



# LET'S MOVE YK!

YELLOWKNIFE TRANSPORTATION PLAN



## INTERIM REPORT #1

### Transportation in Yellowknife Today

December 2025



The City of Yellowknife acknowledges that we are located in Chief Drygeese territory. From time immemorial, it has been the traditional land of the Yellowknives Dene First Nation. We respect the histories, languages, and cultures of all other Indigenous Peoples including the North Slave Métis, and all First Nations, Métis, and Inuit whose presence continues to enrich our vibrant community.

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### December 2025

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SYSTEMS



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# 1.0 INTRODUCTION



## 1.1 PROJECT BACKGROUND

The City of Yellowknife is located in Chief Drygeese territory and has been the traditional land of the Yellowknives Dene First Nation for time immemorial.

As the Northwest Territories' capital and home to approximately half of the territorial population with nearly 22,000 residents, Yellowknife plays an important economic, cultural, and governmental role and is a critical transportation hub in Canada's North.

Yellowknife is a gateway city to the Northwest Territories, with the airport as the main hub connecting remote communities across Canada's North with major Canadian cities, Highway 3 as a key transportation corridor for goods and people, and winter ice roads on Great Slave Lake that connect to nearby communities and resource sites.

The City's Council Strategic Directions 2023-2026 identifies a vision that Yellowknife is a welcoming, inclusive, and prosperous community with a strong sense of pride in our unique history, culture and natural beauty and role as the capital city and gateway to the Northwest Territories.

The City has many transportation related-plans, policies and bylaw over in recent years, including the Bicycle Routing Study (2008), Integrated Parks, Trails, and Open Space Development Study (2005), Accessibility Audit Report and Implementation Strategy (2017), Trail Enhancement and Connectivity Strategy Report (2018), Wayfinding Strategy and Implementation Plan (2019), YK Public Transit Review (2020), and ongoing Development and Design Standards.

The City is currently undergoing a Community Plan Comprehensive Update – **Let's Talk YK 2050** – to guide long-term growth and development. Building on this momentum, the City is also developing this Transportation Plan – which we're calling **Let's Move YK** – to help shape the future of transportation in Yellowknife. While the Community Plan Comprehensive Update will establish broader high-level goals for growth, land use, housing, and transportation, Let's Move YK will build on it by providing detailed strategies, actions, and priorities for transportation.



## 1.2 WHAT IS LET'S MOVE YK?

Yellowknife is always moving through our seasons, across our neighbourhoods, and toward our future. That's why the City has launched **Let's Move YK**.

The name reflects exactly what this plan is meant to do:

### Let's

is an invitation. This is a project for everyone, built together by residents, Indigenous governments, community partners, and the City.

### Move

captures both the literal ways we travel and the progress we want to make as a community. It is action-oriented, a rallying call for change. It sets the standards and guidance that will shape safer, more inclusive, and connected transportation for everyone.

### YK

grounds the plan in our northern reality: our geography, climate, and way of life.



## LET'S MOVE!



Let's Move YK will bring together past studies, strategies, and policies with new ideas and standards, creating a single, unified roadmap for Yellowknife's transportation network. This plan will help the City move forward with investments in transportation projects for all modes of travel over the next 25 years.

Its purpose is to make travel safer, more welcoming, and inclusive for all residents, whether they walk, cycle, drive, or take transit. The plan will help guide the City towards its vision of being a welcoming, inclusive, and prosperous community and is a crucial step towards creating a transportation network that serves community members of all ages and abilities and will align with the Community Plan Comprehensive Update.

## 1.3 WHY TRANSPORTATION MATTERS

Transportation is an important element in our everyday lives and directly impacts how safe, affordable, and equitable our communities are. The modes we have available to us and choose to use have impacts for our own health and community. Creating a transportation system that prioritizes people and sustainability can address a wide range of broader societal objectives, shaping our communities and lives.



### Safety

High automobile speeds and traffic volumes contribute to traffic-related injuries and fatalities for pedestrians, cyclists, and motorists. Safe street design improves safety for all road users and addresses people's perception of safety.

### Climate Action

Transportation-related air pollutants are the largest contributors to poor air quality and produce greenhouse gas (GHG) emissions. The City's Corporate and Community Energy and GHG Emissions Inventory and Forecast Report found that on-road transportation accounts for 20% of Yellowknife's community GHG emissions. This has had negative implications for community quality of life, public health, and climate change. Supporting sustainable transportation options, such as walking, rolling, cycling, and transit use are ways the City can implement climate action that improves air quality and the resilience of our transportation network. The City is currently in the process of developing its 2026-

2036 Climate Action Plan.

### Public Health

Transportation and urban planning policies can effectively encourage physical activity. With more active transportation and transit options, people can be more active. Being more physically active improves people's overall health and can reduce rates of chronic disease and premature death.

## Equity & Affordability

Affordable and equitable transportation can enable residents of all incomes and abilities to access necessary services and supports (e.g., employment, education, healthcare, public and social services and healthy food) that are critical components to people's dignity and well being. The cost of owning a vehicle (such as car payments, insurance, maintenance and fuel) is significant and rapidly increasing. This also disproportionately impacts lower income individuals and families. While the City boasts one of the highest average household incomes in Canada at over \$165,000, many households face pressures due to the high cost of living, particularly for the combined costs of shelter and transportation.

According to Statistics Canada, the average household expenditure on shelter and transportation is over \$44,000 in Yellowknife, which is far higher than the Canadian average of \$31,205. Prioritizing investments that reduce reliance on vehicle ownership can free up resources to support inclusive, affordable transportation options and improve access for residents who face financial or mobility limitations.

## Economy

An efficient transportation network benefits more than just commuting employees – goods are delivered with ease, customers can access shops more frequently, and the community becomes a sought-after destination for new businesses. Housing and transportation costs, both of which are often the two largest expenditures for households, are barriers for many. Affordable housing options need to be provided where households have access to sustainable, cost-effective transportation options and choices, particularly transit and proximity to places of employment and daily needs.



## 1.4 PLAN PROCESS

The Transportation Plan is being developed through four phases over a year-long process, as shown in **Figure 1**. The planning process will include a variety of opportunities for community members to participate in the planning process and provide input. This report summarizes the findings from Phases 1 and 2.

**Phase 1: Launching** involved initiating the project and collecting and reviewing background data and information.

**Phase 2: Discovering** involved developing a detailed understanding of existing conditions for transportation in Yellowknife.

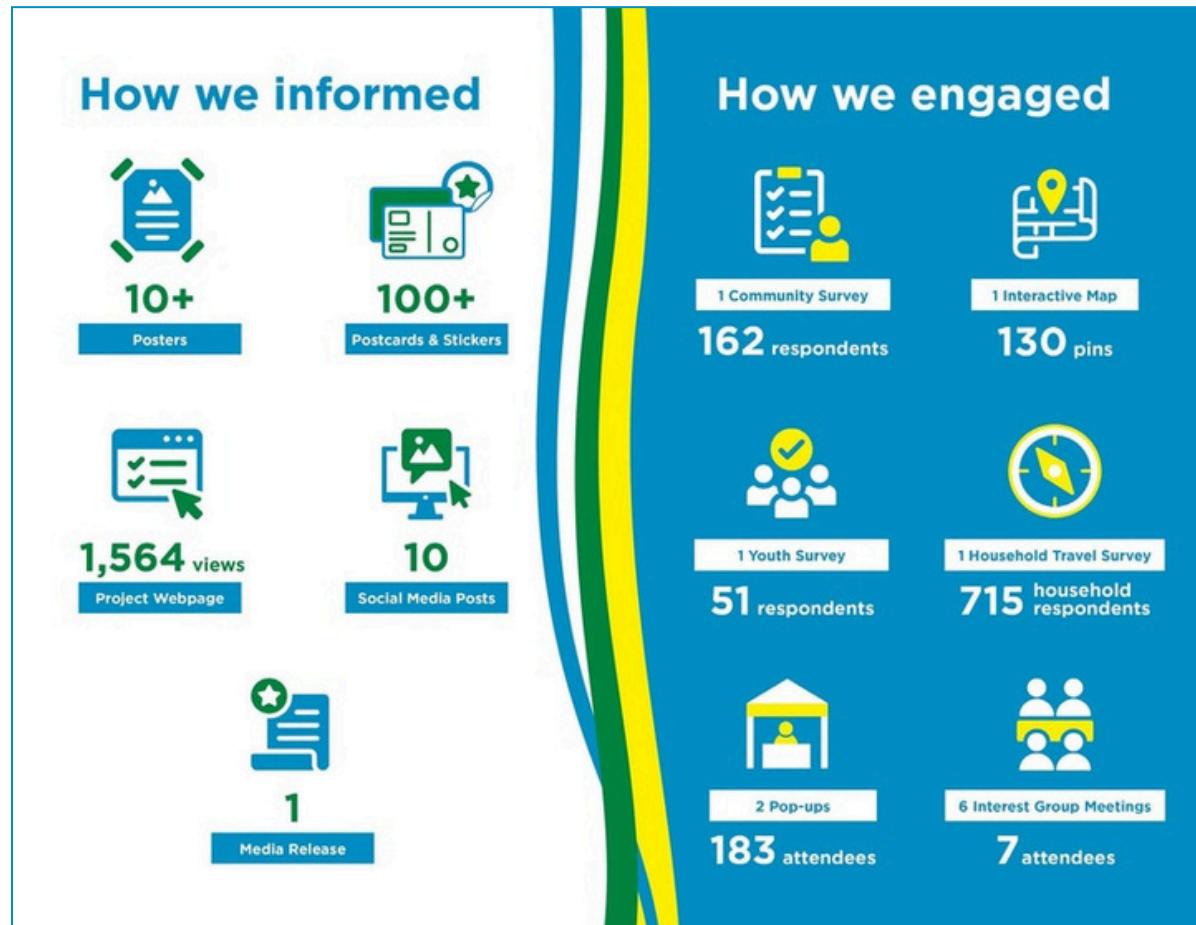
**Phase 3: Planning** will involve developing a vision and goals for the future of transportation in Yellowknife along with actions for each mode of transportation.

**Phase 4: Prioritizing** will involve developing an implementation plan and identifying priorities over the short-, medium-, and long-term.

**FIGURE 1: STUDY PROCESS**



## 1.5 COMMUNITY ENGAGEMENT



The first round of community engagement took place between September and October, 2025. The purpose of this round of engagement was to introduce the Let's Move YK: Transportation Plan to the community and gather input on transportation needs, challenges, and opportunities across Yellowknife. Through surveys, interactive maps, pop-up events, and meetings with community organizations, residents shared their experiences and ideas for improving how people move around the city. A summary of the first round of community engagement is provided in the corresponding **Round One Engagement What We Heard Report**.



YELLOKNIFE TRANSPORTATION PLAN  
INTERIM REPORT #1: TRANSPORTATION IN YELLOKNIFE TODAY

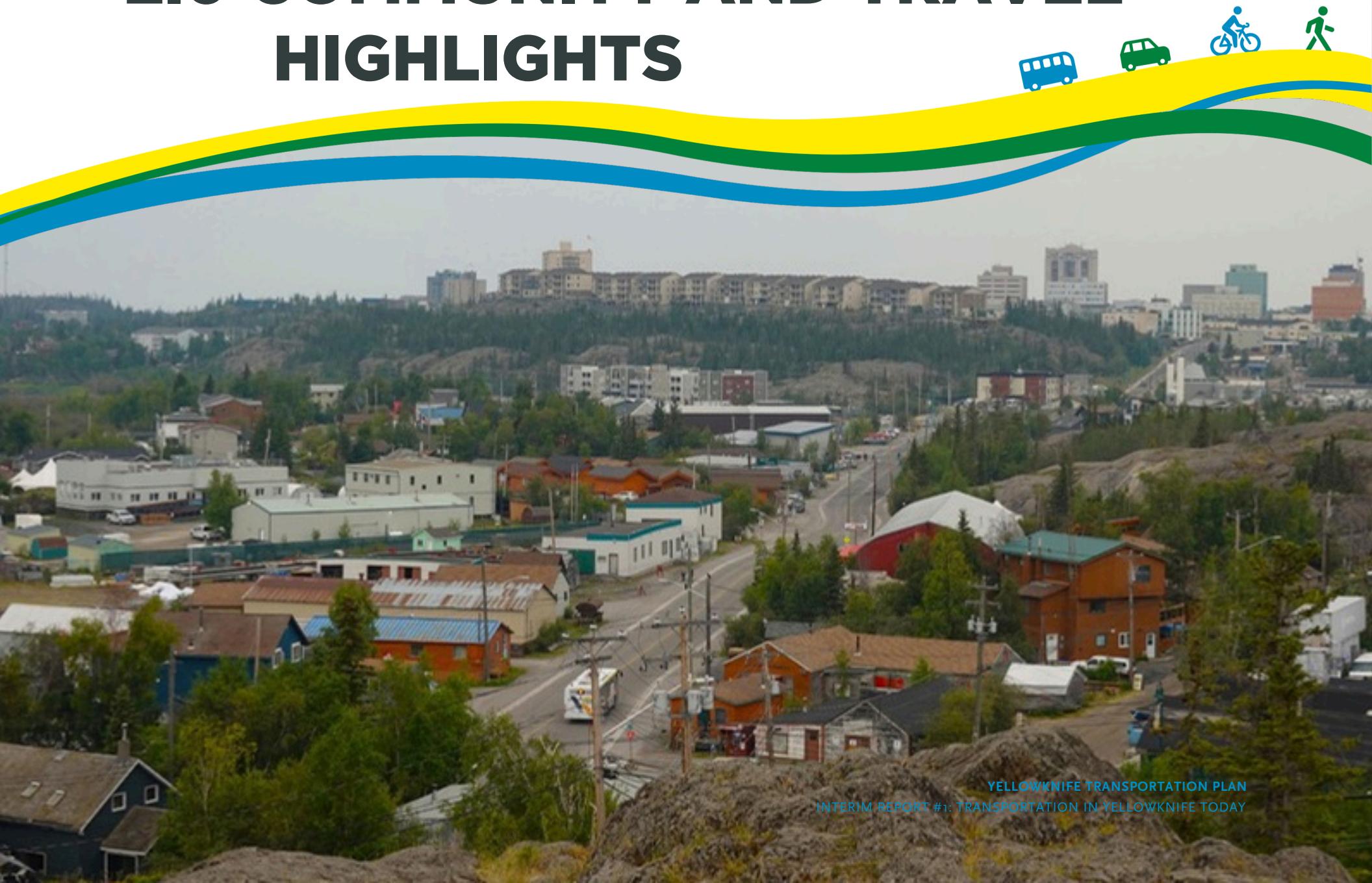
# 1.6 REPORT OVERVIEW

**Transportation in Yellowknife Today** is the first in a series of Interim Reports prepared as part of the Transportation Plan process and provides an overview of the current state of transportation and mobility in Yellowknife. This report includes the following sections:

- 1.0** **Introduction** provides an overview of the plan, including background, plan process, and structure of this report.
- 2.0** **Community & Travel Highlights** summarizes the existing factors that shape transportation in Yellowknife including land use and demographic patterns, geographic context, the policy context, and travel pattern trends.
- 3.0** **A Gateway to the North** summarizes the relationship between air-based, water-based, and road-based modes of transportation in Yellowknife.
- 4.0** **Walking** summarizes the existing conditions, issues, and opportunities for active transportation walking and mobility aids.
- 5.0** **Cycling and Rolling** summarizes the existing conditions, issues, and opportunities for cycling and rolling.
- 6.0** **Public Transportation** summarizes the existing conditions, issues, and opportunities for public transit as well as school buses, taxis, and ride-hailing.
- 7.0** **Driving** provides an overview of the current state of driving in Yellowknife, including street network characteristics, traffic volumes, goods movement, parking, car sharing, and safety considerations.
- 8.0** **Closing and Next Steps** provides a summary of the key findings of this report along with next steps for subsequent phases of the process.

This report is being developed in parallel with **Interim Report #2: Best Practices and Emerging Trends**

## 2.0 COMMUNITY AND TRAVEL HIGHLIGHTS



## 2.1 COMMUNITY CONTEXT

### 2.1.1 **Historic Context**

Yellowknife is located in Chief Drygeese territory. Since time immemorial, it has been the traditional land of the Yellowknives Dene First Nation (YKDFN). The Yellowknives Dene people were known for crafting copper tools and lived along the shores of Great Slave Lake. The waters sustained the Yellowknives Dene people by both providing essential resources for fishing, hunting, and gathering, as well as being a vital transportation and trade route connecting communities and supporting the exchange of goods and knowledge across the north.

In the late 18th century, European contact started when fur traders established trading posts near Great Slave Lake. It wasn't until the 1930s when settlement expanded, and Yellowknife grew into a frontier boom town with settlers arriving due to the gold rush. At the same time, Indigenous families were increasingly displaced from their shoreline villages to make way for the influx of settlers and miners settling in Old Town due to the gold mining operations. In 1951, the federal government designated "Lot 500" at the end of Latham Island as an Indigenous-only area which is known as Ndilo.

As the population in Old Town increased, the area became overcrowded, and the Downtown was developed to meet growing residential and commercial needs with an urban street grid. Subsequent growth in the 1970s and 1980s developed in the form of suburban-style neighbourhoods such as Range Lake and Frame Lake.

Yellowknife has transformed from being a resource-driven mining town to an administrative capital. The City's designation as the capital of the Northwest Territories in 1967 brought in federal and territorial government offices, workers, and administrative infrastructure. In addition, the discovery of diamonds in the late 1990s and the closure of gold mines in the early 2000s changed the nature of the workforce and patterns.



## 2.1.2 Geographic and Land Use Context

Yellowknife is located in Canada's sub-arctic, on the northern shore of Great Slave Lake. As the capital of the Northwest Territories, above the 62nd parallel, the City is situated on the rocky Canadian shield surrounded by boreal forests and vast freshwater lakes. Ndilq, a Yellowknives Dene First Nation community, is located at the tip of Latham Island within the municipal boundary.

While Yellowknife has a very large land area of approximately 134 square kilometres, the City faces significant land constraints due to a lack of suitable land for development, which is compounded by the high cost of land and the City's location on the Canadian Shield. As a result, Yellowknife's urban area is very compact, with most development concentrated south of Highway 3 and east of Deh Cho Boulevard, placing most residents within a relatively short walking distance of Downtown, as shown in **Map 1**.

The City includes several unique neighbourhoods, including the Downtown and Old Town, as well as several residential neighbourhoods such as Niven Lake, Frame Lake, and Range Lake. Commercial activity is concentrated in Downtown and along the Old Airport Road corridor.

Civic recreation facilities are concentrated north of Franklin Avenue, between Old Airport Road and the Downtown. The airport is in the northwestern area of the city along Highway 3 and Old Airport Road, with surrounding business and industrial located near Kam Lake.

Other key destinations are shown in **Map 2**, including grocery stores, the hospital and senior centre, and childcare centres.

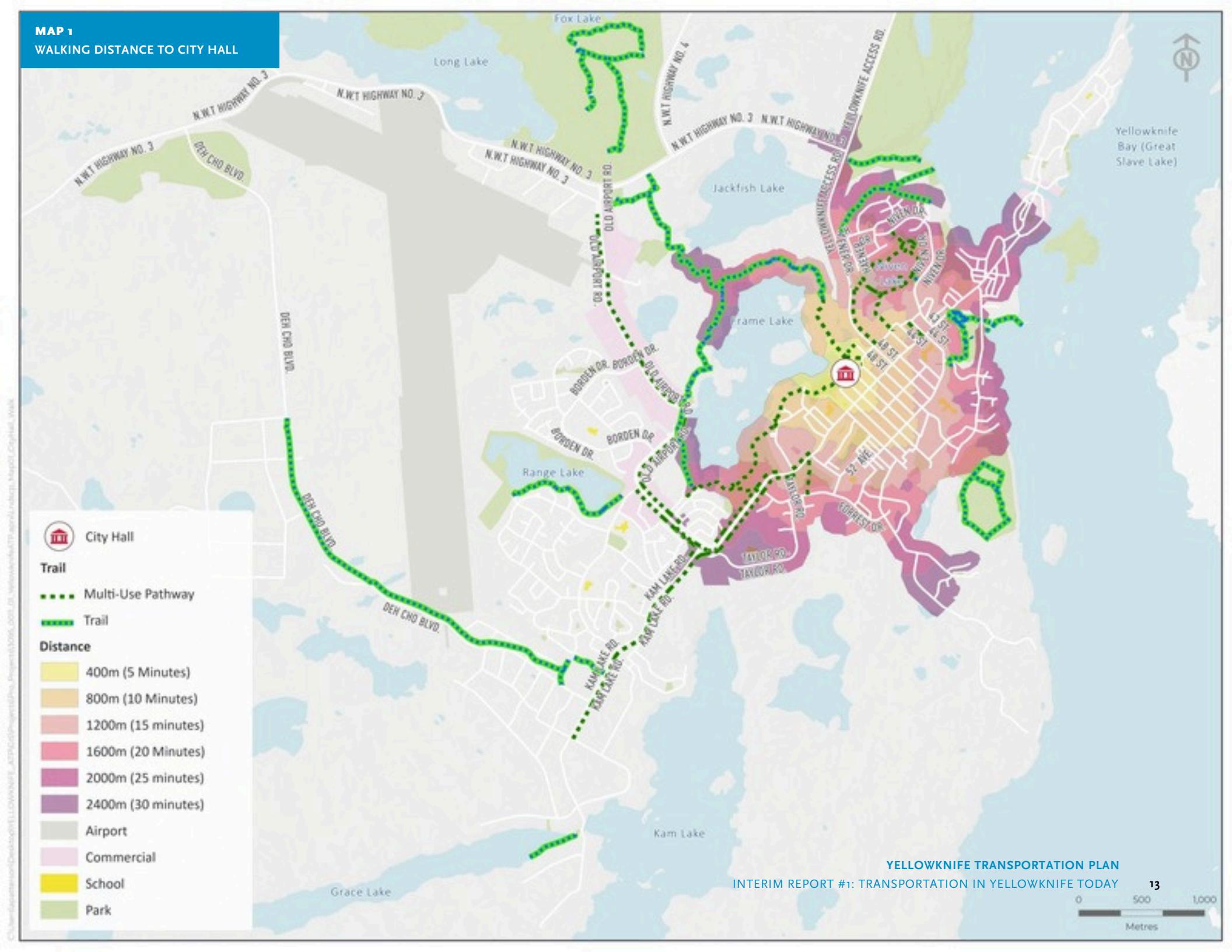
Yellowknife is a northern winter city, with winter conditions typically lasting from October to April. During these months, temperatures can drop below -30°C, and daylight hours are limited. Extreme cold, regular snowfall, ice buildup, and reduced daylight affect all modes of travel – driving, walking, cycling, rolling, and transit. These climate conditions shape the transportation context in Yellowknife, where planning and design must account for snow and ice management, freeze-thaw cycles, and permafrost impacts. A northern winter lens is essential to ensure transportation systems remain safe, reliable, and accessible year-round.



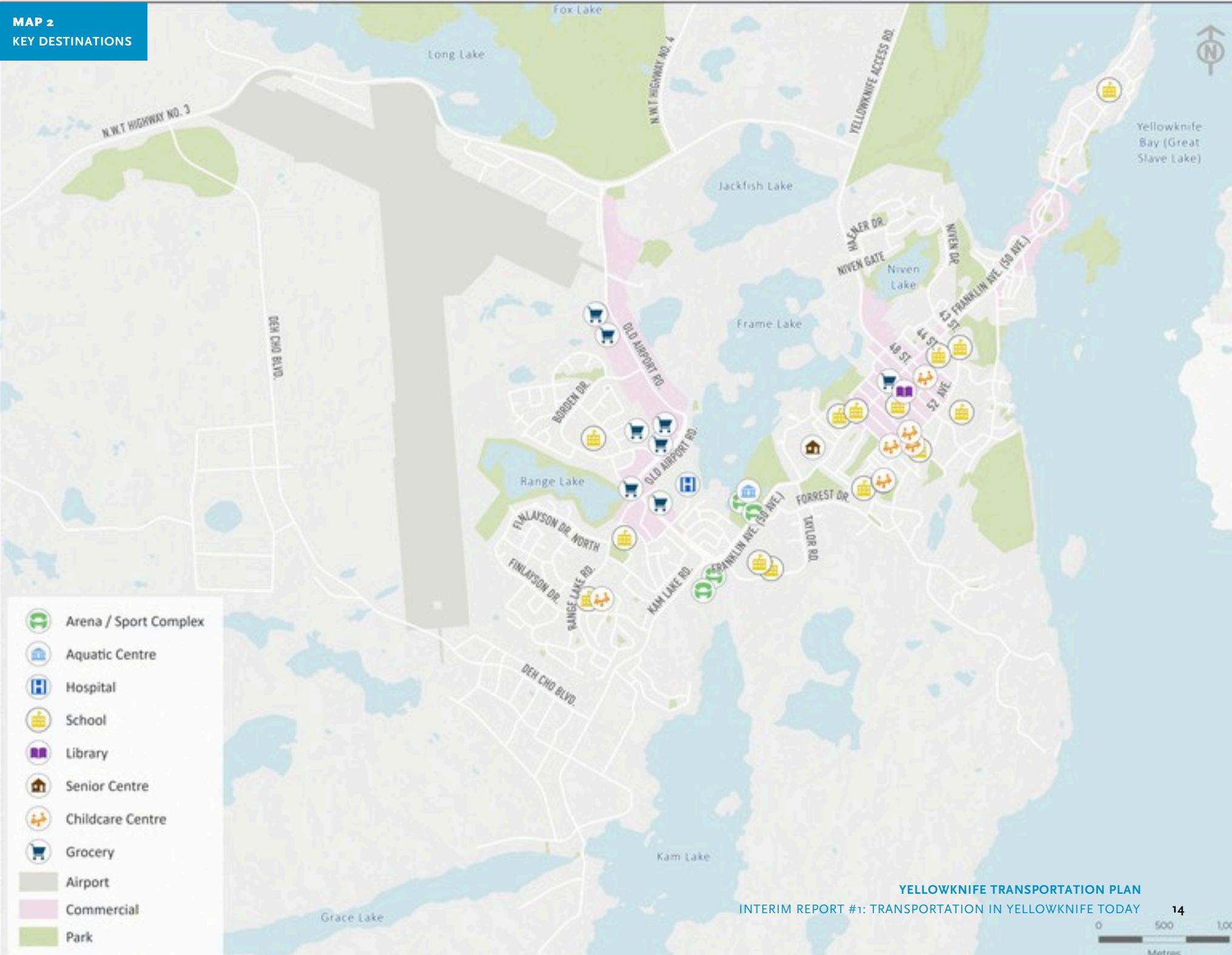
## MAP 1

## WALKING DISTANCE TO CITY HALL

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N



## MAP 2 KEY DESTINATIONS



YELLOWKNIFE TRANSPORTATION PLAN  
INTERIM REPORT #1: TRANSPORTATION IN YELLOWKNIFE TODAY

0 500

14

### Metres

<b>Average Daylight hours</b> <b>5.1   19.8</b> Dec   July	<b>Coldest Month</b> <b>-25.5°</b> average daily temperature in January	<b>Extreme Cold</b> <b>36 days   9 days</b> <b>-20 to -30°   -30°</b> per year with daily maximum temperature
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### Average Hours of Daylight by Month



### Average Temperature by Month



### Temperature Above Freezing

**192 days**

per year with maximum temperature above zero degrees (173 days with maximum temperature below zero degrees)

**257 days**

with maximum temperature warmer than -10°

**Annual Snowfall**  
**155 cm**  
on average

**Average Monthly Snowfall**  
**22.9cm**  
between October and March

**Average Snow Depth**  
**25.5cm**  
between October and March (41.1 cm in March)

(Source: Environment Canada Canadian Climate Normals, 1991 - 2020)



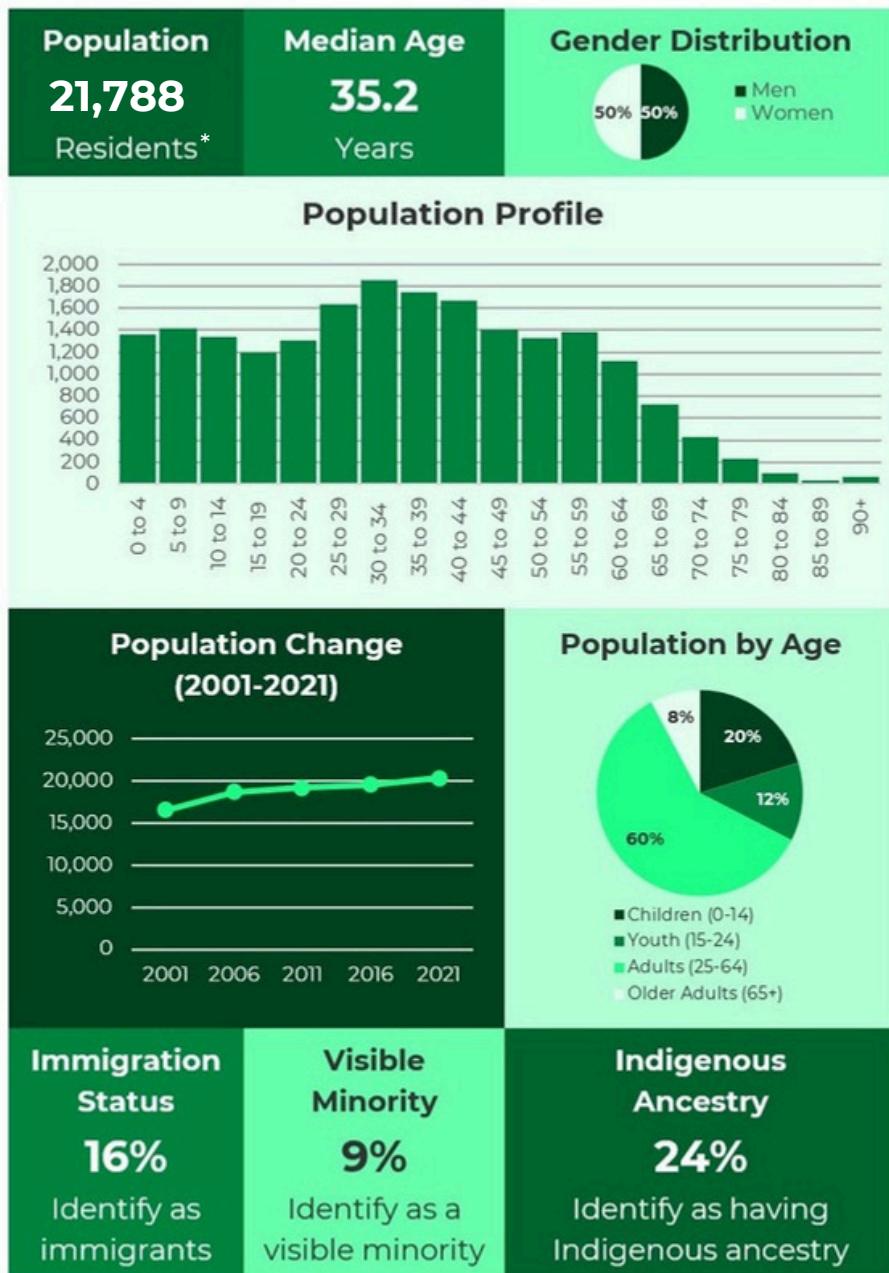
### 2.1.3 Demographic Context

According to the 2021 Census, the City has a population of approximately 20,340 residents, living in over 7,500 households. According to the Yellowknife Population Projections report conducted as part of the Community Plan Comprehensive Update, the population has increased to 21,788 in 2024. The City's population has increased steadily in recent years, increasing 3.9% between 2016 and 2021, mostly due to natural increases and people moving from other territories and/or provinces. This growth is expected to continue, with the City's population expected to increase to between 22,979 and 26,659 people by 2051, depending on the growth scenario. This increased population growth will place increasing pressures on the City's transportation system.

Yellowknife's demographics are unique, compared to Canada as a whole and other northern cities. The City is also home to both a significant youth and growing older adult population. Over a quarter (26.1%) of the City's population is 19 years or younger, while 8% of the population are 65 or over. Indigenous residents make up 24% of the population.

Each of these groups benefit from safe and convenient alternatives to driving. Walking, cycling, and transit can provide a range of independent mobility options for those who do not have access to motor vehicles. These demographics require active and safe routes to promote fitness and engage in recreational activities.

Furthermore, as the population ages, travel behaviours change considerably as older groups create different transportation needs for the City. As residents age, incorporating accessibility features such as longer crossing signal times, curb ramps, and seating areas along routes to provide places to rest can help accommodate slower walking speeds and mobility devices. These enhancements are essential to ensuring that the transportation needs of older adults are effectively met.



\* Population based on the City's Population Projections Report

(Source: Statistics Canada)



## 2.1.4 Transportation Barriers

Transportation barriers, such as a lack of affordable and safe transportation options, can prevent people from accessing jobs, education, healthcare, recreation, and ultimately connecting with their community. One of the aims of the Transportation Plan is to develop a transportation network that serves all areas of the City and provides equitable access for all residents. This means being inclusive of and prioritizing the needs of people who experience transportation barriers.

Yellowknife is home to a significant number of people experiencing transportation barriers, including Indigenous residents, who make up 24% of the population; seniors aged 65 over, who have doubled in population over the last decade; and the unhoused population, which includes over 300 individuals identified through the 2021 Point-in-Time Count.

These groups are important to consider as they may have different transportation needs. For example, low-income groups may not be able to afford an automobile, while some groups such as children and seniors may not be able to drive, and may be reliant on public transit or active transportation, and other groups may require unique travel patterns to access medical and social services throughout the day. People with disabilities, including people with mobility challenges or people with sight loss, face additional barriers accessing and navigating the transportation network.

While the City boasts one of the highest household incomes in Canada, many households face pressures due to the high cost of living, particularly for the combined costs of shelter, food, and transportation, which are higher than the Canadian average. As a result, it is important to consider transportation from an inclusive approach, including people who may not be able to afford an automobile.

A GIS-based analysis was used to identify areas of the City where there are higher concentrations of groups experiencing transportation barriers. The results of this analysis identify under-served areas in the City where there is an opportunity to make strategic investments to improve transportation access and opportunities.

The analysis used nine indicators that were combined to determine an overall transportation barrier score:

- Youth aged 14 years and under;
- Seniors aged 65 and over;
- Low-income households;
- Indigenous populations;
- Recent immigrants;
- Visible minorities;
- People with limited knowledge of English;
- Rent-burdened households; and
- Single parent households.

A higher transportation barrier score (dark purple) indicates a greater need to improve transportation access and opportunities, as these areas have more residents who face transportation barriers. The area with the highest concentration of these groups are found near the Downtown core, as shown in **Map 3**.

It is important to note that there are several different methodologies that can be used to look at demographics and neighbourhood need, and this GIS analysis did not weigh the criteria and is limited to the information contained within the federal census. Due to limitations in spatial data, this analysis did not capture people with accessibility needs, the LGBTQ2SIA+ community, people experiencing substance use disorder, and people experiencing homelessness.

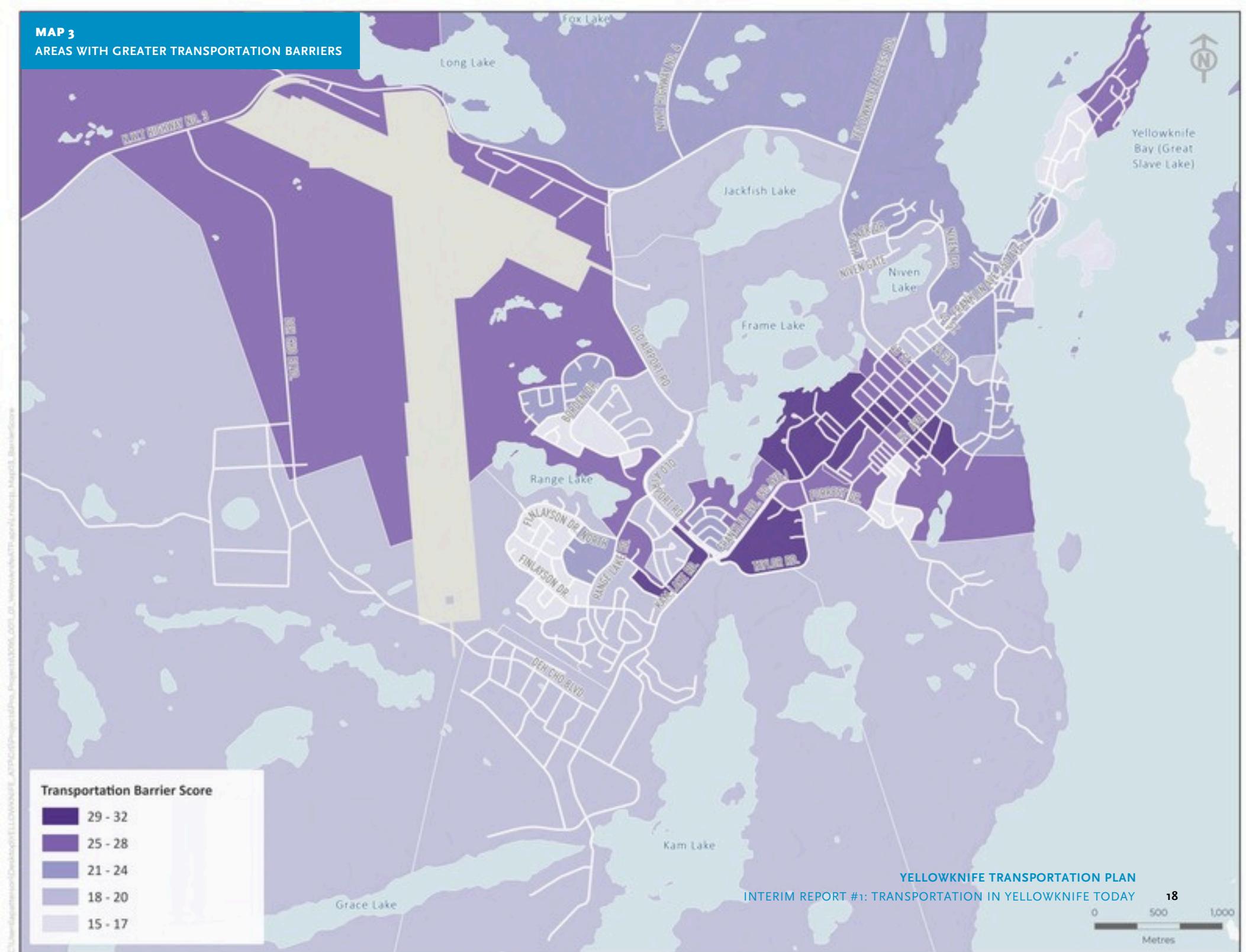
## How to Read the Transportation Barriers Map

This analysis **uses census tracts** as the geographic unit. Census tracts provide consistent boundaries for comparing population characteristics within a community.

The **size of a census tract on the map represents land area, not population**.

- **Urban tracts** are smaller because they contain higher population densities.
- **Rural tracts** are larger because they cover areas with fewer residents.

Overall, **larger census tracts do not indicate more people - they typically reflect lower population density**.

**MAP 3****AREAS WITH GREATER TRANSPORTATION BARRIERS**

## 2.2 POLICY CONTEXT

The Transportation Plan is closely linked to several other plans and policies at the local, regional, and territorial levels. These documents set the overarching goals, visions, and objectives for land use, transportation, and other key long-term planning considerations in the city.

### 2.2.1 External Plans and Policies

Both the Federal and Territorial governments have established bold targets to reduce GHG emissions. Canada has set a target to cut its GHG emissions by 40–45% below 2005 levels by 2030, while the Territory's Energy Strategy includes targets to reduce GHGs by 40–30% below 2005 levels by 2030 and achieve net-zero emissions by 2050.

The Government of Northwest Territories (GNWT) released the *Northwest Territories Transportation Strategy* in 2015 to support providing and promoting a safe, reliable, and sustainable multi-modal transportation system by strengthening connections, capturing opportunities, and embracing innovation.

The GNWT administers several funding programs that can support transportation initiatives and infrastructure such as the Community Access Program and Community Tourism Infrastructure Contribution Program. These territorial initiatives, along with Canada's federal National Active Transportation Strategy and National Active Transportation Fund, represent new partnership opportunities to help finance transformational transportation infrastructure programs for communities with shovel-ready projects that meet the goals of making active transportation safe, comfortable, and connected.

### 2.2.2 City of Yellowknife Plans and Policies

There are several overarching plans and policies that will shape the Transportation Plan. The City's *Community Plan* (2019) provides guidance for the City's growth and development and includes policies related to transportation. The *Community Plan* recognizes the strong relationship between land use and transportation, and notes that the City is committed to a transportation system that is safe, efficient, and accessible for all modes. The City also aims to shift more trips from private motor vehicles to more sustainable and more space efficient modes of transportation such as walking, cycling, and public transit. The *Community Plan* also states that the City's overall General Development Goals support shifting trips from private motorized vehicles to walking, cycling, and public transportation by prioritizing compact urban growth and encouraging mixed-use development. This growth will also be focused on arterial roadways with existing public transit service and gaps in the active transportation network will be filled to provide better connectivity and safety for users.

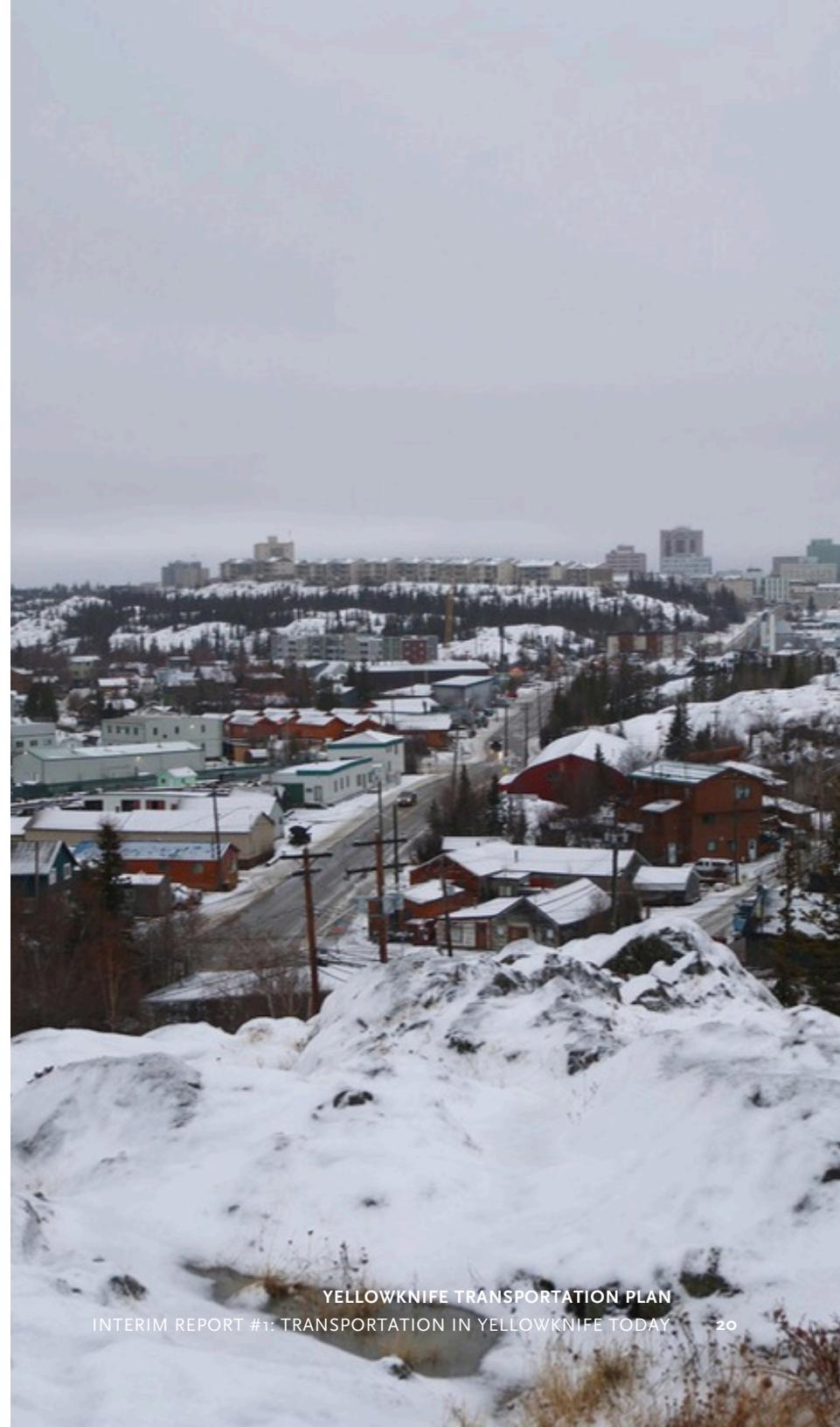
The *Community Plan* is currently being updated in parallel with the Transportation Plan. Along with the *Community Plan*, the *Climate Action Plan* is currently under development.

Beyond these recent planning documents, the City has completed several transportation-related plans and studies, including:

- Trail Enhancement and Connectivity Strategy (2018)
- Smart Growth Development Plan: Transportation Improvements Study (2010)
- Yellowknife Parkade Feasibility Study (2021)
- Bicycle Routing for the City of Yellowknife (2008)
- Yellowknife Public Transit Review (2020)
- Yellowknife Old Town Emergency Circulation Review and Parking Study (2021)

Other recent plans and policies to be considered as part of the Transportation Plan include:

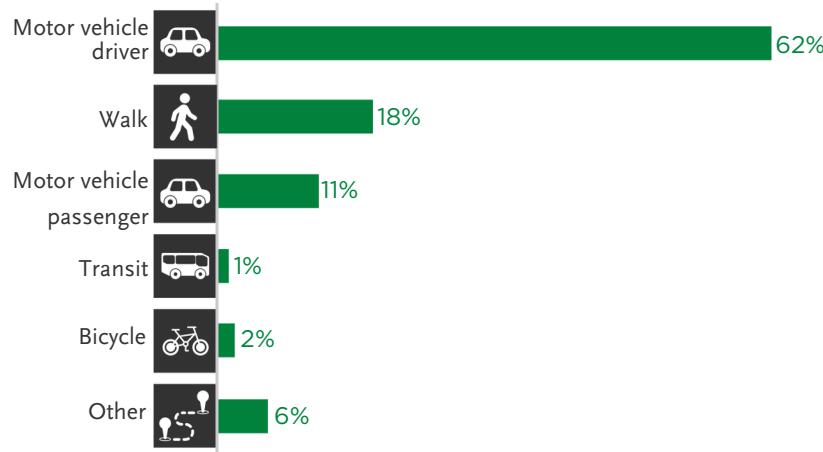
- Housing Needs Assessment (2024);
- Economic Development Strategy 2020-2024 (2020);
- Yellowknife 2025-2038 Tourism Strategy (2025);
- Wayfinding Strategy (2019);
- All-Terrain Vehicles By-law No. 3054;
- Community Plan By-law No. 5007;
- Helmet By-law No. 4795;
- Highway Traffic By-law No. 5055;
- Orderly Use of Highways By-law No. 1276;
- Fees and Charges By-law No. 4436;
- Parking By-law No. 5053;
- Public Parks and Recreation Facilities By-law No. 4564;
- Public Transit System By-law No. 4284;
- Snowmobile By-law No. 3722; and
- Zoning By-law No. 5045.



## 2.3 TRAVEL PATTERNS

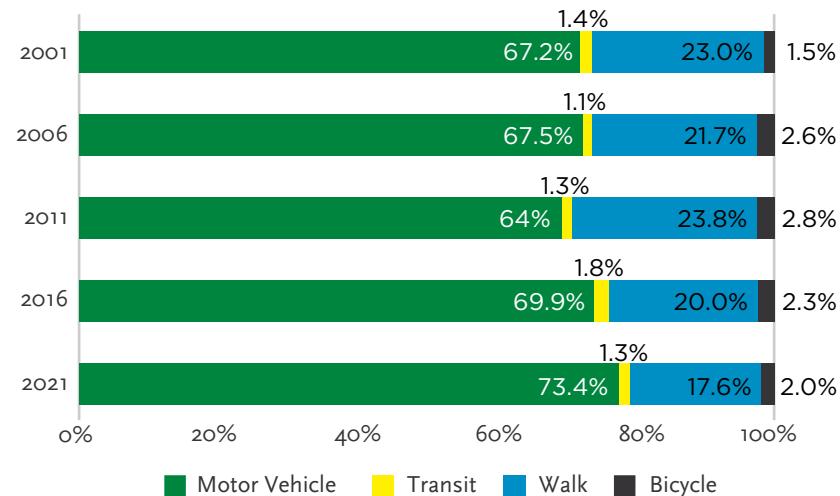
According to 2021 Censusdata, Yellowknife's mode share for commute trips to work and school is primarily motor vehicle oriented, with 62% of commute trips made by motor vehicle drivers and 11% made by motor vehicle passengers. Sustainable transportation such as walking, cycling, and transit make up 21% of commute trips made by Yellowknife residents (see [Figure 2](#)). It should be noted that Census data is limited to commute trips to work and school, and does not accurately reflect the broad range of travel patterns made by Yellowknife residents. Due to this, the City also conducted a Household Travel Survey in the fall of 2025 to obtain a more comprehensive understanding of travel patterns. The results of the Household Travel Survey are currently being analyzed and will be made available in a separate report during the next phase of the process.

**FIGURE 2: MODE SHARE**



Looking at changing transportation patterns over time, motor vehicle commute mode share has increased since 2011 while walking and cycling has steadily declined, and transit mode share has averaged around 1.4% (see [Figure 3](#)).

**FIGURE 3: MODE SHARE TRENDS, 2001–2021**

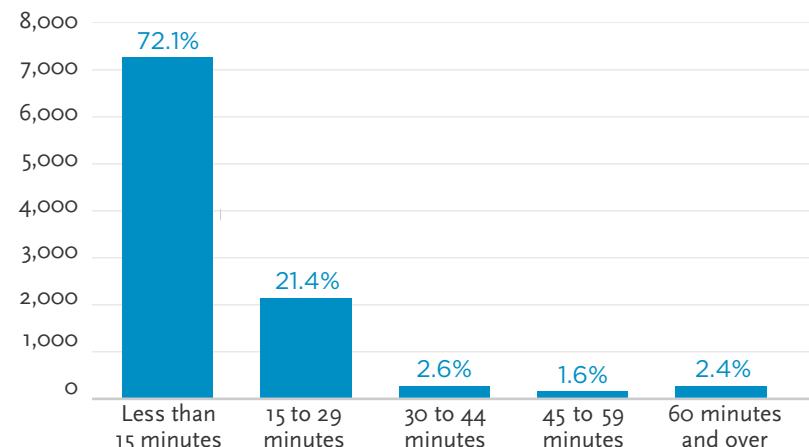


(Source: Statistics Canada, 2001-2021 Census)

While the City has a relatively even demographics breakdown between genders, there are important gender differences between different forms of transportation. For example, women are more likely to be a vehicle passenger (67% of all passenger trips) or walk (54% of all walking trips). In contrast, men are more likely to drive (52% of all motor vehicle driving trips) or bicycle (65% of all bicycle trips). From an equity and diversity perspective, it is important to consider the travel needs and behaviours of all demographics as the plan is developed.

Due to its compact nature, most trips made by Yellowknife residents are relatively short. In fact, nearly three quarters (72%) of all trips in Yellowknife are less than 15 minutes in length (see **Figure 4**). This presents opportunities to support sustainable forms of transportation since shorter trips could be replaced by walking, cycling, or transit.

**FIGURE 4: COMMUTING DURATION**



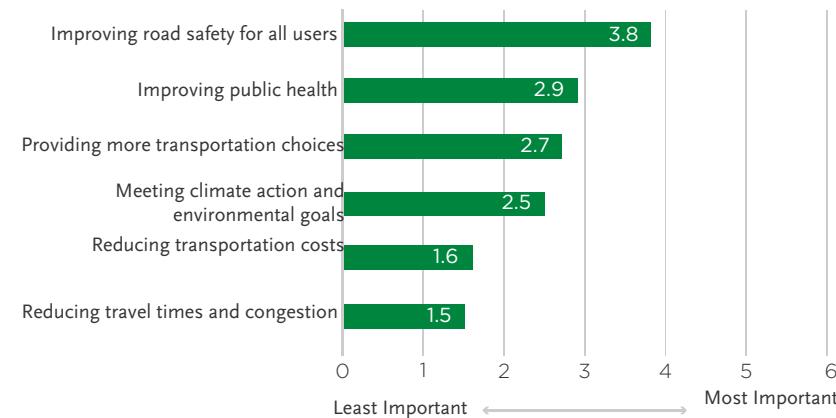
(Source: Statistics Canada, 2021 Census)

## 2.4 COMMUNITY PRIORITIES

As part of the Community Survey, conducted in the first round of engagement, survey respondents were asked to rank what transportation outcomes were most important to them from a list of six outcomes. As shown in **Figure 5**, improving road safety was ranked as the most important outcome, followed by improving public health, providing more transportation choices, and meeting climate action and environmental goals. Reducing transportation costs and reducing travel times and congestions were the lowest ranked outcomes.

**FIGURE 5: TRANSPORTATION OUTCOMES**

Which of the following transportation outcomes are most important to you? Rank these in order of priority from 6 (most important) to 1 (least important).

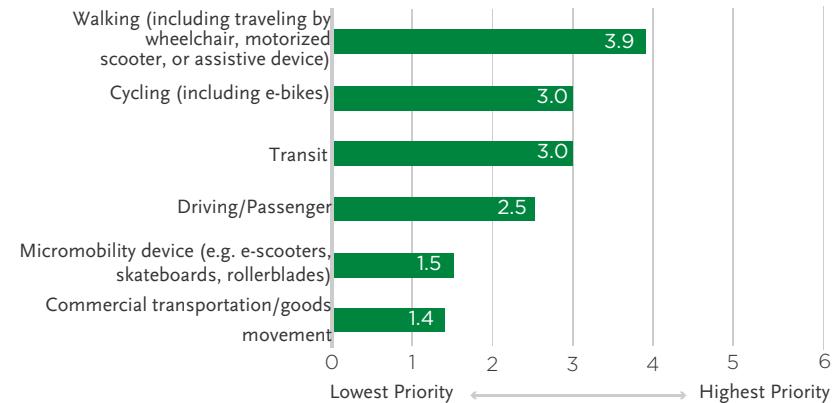


(Source: Community Survey)

Survey respondents were also asked what aspects of Yellowknife's transportation system should be considered the highest priority. As shown in **Figure 6**, walking, cycling, and transit were ranked as the highest priorities, followed by driving or passengers, micromobility devices, and commercial transportation / goods movement.

**FIGURE 6: TRANSPORTATION PRIORITIES**

What aspects of Yellowknife's transportation system should be considered the highest priority? Average rank with 6 (most important) to 1 (least important).



(Source: Community Survey)

# 3.0 A GATEWAY TO THE NORTH



## 3.1 BACKGROUND

Yellowknife is both the gateway point to Canada's North and a central hub to the Northwest Territories' transportation network through its capital airport, connections to the highway network, winter roads, and ice roads, making it a key junction for movement across the territory and country. As a result, Yellowknife's strategic gateway and location positions the City as an important transportation and service hub.

The City's road and air-based transportation networks connect Yellowknife to the rest of the territory and country. While these strategic connections for people, goods, and services are important components of the City's transportation system and play a strong role in supporting the local economy, they are largely outside the City's jurisdiction.

The plan will focus on how the City can strengthen these connections within a larger territorial and national transportation context.



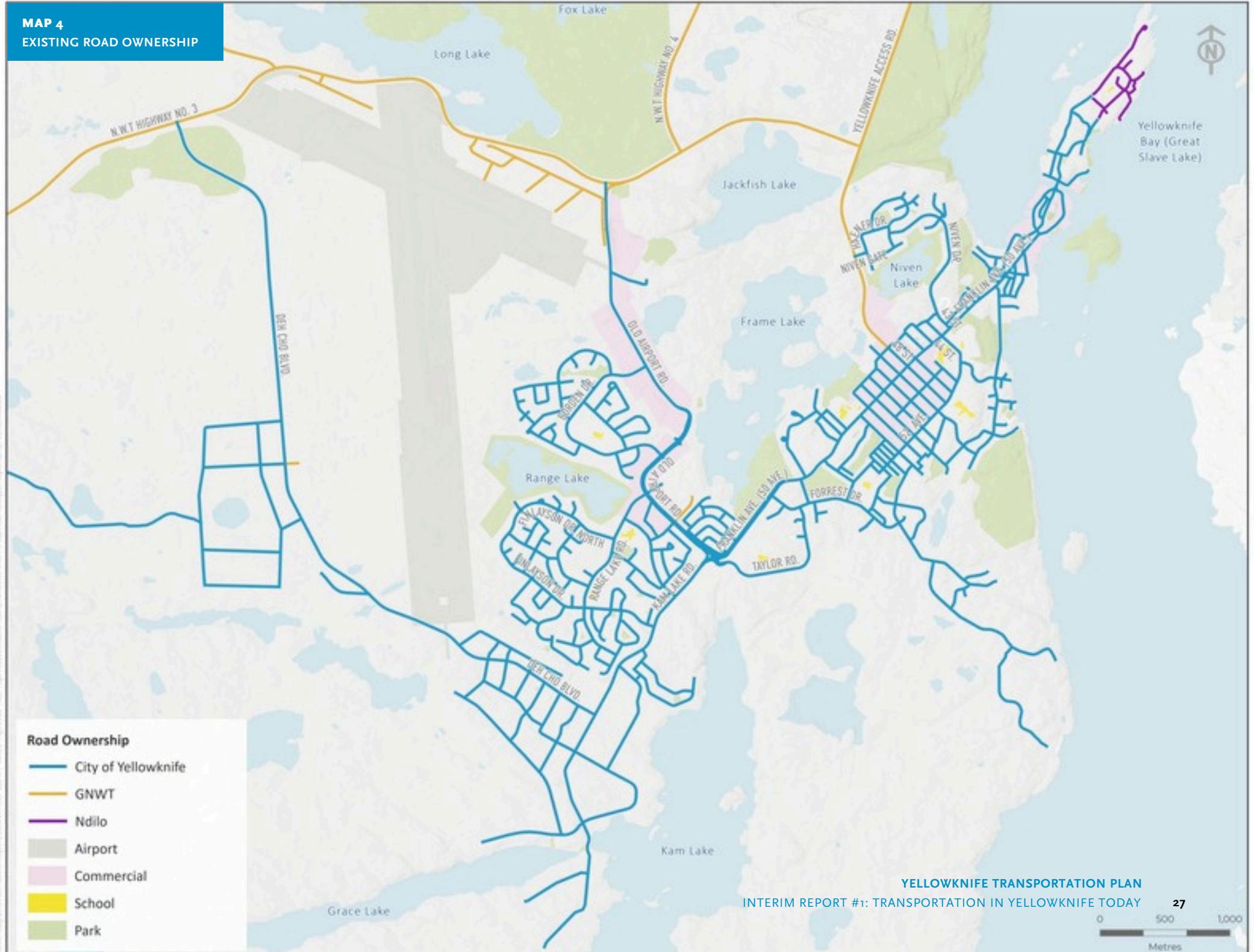
## 3.2 FACTS AND FINDINGS

**Road-based Modes:** Highway 3, Highway 4, and Yellowknife Access Road are located north of the city, with Highway 3 providing a connection to the larger GNWT Highway network (see [Map 4](#)). Highway 3 provides an important role in ensuring the efficient and reliable movement of people and goods throughout the city. Highway 3, 4, and Yellowknife Access Road are under the jurisdiction of the GNWT. As a part of the *NWT 2030 Energy Strategy*, Highway 3 has been identified as a part of the Territory's electric vehicle network.

- **Air-based Modes:** The GNWT operates Yellowknife Airport (YZF). The airport is a hub to the Canadian North and is served by several national and regional airlines offering passenger and cargo services across the Northwest Territories' and beyond. Float planes connect the city to remote communities, with most operations based in Old Town offering convenient access to Great Slave Lake. Float planes also offer scenic flights of the city and surrounding areas. The City's *Tourism Strategy* identifies an action to continue building strategic partnerships with the Yellowknife Airport to increase the number of flights into the city and explore opportunities to enhance airport infrastructure to support the Northwest Territories' tourist experience. The GNWT is finalizing the *Yellowknife Airport 20-Year Master Plan* where two options have been identified for the new terminal and airside development: one at the junction of the two runways, and the other on the west side of the airport along the Deh Cho Boulevard Truck Route.
- **Ice Roads:** During the winter months, when Great Slave Lake freezes over, the Dettah Ice Road offers a direct and efficient connection between Yellowknife and Dettah. Maintained and operated by the GNWT, this seasonal route is open from late December through early April.
- **Major Service Hub:** Yellowknife serves as a key, central access point and service hub for neighbouring remote communities in the surrounding area and resource development projects across the Northwest Territories. With the Yellowknife Airport as a regional transportation connection and highway road connections to adjacent provinces and territories, Yellowknife is well-positioned as a logistical hub for goods and services for the Northwest Territories. Yellowknife also has various government offices, health services, and education institutions solidifying the city's role as the administrative and economic hub of the Northwest Territories.



♂



# 4.0 WALKING



## 4.1 BACKGROUND

Walking—including people using personal mobility devices such as wheelchairs and mobility scooters—is critical to how people move around the community. Walking is the most fundamental form of transportation as it is a part of every trip, whether that trip is made by bicycle, transit, or car. Walking can be an attractive alternative to driving for short trips, especially where destinations are close and they can be accessed through direct and convenient routes.

Due to its compact urban form and layout, much of Yellowknife is already very walkable. Walking accounts for approximately 18% of all commute trips made by Yellowknife residents.

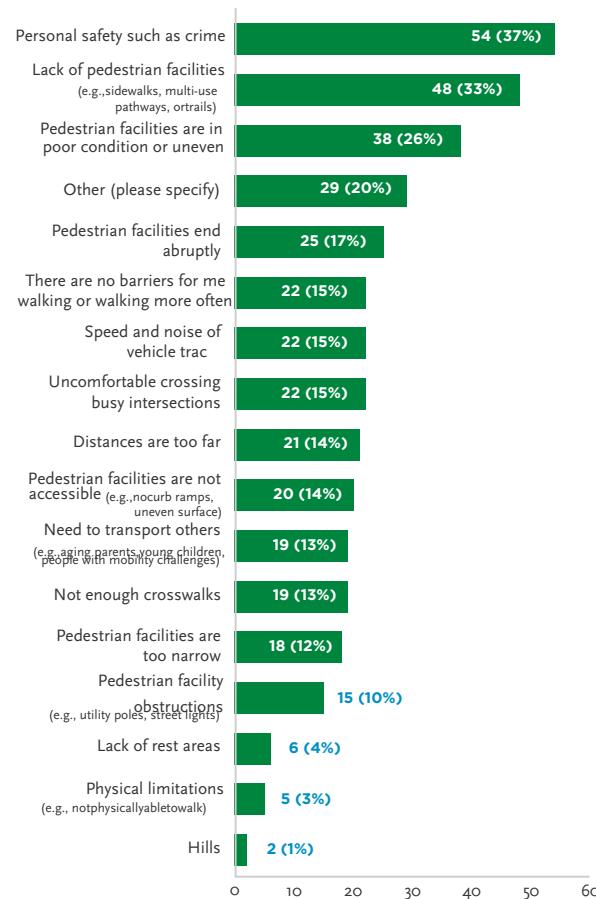


## 4.2 BARRIERS AND OPPORTUNITIES

As shown in **Figure 7**, the top barrier to walking in Yellowknife are:

- Personal safety such as crime;
- Lack of pedestrian facilities; and
- Pedestrian facilities are in poor condition or uneven.

**FIGURE 7: BARRIERS TO WALKING**



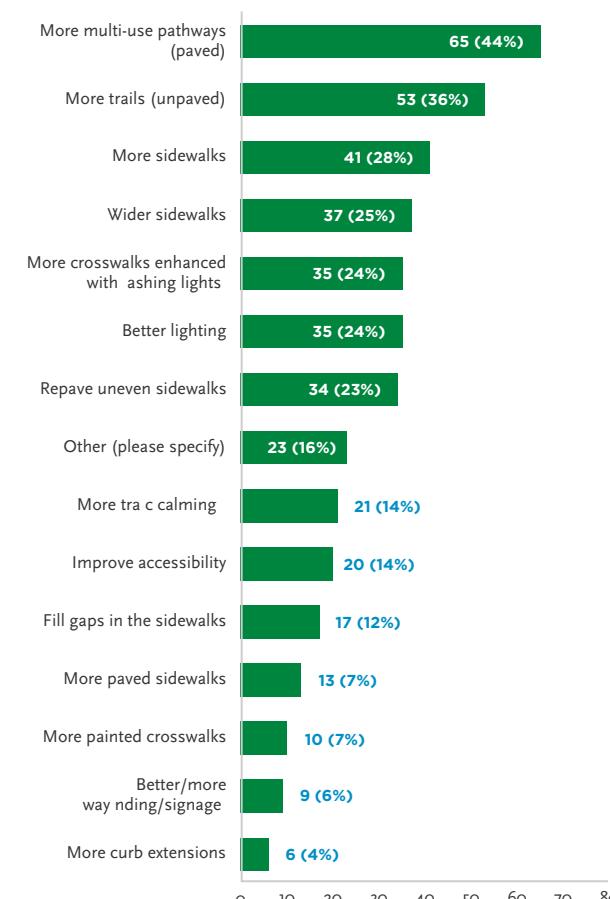
(Source: Community Survey)



As shown in **Figure 8**, the top walking infrastructure priorities identified are:

- More paved multi-use pathways;
- More unpaved trails; and
- More sidewalks

**FIGURE 8: WALKING INFRASTRUCTURE PRIORITIES**



(Source: Community Survey)

## 4.3 VISUAL SUMMARY



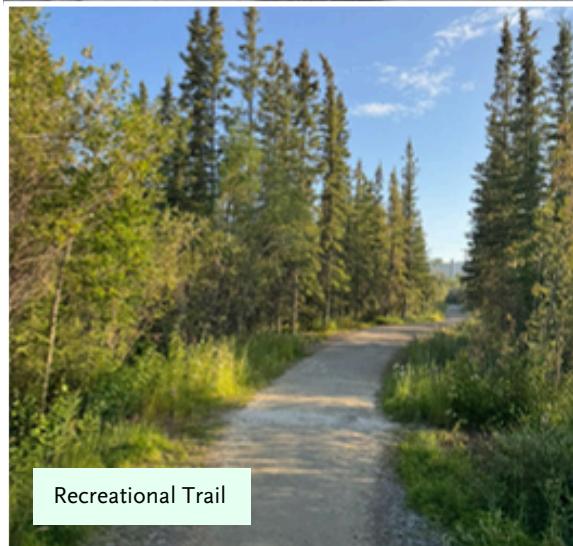
Concrete Sidewalk with Landscaping



Asphalt Sidewalk



Paved Multi-use Pathway



Recreational Trail



Boardwalk



Pedestrian Activated Push Button

## 4.4 FACTS AND FINDINGS

- **Pedestrian Network:** The City's existing pedestrian network is shown in [Map 5](#) and includes a range of pedestrian infrastructure, including:
  - » Sidewalks;
  - » Pathways and trails;
  - » Boardwalks;
  - » Pedestrian underpasses;
  - » Traffic signals; and
  - » Crosswalks.
- **Sidewalk or Multi-use Pathway Coverage:** Sidewalks or multi-use pathways are provided on many streets throughout the city, although there are notable gaps in the pedestrian network (see [Map 6](#)). While nearly half of city streets do not have sidewalks, 72.1% of arterial roads and 99.4% of collector roads have a sidewalk or multi-use pathway on at least one side providing connectivity between neighbourhoods and major routes (see [Table 2](#)).

**TABLE 1: SIDEWALK OR MULTI-USE PATHWAY COVERAGE BY ROAD CLASSIFICATION**

Road Classification	0 Sides	1 Side	Both Sides
Arterial	27.9%	24.6%	47.5%
Collector	0.6%	53.9%	45.6%
Local	58.8%	28.4%	12.8%
<b>Total</b>	<b>47.6%</b>	<b>30.2%</b>	<b>22.2%</b>

Sidewalks or multi-use pathways are provided on both sides of the following streets:

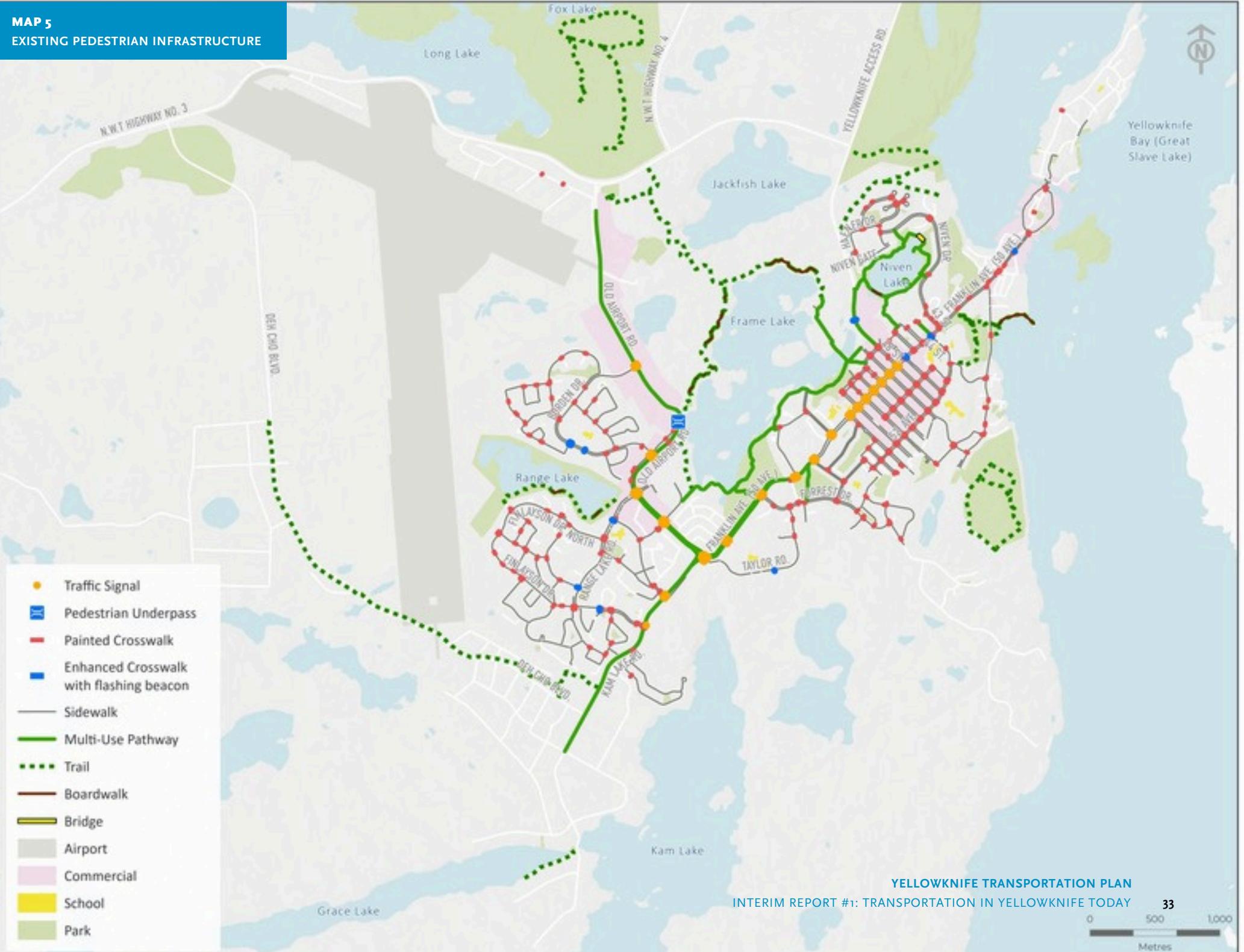
- » Most of the downtown;
- » Niven Drive;
- » Old Airport Road from the pedestrian underpass at the Co-Op to Franklin Avenue;
- » Franklin Avenue from Old Airport Road to McDonald Drive; and
- » Forrest Drive from Franklin Avenue to Burwash Drive.

- **Sidewalk Material:** Most sidewalks are made of concrete, although there are some asphalt and gravel sidewalks, particularly in low lying areas such as Old Town and along segments of Range Lake Road, Borden Drive, and Kam Lake Road (see [Map 7](#)). Depending on width, many asphalt sidewalks are considered multi-use facilities.

- **Sidewalk Width:** The minimum desired width for a sidewalk is 1.8 metres, which allows two people using mobility devices to pass each other side by side. Most sidewalks do not meet this desired width, and many sidewalks are below 1.5 metres, which does not allow people to walk side-by-side (see [Map 8](#)).

- **Pedestrian Safety and Accessibility:** Several locations throughout Yellowknife, particularly intersections, present potential accessibility and safety issues, particularly for persons with disabilities and older adults. Wide crossing distances, intersections without curb let downs, and desirable crossing locations without crosswalks can create challenges to navigating the city as a pedestrian. There are also locations where it may be warranted to install a pedestrian activated signal to help ease crossings. To overcome some of the safety and accessibility concerns at intersections in the city, and to make walking an attractive transportation option, enhanced crossing treatments are needed at some locations.

- **Pathway and Trail Network:** The city has an extensive network of approximately 25 km of pathways and trails, including approximately 5 km of paved multi-use pathways, 19 km of recreational trails, and 1.1 km of boardwalks (see [Map 6](#)). The map does not show trails that are not maintained by the City. Recommendations for the trail network will be developed as part of this plan.

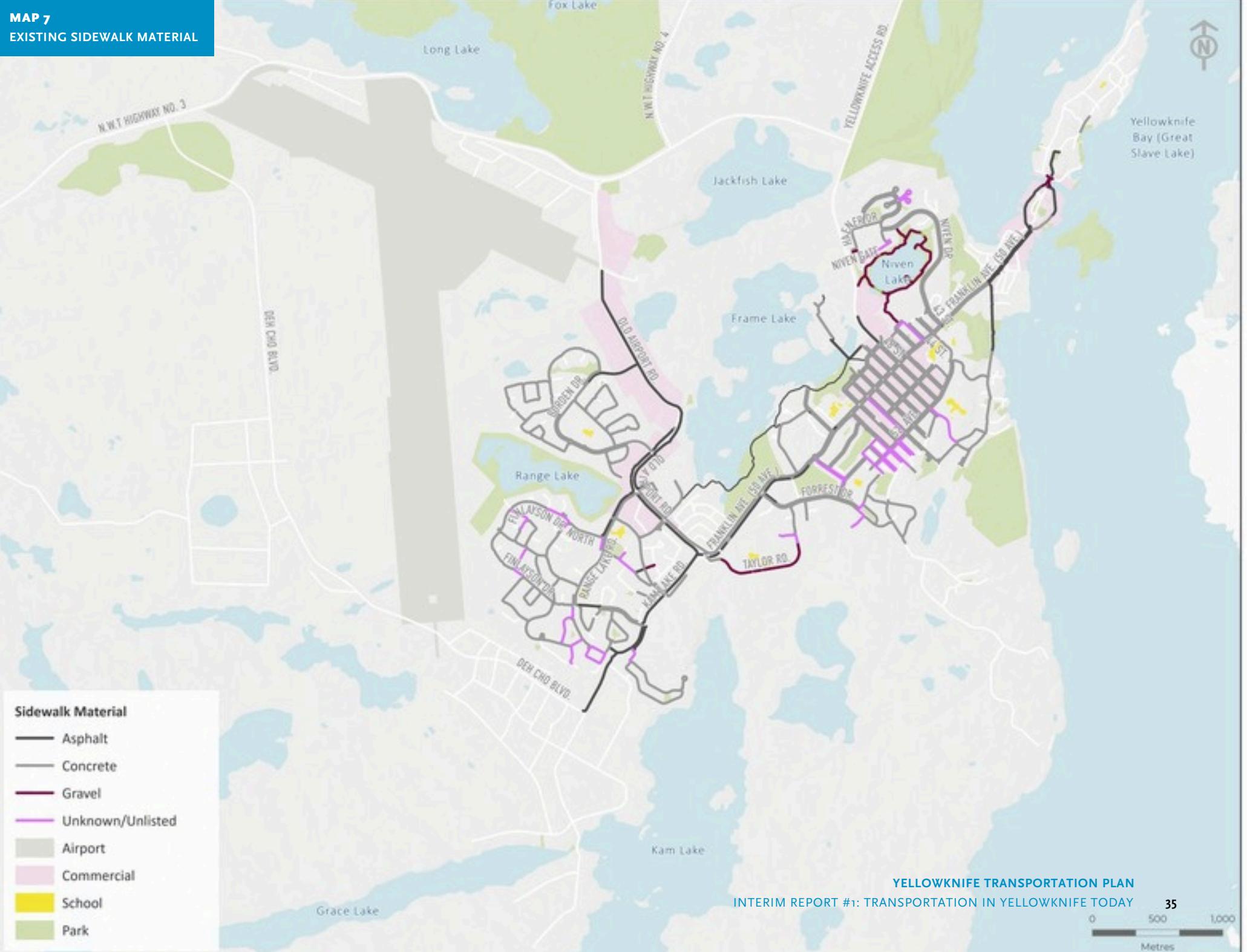
**MAP 5****EXISTING PEDESTRIAN INFRASTRUCTURE**

MAP 6

## EXISTING SIDEWALK COVERAGE

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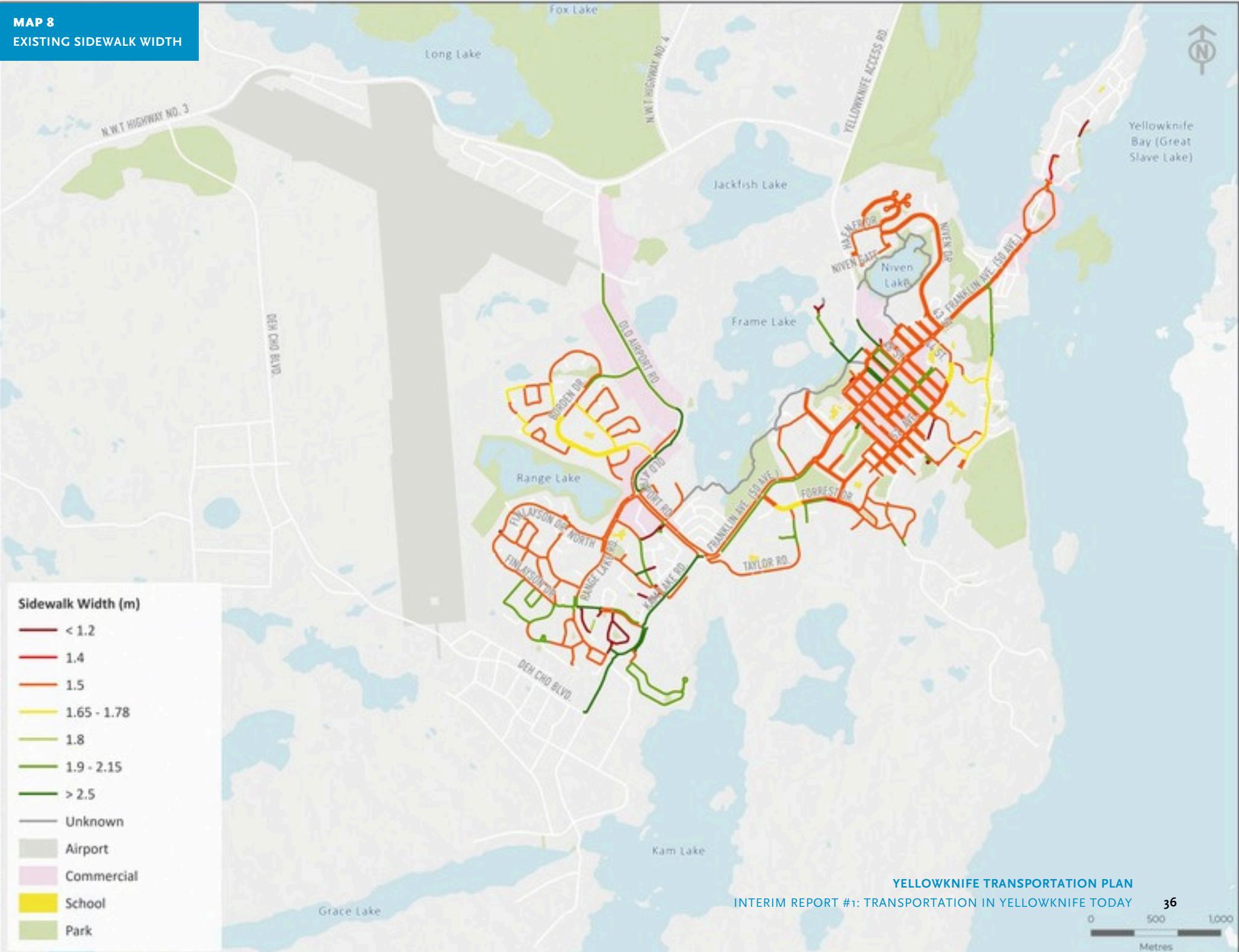


**MAP 7****EXISTING SIDEWALK MATERIAL**

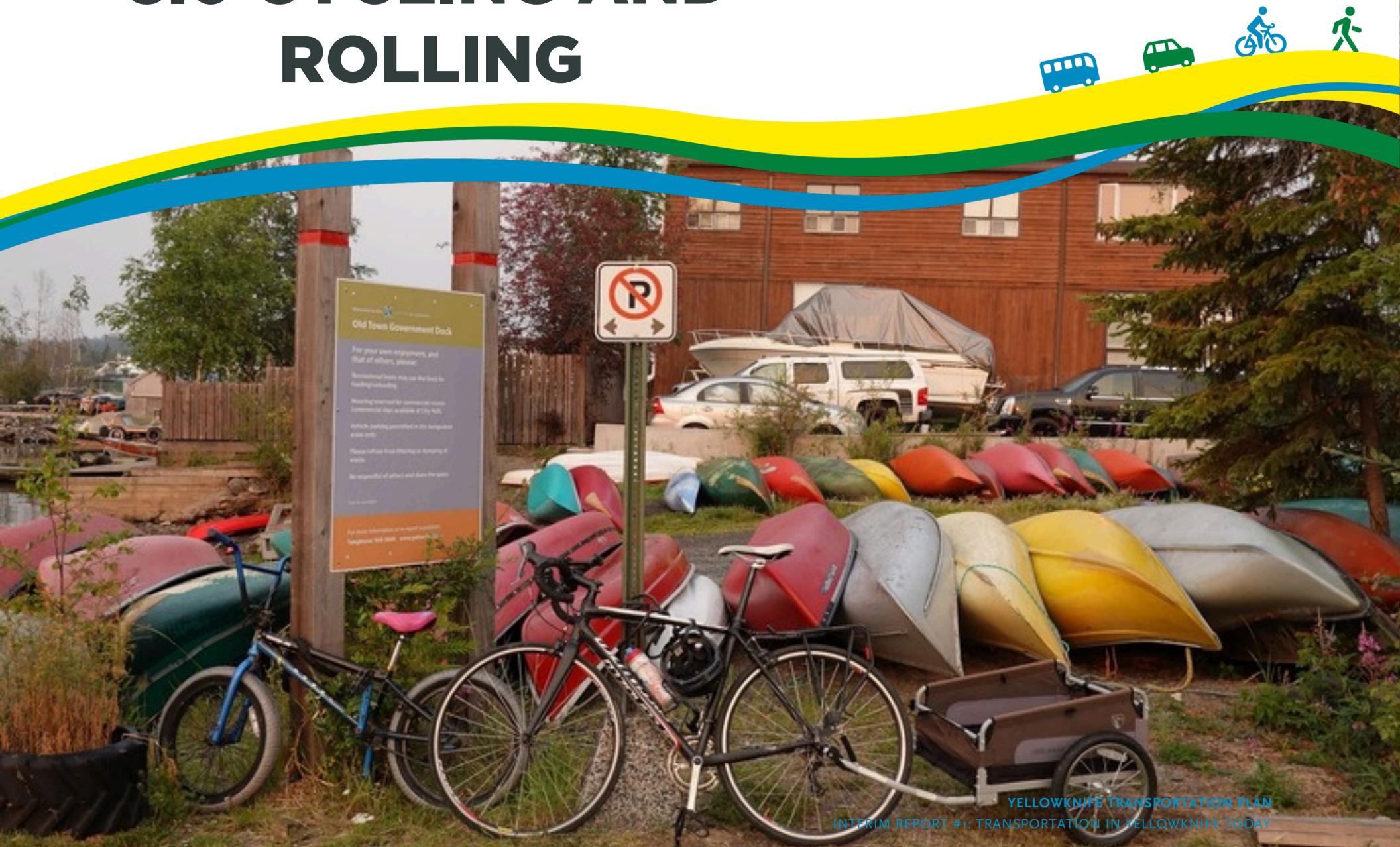
MAP 8

## EXISTING SIDEWALK WIDTH

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# 5.0 CYCLING AND ROLLING



## 5.1 BACKGROUND

Creating a community where cycling and walking is a safe, comfortable, and convenient transportation option can help foster a more balanced transportation system that encourages healthy living, creates a more livable community, and results in cost-effective and efficient solutions. As a form of transportation, cycling provides a convenient mode of travel for trips that are too far to walk and do not specifically require the capacity or range of a motor vehicle. Cycling currently accounts for approximately 2% of commute trips made by Yellowknife residents.

Several existing City plans and studies document improvements to Yellowknife's cycling network.



### What is All Ages and Abilities (AAA)?

All ages and abilities is an approach to ensure that active transportation routes are safe, comfortable, and accessible for everyone regardless of age, ability, and experience level. This means that people using various mobility devices (e.g., walkers, wheelchairs, mobility scooters) and bicycle types (e.g., e-bikes, bicycles with attachments) are considered in the development of the pedestrian and cycling network as well as in facility selection.

## 5.2 BARRIERS AND OPPORTUNITIES

As shown in **Figure 9**, the top **barriers to cycling** in Yellowknife are:

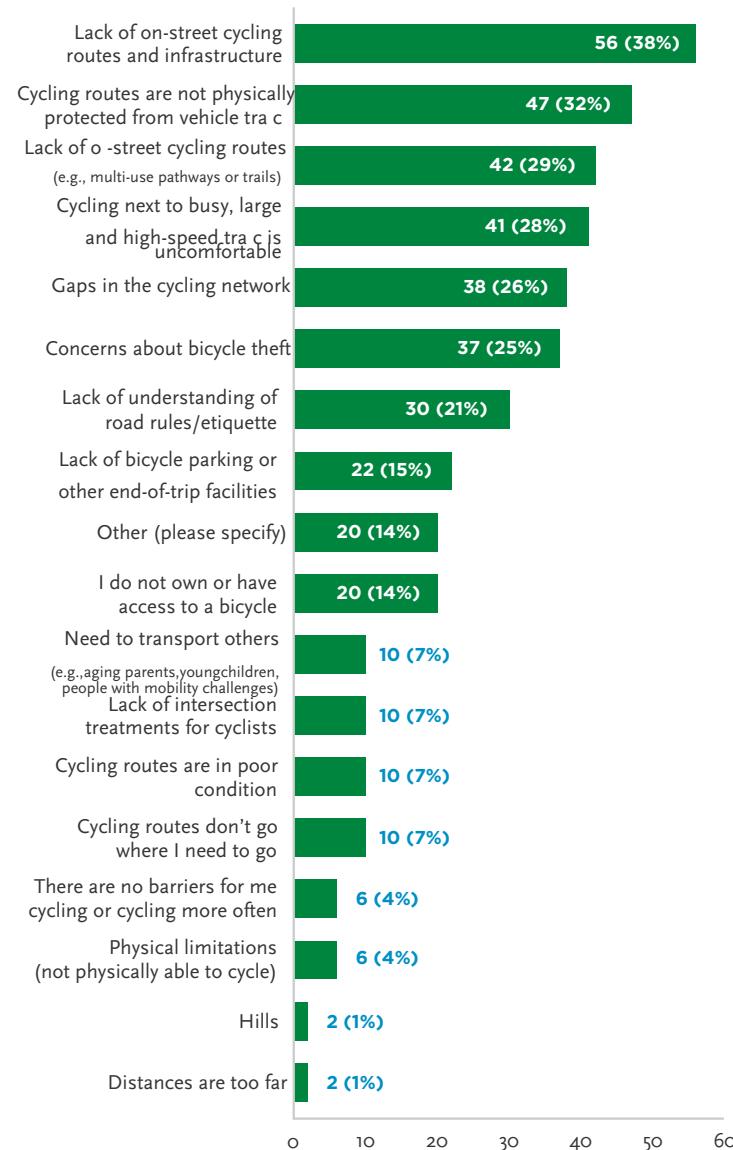
- Lack of on-street cycling routes and infrastructure;
- Cycling routes are not physically protected from vehicle traffic; and
- Lack of off-street cycling routes.

As shown in **Figure 10**, the top **opportunities to improve cycling** are:

- More multi-use pathways;
- More on-street bicycle lanes that are physically separated from traffic; and
- More bicycle parking and end-of-trip facilities.



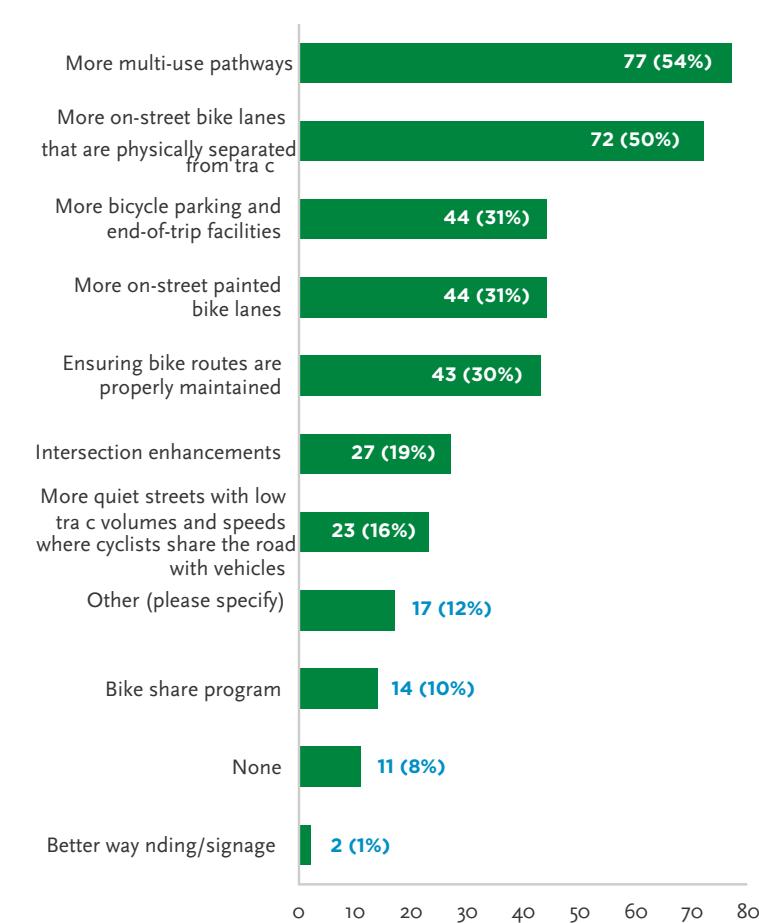
**FIGURE 9: BARRIERS TO CYCLING**



(Source: Community Survey)



**FIGURE 10: OPPORTUNITIES TO IMPROVE CYCLING**



(Source: Community Survey)

## 5.3 VISUAL SUMMARY



On-Street Painted Bicycle Lane



Multi-use Pathway



Multi-use Sidewalk (Sidewalk with Gravel Boulevard)



Off-Street Bicycle Pathway



Short-term Bicycle Parking



Bike Route Sign

## 5.4 FACTS AND FINDINGS

- **Cycling Network:** The City's existing cycling network is shown in [Map 9](#) and includes a range of cycling facilities, including:
  - » **Off-street multi-use pathways** are physically separated from motor vehicles and used by people walking, cycling, and rolling. Multi-use pathways are paved and located adjacent to a street and are typically wider than 3 metres in width.
  - » **Off-street multi-use sidewalks** are similar to multi-use pathways, but which are not clearly marked and appear to be located along asphalt sidewalks or sidewalks with a gravel boulevard to provide additional space for cyclists (e.g. Franklin Avenue between Forest Drive and Old Airport Road).
  - » **Off-street bicycle paths** are similar to multi-use pathways as they are physically separated from motor vehicles, but only accommodate people cycling (e.g. 52 Avenue).
  - » **On-street painted bicycle lanes** are on-street dedicated cycling facilities marked by a painted line. The existing bicycle lanes in Yellowknife are not considered AAA cycling facilities.
  - » **Signed bicycle routes** are shared cycling routes with signage. The signed bicycle routes in Yellowknife are not considered AAA cycling facilities, although they could be considered AAA with signage and pavement markings, and if traffic volumes and speeds are relatively low.
  - » **Paved shoulders** are paved spaces on the side of a highway or rural road. Paved shoulders are not considered AAA cycling facilities.
  - » **Bicycle Parking and End-of-Trip Facilities:** The City's Zoning Bylaw provides requirements for bicycle and scooter parking, including design standards for bicycle parking spaces and requirements for the number of bicycle parking spaces based on the land use.

The Zoning Bylaw includes bicycle parking requirements specific to off-street parking, outlining bicycle parking minimums and bicycle parking location siting guidance in:

- » Multi-unit dwellings;
- » Special care residence, hotels, and motels; and
- » All other uses excluding single detached, in-home secondary detached, detached secondary, factory-built, and townhouse dwellings

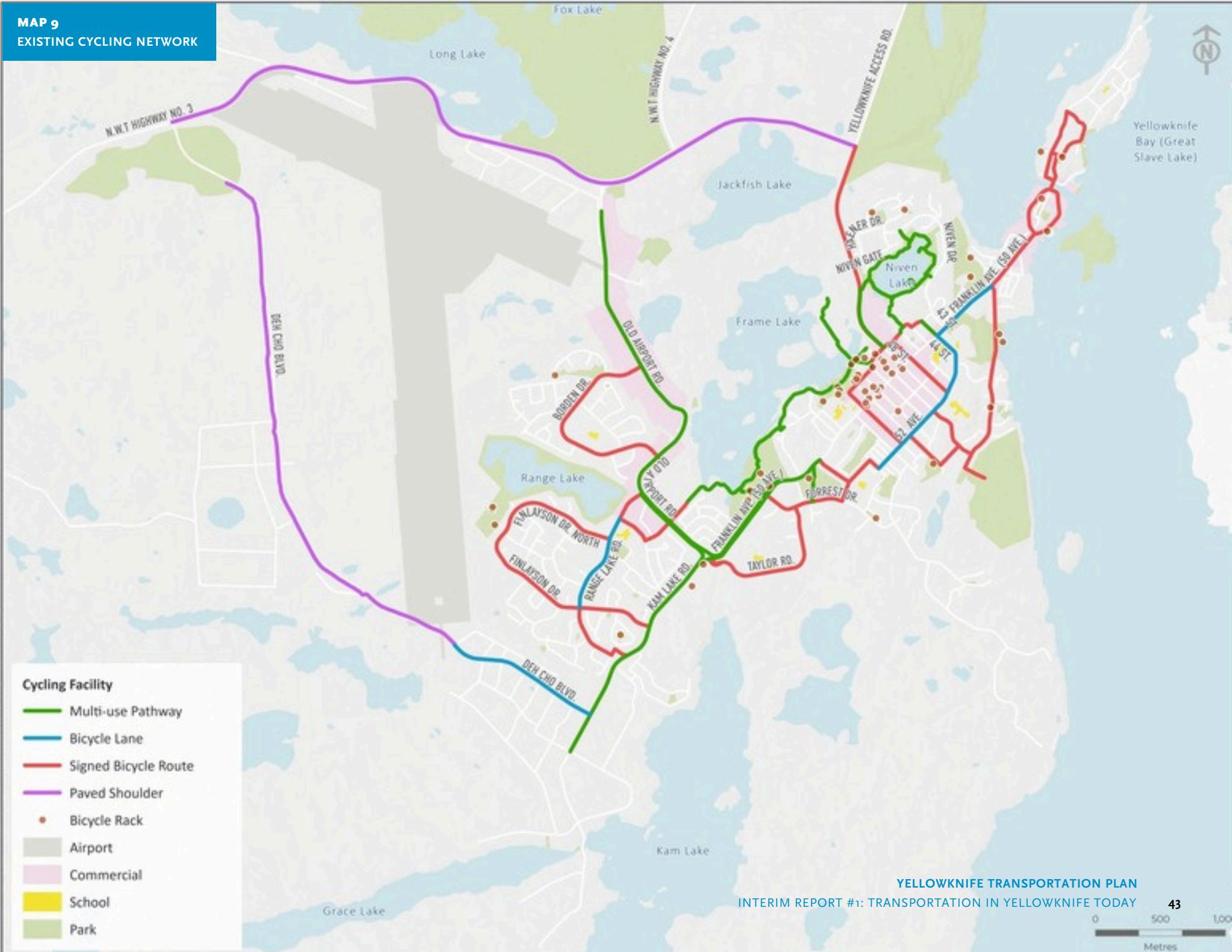
The Zoning Bylaw does not provide guidance on long-term bicycle parking or end-of-trip facilities such as shower facilities, lockers, or access to e-bike charging stations.

Overall, bicycle racks are available at most civic buildings.

- **Bike Share:** In partnership with the NWT Recreation and Parks Association, SHIFT NWT runs a bike share program where people can borrow bikes, e-bikes, e-cargo bikes, and e-trikes free of charge for two weeks. This program allows people to explore active mobility without financial or logistical constraints. This initiative is funded by the GNWT Healthy Choices Fund. A survey of SHIFT NWT users in 2024 found most users (25 out of 30 respondents) were very satisfied with the bicycle. The survey found that the bicycles were most frequently used for work (12 responses), errands (11 responses), and recreation (7 responses), followed by school (3 responses).
- **E-scooters:** There are no provisions for e-scooters under the NWT Traffic Safety Act. With this legislative gap, e-scooter use is legally restricted to private property and their operation on streets, sidewalks, and trails is considered illegal. However, personal e-scooters are still being used by the public.

MAP 9

## EXISTING CYCLING NETWORK



# 6.0 PUBLIC TRANSPORTATION



## 6.1 BACKGROUND

Public transportation, including transit, school buses, and

taxis, can reduce the overall environmental and community impacts of transportation. Public transportation benefits those who choose to use it as well as those who have no other option. Public transportation provides an essential service for many community members. For people who do not drive, public transportation can often be the only option for getting to work, school, shopping areas, and recreational centres. Public transportation currently accounts for approximately 1% of commute trips made by Yellowknife residents.

Conventional transit service in Yellowknife is known as **YK Transit**. The public transit system is operated by TransDev, a private company that is responsible for the provision, maintenance, or operation of public transit based on transit frequency and service levels established by the City.

In 2020, the City developed a *Public Transit Review* to explore opportunities to improve the performance of the City's transit services. A new transit system was introduced on October 1, 2024 as a result of this review with a transit system based on three routes.

In addition to public transit, it is noted that public transportation services in Yellowknife also includes a taxi system and school buses, which are also discussed in this section.

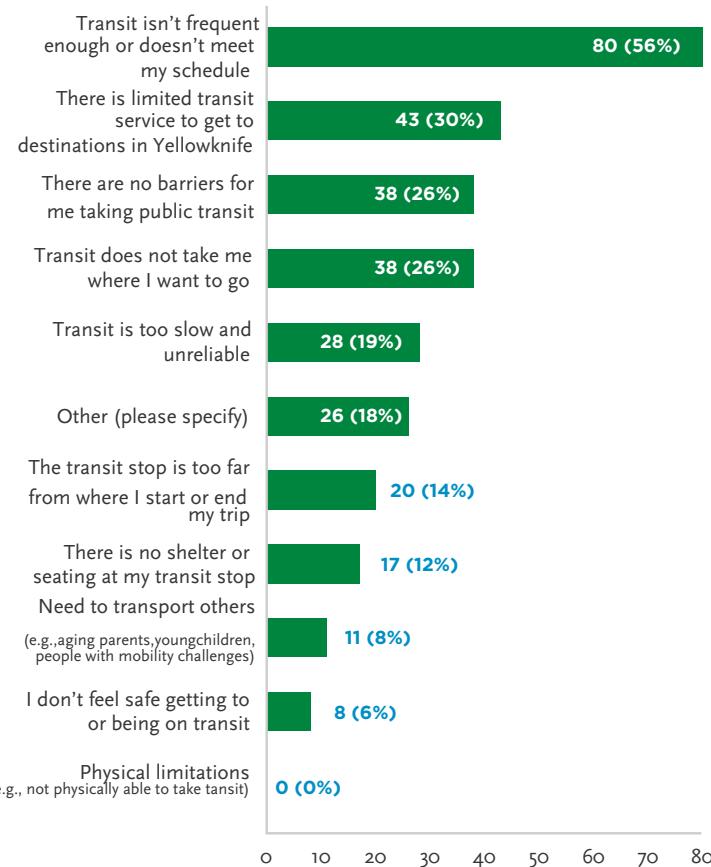


## 6.2 BARRIERS AND OPPORTUNITIES

As shown in Figure 11, the top barriers to transit in Yellowknife are:

- Transit isn't frequent enough or doesn't meet my schedule;
- There is limited transit service to get to destinations; and
- Transit does not take me where I want to go.

FIGURE 11: BARRIERS TO TRANSIT



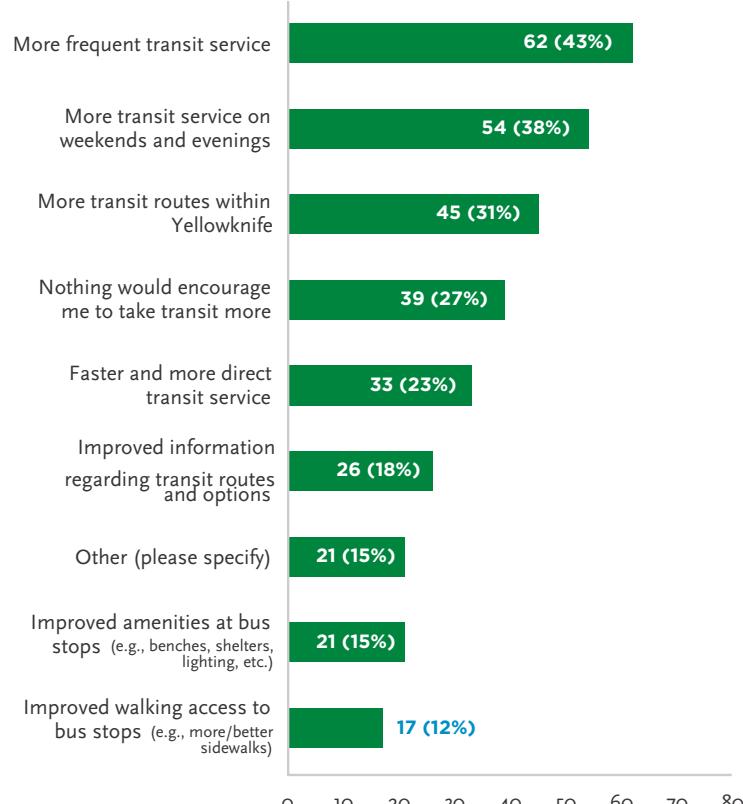
(Source: Community Survey)



As shown in Figure 12, the top three things that would encourage people to use transit more often are:

- More frequent transit service;
- More transit service on weekends and evenings; and
- Most transit routes within Yellowknife.

FIGURE 12: OPPORTUNITIES TO INCREASE TRANSIT USE



(Source: Community Survey)

## 6.3 VISUAL SUMMARY



Conventional Transit Bus



Custom Paratransit Bus (YKFlex)



Bus Stop Signage



Bus Stop with Small Shelter and Bench



Bus Stop with Large Shelter and Bench



Bus Stop with Route Schedule

## 6.4 FACTS AND FINDINGS

- **Transit Vehicles:** TransDev owns and operates eight wheelchair accessible conventional transit buses and two custom paratransit buses, and also provides school buses for schools and provides charter transit services.
- **Transit Network:** The transit network is made up of three transit routes, including one main connector route and two neighbourhood routes that provide local services throughout Yellowknife (see **Map 10**). The three routes include:
  - » **Route 1: YK Connector** is the main connector transit route connecting the highest ridership destinations along Franklin Avenue from Old Town and Ndilq and through the Downtown and Range Lake neighbourhood. This route also connects to Kam Lake twice daily Monday-Friday.
  - » **Route 2: Borden/Forrest** is a neighbourhood route connecting the Borden and Forrest neighbourhoods to key destinations along Old Airport Road and schools on Taylor Road to the downtown.
  - » **Route 3: Niven Loop** is a neighbourhood route connecting the Niven neighbourhood to downtown. This route operates as a one-way loop.
- **Transit Service:** Most transit routes operate six days a week from Monday to Saturday between 6:30 am to 7:30 pm. Transit service is not provided on Sundays, statutory holidays, or at night. Transit frequency is typically provided every 20 – 40 minutes in the morning and afternoon peak periods, and every hour during the mid-day periods and on Saturdays, as shown in **Table 2**.

TABLE 2: TRANSIT FREQUENCY BY ROUTE

	Morning (6:55am – 9:00am)	Mid-day (9:00am – 2:30pm)	Afternoon (2:30pm – 7:30pm)	Saturday (all day)
Route 1: YK Connector	22 – 35 minutes	Hourly	20 – 40 minutes	Hourly
Route 2: Borden / Forrest	20 – 40 minutes	Hourly	30 – 45 minutes	Hourly
Route 3: Niven Loop	25 – 35 minutes	Hourly	30 minutes	Hourly
Route 1: Kam Lake Service	Once	N/A	Once	N/A

- **Transit Ridership:** Transit ridership has fluctuated between 190,000 and 211,000 annual riders using the conventional transit system between 2019 and 2024, as shown in **Figure 13**. Conventional transit ridership declined to 133,000 customers per year in 2021, although this drop can likely largely be attributed to the COVID-19 pandemic. Transit ridership has seen a steady increase, with ridership passing pre-pandemic levels in 2024.

Of note, the new transit routes were introduced October 1, 2024. Average ridership has significantly increased since the new transit routes were introduced, with average monthly ridership increasing from 15,356 customers between January 2023 and September 2024 to 23,457 customers from October 2024 to July 2025 – an increase of 53% after the new routes were introduced.

Route 1: YK Connector is the most well-used route, with an average of approximately 15,000 customers per month between January and July 2025, compared to approximately 6,840 customers on Route 2: Borden / Forrest and 2,620 customers on Route 3: Niven Lake, as shown in **Figure 14**.

FIGURE 13: ANNUAL TRANSIT RIDERSHIP, 2019 – 2024

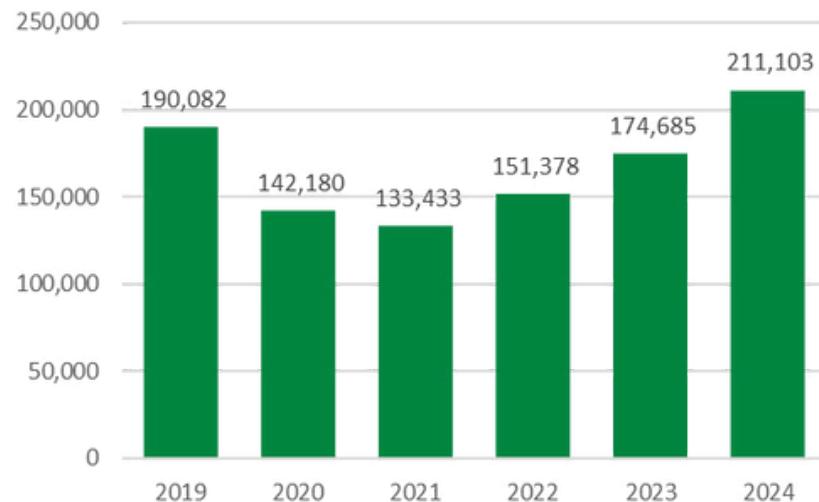


FIGURE 14: AVERAGE MONTHLY TRANSIT RIDERSHIP BY ROUTE, JANUARY TO JULY 2025



- **Accessible Transit:** While all conventional transit vehicles are accessible, not everyone is able to use conventional transit. YKFlex is an accessible door-to-accessible door custom transit service for people who are unable to use conventional transit with safety and dignity due to a temporary or permanent physical or functional disability. The City has two YKFlex vehicles. YKFlex service operates from Monday to Saturday between 6:40 am to 7:10 pm. Residents must first register for YKFlex by filing out an application form, including a portion that must be completed by a medical professional. Once the application is approved, customers can book their trip by phone between 8:00am and 5:00pm on weekdays and Saturdays.

**Transit Maintenance:** All transit vehicles are stored in a TransDev owned maintenance garage that is heated year-round.

- **Transit Fares:** YK Transit offers single rides for \$2 per trip as well as four levels of ride passes (single ride pass, 10 ride passes, monthly passes, and an annual pass), as summarized in **Table 3**. Transfers for single rides can be provided by the bus driver upon request. If paying on the bus, payment is only accepted by cash with exact change. Ride passes can be purchased at various locations throughout the City. Discounted fares are available for seniors, students, people with disabilities, and registered YKFlex passengers using YKFlex service. Children 12 and under accompanied by an adult can ride for free.

TABLE 3: TRANSIT FARES

	Full Fare	Discounted Fare
Single Ride	\$2	\$2
10 Ride Pass	\$18	\$12
Monthly Pass	\$75	\$50
Annual Pass	<b>\$750</b>	<b>\$500</b>

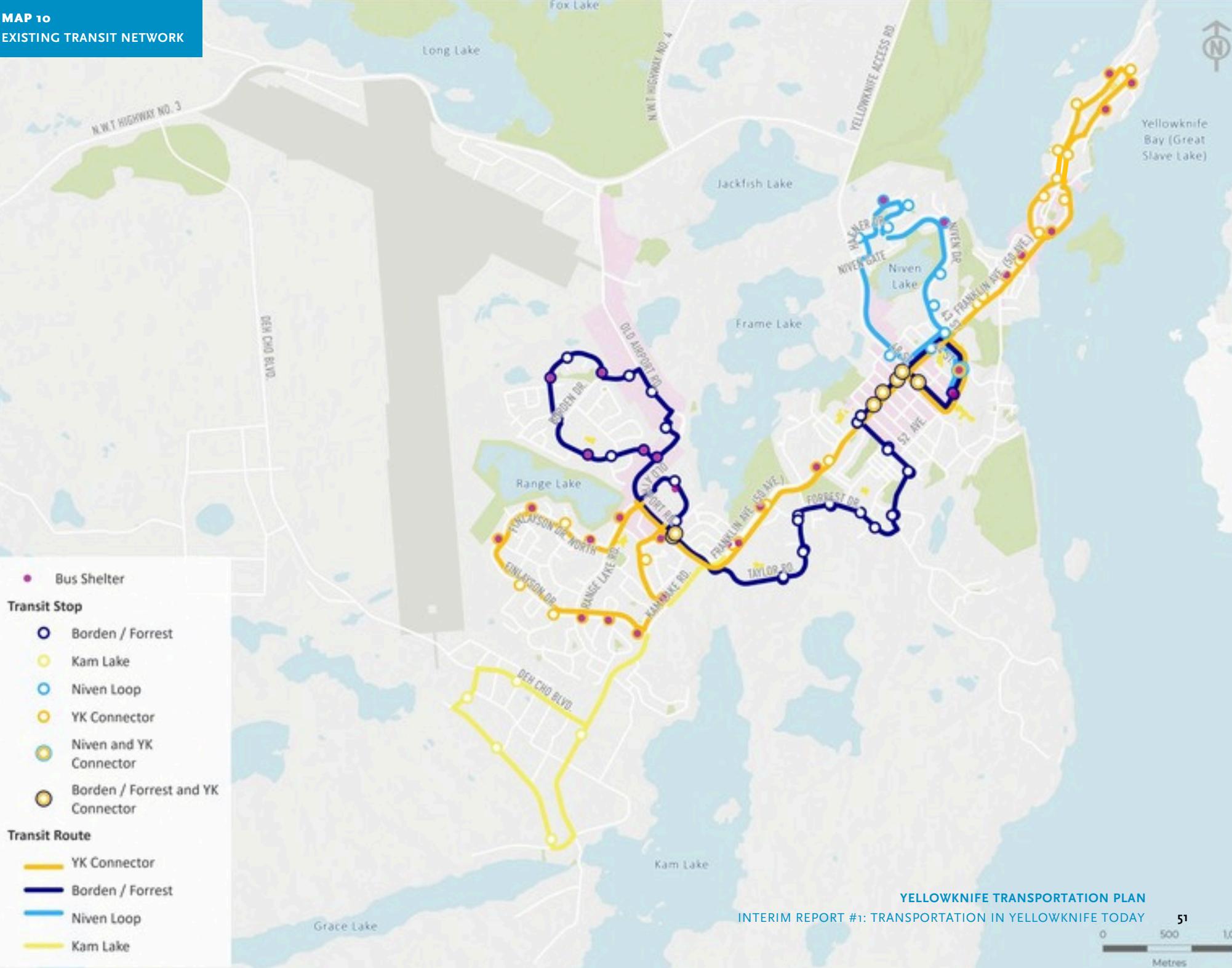
- **Transit Riders' Guide:** The City publishes a Transit Rider's Guide on its website, which provides a map of the transit network, schedules for each transit route, and fare payment information, as shown in **Figure 15**.
- **Transit Mobile App:** Residents can access real-time transit information using the Passio Go! Mobile application on smartphones. The Passio Go! App provides an interactive platform showing all bus routes and bus stops and displays real-time bus tracking information.
- **Transit Amenities:** There are 93 bus stops in Yellowknife. Transit stop amenities such as benches, shelters, lighting, route information, and walking connections to transit, are important for making transit a convenient, attractive, and accessible transportation mode. The amenities available at each bus stop vary, with shelters being the most commonly provided type of amenity. There are two types of shelters, including large or small shelters. Of the 93 existing bus stops, 30 (32.3%) have shelters, including 15 bus stops with large shelters and 15 bus stops with small shelters, as shown in **Map 10**.
- **Hotel Shuttles:** Many hotels offer private shuttle services between the Yellowknife Airport and most hotels.
- **Taxis:** There are three main taxi companies that serve Yellowknife: City Cab, Yellowknife Cab Limited, and Aurora Taxi. Taxis also serve those arriving via an airplane as a key way to find their way through the city.
- **Ride-Hailing:** Ride-hailing is currently not permitted in the Northwest Territories.
- **School Buses:** TransDev also operates school bus service for eligible schools within the Yellowknife School Boards. Students who meet the following distance criteria are eligible for a subsidized bus pass:

- » **Kindergarten** children living further than 0.4 km from school.
- » Students in **Grade 1 – 3** living further than 1.2 km from school.
- » Students in **Grade 4 – 6** living further than 1.6 km from school.
- » Students in **Grade 7 – 8** living further than 2.0 km from school.

After Grade 8, students can start using transit with discounted fares.



FIGURE 15: YK TRANSIT RIDERS GUIDE

**MAP 10****EXISTING TRANSIT NETWORK**

# 7.0 DRIVING



## 7.1 BACKGROUND

The City's street network includes an established road network anchored around highways and major roads such as Highway 3, Old Airport Road, Franklin Avenue, Kam Lake Road, and 48 Street. The road network also includes several major intersections, including nearly 20 signalized intersections.

Travel by private vehicle is the dominant mode of transportation in Yellowknife today, as vehicles account for over 62% of trips made by Yellowknife residents. Driving takes place on the City's street network, which is made up of different components, each serving specific functions within the overall network.

This section focuses on driving, including parking management, goods movement, and emerging technologies.



## 7.2 BARRIERS AND OPPORTUNITIES

As shown in **Figure 15**, the top barriers to driving in Yellowknife are:

- Unsafe driving behaviour;
- Difficult to find parking; and
- Unsafe intersections.

As shown in **Figure 16**, the top three things that would **improve driving** are:

- Improve walking, cycling, and transit to reduce the need to drive;
- Encourage people to drive less; and
- Implement safety improvements at higher collision locations.

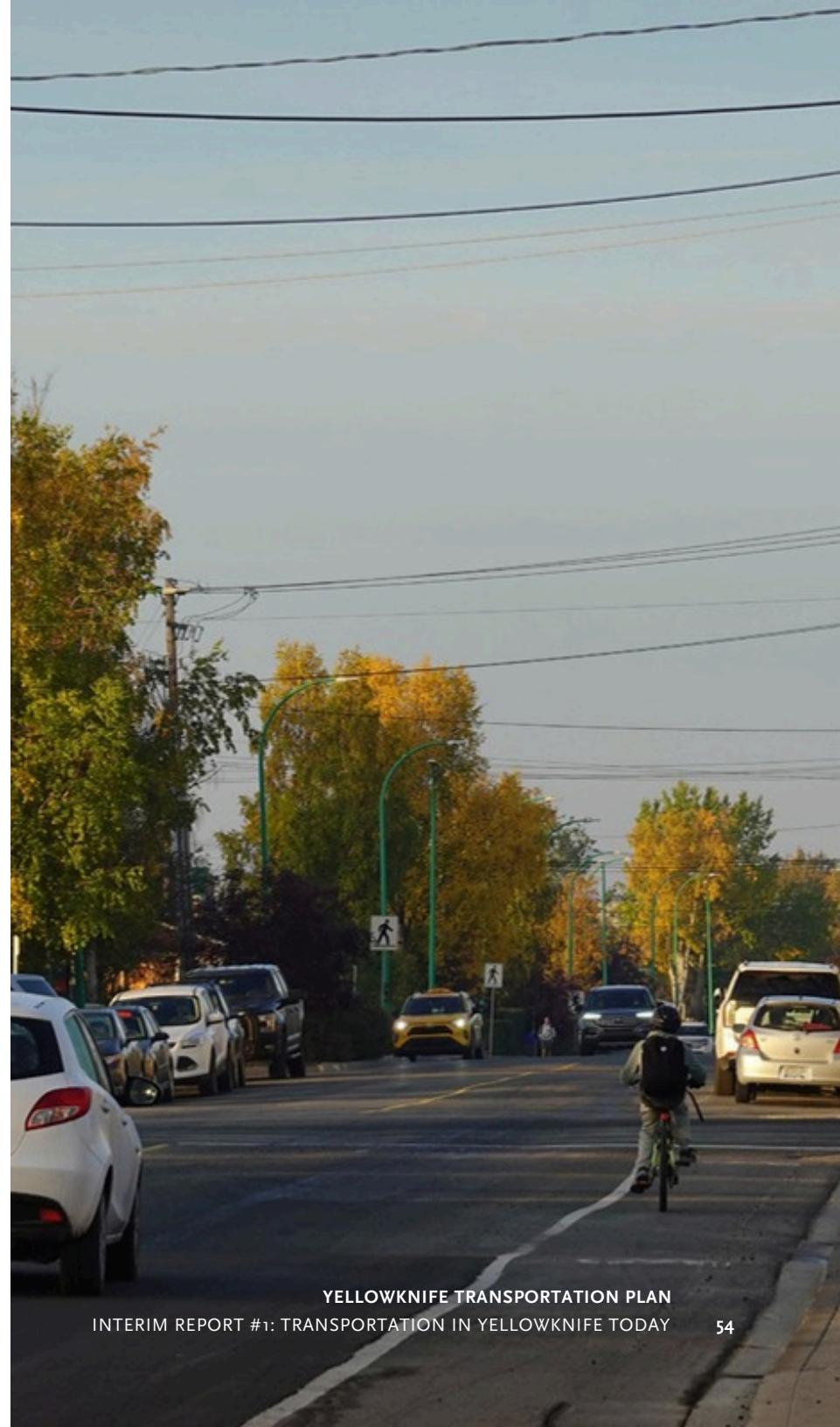
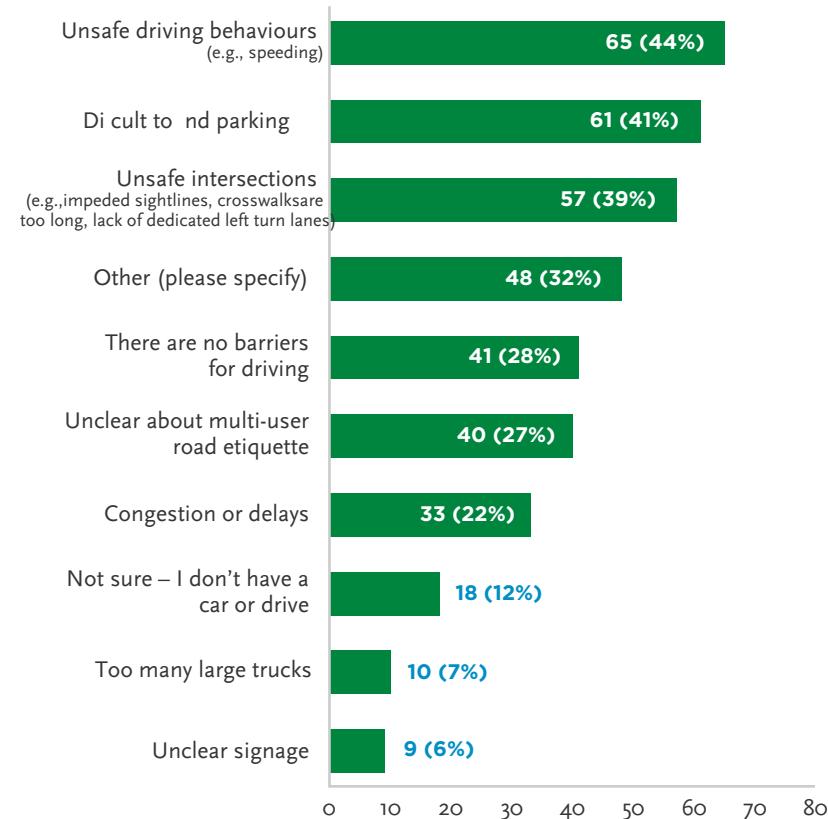
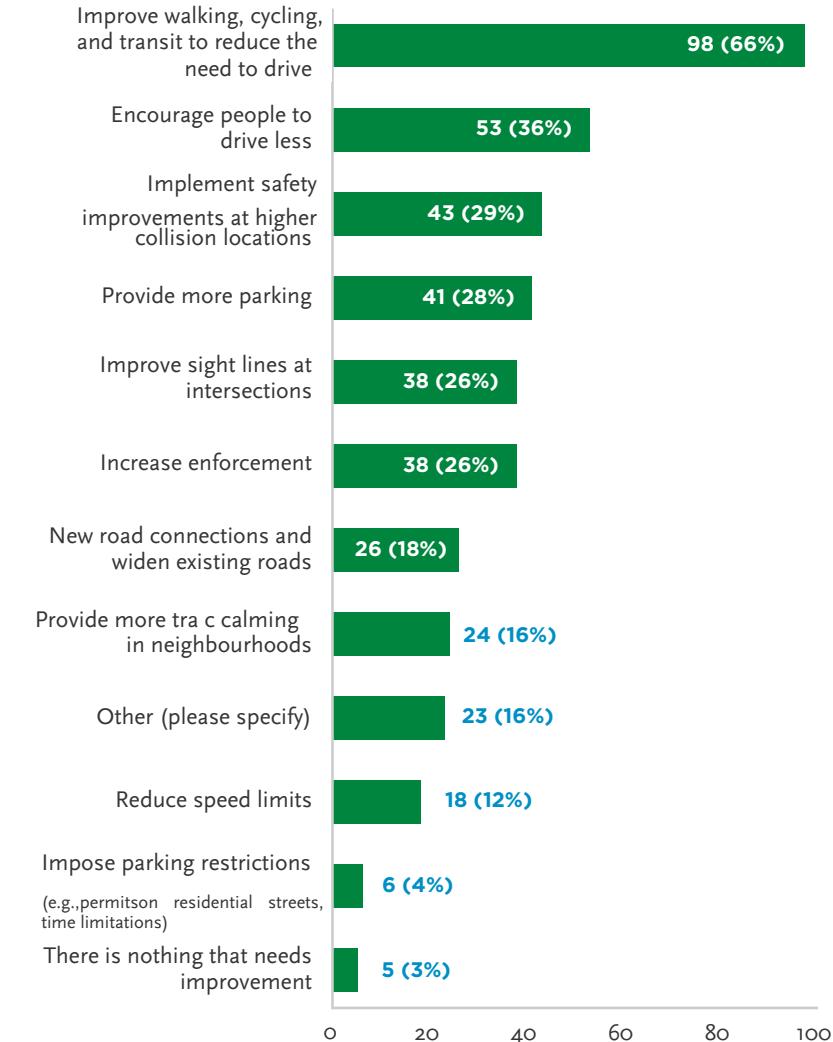


FIGURE 15: BARRIERS TO DRIVING



(Source: Community Survey)

FIGURE 16: OPPORTUNITIES TO IMPROVE DRIVING



(Source: Community Survey)

## 7.3 VISUAL SUMMARY



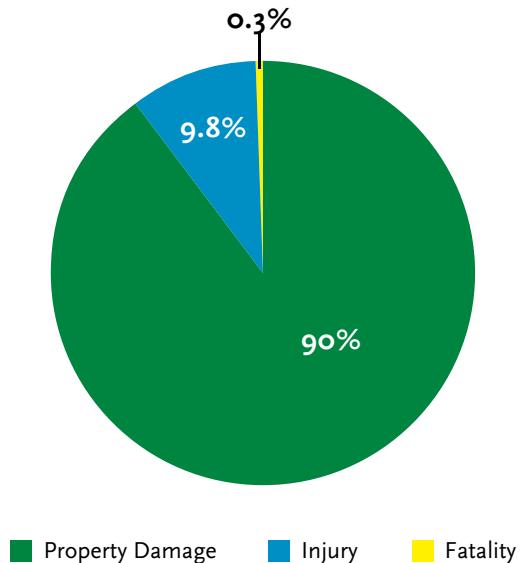
## 7.4 FACTS AND FINDINGS

- **Street Network:** The City's street network is divided into a street network classification hierarchy that reflects the mix of traffic and function of each street (see [Map 11](#)). The street network classification represents the typical form and function for each type of street, although there may be some variations in the actual characteristics of various roadways. Territorial highways, which are under GNWT jurisdiction, are at the highest level of the street classification. The street classification includes:
  - » **Highways** are under the jurisdiction of GNWT connecting Yellowknife to the rest of the Northwest Territories (e.g. Highway 3)
  - » **Arterial streets** are major corridors designed to move large traffic volumes efficiently, connecting various areas of the city (e.g. Old Airport Road).
  - » **Collector streets** provide links between local streets to arterial streets (e.g. Borden Drive). Collector streets are not intended for the use of non-local and commuter through traffic.
  - » **Local streets** include one-way and two-way streets and alleys that are designed for low-speed everyday access to individual properties (e.g. Banke Crescent).
- **Traffic Controls:** There are 19 traffic signals in the City, including signalized intersections on Old Airport Road, Franklin Avenue, and Kam Lake Road (see [Map 11](#)). Most intersections throughout Downtown have traffic signals.
- **Traffic Volumes:** Based on traffic data provided by the City, traffic volumes were estimated at key locations. Arterial streets typically carry the highest traffic volumes, with Franklin Avenue downtown carrying approximately 18,000 vehicles per day. Other corridors with higher traffic volumes include Kam Lake Road (7,000 – 10,000 vehicles per day), Range Lake Road west of Old Airport Road (approximately 10,000 vehicles per day), 48 Street (approximately 9,000 vehicles per day), and Franklin Avenue east of Downtown (approximately 7,000 vehicles per day) (see [Map 12](#)).
- **Speed Limits:** The maximum speed limit within the City of Yellowknife is typically 45 kilometres per hour. School zones and playground zones maximum speed limit is 30 kilometres per hour. School zones are enforced at all times, 24 hours 7 days a week. Speed limits increase to 70 km/h and above on GNWT highways.
- **Traffic Speeds:** Based on GPS-based speed data for arterial roads in the City, many vehicles are travelling above the speed limit on several arterial streets, including Old Airport Road and 48 Avenue along with Highway 3, while traffic speeds are generally lower in the Downtown core (see [Map 13](#)).
- **Industrial Traffic and Goods Movement:** Goods movement is a crucial component of the local and broader transportation network, as it is critical to ensure that there is an efficient and reliable flow of goods to, from, and within Yellowknife as well as to and from the industrial and commercial areas. [Map 14](#) shows the existing truck routes that provide access for heavy and overweight vehicles on Highway 3, Yellowknife Access Road, De Cho Boulevard, Old Airport Road, Kam Lake Road, Franklin Avenue, and Forrest Drive
- **Traffic Calming:** Traffic calming can help to create safe and liveable residential streets by reducing traffic speeds and volumes. A range of traffic calming measures can be considered, including speed humps, traffic circles, curb extensions, and reduced speed limits, among other things. The City currently does not have a Traffic Calming Policy.

## Road Safety

Based on RCMP collision data collected between 2018 and 2022, there were 3,475 reported collisions in Yellowknife. Over the course of these five years, approximately 10% of these collisions caused an injury or fatality, including 340 injury collisions and nine fatal collisions. The remaining 90% of collisions only resulted in property damage (see **Figure 17**).

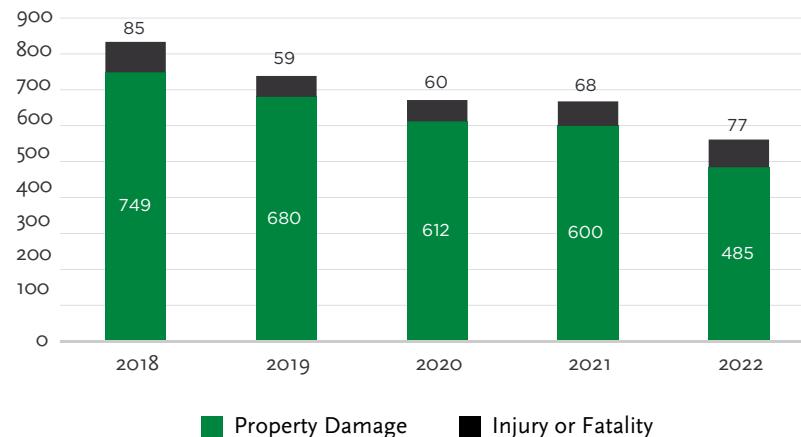
**FIGURE 17: REPORTED COLLISIONS BETWEEN 2018 AND 2022**



(Source: Government of Northwest Territories, compiled from RCMP 2018-2022 Collision Data)

The total number of reported collisions has decreased significantly year-over-year, with a 33% reduction in total annual collisions between 2018 and 2022 (see **Figure 18**). However, the proportion of collisions resulting injury or fatality did not see significant changes over time, as they have fluctuated from approximately 60 to 85 injury or fatal collisions over this time.

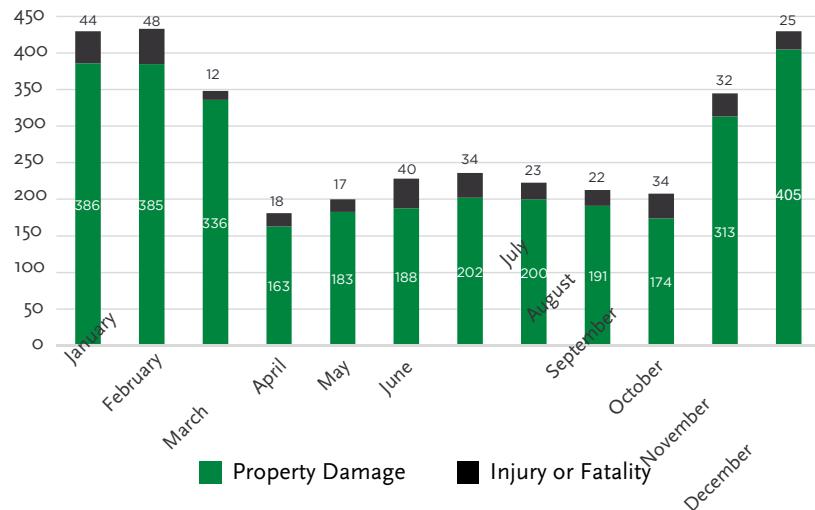
**FIGURE 18: REPORTED COLLISIONS BY YEAR BETWEEN 2018 AND 2022**



(Source: Government of Northwest Territories, compiled from RCMP 2018-2022 Collision Data)

The winter season contained the most collisions, with 37% of all collisions and 34% of injury or fatal collisions being reported between the months of December and February (see **Figure 19**). Collisions were most frequently reported in the afternoon peak period between 3pm and 6pm, with 22% of all collisions and 27% of injury or fatal collisions reported between these hours.

FIGURE 19: REPORTED COLLISIONS BY MONTH BETWEEN 2018 AND 2022

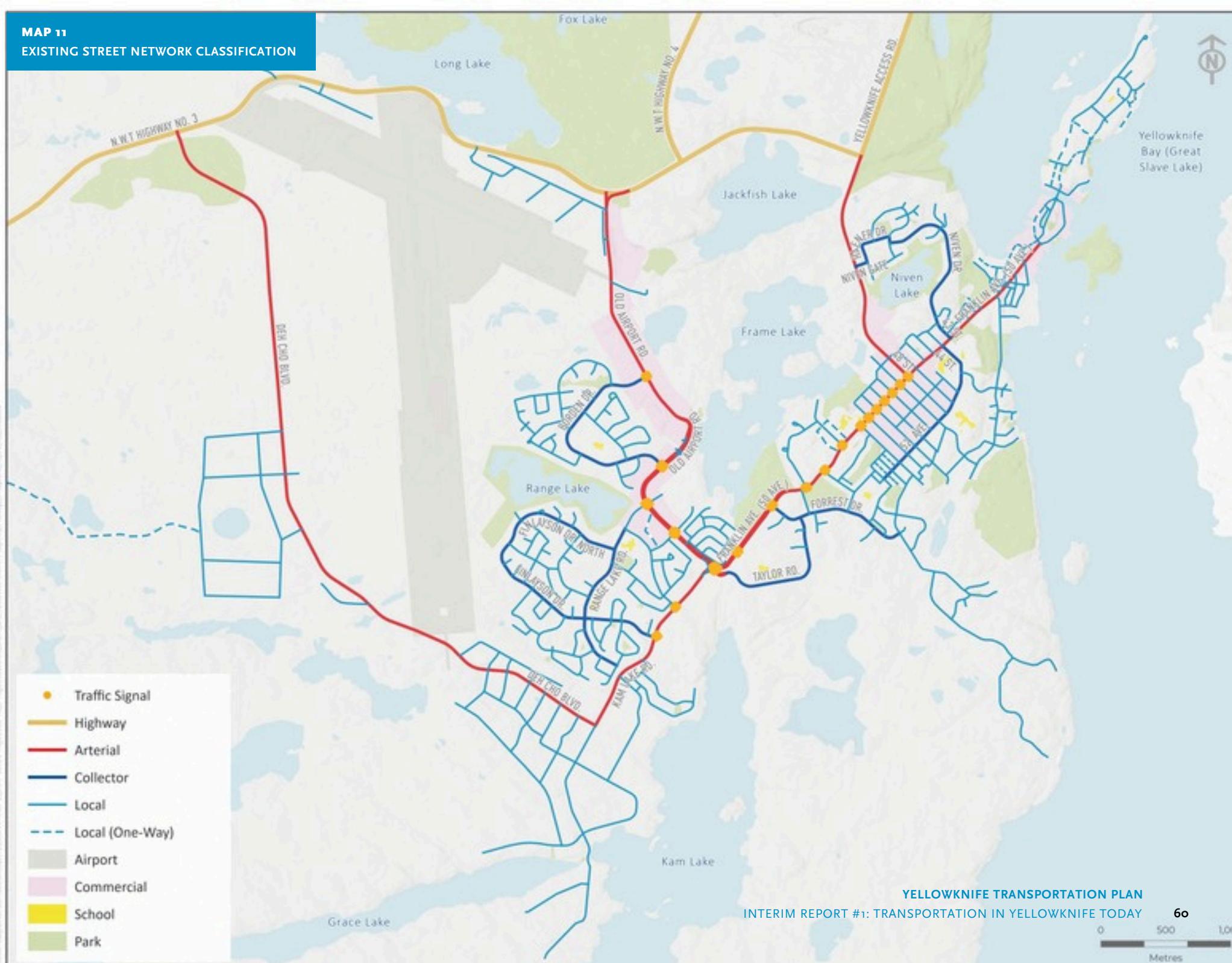


Of the collisions with known major contributing factors, backing unsafely was the most common cause of collision, resulting 723 incidents (see Figure 20). However, only 12 of these incidents caused injury or fatality. Failure to yield right-of-way caused 89 instances of injury or fatal collisions, the most of any major contributing factor. Other leading contributing factors to collisions include motorists losing control, driving fast for conditions, and distracted or inattentive driving.

FIGURE 20: REPORTED COLLISIONS BY CONTRIBUTING FACTOR BETWEEN 2018 AND 2022

## MAP 11

## EXISTING STREET NETWORK CLASSIFICATION



**MAP 12****DAILY TRAFFIC VOLUMES****Average Daily Traffic Volume**

Vehicles / Day

&lt; 5,000

5,000 - 10,000

&gt; 10,000

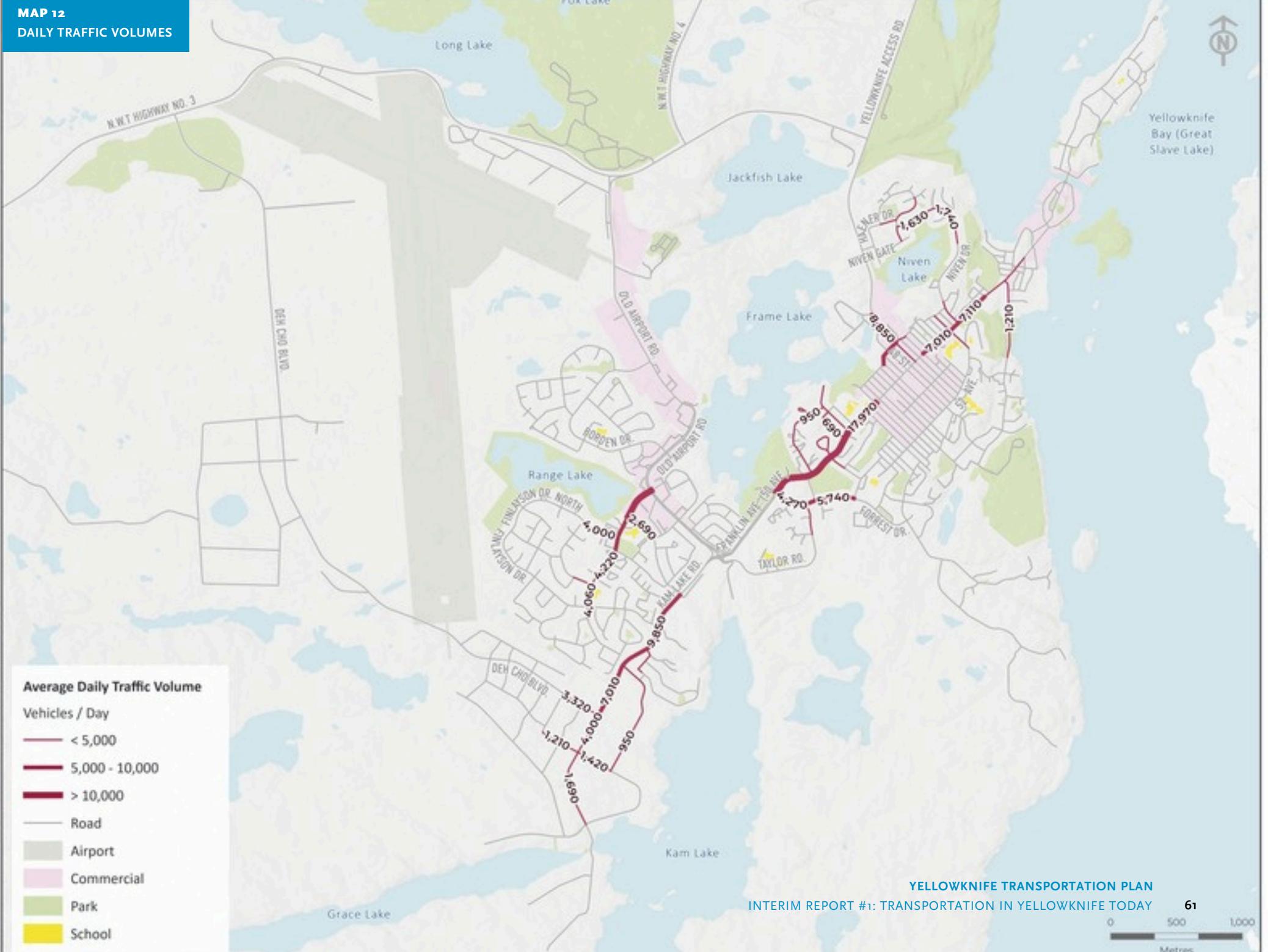
Road

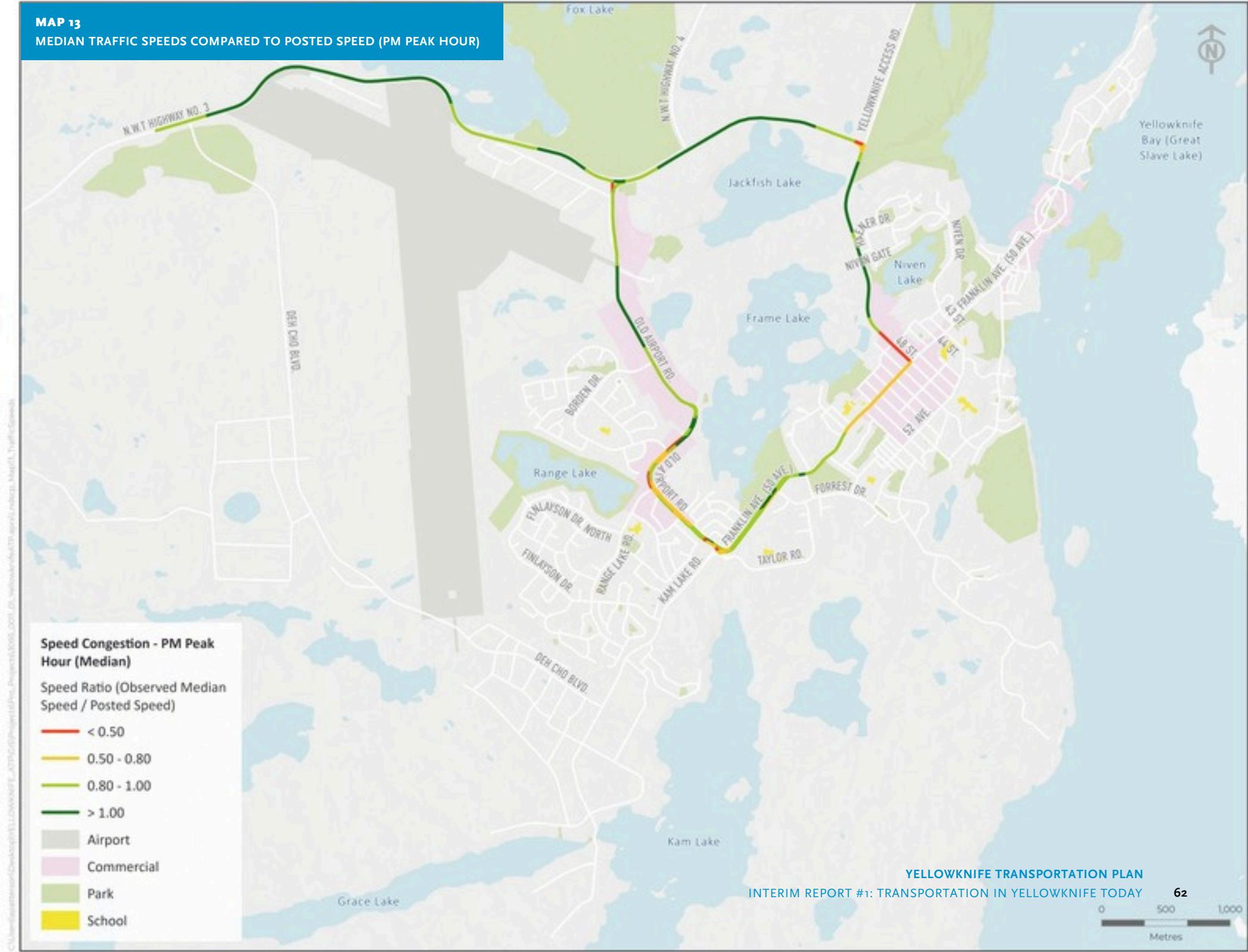
Airport

Commercial

Park

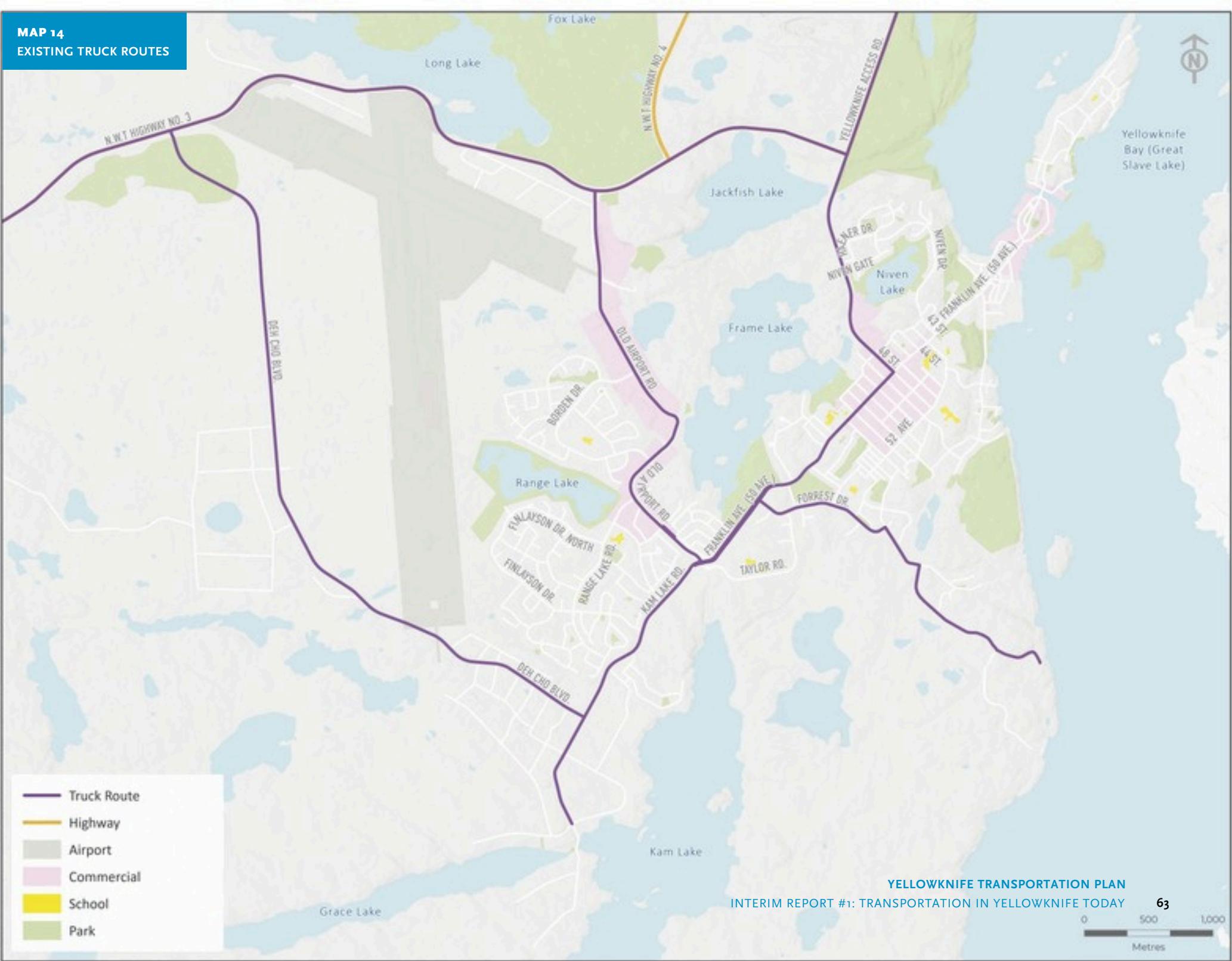
School



**MAP 13****MEDIAN TRAFFIC SPEEDS COMPARED TO POSTED SPEED (PM PEAK HOUR)**

## MAP 14 EXISTING TRUCK ROUTES

↑  
N



YELLOWKNIFE TRANSPORTATION PLAN

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A horizontal scale bar with tick marks at 0, 500, and 1,000. The word 'Metres' is centered below the bar.

- **Winter Road Maintenance:** The City performs three key winter maintenance activities to ensure safe road conditions: sanding for traction at intersections and hills, daily plowing and grading to level snow-covered surfaces, and scheduled snow removal to clear accumulated snow and ice.

Plowing and grading occur daily from first snowfall to spring, covering large areas quickly. Snow removal is more intensive, requiring full street closures and additional resources. The City does not clear roads down to bare asphalt; therefore, snow accumulates into hard pack. Once the hard pack reaches a depth of 10-15 centimetres, snow removal activities are scheduled for those streets. Crews typically clear 400–600 metres per shift on major roads and 600–800 metres on residential streets, depending on obstacles. The removal program runs for 22 weeks, prioritizing key corridors such as Franklin Avenue and Old Airport Road, with flexibility to adjust for severe weather.

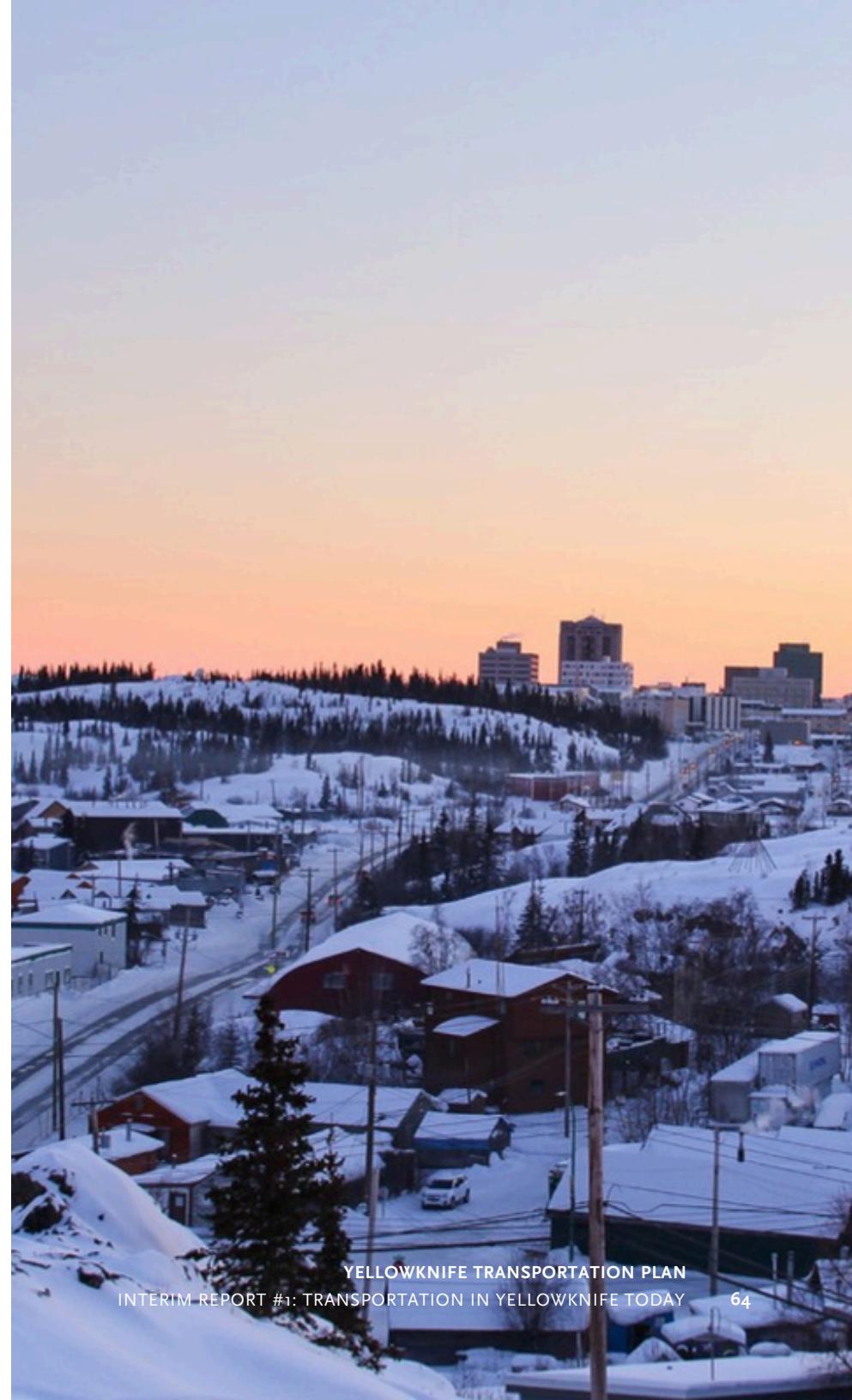
As shown in **Map 15**, ice management are prioritized based on traffic, safety, and environmental considerations:

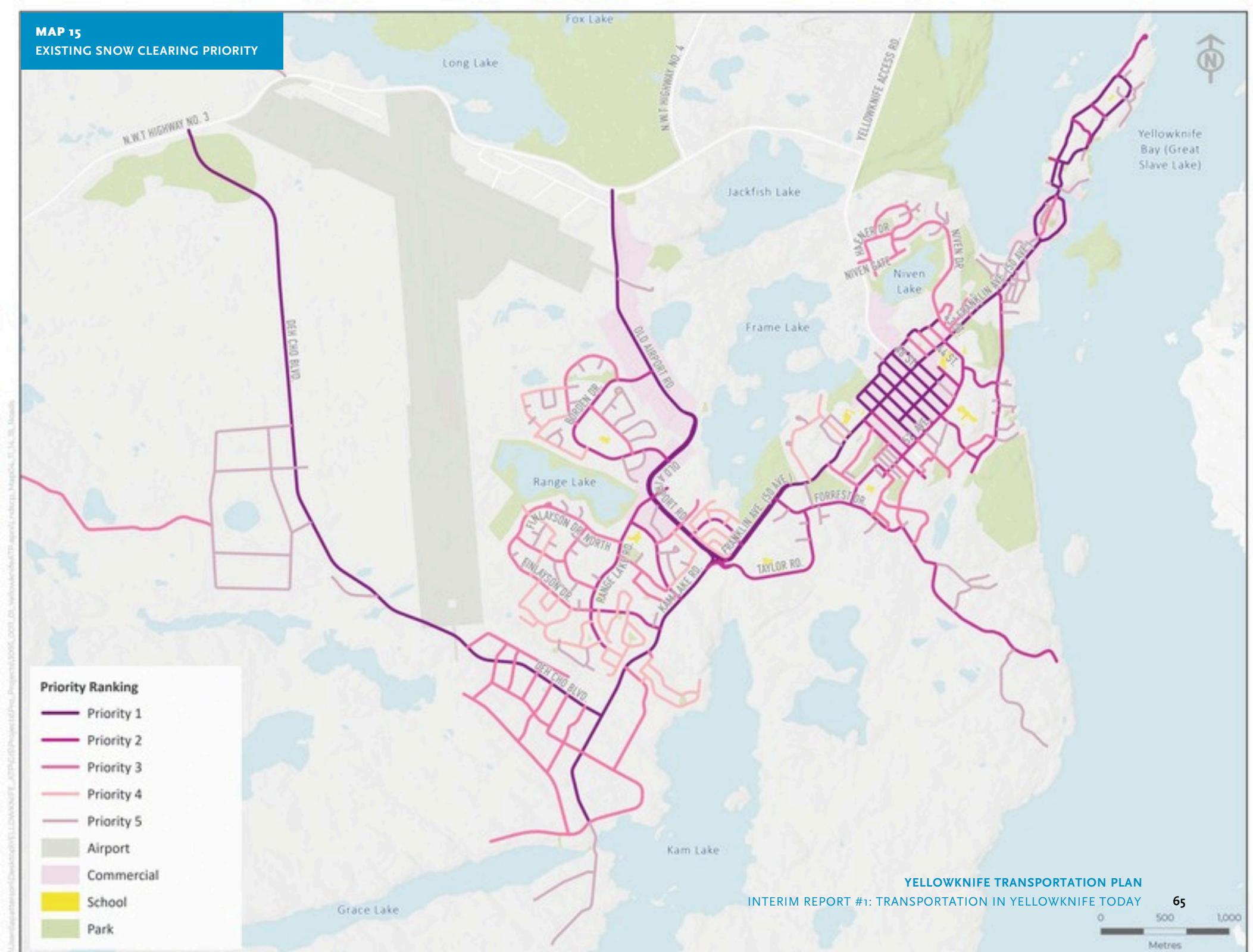
- » **Primary Priorities:** Major arterial roads, emergency routes, main bus routes, and roads near environmentally sensitive areas.
- » **Secondary Priorities:** Remaining arterial roads, additional bus routes, roads in the Central Business District, streets near schools, routes to prioritized City facilities, and other emergency routes.
- » **Tertiary Priorities:** All other City roads, City-owned parking lots, and alleyways.

Under the Highway Traffic Bylaw, property owners must:

- » Remove winter debris (dirt, sand, gravel) from adjacent sidewalks by May 15 each year.
- » In the Central Business District and along Franklin Avenue (Matonabee to 57th Street), clear snow and ice within 24 hours of accumulation, apply sand or salt, and take all reasonable steps to ensure pedestrian safety.

Residents living outside the Central Business District are not required to clear sidewalks for snow and ice.



**MAP 15****EXISTING SNOW CLEARING PRIORITY**

- **Spring Road Maintenance:** The City of Yellowknife operates three street sweepers for seasonal road and sidewalk maintenance. In April, two sweepers are deployed to remove the bulk of winter sand. Once this initial cleanup is complete, operations transition to a single sweeper working during regular hours in residential neighbourhoods, while another operates downtown after hours to reduce disruption for residents in both areas.

The current street sweeping priority include:

- » **Priority #1:** Major arteries and bus routes
- » **Priority #2:** Minor arteries and bus routes, major industrial roads, central business districts, roads adjacent to schools and city-owned properties; and
- » **Priority #3:** Remainder of municipal roads.
- » High traffic areas and areas close to schools have a higher priority than low traffic residential roads. A few reasons why a street may have a higher priority are: high vehicle or pedestrian traffic, location of a school, street may be narrow (a public safety concern), trucked services, public or school bus transit, etc.
- **Electric Vehicle Charging Infrastructure:** While there is no comprehensive electric vehicle legislation in the Northwest Territories, the GNWT, in partnership with the federal government, has offered funding to support the installation of EV charging at public places, street locations, multi-unit residential buildings, workplaces. Data from PlugShare – a comprehensive online tool for locating EV charging stations – indicates that there are four electric vehicle charging locations in Yellowknife at City Hall, Arctic Energy Alliance, Northland Utilities Office, and Aurora Ford Yellowknife.

- **Car share:** Car share services increase mobility options and affordability by providing access to motor vehicles without having to purchase a private vehicle. This promotes sustainable transportation choices, allowing residents to make most trips by active transportation and transit and use a car only when required. Two-way car share services need to be picked up and returned to the same spot, whereas one-way car share allows users to start and end a trip anywhere within a designated home zone.

The City sponsors YK Car Share Co-op, a community-owned electric vehicle car sharing initiative that offers personal plans for individuals and corporate plans for teams and organizations. YK Car Share is a two-way car share service where their pick-up and drop-off locations are located at City Hall and at an Outpost Location at a car rental store. YK Car Share has two electric vehicles in their fleet available for hourly and daily rentals.

- **Parking:** The *Community Plan* outlines how no new surface parking lots are permitted and off-street parking minimums are eliminated in the downtown city core area. Old Town and the Downtown central residential area have reduced off-street parking minimums. The *Zoning Bylaw* aligns with the *Community Plan*, establishing parking standard areas to identify minimum parking space requirements by land use.

Downtown Yellowknife uses a mix of 1-hour, 2-hour, and 9-hour parking meters to manage short-term and long-term parking (see **Map 16**) with a total of approximately 4,655 parking stalls (see **Table 4**). Payment options include coin payment and the use of a Passport Parking Canada mobile phone application.

There have been several parking-related studies completed for the City. The *Yellowknife Parkade Feasibility Study* assessed downtown parking supply found that there was a surplus of parking during peak demand periods and that a downtown Parkade is not necessary to serve future parking demand.

TABLE 4: DOWNTOWN YELLOWKNIFE PARKING SUPPLY

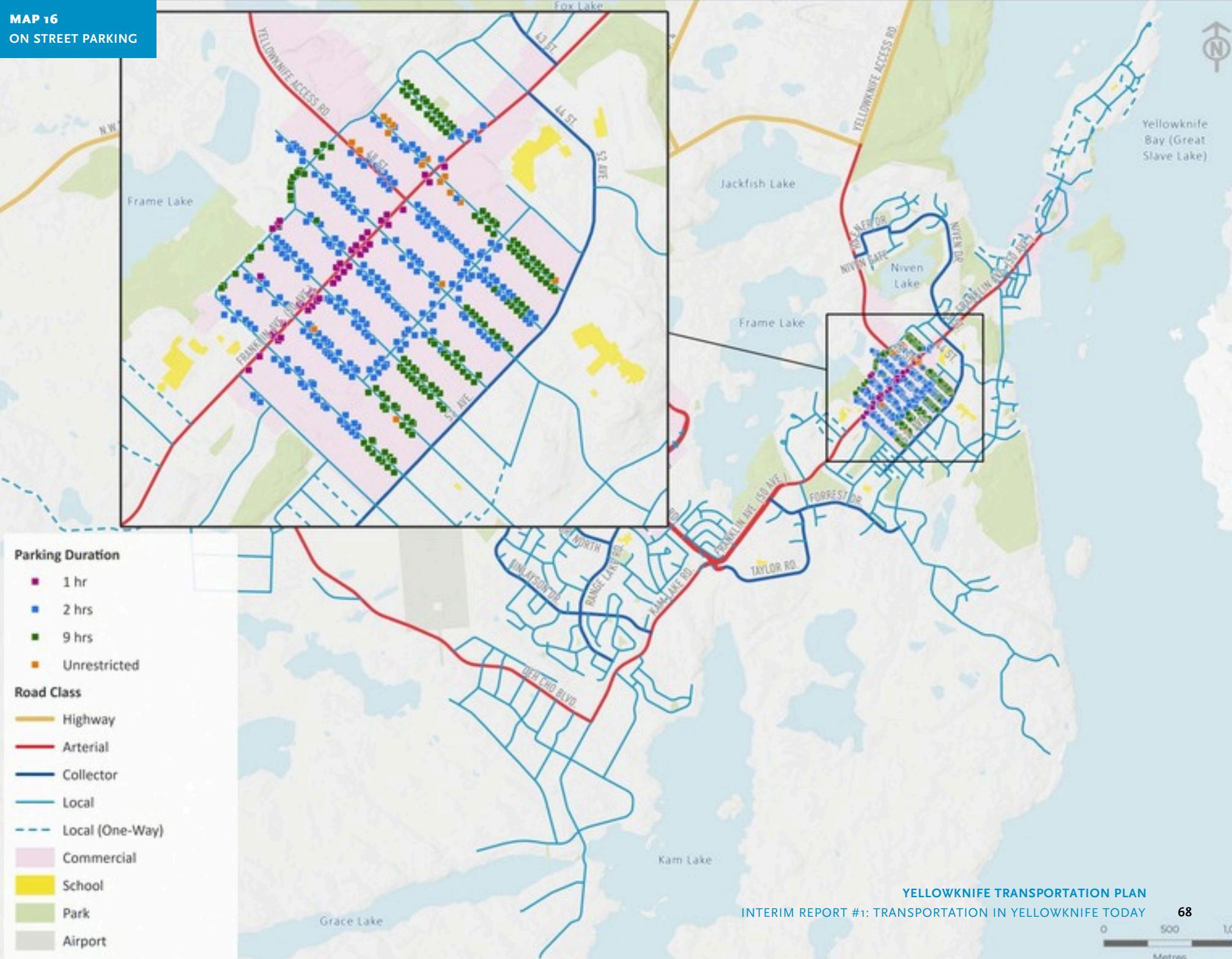
Parking Type	Details	Parking Supply
On-street	Metered	534
	Unmetered	558
Off-street	Surface Lots	2,548
	Lanes	465
	Centre Square Mall Parkade	550
<b>Total</b>		<b>4,655</b>

(Source: Yellowknife Parkade Feasibility Study, 2021)

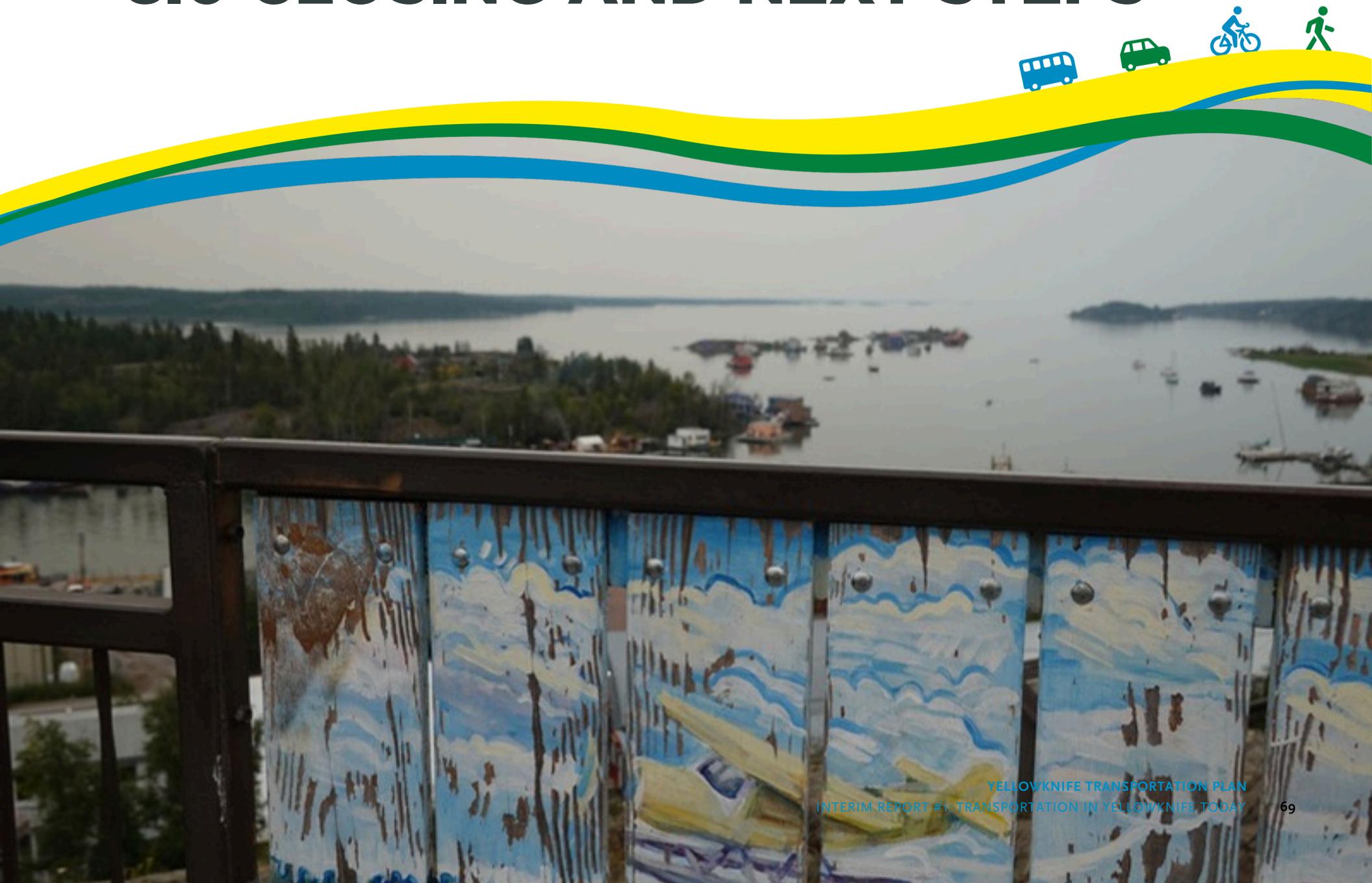
The Yellowknife Old Town Emergency Circulation Review and Parking Study identified how parking is a challenge in Old Town due to its compact development pattern, narrow streets and alleyways, and competing parking needs from tourism, recreation, and commercial boating. The study recommended emergency access in Old Town by adding no-parking signage throughout the area, improving parking infrastructure by capitalizing on existing off-street parking areas, and exploring a residential parking pass program.



**MAP 16**  
ON STREET PARKING



## 8.0 CLOSING AND NEXT STEPS



This is the first Interim Report prepared as part of the Yellowknife Transportation Plan process and summarizes existing conditions for all modes of transportation in the City today. This report has been developed in parallel with **Interim Report #2: Best Practices and Emerging Trends**, which summarizes current and emerging trends and best practices for all forms of transportation.

The next phase of work will focus on charting the course for the future of transportation in Yellowknife. A future vision with supporting goals will be developed along with detailed strategies and actions to achieve the vision and goals. The strategies and actions will lay out the long-term plan, which will be followed by an implementation and monitoring strategy identifying short-, medium-, and long-term priorities.

