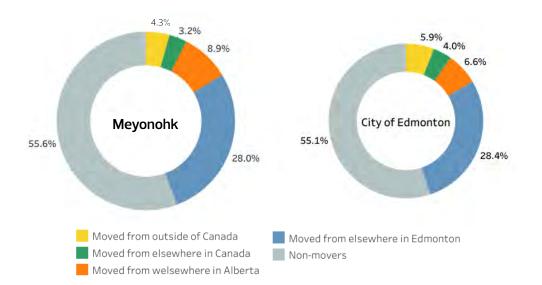
Meyonohk	Cit
Prevalence of Low Income	Pre
measure, after tax 10 %	me
(25% sample size)	(25

City of Edmonton

Prevalence of Low Income measure, after tax 10% (25% sample size)



Travel Modes to Work



MEYONOHK URBAN DESIGN ANALYSIS-FINAL | 10

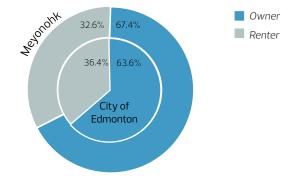
TRAVEL MODES TO WORK

More than 80% of Meyonohk residents use a car, truck or van as their main mode of travel to work. Approximately 10% of people use transit and 1.3% of people walk to get to work. It is important to note that this data was collected before the opening of the Mill Woods Valley Line southeast LRT station in 2023 which may have impacts on travel preferences.

DWELLING AND MOBILITY STATUS

Approximately 68% of people living in Meyonohk own their dwellings rather than renting them. Nearly one half (48.3%) of Meyonohk residents live in single-family homes. Of note, there are 29.1% of people who live in row housing, which is triple the city's average (9.7%). Average dwelling values are lower in Meyonohk (\$290,000), compared to the city's average (\$430,158). This may be related to the older age of dwellings, since 93.5% of dwellings in Meyonohk were built before 1990. Elsewhere in the city, only 58.4% of dwellings were built before 1990.

Around 55% of residents have lived in the neighbourhood for more than five years. Close to 30% of residents moved to the neighbourhood from another area of the city during the last five years.





Aerial Image of Meyonohk

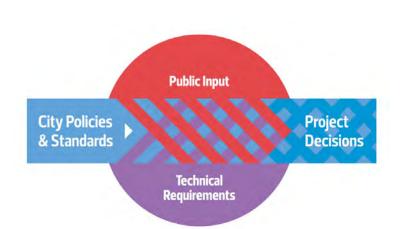
POTENTIAL PROJECT IMPACTS RELATED TO DEMOGRAPHICS

The following outlines potential project considerations based on demographics:

- Age distribution is close to Edmonton averages, but there may be slightly more seniors. This may indicate a greater need to consider issues related to aging-in-place, fixed retirement incomes and accessibility.
- Similar to the rest of Edmonton, over half of the population has lived in this community for over five years and nearly 70% of residents own their dwelling. This may indicate that residents may be more interested in the potential changes to their neighbourhood because they intend to reside there for longer.
- Meyonohk has a higher number of Indigenous people and non-visible minorities. This may indicate a greater diversity in perspectives and experiences about their neighbourhood.
- Similar to the rest of Edmonton, most resident commute to work using vehicles. However, Meyonohk residents tend to walk to work less, but use transit more than the average Edmontonian. Because of the limited number of people who walk and bike to work, this may indicate a need for improvements to walking, rolling and biking network.

2.4 Policies and Standards

City policies, standards and plans form the foundation of the design development during the Neighbourhood and Alley Renewal project. Community input received through public engagement, technical requirements and existing constraints influence how the policies are applied in Meyonohk. An important part of the UDA process is a comprehensive review of relevant planning and policy documents. Throughout the project, these documents will be revisited to ensure that the resulting renewal plans are in line with the City's strategic vision.



The following provides an overview of relevant policies, plans and standards:

CONNECTEDMONTON (2019-2028)

ConnectEdmonton outlines a strategic vision for how the City and residents can work together in creating a healthy, vibrant, innovative city that is connected to the Metro Region and resilient to changes in climate. The guiding principle of the plan is to create as a community, to connect people to what matters to them and to care about the impact of everyone's actions on Edmonton's social, economic, cultural, spiritual and environmental systems. The strategic goals of the plan are:

- 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

"We work together to create liveability for all, where everyone has what they need to succeed."

~ConnectEdmonton, 2019

"Edmonton is many things, but first and foremost it is a gathering of people." ~ The City Plan, 2020

THE CITY PLAN

The project will review decisions and opportunities based on the strategic goals listed above. Rather than focusing solely on creating an infrastructure improvement plan, the project will take a systems approach to ensuring roads, sidewalks and pathways, landscaping and open space design create good community design. The project may have the opportunity to partner with commercial property owners through the Corner Store Program and with EPCOR on Low Impact Development (LID) initiatives.

The City Plan charts out how Edmonton will become a healthy, urban and climate resilient city of two million people that supports a prosperous region. 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 includes strategic direction in environmental planning, social planning and economic development.

The City Plan, though it is a very high-level plan, still provides a framework for understanding the intent behind other more-specific planning documents, which are integral for work on this project. One of the cornerstones of The City Plan is a new planning geography called districts. Districts are collections of diverse neighbourhoods where residents can

meet most of their daily needs within a 15-minute walk, roll, bike or transit trip from their home. We can support the City Plan by:

- Improving people's ability to move throughout the neighbourhood by walking, rolling and biking to connect to transit and destinations inside and outside of the community
- Make neighbourhood businesses more attractive and connected to residents by supporting the Corner Store Program
- Planting new trees in boulevards and open spaces to help achieve the City's two million new trees initiative
- Create a welcoming, accessible and diverse community through thoughtful design of public spaces

MILL WOODS AND MEADOWS DISTRICT PLAN (DRAFT)

District plans aim to create a "community of communities" in the city, improving connection, accessibility and quality of life at a local level. The goal is to help Edmontonians meet most of their daily needs within a 15-minute walk, roll, bike or transit trip from their home. The Mill Woods and Meadows District Plan provides high-level guidance on how to implement the direction of The City Plan as part of this project. The Mill Woods and Meadows District is located in the southeast area of the city and is one of fifteen districts in Edmonton's District Network as outlined in The City Plan. Strathcona County neighbours the Mill Woods and Meadows District to the east and nearby districts include the Southeast, Scona, Whitemud, Southwest and Ellerslie Districts.

"A liveable city is one that allows people to easily complete their daily needs within their District and within a 15-minute travel time by walking, rolling, biking or transit."

~ The City Plan, 2020

The Mill Woods and Meadows District is generally bordered by Gateway Boulevard to the west, Whitemud Drive NW to the north and Anthony Henday Drive to the west and south. These roads connect and support the movement of people and goods, mass transit and active transportation modes between the district and its surrounding areas.

Mill Creek Ravine crosses the eastern portion of the district, while a portion of Fulton Creek is located in its northeast corner. These ravines provide hydrological and ecological connections to the North Saskatchewan River and its wider ravine system.



- Mill Woods Road and 23 Avenue are both classified as "secondary corridors", which are intended to become vibrant residential and commercial streets with local destinations for surrounding neighbourhoods
- There are sections of 23 Avenue that have fire flow constraints, which may limit some types of redevelopment due the required water flow rate needed to control fires
- There are two "secondary nodes" at 23 Avenue and 85 Street and at 23 Avenue and Mill Woods Road. These nodes will act as small urban village centres, with a variety of smaller scale services and housing that is typically medium-density
- A major redevelopment node near Meyonohk is identified at Mill Woods Road and 28 Avenue near the Lakewood Transit Centre
- The commercial area at 28 Avenue and Lakewood Road North is identified as a "local node", which offers a mix of services fitting with the scale and character of the neighbourhood

Overall, this plan will impact 85 Street and Lakewood Road which are already classified as collector roads. Therefore, if the neighbourhood is densified as per the district plan, it should not impact the neighbourhood's road design approach.

The plan provides guidance on the following locations within and near Meyonohk:

Mill Woods and Meadows District Location and Boundaries

CLIMATE RESILIENT EDMONTON: ADAPTATION STRATEGY AND ACTION PLAN

Climate Resilient Edmonton: Adaptation Strategy and Action Plan is Edmonton's Climate Change Adaptation Plan under section 615.5 of the City Charter. The strategy outlines how the City of Edmonton will plan and invest resources to increase our communities' climate resilience, minimize the exposure of people and assets to the impacts of climate change and take advantage of new opportunities as they arise. It begins with an examination of climate change adaptation and leads into an outline of the methods Edmonton used for its adaptation planning.

While climate change is a global issue, impacts are being felt on a local scale and will differ depending on the local context. To be successful climate change adaptation efforts must be taken at a local scale, including government action. Local governments typically have many planning and policy tools available to address climate change impacts such as land use planning and zoning, design guidelines for infrastructure and development and emergency management.

The project 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 vulnerable populations.

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 Neighbourhood Renewal project can support this opportunity through the development of enhanced biking, walking and rolling networks.

ECONOMIC ACTION PLAN (ACTION 10)

The Edmonton Economic Action Plan (Action 10) is a 10-year road map to building a vibrant, inclusive and sustainable economy. This Action Plan is one of the key elements of The City Plan and aims to create jobs, attract investment and strengthen our economy.

Action 10 in the plan aims to develop tools and strategies to attract commercial, residential and mixed-use development in key locations for development.

The Neighbourhood and Alley Renewal program can support this action by partnering with the Corner Stores Program to incentivize the revitalization of neighbourhood commercial properties.

"We take pride in our small businesses, our made-in- Edmonton success stories, and our leadership in regional collaboration."

~Action 10, 2021

COMPLETE STREETS DESIGN AND CONSTRUCTION STANDARDS

The Complete Streets Design and Construction Standards

"Streets can connect people to their destination and can also be places themselves where people live, work, and play." ~Complete Streets, 2018

"Decisions made today about how we design and build our city, transportation systems, infrastructure and energy will set the course for our future greenhouse gas emissions."

> ~Community Energy TransitionStrategy, 2021

(CSDCS) have a significant effect on the development of design options for Neighbourhood and Alley Renewal. It integrates 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 includes designing with a retrofit lens, specifically speaking to the challenges that may be encountered in a retrofit context, including the location of existing buildings, mature trees, utilities, private landscaping within the right-of-way and numerous other constraints within an existing right-of-way. In cases where the CSDCS guidelines cannot be met, there is a formal design exception process that is used to document the rationale and grant approval.

ACCESS DESIGN GUIDE / ACCESSIBILITY POLICY (C602)

Policy C602 ensures that people with disabilities are treated with respect and have equitable access and opportunity within the City. The Access Design Guide is intended for use when planning, designing, building and maintaining facilities, parks and open spaces owned or leased by the City of Edmonton. This includes transportation and open space infrastructure, and it is expected that the guidelines will be incorporated into the design for Neighbourhood and Alley Renewal program projects. Accessibility is an important goal for this project and best design practices, including the Access Design Guide and the Alberta Barrier-Free Design Guide (Safety Codes Council, 2017), will be applied to the design of the sidewalk and pathway network to ensure ease of access by residents of all abilities.

COMMUNITY ENERGY TRANSITION STRATEGY / CLIMATE RESILIENCE POLICY (C627)

The purpose of Policy C627 is to work toward achieving a climate resilient community. Related to this project, the policy notes a commitment to increase climate adaptation and minimize the exposure to and reduce the vulnerability of people and assets to the impacts of climate change by adapting, preparing for and responding to a changing climate by being:

- Climate prepared, adapting infrastructure and urban form Planning, developing, building and adapting Edmonton to be ready for the future climate reality
- Prepared and adapted communities Supporting communities, households, institutions, businesses and residents to be more prepared for and able to respond to and recover from the impacts and opportunities of a changing climate
- Climate resilient, adapted and healthy ecosystems Investing in and protecting ecosystems to build resilience, protect communities, enhance environmental connection, and support and improve quality of life

"Edmonton's streets are for everyone no matter how they are moving, and the most vulnerable users need to be protected."

~Safe Mobility Strategy, 2021

• Proactive risk management – Identifying and managing climate risks and vulnerabilities that could impact our city's long-term livability

The project will review the existing context of the neighbourhood from the lens of climate change to discover and integrate solutions that enhance community resiliency. Some opportunities may include improving non-vehicular movement (for example, sidewalks and trails) throughout the neighbourhood, the inclusion of low-impact development facilities and enhancing the community's urban tree canopy.

80%

of all fatal and serious injury crashes are the result of driver mistakes.



74%

of intersection crashes involving someone walking or using a mobility aid (like a wheelchair) happen when the pedestrian has the right of way.

87%

of bike-related serious injury or fatal crashes happen in locations without bike facilities such as protected lanes or shared pathways.



SAFE MOBILITY STRATEGY (2021-2025)

This strategy continues Edmonton's work toward Vision Zero, an internationally endorsed long-term goal of zero trafficrelated fatalities and serious injuries. To continue to grow into a city built for people, a combination of location-based and system-wide approaches are necessary to support safe and livable streets for all. With this approach, the City can tackle widespread issues that contribute to crashes, including street design and the deep-rooted cultural norms around traffic and mobility.

The project will identify traffic safety issues through public engagement and safe mobility data (311 requests, school safety assessments, speed and volume data, High Injury Network Map) and develop concepts to mitigate traffic safety issues through design.

In addition to targeted safety improvements, projects should also include a safe systems approach, looking for opportunities to redesign streets and crossings to be safe for all modes of transportation, including separating modes, designing to lower speeds and volumes, narrowing roads, reducing curb radii and improving crossings where higher levels of conflict are expected, such as near schools and at path or bike route crossings. The tool box of potential measures includes many options that are relevant to the NRP, such as raised crosswalks, centre median crossings, traffic circles, curb extensions, traffic diversion and reviewed signal timings. "If Edmonton is to reach its full potential as a vibrant, smart and livable city, we need to do more to work with the climate and transform winter into an asset."

~Winter City Strategy, 2012

THE BIKE PLAN (2020) AND THE BIKE PLAN IMPLEMENTATION GUIDE: 2021–2026

The Bike Plan (September 2020) provides strategic direction for how the City plans, designs, implements, operates and maintains items that support the use of bikes and programs related to biking. The Bike Plan Implementation Guide 2021-2026 continues to build on these directions, outlining the next steps and processes for building out the bike network and implementing support programs and initiatives. The Bike Plan does not identify new neighbourhood bike routes for Meyonohk; however, it provides the principles for identifying potential new routes. The project will implement expansions and upgrades to the bike network, such as increased pathway widths, which improve the city wide network. The Bike Plan Implementation Guide identifies future district connector routes near the Meyonohk boundaries (See Section 3.8 for biking network analysis)

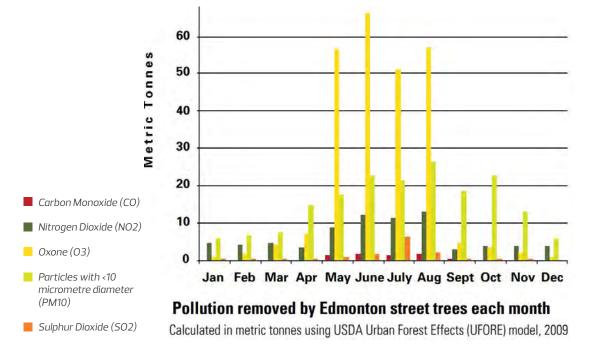
BREATHE: EDMONTON'S GREEN NETWORK STRATEGY

Breathe: Edmonton's Green Network Strategy is a longrange strategic plan to support a network of high-quality, accessible and connected open spaces for the next 30 years, as Edmonton continues to grow. The plan complements the City's Open Space Policy C594 (2017) and Parkland Bylaw (Bylaw 2202). The main goal of the strategy is to plan and sustain a healthy city by encouraging connection and integration of open space at the site, neighbourhood, city and regional levels. It aligns with the City's strategic goals and provides 10 strategic directions with accompanying policies to guide open space planning, design, (re)development, management and use as the city grows and changes. The Project Team can implement Breathe by improving connections within and to Meyonohk Park, which Breathe classifies as a community park, and other green spaces in the neighbourhoods. Specifically, these green spaces can be reviewed for opportunities for new trail connections and amenities, such as benches, garbage cans and picnic tables. Locations of potential future park improvements, tree plantings or naturalization can be identified through collaboration with partners or the community league.

WINTER DESIGN GUIDELINES / WINTER DESIGN POLICY (C588)

The Winter Design Guidelines builds on the Winter Design Policy, Policy No. C588 (2016) and envisions a city that embraces all seasons. Winter is a core part of Edmonton's identity and needs to be fully considered as our city grows. Northern urban design fully considers the winter context, making the most of opportunities to stay outdoors by capturing the sun's warmth, providing protection from the wind, and making the city more accessible, safe and enjoyable year-round.

The Winter Design Guidelines identify streets as the most visible and plentiful part of our shared public realm and emphasizes the role of parks and open spaces in supporting meaningful social interactions. Streets designed with winter comfort, safety, access and aesthetic appeal in mind, considering all ages and abilities, are critically important in neighbourhoods. The Guidelines build on the five design principles of the Winter Design Policy by providing goals, outcomes and specific actionable guidelines to improve the outdoor experience in winter, championing active winter living. "A healthy diverse urban forest is an irreplaceable asset that contributes to Edmonton's long-term livability." ~Urban Forestry Management Plan, 2012 The Project Team will use the Winter Design Guidelines to look for opportunities to make winter more hospitable and engaging for residents and to make it easier to 'play' outside. Strategies, such as introducing sheltering or wind-blocking elements, improving infrastructure that supports winter activities and enlivening the landscape through colour, evergreen foliage and interesting forms. The improvement of walking, rolling, biking and transit access, will better encourage people move quickly, efficiently and safely in challenging weather conditions.



EDMONTON'S URBAN FOREST MANAGEMENT PLAN (UFMP)

UFMP is a strategy for sustainably managing and enhancing our diverse urban forest, with a goal to establish 20% tree canopy coverage. The plan's main guiding principle includes promoting a healthy and sustainable urban forest, engaging the community in protecting and managing the urban forest, thinking globally and regionally while planning and acting locally, and using best practices, innovation, science, information and technology.

The Project Team will consider how to protect and maintain existing trees, actively look for locations to plant new trees in the road right-of-way and look for opportunities to convert curbside walks to boulevards with space for tree plantings. The diversity of tree species within the community will be reviewed to ensure that the urban forest is resilient and can adapt to changes in climate. The project will also adhere to the Corporate Tree Management Policy C456C (2020), which protects existing trees and provides compensation for the loss of existing trees.

GENDER-BASED ANALYSIS PLUS (GBA+)

GBA+ is a process where policies, programs, initiatives or services are evaluated for their diverse affects on various groups of individuals. A GBA+ approach recognizes that people are influenced by intersecting identity factors that are either marginalized or privileged and that change over time.

The City of Edmonton is committed to adopting the use of GBA+ across all its projects on an ongoing and permanent

"The urban environment must provide a complete range of diverse experiences to meet all needs — the peace and quiet of personal privacy to the excitement and stimulation of group participation"

~The Mill Woods Development Concept Plan, 1971 basis. Project teams will use the GBA+ process to recognize how their work impacts people differently by systems of power, privilege and marginalization. Reflection on perceptions and biases will encourage evidence-based project decisions and ensure that final designs are both inclusive and equitable. The Project Team will use a GBA+ lens to evaluate design options, implement design decisions, and throughout the public engagement process.

THE MILL WOODS DEVELOPMENT CONCEPT PLAN

The Mill Woods Development Concept Plan, established and approved by the Municipal Planning Commission in March 1971, serves as a comprehensive land use planning framework for the Mill Woods area, located southeast of the City of Edmonton. The plan, consolidated in June 2021, integrates various amendments to present a clear, updated vision. It outlines the development of a new urban community, aiming to house over 120,000 people across approximately 6,000 acres.

The document offers critical insights into the original vision for Mill Woods and Meyonohk, encompassing aspects like regional context, land use patterns, transportation networks and staged development. It stands as a historical record, reflecting the evolution of the area and the intent behind its layout and design, while remaining flexible to future modifications and growth. The Meyonohk neighbourhood has been fully built out as per the initial intent of the plan.

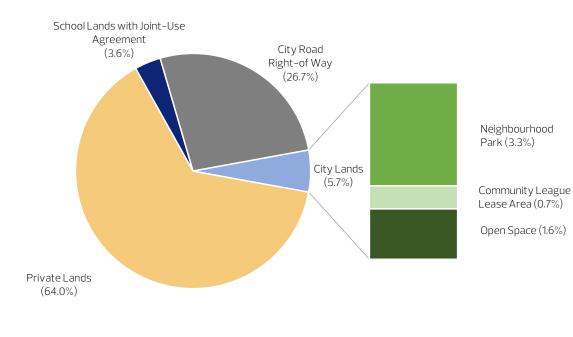
The plan placed a strong emphasis on walkability as a key aspect of the community's design and function. The plan details the integration of walkways into the overall circulation system, highlighting the importance of coordinating and integrating with the overall concept for open space, since walking and rolling forms the link between transportation and open space uses. The initial design approach used a loop and lollipop street layout that aimed to minimize conflicts and hazards between people and vehicles, thus enhancing convenience for residents. However, it is important to note that modern research suggests that loop and lollipop street layouts similar to Meyonohk may have pose greater risks to people who walk and roll compared to neighbourhoods with a grid pattern street layout.

Local parks, strategically located within each neighbourhood unit, are designed to be within walking distance for every dwelling, serving around 5,000 residents each. These parks, along with school facilities, are intended to be easily accessible, fostering a sense of community and encouraging the use of these spaces.

Additionally, the placement of schools at the heart of each neighbourhood ensures that they are within easy walking distance for students, emphasizing the importance of access by neighbourhood children.

From the language in the plan, Meyonohk was intended to have a strong focus on convenience for people who walk, roll and bike. However, this intent may not have been properly achieved according to modern perspectives. The project has the opportunity to build upon this initial intent by revisiting the design of roads and the walking, rolling and biking network based on complete street design philosophy and traffic calming principles.

SECTION 3 NEIGHBOURHOOD ANALYSIS



Public and Private Land Use in Meyonohk

3.1 Land Ownership and Development Opportunities

LAND OWNERSHIP AND LAND USE

The Meyonohk neighbourhood covers a total of 79 hectares, of which 64% (50.6 hectares) is privately owned, 27% (21 hectares) is City road right-of-way and 6% (5 hectares) is City land and 3% (3 hectares) is school land.

The publicly accessed open space categories include open space, parks, school sites, a community league lease area and road right-of-way (see chart on this page and the plan on the following page).

JOINT-USE AGREEMENTS AND PUBLIC LEASES

There is a joint-use agreement between the City and Edmonton Public School Board (EPSB) for the open space within the Meyonohk School site.

There is a Lease Agreement in Meyonohk Park for lands around the skate shack operated by the Lakewood Community League.

Public and Private Land

This map shows the distribution of City-owned and privately owned properties in Meyonohk. This includes an overlay of City lands leased to the community league, and school lands (privately owned) that have joint-use agreements with the City.

MAP LEGEND





REZONING APPLICATIONS

Within the Meyonohk neighbourhood, there are no active rezoning applications as of November 2023.

There is one rezoning application across 91 Street from Meyonohk in the Parson Industrial area. Application File Number # LDA23-0173 at 2703-92 Street NW (Shown as "A" in green on map). The site is currently zoned DC2.1033, which allows for industrial business uses, offices and limited range of commercial uses. The proposed zoning is Industrial Business Zone (IB), which allows for industrial business uses, including professional, financial, office support and personal service uses. The proposed rezoning conforms with the South Industrial Area Outline Plan. This application is not anticipated to have a significant bearing on this project.



CONCURRENT CITY PROJECTS

- Valley Line LRT The new Valley Line LRT runs through Millwoods on 66 Street, terminating near the Mill Woods Town Centre. Construction activities are complete with deficiency correction and final completion activities occurring along the corridor. There is no anticipated impact of this project on the Meyonohk Neighbourhood and Alley Renewal Project
- Meyokumin Neighbourhood and Alley Renewal Project is currently completing the final design stage of the project and will be under construction in 2024 and 2025. This project may have minor effects on communication and engagement with Meyonohk residents, since they may be aware of this project or have been involved previous engagement activities
- Hillview Neighbourhood and Alley Renewal Project is in the planning and design stage of the project with construction anticipated to begin in spring 2025. This project may have minor effects on communication and engagement with Meyonohk residents, since they may be aware of this project or have been involved previous engagement activities
- Pollard Meadows, Daly Grove, Crawford Plains Neighbourhoods Alley Renewal – Alley Renewal for the neighbourhoods of Pollard Meadows, Daly Grove and Crawford Plains is underway with construction staged between 2023–2025. This project may have minor effects on communication and engagement with Meyonohk residents, since they may be aware of this project or have been involved previous engagement activities

- Covenant Health Wellness Community Project is currently under construction in Kameyosek neighbourhood. The project includes a community health and wellness hub, multi-generational housing, seniors continuing care and potential surgical services and commercial spaces. This project may have minor effects on communication and engagement with Meyonohk residents, since they may be aware of the project and seek information at engagement events
- The Community Parks Framework Project The Community Parks Framework is a proposed new approach the City is considering developing, to increase equitable access to community park amenities, such as playgrounds, benches and picnic areas. The framework aims to ensure the City's investment in the development and renewal of amenities is providing the optimum long-term value through planning, operations and life cycle management. Approval of the Framework is anticipated and park improvements proposed as part of this project will align with the Framework
- Edmonton Design and Construction Standards Volume 2 (Complete Streets) and Volume 5 (Landscaping) – These two documents are currently in a revision process. Depending on the changes within the standards, there may be an effect on project decisions and neighbourhood design. As these are ongoing projects, the project will continue to be in contact with City staff working on the updates

- Open Space Standards and Management Plan and Open Space Network Analysis Framework – An RFP for this project was recently released to consultants and completion of the project is anticipated to mid–2025. The project builds on the strategic direction in Breathe and will provide clarity for the review of land development applications, proposed park redevelopments, or as part of the City's responsibility for open space operations and management. It will also provide funding strategies for land acquisition, services and parks infrastructure
- Towards 40 Program The City of Edmonton's Safe Mobility Team has identified three roads in Mill Woods, including Mill Woods Road, for potential adaptable improvements. There is currently no defined approach for these roads. When the Safe Mobility Team understands their next steps, the two Project Teams will coordinate to ensure project alignment.
- Accelerated Active Transportation Project Bike Path from 85 Street to 50 Street Project – The City is preparing to introduce a bike path extending between 50 Street and 85 Street along 23 Avenue adjacent to Meyonohk. Scheduled for construction in May 2024, the active transportation project will not directly impact the Meyonohk Neighbourhood and Alley Renewal Project. However, coordination will be required between both projects to ensure adequate messaging and communications are provided to the residents of Meyonohk when construction begins



CORNER STORE PROGRAM OPPORTUNITIES

There are two neighbourhood commercial sites in Meyonohk at the corner of Lakewood Road West and 28 Avenue. These sites are potential candidates for the Corner Stores Program. Potential improvements may include:

- New or improved access for people who walk, roll or bike entering and moving through large parking lots to access stores
- Increased landscaping and improved aesthetics for commercial properties and to create a welcoming entrance into the neighbourhood
- Improve the interface and the connections at the back of the property
- The addition of seating areas and plazas to create an attractive place that people want to spend time in
- Improved building aesthetics that are more appealing to the street front, especially at commercial sites where business frontage face inward towards parking and the rear accesses are street facing. While these improvements are not within the scope of our project, we will coordinate our designs to ensure they align with the Corner Store Program's overall vision

3.2 Commercial Nodes and Community Destinations

The following sections provide insight into commercial and community destinations residents may use.

INTERNAL COMMERCIAL DESTINATIONS

There are two commercial sites in the Meyonohk neighbourhood located at 28 Avenue and Lakewood Road West. The following bullets describe the developments and lettering corresponds to the map on the following page. This development includes:

- A strip mall complex (West Lakewood Crossing) consisting of three single-storey buildings with approximately ten businesses. A large parking area is located at the centre of the site and along the north and east lot frontages. Businesses include restaurants, salon, medical clinic, dental clinic, convenience store, liquor store, cannabis store and car wash
- B A two-story strip mall (West Lakewood Centre) with approximately seven businesses, including daycares, veterinary hospital, music lesson studio, restaurant, barber and pharmacy

EXTERNAL COMMERCIAL DESTINATIONS

There are three neighbourhood commercial destinations within a five-minute (400 m) walking radius (actual walking and rolling times may vary) of the Meyonohk neighbourhood boundaries:

- C A small strip mall (Kameyosek Shopping Centre), which provides similar commercial sites provide amenities similar to those offered in Meyonohk
- A major power centre with a gas station (Costco), requires a paid membership. This is the closest grocery store to Meyonohk. Gaps in the sidewalk network west of 91 Street create accessibility and winter challenges for those who walk and roll from the neighbourhood
- E A strip mall (Square on 23rd), which provides a range of commercial, medical and paramedical services

Major commercial developments, grocery stores and power centres are within a short driving distance (approximately 5 minutes) to the Mill Woods Town Centre area or South Edmonton Common area.



Aerial photo of Meyonohk strip malls , looking southwest from corner of 28 Avenue and Lakewood Road West

Commercial Destinations

This map identified commercial properties in and near to Meyonohk. The letter labels on the maps correspond to the commercial site descriptions in Section 3.2 on the preceding page. The fiveminute walking radius is based on 400m distance from Meyonohk neighbourhood boundaries (actual walking and rolling times may vary).

Neighbourhood Shopping Centre Power Centre Retail Gas Station Parks and Open Spaces Meyonohk Five Minute Walking Radius from Neighbourhood Boundaries Labels reference to site descriptions in Section 3.2 text.



MAP LEGEND

INTERNAL RECREATION DESTINATIONS

Meyonohk Park, including the Lakewood Community League's skate shack is the local recreation hub of the community. The park site and adjacent Meyonohk School Site includes a large playground, tobogganing hill, skating (snow bank) rink, skate shack, and sports fields.

Recreational destinations within the community are displayed on the Recreation Network map in Section 3.4 Open Space Network.

EXTERNAL RECREATION DESTINATIONS

Meyonohk is located directly to the west of Mill Woods Sports Park and Mill Woods Recreation Centre. Mill Woods Sports Park includes the following activities and facilities:

- Park pavilion with public washrooms
- Picnic sites (summer only)
- A small lake (no boating or swimming)
- Splash park, accessible playground and skatepark
- An artificial turf football field
- Natural turf combo fields
- Baseball diamonds with shale infields
- Cricket pitch
- Outdoor tennis, pickleball and basketball courts

- Running track
- Paved pathways, gathering and seating areas and landscaping

Mill Woods Recreation Centre includes the following activities and facilities:

- Aquatic facilities, including a wave pool, whirlpool, sauna and dive tank
- Fitness centre
- Indoor play space
- Squash and racquetball courts
- Meeting rooms and a multipurpose space
- NHL-sized arenas with spectator seating
- Staffed programs and lessons



Interior photograph of Mill Woods Recreation Centre

There are also a series of smaller neighbourhood park sites within a five-minute (400 m) walking radius (actual walking and rolling times may vary) of the neighbourhood boundary. These include Tipaskan Parks, Tipaskan Park 2, and Kameyosek Park.

The naturalized trail corridor between the Meyonohk boundary and 91 Street is designated as an off leash area.

Recreational destinations external to the community are displayed on the Recreation Network map in Section 3.4 Open Space Network.

INTERNAL COMMUNITY SERVICES DESTINATIONS

There are two childcare centres located in West Lakewood Centre strip mall and one childcare centre located inside Meyonohk School.

There is one public elementary (K–6) school, Meyonohk School, located adjacent to Meyonohk Park. The school offers a regular English program and a bilingual Mandarin program that attracts students from outside of the neighbourhood. According to the Edmonton Public Schools Growth Control Model, Meyonohk School is at Level 1, meaning that the school will currently accept students from outside of the attendance boundary area because there is sufficient capacity for additional students. School Administration estimates that 20% of students are from within Meyonohk and 80% of students are from outside of the neighbourhood.

Though the Lakewood Community League building is not within Meyonohk, the league manages a lease area and skate shack in Meyonohk Park.

There is one place of worship in the neighbourhood, Lord of Life Lutheran Church, located at the corner of 79 Street and 28 Avenue.

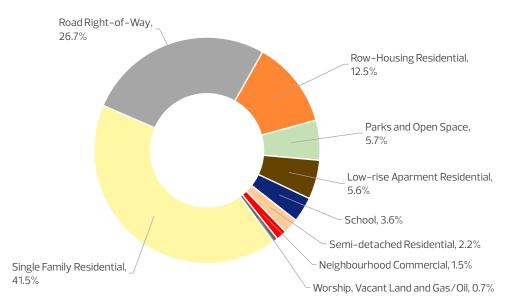
See Section 3.6 – Mobility Network – Walking and Rolling for walkability maps of community service locations.

EXTERNAL COMMUNITY SERVICES DESTINATIONS

There are several schools in the neighbouring communities within a five-minute (400 m) walking radius (actual walking and rolling times may vary). These include Frere Antoine School (K-6 Catholic French Immersion), J. Percy Page High School, and Holy Trinity Catholic High School. The closest junior high schools are St. Clements School (K-9 Catholic) and Kisêwâtisiwin School (7-9), which are both located a ten-minute walk (800 m) to the south of the Meyonohk boundaries.

There are numerous churches, mosques and other places of worship in the neighbouring communities.

See Section 3.6 – Mobility Network – Walking and Rolling for walkability maps of community service locations.



Meyonohk Land Use Distribution

3.3 Built Form and Character Areas

LAND USE MIX

Meyonohk is a predominantly residential neighbourhood with a range of different housing types, which was innovative compared to earlier Edmonton area developments. Based on analysis at the time of the Mill Woods' concept plan development, it was anticipated that a shift toward multifamily occupancy in Edmonton was occurring, though it was unclear whether it was a condition of rising building prices or a change in residential preferences. As a result, each neighbourhood within Mill Woods contains a mix of residential densities from single-family residential to lowrise apartments. This approach also reflects the community designers' commitment to attracting a diverse population with different income levels and tenure types (rental versus ownership).

Each neighbourhood provides neighbourhood commercial, open space and community service (places of worship) opportunities that are easily accessed by vehicles and people who walk, roll or bike.

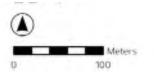
See figure on this page for the mix of land use categories in Meyonohk.

Land Use and Built Form

This map illustrates the land use and built form layout of the neighbourhood. The building footprints are colored according to their land use.

MAP LEGEND







LAND USE PATTERN

It is clear from the current land use pattern that the original designers of Mill Woods envisioned a nested community pattern where Mill Woods is comprised of nine communities that are made up of a small number of neighbourhoods. The nine communities are linked together with arterial roads that allow people to move through Mill Woods and out into the rest of Edmonton. The neighbourhoods in each community are linked together by a looping collector road that passes through the heart of each neighbourhood. Each community has a central school and/or park site, which are linked together by a pathway network. A small neighbourhood commercial area is typically located in each neighbourhood where the collector road meets the arterial road bordering the neighbourhood boundary. The central Mill Wood's community is Mill Woods Town Centre, which contains a high level of densification, a major shopping area and community hospital.

Meyonohk is located within the Lakewood community. The intent of each Mill Woods community is to provide a different identity and character to "achieve overall vitality and interest" in Mill Woods. Within the Lakewood community, there are three neighbourhoods, Meyonohk, Tipaskan and Kameyosek. The three neighbourhoods are connected by a looping collector road (Lakewood Road) and an off-street "spine" pathway corridor that connects the central open space and school site within each neighbourhood. Local roads and residential land parcels are arranged in a loop and lollipop pattern, with clustered areas of low-density and middensity residential parcels.

The heart of Meyonohk is Meyonohk Park and Meyonohk School, which are accessible by vehicles and people who walk, roll and bike. Most of the neighbourhood is within a five-minute (400 m) walking radius (actual walking and rolling times may vary) to Meyonohk Park, except for the houses on the furthest west side of the community (approximately 10–15% of residents) who may need to walk or roll seven to 10 minutes. Neighbourhood commercial opportunities are also provided at the junction of the arterial road network (28 Avenue) and collector road network (Lakewood Road West).



Loop and Lollipop Roadway Pattern , looking northwest towards Meyonohk Park

BUILT FORM

In general, the population density varies across the neighbourhood and is largely related to the built form residential development. Just over half of the residential land in Meyonohk is single-family residential, while the remaining residential area is medium-density

Mid-density housing takes the form of cluster-housing complexes of row houses and low-rise apartment developments. As noted in the Mill Woods Concept Development Plan, cluster housing was an innovative building form at the time "with the objective of obtaining the highest quality of residential environment possible." Row housing and low-rise apartments are a maximum of two-storeys and are surrounded by parking bays and generous open spaces with mature landscaping. The majority of medium-density building residential buildings have entrances that face inward to central parking areas, which makes the nearby streets less active and engaged.

Low-density residential development includes singlefamily homes and semi-detached homes (duplexes). Lowdensity residential property accesses either have a front driveway access garage or rear alley access. Front access properties either have a short driveway to an attached garage (mostly two-car garages) or a longer side access driveway to a rear detached garage. These two types of front accesses are often mixed, even within the same block. There are also properties that have both front access and rear access garages. The prevalence of front attached garages contributes to inactive frontages within the neighbourhood. Houses tend to be one-storey bungalows, bi-level or fourlevel splits. The majority of houses are those originally built at the time of neighbourhood development. Though houses have been renovated or modified overtime, there are few houses that have been demolished and completely rebuilt.

There are 14 single-family properties with secondary suite permits. All secondary suite permits are for basement suites. There are no known garden suite developments in the neighbourhood.

The commercial building forms are one to two storey strip malls with surface parking lots. Descriptions of commercial properties noted in Section 3.2 – Commercial Nodes and Community Destinations.

Meyonohk School is a single storey building structure with a relatively small parking lot. Half of the parking lot is within school land and other half is within the Community League lease area.



Aerial Photograph of Low-Rise Apartments (right), Row-housing (left) and single family residential (top), looking southwest from corner of Mill Woods Road and 28 Avenue

COMMUNITY CHARACTER

The character of Meyonohk is similar to the character of the two other Lakewood neighbourhoods. The neighbourhood's shared collector road (Lakewood Road) creates a sweeping arch through the community. Houses are setback approximately ten to fifteen metres from the road's curb and there are few front access driveways. As a result the street character is dominated by wide expansive front lawns with mature trees and ornamental landscaping. There are no landscaped boulevards or public street trees. As Lakewood Road West transitions into Lakewood Road South, the landscape opens out into Meyonohk Park's vast expanse of mown grass dotted with mature trees and park features.



Local road cul-de-sacs create pockets of single-family homes surrounded by mature trees, landscape beds and mown lawns. Cul-de-sacs have wide asphalt areas, but most properties tend to have large, landscaped front yards. There is only one cul-de-sac that has a landscaped island.

The pathway network is fully developed with pathways, lighting and mature deciduous and coniferous trees.

The commercial areas are focused on providing local services and conveniences for residents, but do not provide much of a distinct or enjoyable outdoor experience.

BUILT FORM AND CHARACTER ISSUES AND CONSTRAINTS

The following outlines some of the issues and constraints regarding the built form and character:

- Most of the community was built decades ago, which has created a traditional suburban sense of community and character. The suburban style creates issues including inactive frontages, large setbacks leading to a lack of ownership over the public realm and personal comfort concerns including large coniferous trees blocking views and houses backing onto the pathways and parks with fences.
- The neighbourhood has a mix of different housing densities, which is positive. However, many of the multifamily residential sites are inward facing and do not feel connected to day-to-day activities on the streets

- Many of the multi-family sites have internal sidewalk networks. Some of these connect to public sidewalks (within boulevards or parks) and some do not. For the ones that connect, people walking, rolling or biking might not understand that they are entering private land. For ones that don't connect, residents in the multi-family homes may have challenges accessing the public sidewalk and pathway network
- The low-rise apartment complex in the northeast corner of the neighbourhood has large parcels of open mowed lawn space. Since this open space is privately owned, Neighbourhood and Alley Renewal does not consider it to be public open space within the project scope.



3.4 Open Space Network

PARKS

Meyonohk Park is the large recreational open space hub of the neighbourhood. The site contains an elementary school, a community league operated skate shack, two outdoor rinks, two soccer fields, a baseball diamond, an outdoor snowbank rink and a playground. There is a large portion of the passive space within the park that is bookable for events and contains amenities, such as benches and garbage cans. There is a large hill in the southwest corner that is likely used for tobogganing though it is not officially designated as a toboggan hill by the City. Park landscaping consists of maintained grass area and mature deciduous and coniferous trees.

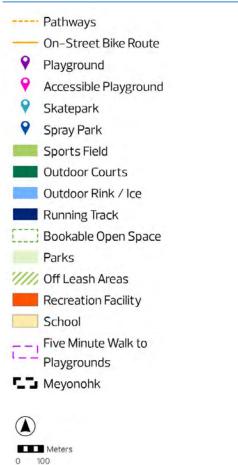
Meyonohk Park's central location in the neighbourhood means that most residents can walk or roll to the park in five minutes (measured using a 400 m radius, though actual walking and rolling times may vary). People who live on the far west side of Meyonohk, approximately 10–15% of residents may need to walk or roll nearly ten minutes (depending on ability) to reach the park.

Meyonohk Park, looking northeast

Recreation Network

This map shows the layout of parks and open space sites in and next to Meyonohk. The 400m radius (dashed purple lines indicated an approximately five-minute walking distance to playgrounds. Actual walking and rolling times may vary.

MAP LEGEND





PATHWAY NETWORK

Pathway corridors, which are narrow linear strips of land typically used for sidewalks, shared pathways and/ or emergency access, are provided throughout the neighbourhoods and serve as vital connections for people who walk and roll. All pathway corridors have been developed with existing sidewalks.

The pathway network is focused on a north-south connection that links Meyonohk Park to Tipaskan Park and Satoo Park in adjacent neighbourhoods. This pathway corridor is developed with a sidewalk, trail lighting and mature trees. It provides a positive recreational experience



for the neighbourhood, as well as providing access between residents, schools, parks and commercial sites.

There are a handful of pathway connections that provide shortcuts between local roads and to arterial roads out of the neighbourhood. Generally, pathway connections are well landscaped with mature trees and shrubs.

Though alleys are not officially part of the pathway network, they likely are used by people who walk, roll or bike. There are several alleys in the neighbourhood that provide convenient shortcuts between destinations.

PARKS WITHIN WALKING DISTANCE

There are three neighbourhood parks within a 400 m of the neighbourhood boundaries that may walk or roll to depending on their abilities and preferences: Tipaskan Park, Tipaskan Park 2, and Kameyosek Park. The three external neighbourhood parks provide an additional four playgrounds, four sports fields and four ball diamonds for potential use by Meyonohk residents.

Mill Woods Sports Park, a district level park site, provides a high quality destination park experience for Meyonohk residents. Outdoor recreation features include a park pavilion, picnic sites, splash park, accessible playground and skatepark, an artificial turf football field, four natural turf combo fields, five baseball diamonds with shale infields, a cricket pitch, four outdoor tennis/pickleball courts, two basketball courts, and a running track.

North–South Pathway Corridor , between 28 Avenue and 27 Avenue

ECOLOGICAL NETWORK

The Environmental Sensitivity Project was initiated in 2015 and was designed to identify areas of significant ecological value (assets), threats to those valued resources and physical and cultural constraints to development. The resulting maps ranked those sensitivities and development constraints to identify areas that should be considered for protection, conservation or restoration and zones in which development poses a low risk to the ecological network. This information was used along with a desktop study of the urban tree canopy to create a high-level framework for understanding potential ecologically sensitive areas within the neighbourhood. Overall, the neighbourhood is rated as "low" or "moderate" environmental value due to its level of development and lack of natural features (for example, forests, ravines, etc.). For context, the value ranges used in the Environmental Sensitivity Project are low, moderate, high, very high, and extremely high. For more information: https://data.edmonton.ca/stories/s/Environmental-Sensitivity-Project-Data-Portal/pswc-e52d

The landscaped trail corridor between 91 Street and Meyonohk boundaries is designated by the City as a naturalized area. The area is predominately naturalized grass and trees. There are also mature public trees throughout Meyonohk Park and pathway corridors and a significant number of mature privately owned trees on residential properties.



Naturalization Area along 91 Street

Ecological Network

This map shows a high-level ecological network analysis based on the City of Edmonton Environmental Sensitivity Project (2015) and Urban Forestry inventory.

MAP LEGEND

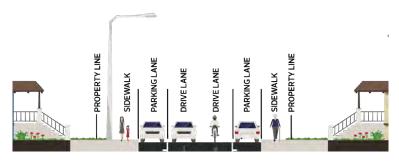
City Trees
 Low Environmental Value
 Moderate Environmental Value
 Naturalized Landscape Area
 Building Footprints
 Meyonohk



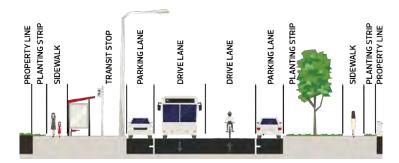


3.5 Complete Streets Analysis

The City of Edmonton uses the Complete Streets Design and Construction Standards (CSDCS) to govern road design and ensure the creation of streets that are safe, attractive, comfortable and functional for all users in all seasons. Additionally, the Complete Streets approach provides direction for designing streets that reflect the surrounding context, land use and users, enhancing the unique characteristics of the neighbourhoods and districts they serve. Neighbourhood and Alley Renewal projects apply a Complete Streets lens to neighbourhood analysis to identify opportunities to achieve these City goals. Three cross sections of the existing typical road types and their purposes within Meyonohk described on the following pages.



Local Road: This type of road provides direct access to nearby properties and serve neighbourhood travel needs



Collector Road: This type of road provides neighbourhood travel between local and arterial streets with direct access to nearby properties. Public transit buses generally operate on collector roads.



Alley: This type of road provides direct access to the rear yards of nearby properties and are typically used for local access, deliveries, and waste collection.

Complete Streets Map

This map identifies the local roads, collector roads and alleys in the Neighbourhood and Alley Renewal project.

MAP LEGEND



91 Street





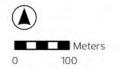
Road and Right-of-Way Widths Map

This map identifies the widths of roads (asphalt surface between curbs) and their right-of-way (public land between property lines).

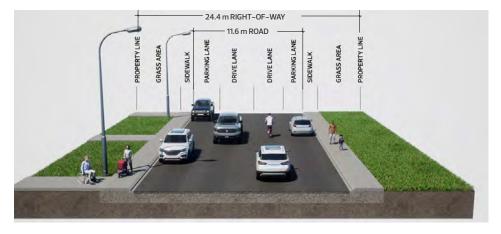
MAP LEGEND

9.2 m Road Width
 11.6 m Road Width
 13.4 m Road Width
 16.8 m Right-of-Way
 18.3 m Right-of-Way
 20.1 m Right-of-Way
 24.4 m Right-of-Way
 6.1 m Alley Right-of-Way
 9.1 m Alley Right-of-Way
 Open Spaces

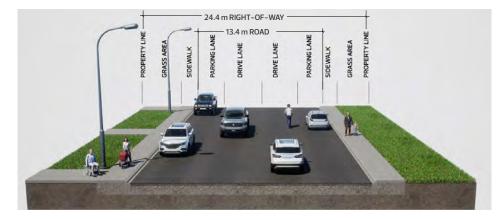
Meyonohk







Typical cross-section of collector roads that are 11.6 m wide with an 24.4m right-of-way



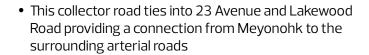
Typical cross-section of collector roads that are 13.4m wide with an 24.4m right-of-way

COLLECTOR ROADS

There are two collector roads in the scope of the Neighbourhood and Alley Renewal project: Lakewood Road and 85 Street. The characteristics of both of these collector roads are very similar.

- Lakewood Road
 - The road right-of-way is 24.4 m wide
 - The majority of the road is 11.6 m wide with two-way traffic and parking available on either side. North of 27 Avenue, adjacent to the two strip malls, the road does widen to 13.4 m wide
 - 1.5 m wide curbside sidewalks with no boulevard spaces provided for additional landscaping
 - No shade or amenities for people walking or rolling are provided along the sidewalks
 - Single-family residential parcels with surface parking, and multi-family sites are the types of properties that front the road. There are commercial sites that are separated from the street through surface parking lots.
 - Meyonohk School fronts onto a portion of the street
 - Loading zones are provided for school buses in front of Meyonohk School

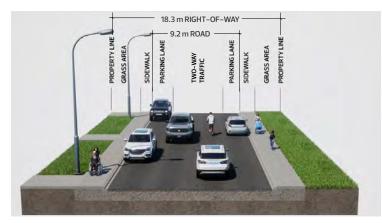
- There are no ETS bus stops located on this street or the entire neighbourhood
- This street provides an important direct connection from residential properties to the local Meyonohk School, and the adjacent arterial roads which surround the community
- 85 Street
 - The road right-of-way is 24.4 m wide
 - The road is 11.6 m wide with two-way traffic and parking available on both sides
 - 1.5 m wide curbside sidewalks with no boulevard spaces provided for additional landscaping
 - There are no amenities provided for people walking or rolling along the sidewalks
 - Both single-family residences, and access' leading to multi-family sites connect to the road



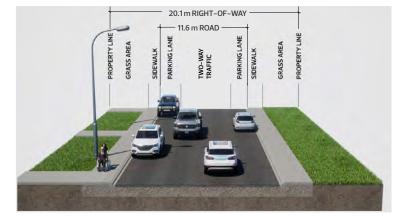
LOCAL ROADS

Most of the roads in the neighbourhood are local roads. They are relatively consistent in their design and intent. The typical design for local roads are:

- Typical road right-of-way varies with most sections being 18.3 m to 20.1 m wide (exception: Cul-de-Sacs have 16.8 m ROW)
- Larger local roads are 11.6 m wide with two-way traffic and parking lanes on both sides
- Smaller local roads are typically 9.2 m wide (with the exception of some 9.8 m wide) with parking allowed on either side and a wide lane for two-way traffic to share
- 1.5 m wide curbside walks on both sides



Typical cross-section of 9.2 m wide local roads with an 18.3 m right-of-way



Typical cross-section of 11.6 m wide local roads with an 20.1 m right-of-way

- No amenities for people walking or rolling are provided along the sidewalks
- No bus stops are located along local roads, or the neighbourhood
- Single-family homes face the street. Multi-family developments have buildings that face the street and also face interior parking areas
- Pathways tie into several of the local road sidewalks

ALLEYS

There are several alleys found within the Meyonohk neighbourhood. These alleys function as a means of access to the rear of properties and private garages. The expectation is that vehicles share these alleys with people who walk, roll and bike. The typical design parameters for alleys are:

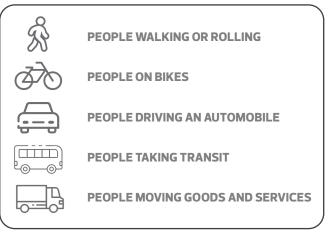
- Right-of-way is typically 6.1m wide (with the exception of one alley being 9.1m wide)
- Alleys are paved with asphalt
- All alleys have residential detached garages fronting onto them
- In some cases, alleys provide more direct routes to destinations than the front streets for people walking and rolling

EXISTING MODAL PRIORITIES AND USER EXPERIENCE

The Complete Streets Design and Construction Standards outlines five different modes of movement for which priorities should be established: people on bikes, walking or rolling, taking transit, driving an automobile and moving goods and services. Modal priorities are interconnected and some users may transition between different modes of travel in a single trip. For example, all transit users eventually become people who walk, roll or bike.

The existing design and dimensions of pathways, sidewalks and roads, and their relationship to other roads in the neighbourhood, were used to determine the existing modal priorities for the collector and local roads. The relationship of commercial buildings to major external roads was used to understand potential routes for moving goods and services.

MODAL PRIORITY CATEGORIES

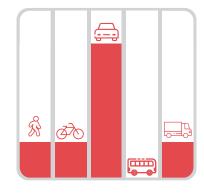


COLLECTOR ROAD MODAL PRIORITIES

Lakewood Road and 85 Street have the following modal priorities based on their existing design:

The rationale for this modal priority classification includes:

 The roads are considered to be wide with no design elements that promote traffic calming or slow driving. Parking is permitted on both sides of the road, which increases the emphasis on automobiles, yet overall onstreet parking is underutilized and inconsistent which does not effectively promote traffic calming. These wide roads



LAKEWOOD DRIVE AND 85 STREET CURRENT MODAL PRIORITIES introduce longer crossing distances for people that are walking and rolling. These factors reinforce the fact that both Lakewood Road and 85 Street are currently oriented toward vehicular travel

- Walking and rolling connections throughout these streets are not ideal. There are only three marked crosswalks along Lakewood Road, and none along 85 Street, all of which are adjacent to the Meyonohk School/Park. Lakewood Road has curb ramps which are not orientated appropriately to the opposing curb ramp across the road. This makes walking and rolling a challenge and may promote jay walking in an alternate location. Additionally, where there are vehicles along the side of the road, it can potentially obstruct the sidewalk/road ahead of those who walk and roll, creating visibility concerns. Furthermore, sidewalks have no separation from the curb. Therefore, when there are no vehicles on the side of the road, it creates an environment that may feel hazardous to those using the sidewalks on the busiest streets in the neighbourhood. Sidewalks are also too narrow for two people rolling to comfortably pass each other
- Riding a bike is not well accommodated on these roads. Those who bike require adequate space to do so comfortably and confidently, the narrow sidewalks within the neighbourhood are not designated to accommodate those who walk, roll and bike simultaneously. Bikes are supposed to share the road with vehicles. This can be a negative experience for less confident users, especially with higher volumes that are typically found on collector

roads over local roads. The existing infrastructure in substandard within the City for those who bike. Based on volumes in the neighbourhood, a separated bike boulevard or painted bike lanes should be provided. Additionally, with no dedicated biking facilities year-round, road conditions caused by inclement weather, vehicles travelling at higher speeds, and inadequate street lighting can contribute to a hazardous environment for those who bike. These factors are likely to lead to a negative biking experience along these roads

Based on the current land use of the neighbourhoods and adjacency to community destinations, the following shift in modal priorities may provide benefit to users of Lakewood Road and 85 Street:



LAKEWOOD DRIVE AND 85 STREET PROPOSED MODAL PRIORITIES The rationale for this modal priority shift includes:

- The collector roads are an important part of the community's sidewalk and pathway network. They link together important destinations, such as Meyonohk park, Meyonohk school, commercial areas and transit. Without these collector road connections, people who walk, roll and bike would have difficulty moving through the community easily and efficiently
- Currently, these collector roads have a wide cross section which promotes faster driving in an area that is used by people who walk and roll most frequently. This is especially concerning given the school zone that fronts onto Lakewood Road. Reducing the priority of vehicles in the design of the road improves non-vehicle movement and encourages slower vehicle speeds

The opportunities to upgrade the collector roads to support the preferred modal priority include:

- Upgrade sidewalk infrastructure by widening, replacing damaged concrete, and improving drainage and sightlines so that walking, rolling and biking can be done comfortably and accommodated easily
- Improve existing, and provide additional designated crosswalks to support multimodal transportation
- Reduce crossing distances and improve sightlines at crossing locations

- Consider a wide range of traffic calming measures (for example, roundabouts, landscaping, mid-block crossings, curb extensions, raised elements) to reduce speeding and improve visibility and comfort for people walking and rolling
- Provide amenities that support people walking, rolling and biking, such as benches and garbage/recycling bins at convenient locations
- Add boulevards and street trees, to improve the experience and comfort of people walking, rolling and biking



View of Lakewood Road South (11.6 m Wide Collector Road)

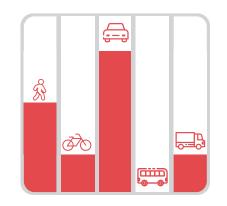


LOCAL ROAD MODAL PRIORITIES

Local roads, based on their current design, have the following modal priorities:

The rationale for this modal priority classification includes:

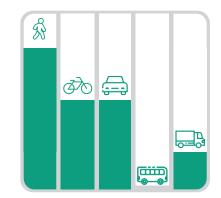
- The drive lanes and parking lanes take up the majority of the local road right-of-way
- Wide local roads with gradual curves and no traffic calming measures encourage speeding



LOCAL ROADS CURRENT MODAL PRIORITIES

- Sidewalks are provided throughout the entire neighbourhood on both sides of the local roads, but are narrow and not separated from the curb by boulevards, which places users closer to traffic and impacts user experience
- Crosswalks are not marked on local roads and vehicles parked too close to intersections reduce sightlines for people crossing and driving
- Not all sidewalk corners have curb ramps (drops in the curb at crosswalks) which limit accessibility for people walking and rolling
- People who bike are expected to share the road with vehicles as there are no designated bike facilities. This impacts the experience for those who may not feel comfortable biking alongside vehicles. Snow clearing is designated as a Priority 4 in these road types (regular maintenance throughout the season with no clearing timeframe provided), which limits the ability for people to bike on local roads in all seasons

Based on the current land use of the neighbourhood and location of community destinations, the following shift in modal priorities may provide benefit to users of local roads:



LOCAL ROAD PROPOSED MODAL PRIORITIES The rationale for this modal priority shift includes:

- Local roads are important to the movement of people in residential areas and connect to the off-street pathway system. They also link together important destinations, such as parks, schools and commercial areas
- Local road sidewalks allow for barrier-free access to residential properties and are important for community inclusion and aging-in-place. They are the primary route between houses and on-street parking
- Local roads are often shared by people in vehicles and people who bike. Both types of movement need to be equally prioritized and balanced



View of 26 Avenue (9.2 m wide Local Road)

The opportunities to redesign the local roads to the preferred modal priority include:

- Identify key walking and biking routes and prioritize those for improvements
- Review current traffic volumes and collision data on local roads that may also have collector road functions. Consider a wide range of traffic-calming measures (for example, landscaping, mid-block crossings, curb extensions, raised elements, narrowing wide roads to meet Complete Streets Design Standards) to reduce speeding and improve sightlines for people crossing
- Upgrade the width of the sidewalks to allow for a more comfortable walking and rolling experience, and meet the minimum recommended width as per the Complete Streets Design and Construction Standards
- Identify locations for crosswalk improvements to improve connectivity, reduce crossing distances and improve sightlines



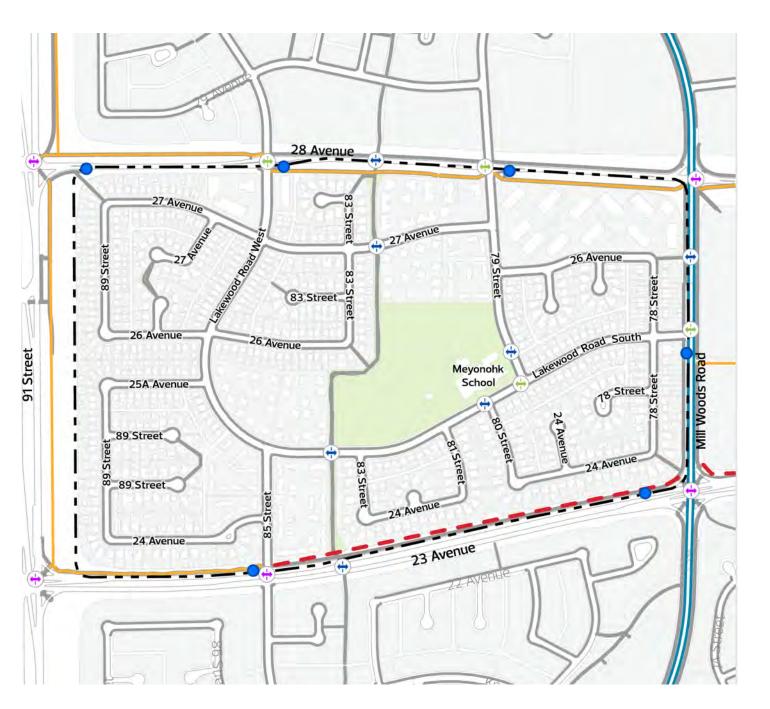
View of 27 Avenue (11.6 m wide Local Road)

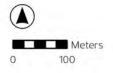
Multimodal Network

This map shows the network of different types of movement available in the neighbourhoods. The multimodal network includes, walking and rolling, biking, taking transit, and driving.

MAP LEGEND

- On-Street Bike Route (Shared Roadway)
- Shared Pathway
 Future District Connector Bike
- Route (from Bike Plan) Bus Stops
- Existing Painted Crosswalk
- Existing Signalized Crosswalk
- Existing Traffic Light with Crosswalks
 - Parks and Open Spaces
- C_' Meyonohk





3.6 Mobility Network – Walking and Rolling

The following sections provide a walkability analysis of the neighbourhoods. Walkability is defined as the ability for people who walk or roll to move through the neighbourhood conveniently, efficiently and enjoyably for recreation and to access services, transit or destinations.

Urban design walking analyses typically rely on drawing a 400 m radius (circle) around a destination to approximate a five-minute walking distance, which is considered to be a convenient distance for most able-bodied people. However, it is important to note that actual walking and rolling times can vary. For example:

- Typical five-minute walk for an able-bodied adult 400 m to 500 m
- Typical five-minute walk for a senior or person with a walker or cane 275 m to 300 m

WALKING AND ROLLING ANALYSIS

Overall, the neighbourhood is well connected with sidewalks and pathways. The "loop and lollipop" arrangement of roads (compared to a traditional grid layout of roads) does increase the amount of walking distance and time that people may need to reach destinations. This can be especially challenging for people who may find longer walks difficult or too demanding. However, the neighbourhood has a complementary off-street pathway network which provides "short cut" walkway connections in many areas to improve walkability in the community. Most residents can select a range of different route options to get to destinations, though Lakewood Road West and Lakewood Road South are probably the most convenient routes for most people.

Most of the off-street pathway network includes pathway lighting, which is especially beneficial in winter. However, there are no off-street pathways that are cleared throughout winter.

Despite the various route options, there are still notable missing connections. In some locations, there are informal pathways worn through the grass in parks and open spaces. These may be preferred by some residents because they reduce walking distances. Notably, there are no streets missing sidewalks on both sides.

The walkability analysis looked specifically at three types of internal and external destinations: commercial destinations, community service destinations, and recreational destinations. The following maps provide an overview of ease of access to destinations.

Walking/Rolling Access to Neighbourhood Businesses

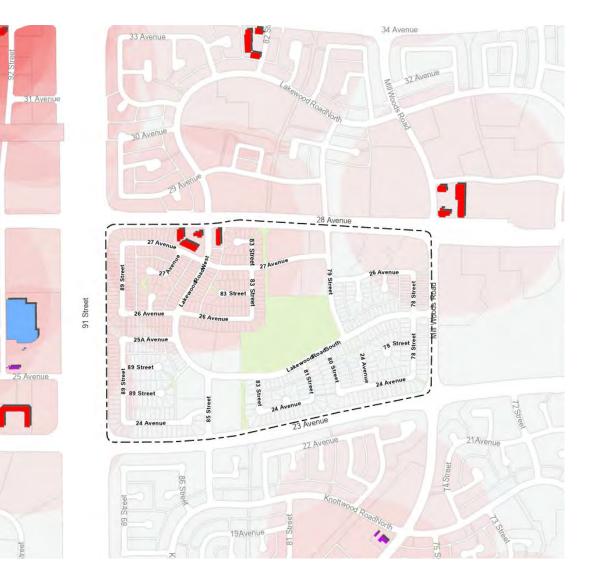
This is a high-level walkability analysis and uses a 400m straight line radius (approximates a five-minute walk) to show the number of commercial business options residents have within an approximately five-minute walking distance. Actual walking and rolling times may vary.

MAP LEGEND

Most Neighbourhood Commercial Options ↓ Least Neighbourhood Commercial Options

 Neighbourhood Shopping Centre
 Power Centre Retail
 Gas Station
 Parks and Open Spaces
 Meyonohk





Walking/Rolling Access to Community Services

This is a high-level walkability analysis and uses a 400m straight line radius (approximates a five-minute walk) to show the number of community service options residents have within an approximately five-minute walking distance. Actual walking and rolling times may vary.

MAP LEGEND





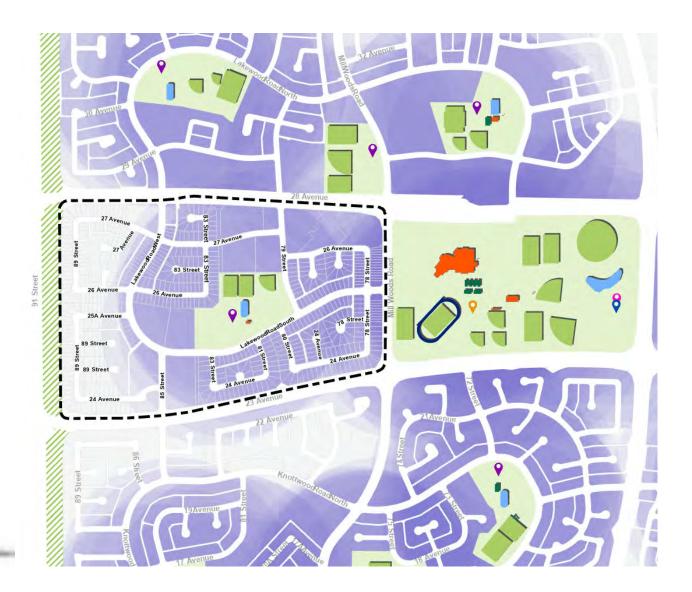


Walking/Rolling Access to Recreation

This is a high-level walkability analysis and uses a 400m straight line radius (approximates a fiveminute walk) to show the number of recreation options residents have within an approximately five-minute walking distance. Actual walking and rolling times may vary.

MAP LEGEND





ACCESSIBILITY AND CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The following accessibility challenges were noted:

- Pathways and sidewalks in the neighbourhood are either concrete or asphalt, which helps people who walk or roll, regardless of ability, to move through the neighbourhood. However, in many places, the pathways or sidewalks are cracked or uneven, which can be difficult for some types of movement and pose trip hazards
- Some sidewalks are interrupted by driveway access into properties, due to the straight face curb line present along these sidewalks, which causes a dip in the level sidewalk surface or increases the risk of a car backing up not seeing a person walking or rolling on the sidewalk



Sidewalk curb ramp aligned with centre of intersection, located on Lakewood Drive South

- Because of cars parked close to the intersections, it may be difficult for people driving to see people starting to cross, especially if they are shorter or in wheelchairs or motorized scooters
- There are intersections that do not have curb ramps
- There are curb ramps that align with the centre of the intersection rather than the curb ramp on opposite side
- There are painted crosswalks at key crossing locations near Meyonohk Park, Meyonohk School and where the north-south pathway crosses roads. Most of the painted crosswalks are on only one side of the intersection, rather than on both
- The signalized intersection crosswalks are on the adjacent arterial roads (28 Avenue, 23 Avenue and Mill Woods Road). However, there is a rectangular rapid flashing beacons (RRFBs) on Lakewood Road near Meyonohk School at 79 Street. This is the only flashing, visual indication for vehicles that people who walk and roll are attempting to cross the road and limits the amount of visible and convenient crossing options, especially at night
- Because some of the roads are wide, crossing distances may be long for people with mobility challenges
- There are limited locations for people to sit when using pathways, which may be challenging for people with mobility issues

• There were no accessible picnic tables noted on site and there were not always level areas next to benches, causing challenges for people who roll

The following CPTED challenges were noted:

- There is an off-street pathway network that improves access through the neighbourhood and provides recreational opportunities. However, many of these pathways are located in narrow spaces of land between the property fences, have blind corners, or are crowded with mature vegetation. This causes these pathways to be less visible from active public areas, such as roads, and hinders passive surveillance by the community.
- Most of the off-street pathways have lighting, however some do not. These unlit pathways may make some people uncomfortable when it is dark outside
- There is little distinction between public spaces and the private spaces on multi-family residential parcels. This can inadvertently cause people to trespass or use private amenities assuming that they are public. However, these private open spaces tend to be well kept and have good natural surveillance
- There are a mix of conditions of privately owned fences, with several of them being in disrepair
- Because of the large size of the park site and limited number of walkways, there may be blind spots behind the school building



Pathway connection between fences with poor sightlines (blind corner)

• There is limited YEG SafeCity data points available in Meyonohk. There were three complaints on Lakewood Road South regarding verbal and sexual harassment, one complaint in an alley for verbal harassment, one complaint for poor lighting and "not enough or no people around" on an open space pathway

PUBLIC / PRIVATE OWNED ROUTES

There are many locations where connector walkways from private apartment or row housing sites do not connect to the public sidewalk/pathway network, which reduces the walkability from these sites. Some of these missing connections are on private property and some are on public property.

ROUTE PRIORITIZATION

The following provides an overview of walking and rolling route prioritization:

COLLECTOR ROAD SIDEWALKS

Sidewalks along Lakewood Road West and Lakewood Road South are likely the most important walking and rolling route through the community, linking people across the neighbourhood to schools, parks, commercial sites and external destinations and transit routes. The existing sidewalks do not meet the current needs of the neighbourhood, and they will benefit from improvements such as sidewalk widening, boulevards, street trees and bench areas.

LOCAL ROAD SIDEWALKS

These sidewalks are well lit, providing fundamental allseason access to residential properties and neighbourhood destinations. They are both used for daily access needs and recreational needs as an extension of the off-street pathway network. Snow & ice removal from sidewalks on Meyonohk local roads are maintained by residents. There currently are no missing sidewalks on local roads, though many of the sidewalks are substandard width and could benefit from widening.

OFF-STREET PATHWAYS

Off-street pathways provide convenient, quiet, enjoyable and attractive connections from one area of the neighbourhood to other areas of the neighbourhood. Pathways are less visible from roads but still provide a lit walking and rolling network. Currently, off-street pathways are classified as a Priority 2 for snow removal (snow is cleared within 3 days). . There are some properties that have access to off-street pathways from their yards using backyard or side yard fence gates. The pathway network could benefit from widening, improved sightlines and upgraded trail lighting.



Example of a narrow local road sidewalk with encroaching signage

OPPORTUNITIES AND CONSTRAINTS

The walking and rolling network on collector roads have the following opportunities and constraints:

- The addition of boulevard street trees to make the pathway and sidewalk experience more enjoyable. This will be dependent on space availability and utility locations
- The addition of benches and garbage/recycling bins in key locations to provide bench areas for pathway users and reduce potential littering. Including bike racks in key locations shared with benches will also improve the overall pathway.
- Widen sidewalks to current standards to improve mobility and accessibility for people who walk and roll
- Ensure that curb ramps are provided at all intersections and mid-block crossing locations
- Consider upgrading to widened shared pathways in select locations. This would allow people on bikes to use them comfortably with people who walk or roll. This option is dependent on the amount of space available in the road right-of way, the location of utilities and other constraints
- Consider adding additional crosswalk line painting where the crosswalk is marked on only one side of the intersection to reduce confusion for people who walk, roll and drive. Additional crosswalk lines make it clear to drivers that people who walk or roll have priority

- Include traffic calming elements, such as curb extensions and raised crosswalks. This will reduce crossing distances, improve crossing visibility and slow traffic
- Shift some pathway connections at intersections to improve crossings since some locations align with the centre of the intersection and not the curb ramp on opposite side of road
- Review all unmarked crosswalk locations to see if improvements are needed. Criteria for the selection of crosswalk improvements should include known vehicle/ person incidents, longer stretches of road where people who drive may speed or may not pay attention and local road crossings near collector road crossings. If a complete upgrade of a crosswalk is not required, the possibility of including movement desire lines will be considered
- Consider adding new pathway connections in open spaces where more direct and convenient routes to destinations can be provided
- Upgrade pathway lighting with newer LED lighting, which reduces energy consumption and improves the quality of lighting. Ensure that the spacing of light poles is consistent with recommendations for even, consistent pathway lighting and dark-sky principles (for example, reduces the amount of light directed to the sky)

3.7 Mobility Network – Transit Network

The following sections provide an analysis of the transit network available to residents and their ability to access it efficiently, conveniently and easily.

TRANSIT NETWORK ANALYSIS

There are no transit routes within the Meyonohk neighbourhood; however, Meyonohk is served by transit along the adjacent arterial streets (Mill Woods Road, 23 Avenue and 28 Avenue). The Lakewood Transit Centre is at the intersection of Mill Woods Road and 28 Avenue. Of the various transit stops, numbers 3853, 3632 & 3109 are the most frequented by passengers. All three of these stops are located along 23 Avenue.

Within a five-minute (400 m) walking radius of the neighbourhood boundaries (actual walking and rolling times may vary) the following bus routes are available:

- Route 56 This is a bus route that connects Mill Woods, Leger and West Edmonton Mall. It runs every 15 to 30 minutes on weekdays and every 30 minutes on weekends. It starts from Mill Woods Transit Centre and goes through Hewes Way, 23 Avenue, Century Park Transit Centre, Leger Transit Centre, Riverbend Road, Whitemud Drive, and ends at West Edmonton Mall Transit Centre
- Route 509A/509B This is a bus route that circulates within Mill Woods. It runs every 15 to 30 minutes on weekdays and every 30 minutes on weekends. It starts from Mill Woods Transit Centre and goes through Hewes Way, 28 Avenue, Mill Woods Road, and 38 Avenue and ends at Mill Woods Transit Centre. Route 509A runs clockwise whereas route 509B runs counterclockwise

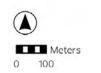
- Route 512 This is a bus route that connects Mill Woods and South Edmonton Common. It runs every 15 to 30 minutes on weekdays and every 30 minutes on weekends. It starts from Mill Woods Transit Centre and goes through Hewes Way, 28 Avenue, Parsons Road, South Edmonton Common and ends at the Mill Woods Transit Centre
- Route 513 This is a bus route that serves the Mill Woods and Knottwood areas in Edmonton. It runs every 20 to 30 minutes on weekdays and every 30 minutes on weekends. It starts from Mill Woods Transit Centre and goes through Hewes Way, Lakewood, 28 Avenue, Mill Woods Road West, Knottwood Road, and ends at Mill Woods Transit Centre. It is a circular line that has 30 stops
- Route 642 This is a school special bus route that connects the Lakewood Transit Centre (TC) with Mill Woods Transit Centre. On weekdays during the school year, it runs from Mill Woods TC to Lakewood TC between 7:50 a.m. to 10:10 a.m. and from Lakewood TC to Mill Woods TC between 12:17 p.m. and 3:39 p.m. There is no weekend service. The route's loop uses 28 Avenue, Hewes Way and 66 Street
- Route 661 This is a school special bus route that connects the Lakewood Transit Centre (TC) with Mill Woods Transit Centre and the Southgate Transit Centre (TC). On weekdays during the school year, it runs from Mill Woods TC to Southgate TC between 8:05 a.m. to 8:32 a.m. and from Southgate TC to Mill Woods TC between 2:57 p.m. and 3:28 p.m. There is no weekend service. The route's loop uses 28 Avenue, Hewes Way and 66 Street, 34 Avenue, 106 Street, 40 Avenue, Whitemud Drive, 91 Street and Mill Woods Road

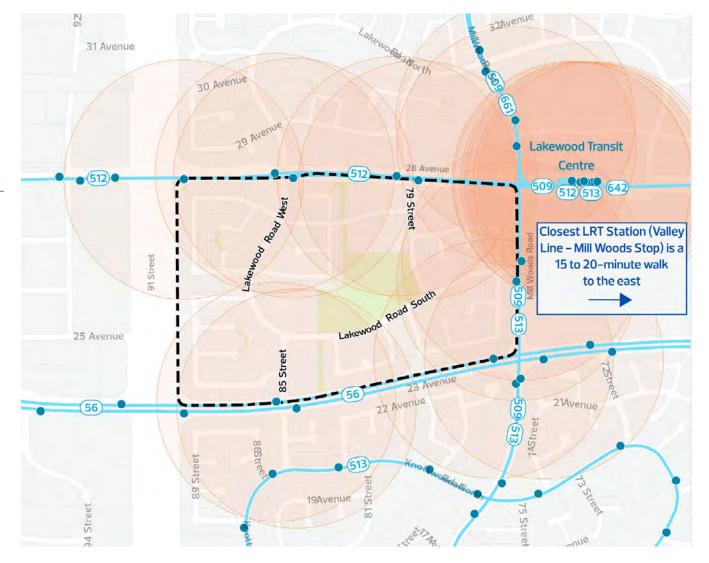
Transit Network

This map provides an overview of the transit network in Meyonohk. The high–level walkability analysis uses a 400m straight line radius (approximates a five–minute walk)from bus stops. Actual walking and rolling times may vary.

MAP LEGEND







 Valley Line LRT – the closet stops are Grey Nuns and Mill Woods, which are an approximately 15 to 20 minute walk from the neighbourhood boundary. The LRT runs every 10 to 15 minutes on weekdays and every 15 to 30 minutes on weekends. It starts from 102 Street Stop in downtown Edmonton and goes through Quarters, Muttart, Strathearn, Holyrood, Bonnie Doon, Avonmore, Davies, Millbourne, Grey Nuns, and ends at Mill Woods Town Centre Stop. The Valley Line LRT West expansion, which is currently under construction until 2027, will extend the route through the west side of Edmonton to the Lewis Farms Transit Centre.

WALKABILITY TO TRANSIT NETWORK

A transit walkability analysis has been conducted using a five-minute (400 m) walking radius (actual walking and rolling times may vary) from bus stops. Almost all residents are within a five-minute walking and rolling distance to a bus stop, though some residents' walks may be slightly longer to reach the route of their choice.

The walkability analysis has also been conducted using a ten-minute (800 m) walking radius (actual walking and rolling times may vary) from LRT stops. Meyonohk is just slightly outside of this radius, with the nearest point being 1200 m (approximating a fifteen to twenty minute walk). Meyonohk residents may use nearby bus stops to transfer to the nearest LRT stop if the walking distance is too long for some people.

It is important to note that this is a high-level analysis and that actual walking times can be more or less, depending on sidewalk and pathway connectivity, the number and type of road crossings and the speed and ability of individual people.



Lakewood Transit Centre, looking east along 28 Avenue

SCHOOL BUS NETWORK

According to information provided by the school within the neighbourhood, there are school bus routes that travel through the neighbourhood. These buses are primarily used by elementary school students, who do not walk, roll or bike to school or do not get dropped off by vehicles.

Meyonohk School typically has five standard yellow school buses and two special needs school buses that park and pick up and drop off students. The bus loading zone is located on Lakewood Road South from 79 Street to the Meyonohk Park skate shack sidewalk. Bus loading zones are signed and are in effect from 7 a.m. to 4 p.m. on school days. The loading zone is also signed as a "no idle" zone.

Parents are not permitted to pick up or drop off students using the bus loading zones. A designated drop off/pick up area is located on 79 Street, east of the school.



Map of Meyonohk School Bus Loading Zones and Parent / Student Drop off Areas

OPPORTUNITIES AND CONSTRAINTS

- Transit services adjacent to the neighbourhood provide a variety of options for residents. Walkways to transit stops will be important to encourage transit over individual vehicle travel to external destinations
- The pathway network is an important part of residents' movement through the neighbourhoods and these connections are critical for transit access. A review of pathway snow removal frequency should be conducted. Snow clearing priority for routes important to transit access should be considered when determining options for locations and types of connections (for example, shared pathways)
- The existing school loading zone length is sufficient to accommodate the current number of buses. Expansion is only needed if buses are added to the system
- According to school officials only 20% of students live in Meyonohk, which makes it highly likely that students are transported by parents or buses. Ensuring convenient pick up and drop off is likely to be a priority for students and their families
- The addition of pathways through large park sites should be considered as a way to reduce walking distances to bus stops

3.8 Mobility Network – Biking Network

BIKING CONNECTIVITY ANALYSIS

There are no official designated bike routes within the neighbourhood. It is anticipated that people who bike use the collector road, local roads and alleys for movement through the neighbourhood. They may also use off-street pathways though these are only intended to be used by children for biking. It is likely that people who feel uncomfortable sharing the road with people who drive choose to ride on the sidewalk instead of the road.

There are four designated bike routes directly adjacent to the Meyonohk boundaries:

- There is a shared pathway between the Meyonohk boundary and 91 Street. This route is identified as a District Connector in the Bike Plan
- There is a shared pathway on 23 Avenue from 91 Street to 85 Street. This route is identified as a District Connector in the Bike Plan
- There is a shared pathway on 28 Avenue. It runs on the north side of the road from 91 Street to Lakewood Road West and then on the south side from Lakewood Road West to Mill Woods Road. This route is identified as a Neighbourhood Route in the Bike Plan
- Mill Woods Road is designated and signed as a shared road

The route through Mill Woods Road used to be marked by sharrows (painted bike and arrow symbol), though the paint is now nearly worn away. The route is considered substandard since it is a shared road with higher traffic volumes. This route is identified as a Neighbourhood Route in the Bike Plan and is included as a project example in the Bike Plan Implementation Guide. In the project example, the initial suggestion is to convert the facility into protected bike lanes (a bike lane separated from traffic) or raised bike lanes (a bike lane that is separated from traffic and raised to curb height) or a shared pathway.

Biking amenities, such as bike racks, are limited and were observed to only be provided at the Meyonohk School and neighbourhood commercial site on Lakewood Road and 28 Avenue.



Bike Connectivity Map

This map shows the existing shared pathways and bike lanes in and around Meyonohk. Missing off-street bike route connections are identified to show potential improvements to the biking network.

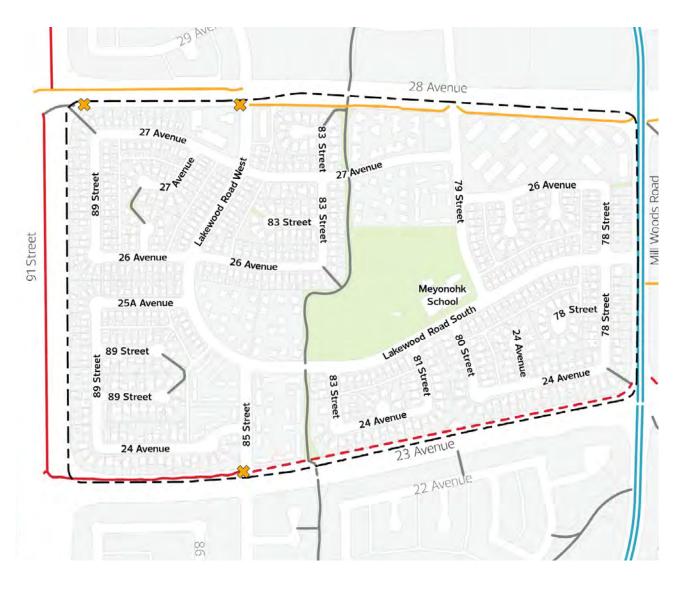
MAP LEGEND

Existing Shared Pathway
 On-Street Bike Route (Shared Roadway)
 Sidewalk
 District Connector Bike Route (Shared Pathway)
 Future District Connector Bike Route (from Bike Plan)
 Parks and Open Spaces
 Meyonohk
 Dead-end Shared Pathways

Meters

100

0



CONNECTIONS TO CITY OF EDMONTON'S BIKE PLAN

In the Bike Plan, neighbourhoods were scored based on how many destinations are accessible by way of off-street shared pathways or bike lanes. Bike Network Analysis (BNA) scoring ranges from 0 to100, where neighbourhoods receiving a high BNA score are preferable over those with low scores. Meyonohk received a score between 20 and 40. These scores indicate that there is a lower level of access to destinations using low-stress bicycle routes.

Bicycle trip potential analysis determines which areas of a community are more likely to generate trips for transportation, such as commuting, school or shopping. This analysis scores areas from Tier 1 to Tier 5, where low number tiers have a higher trip potential than high number tiers. Meyonohk is in Tier 3, giving it a moderate likelihood of generating trips

The Bike Plan (2020) identifies existing and future routes near Meyonohk, though there are no future routes identified within the neighbourhood itself. There is one proposed future route adjacent to Meyonohk: a shared pathway on the north side of 23 Avenue from 85 Street to Mill Woods Road, which has been identified as a City project for implementation.

According to the Bike Plan, the shared roadway on Mill Woods Road is a substandard facility because of higher traffic volumes. However, the Bike Plan and the Implementation Guide do not provide specific recommendations because it is not a district connector route. Though this route is outside of neighbourhood boundaries it would be beneficial to consider the tie-ins to future improvements of this route.

ROUTE PRIORITIZATION

Routes that are used to access schools, recreation facilities, transit or designated bike routes should be prioritized for new biking connections. The type and location of new bike routes in the neighbourhood will need to be considered against both vehicular and non-vehicular traffic amounts.



District Connector bike route along 91 Street

OPPORTUNITIES AND CONSTRAINTS

The following outlines suggested improvements to the biking network:

- Improve areas of deteriorating off-street sidewalk and trail lighting of all off-street routes used by children who bike
- Review existing off-street sidewalks for upgrading to shared pathways. The north-south pathway connection through Meyonohk and its park site should be considered as a key potential shared pathway connection
- Review Lakewood Road to see if a bike route can be incorporated into the design since it will provide a convenient connection through the neighbourhood, adjacent designated bike routes, commercial areas, recreation sites and schools
- Consider adding an additional shared pathway in Meyonohk Park to provide a direct connection to the playground and Meyonohk School
- Identify pathways that should be lit and cleared as part of a winter bike pathway network
- Provide biking support amenities, such as bike racks and resting areas, to encourage longer use of the network and support users of diverse abilities and ages

3.9 Mobility Network – Driving and Traffic Safety

DRIVING NETWORK ANALYSIS

Meyonohk is accessible by vehicle given that it is located between four major arterial roads, with direct access to three of them. Lakewood Road and 85 Street are the two collector road access points from these arterials to Meyonohk. Lakewood Road is the main collector road that runs both east-west and north-south through Meyonohk. Lakewood Road ties into 28 Avenue to the north of the neighbourhood and Mill Woods Road to the east of the neighbourhood. The other collector road, 85 Street, runs north-south and ties directly between Lakewood Road and 23 Avenue. These collector roads, and the various local roads that connect within the neighbourhood are either at uncontrolled intersections or are controlled with stop signs.

There is both public and private parking in Meyonohk. Public parking is in the form of on-street parking; there are no public parking surface lots or parkades. The following provides a summary of the parking network:

On-Street Parking

• Parking is allowed on most neighbourhood streets

On-Street Parking Restrictions

• Parking is not allowed on 79 Street from 8 a.m. to 4 p.m. during school days to accommodate north/south traffic while the west side of 79 Street is used as a loading zone for students

On-Street Seasonal Parking Restrictions

- Seasonal parking areas are in effect for snow clearing. Onstreet parking bans can be placed at the City's discretion with eight hours of notice
- Seasonal parking ban signs exist along Lakewood Road and 85 Street, both collector roads

Accessible Parking / Passenger Loading Zones

- Loading zones for school buses exist along Lakewood Road in front of the Meyonohk School, and along the west side of 79 Street, adjacent to the school for students
- Residents and businesses can request the City of Edmonton to add an accessible parking zone in front of their home/business. These zones are typically 7.5 to 10 m long. Accessible parking zone locations have been identified in five locations throughout the neighbourhood along both collector and local roads

Private Parking Areas

- There are private parking lots at commercial properties, schools and multi-family residential properties
- Most single-family residential properties have driveways and many of them have attached or detached garages

Parking enforcement, including abandoned cars, seem to be ongoing issues for residents based on the City's 311 data, though it is unclear if this is beyond that of other similar communities. According to call logs, over 25% of all 311 calls from 2014 to 2023 have been related to public parking enforcement and 3% have been related to private parking enforcement.

TRAFFIC SAFETY ANALYSIS

There is one automated speed enforcement site in Meyonohk where mobile speed enforcement (photo radar) vehicles track speeding:

• Lakewood Road South between 81 Street and 79 Street (across from Meyonohk Park and Meyonohk School). The speed limit is 30km/h from 7:30 a.m.–9 p.m. and 40km/h otherwise

	2021	2022	2023	Total	Percent
Parking Enforcement – City	47	73	60	180	25.94%
Roadway Maintenance (i.e. snow plowing)	40	87	19	146	21.04%
Roadway Repairs (i.e. potholes)	22	31	29	82	11.82%
Signage and Signals Maintenance	28	30	22	80	11.53%
Urban Forestry Maintenance	17	8	14	39	5.62%
Parks Maintenance	10	9	11	30	4.32%
Garbage/Litter	9	18	2	29	4.18%
Graffiti on Public Property	5	14	7	26	3.75%
Dead Animal Removal	11	7	4	22	3.17%
Parking Enforcement – Private	2	11	7	20	2.88%
Sidewalk/Trail Repairs	7	6	7	20	2.88%
Encampments	7	4	0	11	1.59%
Drainage	1	0	4	5	0.72%
Coyote Issue	2	1	1	4	0.58%
	208	299	187	694	100.00%

Data Source: City of Edmonton Open Data for "311 Requests" at https://data.edmonton.ca/City-Administration/311-Requests/q7ua-agfg

This table shows the classification for all 311 calls made about Meyonohk neighbourhoods since 2021. Approximately 26% of the calls have been about parking enforcement.

Mobile speed enforcement at this location is relatively new and there have only been ten ticketing events since June 2022. During this time, there were a total of 16 tickets issued. No speeding was recorded at 40% of the ticketing events.

The City's Safe Mobility group has recorded vehicle collisions and crashes within the neighbourhood from 2018 to 2022. During this time, 51 collisions have been recorded with one major injury reported.

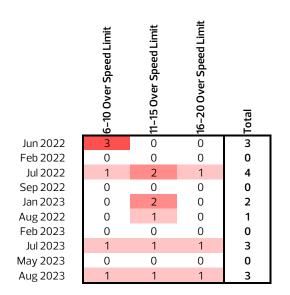
The major cause of collisions was striking parked vehicles (41 of the 51 total collisions), which can be associated with speed-related collisions. Of these parked vehicle collisions, the majority of them occurred during winter months and were located along Lakewood Road between Millwoods Road and 85 Street.

There has been a combined total of 12 walking, rolling and biking collisions within the neighbourhood between 2018 and 2022. All of these collisions have occurred along boundary roads or the entrance to the neighbourhood. These collisions were caused by people who drive failing to yield to the walking, rolling, and biking person.

These statistics suggest that there are a high number of collisions that occur at the immediate entrances to the neighbourhood for those who walk and roll. Within the core of the neighbourhood, the data suggests that speeding has continued despite the implementation of the 40 km/h speed limit.

Photo-Enforced Speeding Tickets

The map and table provide a summary of all photo–enforced (photo–radar) tickets issued for speeding between June 2022 and August 2023. The enforcement location is on Lakewood Road South near 81 Street.



Data Source: City of Edmonton Open Data for "Mobile Automated Traffic Enforcement Tickets Issued (by Month)" at https://data. edmonton.ca/Vehicle-Speed/Mobile-Automated-Traffic-Enforcement-Tickets-Issue/r53s-3xgt



OPPORTUNITIES AND CONSTRAINTS

- Identify locations that may benefit from traffic calming measures to address speeding or collision risk
- Review options to improve visibility of people who walk and roll, shorten crossing distances and enhance crosswalk visibility
- Review traffic challenges around Meyonohk School and playground zones to identify improvement opportunities for all users, especially those who walk, roll and bike



3.10 Infrastructure

UTILITIES

There are both shallow and deep utilities in Meyonohk:

- Shallow Utilities include: ATCO Gas, EPCOR Power, Telecommunications (Telus, Shaw, Bell, Rogers), City Street Lights
- Deep Utilities: EPCOR Water, EPCOR Drainage (Storm and Sewer)

There are no pipeline corridors or major power transmission lines within Meyonohk. The closest pipeline transmission line is located approximately 100 m from the southeast corner of the Meyonohk boundary.

There are major sanitary and storm trunk lines that were replaced in 2017. These lines run along 91 Avenue adjacent to the west Meyonohk boundary.

CROSSING AGREEMENTS

There are no pipeline corridors within Meyonohk and no overhead transmission lines running through the neighbourhood. Therefore, there will not be a need for any crossing agreements to be made before designs proceed. Proximity agreements will also not be required given the above.

Gas facility near Mill Woods Road

ENCROACHMENT AGREEMENTS / LICENSES OF OCCUPATION

An encroachment agreement is a written confirmation between the City and a property owner that allows for the private use of the public right-of-way. Often, encroachment agreements within residential areas are used to extend private yards onto public rights-of-way. Throughout design development, existing agreements will be reviewed for impacts to the project and adjustments to the design will be made accommodate them. Impacts to design resulting from encroachment agreements could include shifting new infrastructure outside of the affected agreement area, initiating discussion between the City and land owner to adjust the agreement, and keeping all parties informed of the opportunities and tradeoffs for these changes. The Project Team is not aware of any encroachment agreements in the neighbourhood.

A License of Occupation (LOO) is an agreement by the City allowing someone to have temporary use of a portion of road right-of-way for a determined period. Since these licenses are temporary, the impact of these licenses is unknown until the project is closer to the time of construction. There currently are no known LOOs within Meyonohk. As the project progresses towards construction, the status of LOOs will be reviewed.

LAND ACQUISITION

During Neighbourhood and Alley Renewal, the City may need to acquire portions of private lands to accommodate proposed improvements. Small land acquisitions are occasionally needed for new signal placements, installation of traffic-calming measures, or new sidewalks within narrow public rights-of-way. Land acquisitions are rare but will be reviewed during the Concept Phase to identify any impacts to design decisions.

OPPORTUNITIES AND CONSTRAINTS

The addition of trees throughout the project will in part be influenced by the location of utilities and pipelines. The project will use the City's standards for planting distances from utilities as its guideline for determining the locations of new trees. Other vegetation options will be explored in locations where utility conflicts limit tree planting options.

Widening of sidewalks and pathways will also have to consider the location of utilities. Underground utilities can be located beneath sidewalks and pathways, but this is not the preference of utility providers or the City as it creates accessibility issues during future utility maintenance. Above ground utility structures, such as electrical transformers and light poles, may need to be relocated if the widening or construction of a high priority sidewalk or pathway conflicts.

LOW IMPACT DEVELOPMENT OPPORTUNITIES

Based on a high-level review of EPCOR's 2014 citywide Flood Mitigation Study and a sag (drainage low point) map provided by EPCOR, there are multiple locations that may be candidates for Low Impact Development (LID) facilities. LID facilities are typically landscaped features that are used to capture stormwater during high rainfall events and slowly release this captured water into the stormwater system.



MAP LEGEND

■ NEIGHBORHOOD 1:20 SAG 1:100 SAG 1:50 SAG 1:200 SAG The neighbourhood has a large number of sag areas that may cause ponding or storm line surcharge issues (meaning that pipes are do not have enough capacity during storm events). LID facilities would provide an environmental benefit for the neighbourhood and reduce the overall strain on the EPCOR's stormwater systems. Based on discussions with EPCOR, Meyonohk has been identified as a possible priority location for added LID facilities.

The process of determining potential LID facilities in the neighbourhood include:

- Analyzing road and land drainage patterns to find areas capable of collecting runoff
- Identifying and prioritizing locations that have the risk of ponding during storm events
- Finding locations with sufficient space on City–owned land for LID facilities
- Reviewing current stormwater pipe and catch basin (inlet) locations that could be connected to a new LID facility
- Conducting technical analysis of the cost-benefit of proposed LID facility based on their capital cost and stormwater capacity
- Coordinating with EPCOR and the City to ensure that the LID facility will meet their goals, objectives and operations and maintenance standards

EPCOR's SAG Map (2023) highlights locations where there may be the potential for surface ponding and flooding during major storm events (for example, 1:20 sag, identifies areas that may pond during a "once in twenty years "storm event).