FINAL REPORT | PROJECT NO. OTT-22020007-A0 | NOVEMBER 29, 2024

CONVENTIONAL AND SPECIALIZED TRANSIT SYSTEM REVIEW STUDY

CITY OF ELLIOT LAKE

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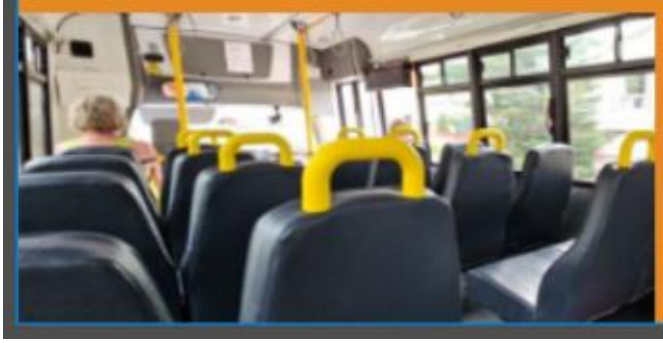

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1. Introduction

Elliot Lake Transit commenced operations in September 1980, following the municipal government's decision to establish a local public transportation system to serve local needs. Initially managed by the City's Transportation Department, the service was officially named Elliot Lake Transit in 1987; the service has since become an essential part of the city's mobility framework, offering reliable bus services within city limits to support residents and visitors.

Over the years, Elliot Lake has evolved in terms of population demographics, land use, and development patterns, and the city's transit system has faced new challenges and opportunities. Notably, the aging population, an increasing number of individuals requiring accessible infrastructure, and challenges associated with delivering and maintaining quality transit services for a small population have shaped the transit landscape.

The City of Elliot Lake initiated a comprehensive review of its transit system, with the objective of determining and implementing methods to improve access to transit and the quality of transit service. This initiative led to EXP being engaged in July 2023 to conduct an in-depth study supporting this review. This report captures this study's findings, reflecting a strategic approach to improving transit services.

Key aspects and considerations of this study included:

- Transit System Review – Evaluating the current transit system to enhance accessibility and improve service standards. The City's transit system includes both conventional and specialized services.

  Conventional Transit Services include regular, scheduled bus operations owned by the city and managed by contracted providers, who handle driver compensation. The primary goal is to deliver reliable and efficient public transportation to all residents within city limits.

  Specialized Transit Services are designed to address the needs of specific community members, such as individuals with disabilities. These services ensure accessibility and inclusion by offering tailored solutions like the Handilift service, which provides accessible transportation for riders with disabilities or mobility limitations. The city collaborates with contracted operators to provide seamless, accessible transit options.

- Community-Centric Approach – Integrating the specific transportation needs of the community into the system's design by engaging local stakeholders. Collaborating to ensure the transit system aligns with the community's needs and preferences.

- Accessibility Improvement – Focusing on making the transit system more accessible, ensuring all residents can use the services without barriers.

- Alternative service delivery models: Investigating delivery models such as on-demand micro-transit.

- Financial Oversight and Infrastructure Management: Developing a capital plan to meet the required service levels, including acquiring additional buses, creating new stops, and improving existing stops for better accessibility.

Exhibit 1: Public Transit Vehicles in Elliot Lake[1]

[1] Extracted from https://www.myespanolanow.com/ and https://cptdb.ca/

1.1. Study Scope

The study consisted of several key milestones summarized as follows:

Milestone	Objective	Milestone Description
Service Delivery Review, including Community and Stakeholder Consultation	To align with community growth and incorporate inclusive planning To address system gaps and have data-driven decisions	It involves assessing the performance of existing transit services from an operational perspective and identifying gaps and opportunities for change based on a comprehensive range of community stakeholder perspectives. This includes a thorough review of the city's plans alongside an analysis of demographic data from the latest Statistics Canada census to understand age distribution, employment, income, and household composition. Synthesizing input from key stakeholders on conventional and specialized transit needs and regional connectivity in developing a detailed profile of transportation movements and needs, enabling a review of services and the development of a customized transit solution for Elliot Lake.
Route Review and Potential Redesign	To assess service alternatives and support transit ridership growth strategies To create a customer-friendly and compliant service model	It involves comprehensively evaluating current transportation services and assets and analyzing fixed-route and specialized services, including transit routes, focusing on service frequency, area, cost, booking mechanisms, convenience, and accessibility.
Capital and Operations Plan	To develop a fare structure, identify alternative revenue streams, and conduct comprehensive financial assessments To identify strategies to secure funding To draft marketing strategies to enhance community engagement and transit use.	It includes creating a simple, affordable fare structure, exploring non-fare revenue sources, and estimating the cost of recommended solutions, focusing on short-term and long-term plans. It involves identifying funding sources, such as gas tax funding from the province of Ontario and other federal and provincial contributions and drafting a marketing strategy to boost community engagement and promote transit use.

1.2. Elliot Lake Community Overview

The City of Elliot Lake is in Algoma District, located in Northern Ontario, Canada. It is situated north of Lake Huron; the surrounding cities are Sudbury to the east and Sault Ste. Marie to the west in the Northern Ontario Region. The City encompasses an area of 698.1 km², and the population year-round is estimated at 11,372 (2021).

Exhibit 2: Image of the local lake and surrounding areas of the City of Elliot Lake[2]

Elliot Lake is a former northern Ontario mining community, now a year-round retirement residence for many. The City of Elliot Lake combines the hospitality of a small town with the services of a larger urban center surrounded by dense forest, over 4,000 lakes, rivers, and hills of Precambrian bedrock. The geographical area of Elliot Lake extends over 698 square kilometers; it poses an opportunity for eco- and geo-tourism, including angling, hunting, ATV and snowmobiling, and cross-country and downhill skiing, with hundreds of kilometers of hiking trails. The city is redeveloping itself as a tourist destination. There are signs of growth throughout the community, with public and private sector investments being made in many sectors, including tourism, retail, manufacturing, health care, residential and commercial. The city's transit needs are also changing with a changing economic environment.

[2] Extracted from Northern Ontario Business, published on Dec 19, 2018

Exhibit 3: Image overviewing the city's commercial areas [3]

1.3. Overview and Requirements of Elliot Lake's Transportation System

Elliot Lake Transit operates a comprehensive network featuring four routes, Westhill, Central, Lakeside and Esten, with two bus loops encompassing 117 bus stops and a fleet of minibuses. The system also includes a Handilift service for individuals with mobility challenges. For areas beyond the city's core, Ontario Northland ensures vital links to Sudbury and Sault-Sainte-Marie.

The transit system's adaptability is critical as Elliot Lake's economy shifts, ensuring it can respond to changes in industry, employment, and demographics. The system's level of accessibility and quality of service is vital for supporting the workforce and residents, who are ready to grow with the city's economic future. Public transportation is integral to economic development, providing efficient connectivity that supports businesses and enhances community life.

In Elliot Lake, the transit service is more than mere transportation; it's a lifeline that binds the community together. It represents a commitment to universal mobility access, allowing everyone to navigate the city freely, regardless of car ownership, physical ability, or economic means. For many in Elliot Lake, the transit service is vital to their autonomy. The city's transport services are currently tailored to its residents' varied needs, particularly catering to a large retiree demographic. These services provide convenient access to shopping, healthcare, and leisure activities.

[3] Extracted from https://www.myespanolanow.com/, published on Dec 21, 2021, Photo by Goran Vinko

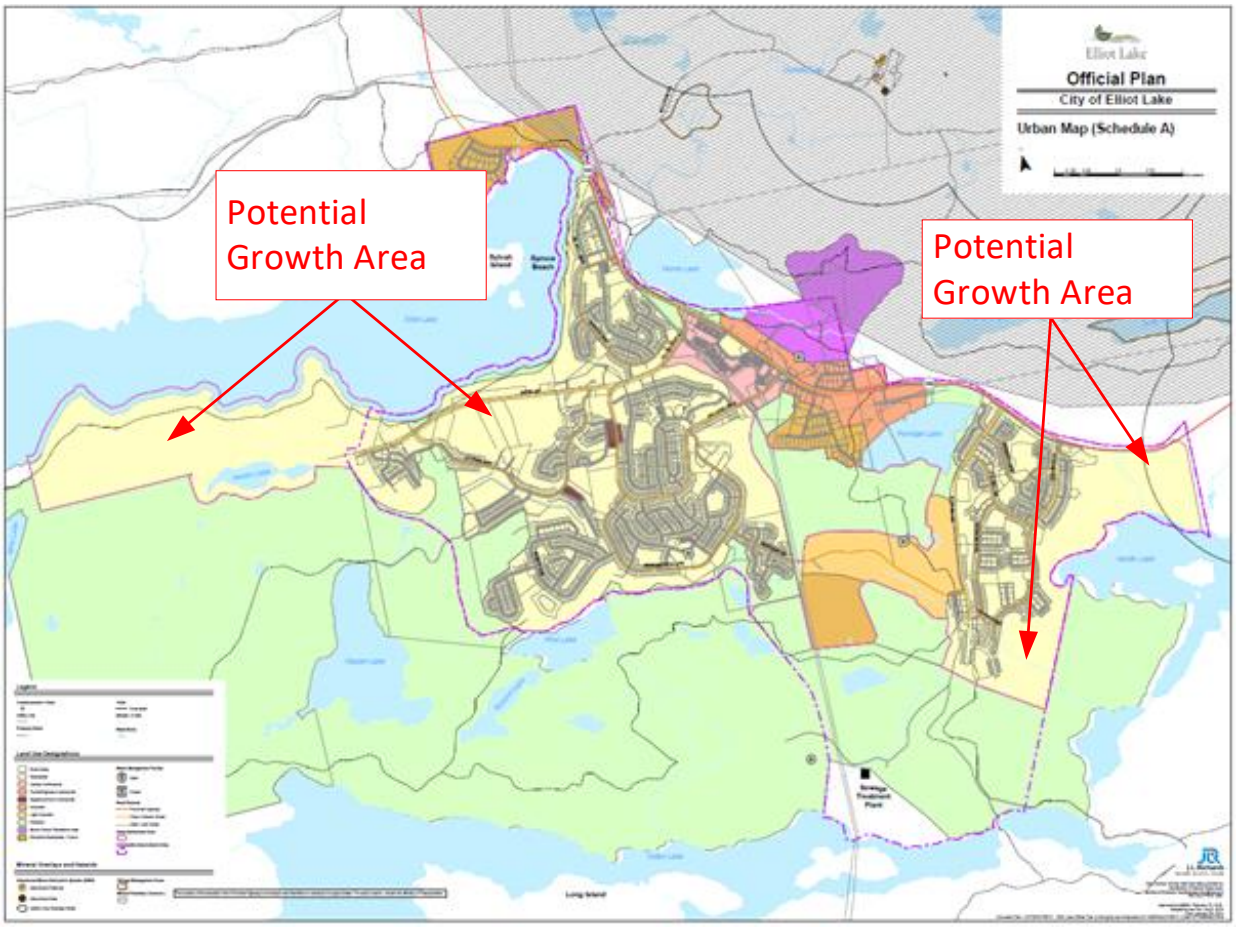


Exhibit 4: Map of Elliot Lake highlighting areas of potential growth[4]

[4] Extracted from the City of Elliot Lake Official Plan

2. Strategic Justification

EXP conducted a thorough review of key planning documents to understand Elliot Lake's current and future transit objectives. These documents form the foundation of the City's comprehensive transportation and transit strategy. The study aligns with Elliot Lake's existing transit planning policies, enhancing ongoing initiatives by aligning with the specified transit goals. This section summarizes the established public policies within the context of transit system planning.

2.1. Official Plan-2018 Update, City of Elliot Lake

The Official Plan-2018 update emphasizes the importance of a robust transit system as part of the city's commitment to improving the quality of life for its residents. Section 7.3 of the Official Plan is dedicated to Transit, outlining the following components:

- The public transit system in Elliot Lake is designed to be safe, eco-friendly, and energy efficient.
- Road planning will incorporate features for public transportation use, including land allocations for bus bays at intersections.
- Roads will be planned and constructed to support transit vehicles, ensuring they are transit-ready.
- The design will aim for maximum service coverage across the community.
- Future improvements to the transit system will consider the specific needs of youth and seniors in the community in determining schedules, transit stop locations, security, and bus shelters.

The Official Plan of Elliot Lake envisions a public transit system that is safe, environmentally conscious, and energy efficient. It includes infrastructure plans for public transportation provisions and aims for comprehensive service coverage. The plan also focuses on the needs of youth and seniors, influencing transit schedules, stop locations, security, and shelters. This vision aligns with the current Conventional and Specialized Transit System Review Study for the City of Elliot Lake, which focuses on enhancing transit access and service quality by updating routes and infrastructure.

2.2. City of Elliot Lake Strategic Plan 2023

The City of Elliot Lake Strategic Plan 2023 is a comprehensive blueprint that aims to enhance the quality of life for all residents through a series of targeted actions. It focuses on:

- **Economic Development and Diversification:** Emphasizing marketing the city's unique strengths and establishing investment readiness.
- **Infrastructure Revitalization**: Including plans to optimize the waste management system and increase airport use, potentially expanding transit options.
- **Strong Partnerships, Environmental Stewardship, And Robust Municipal Governance:** Fostering a culture of excellence and innovation.
- **Financial Stability:** Prioritizing support for these initiatives alongside a commitment to arts, culture, and community wellness.

These strategies collectively underscore Elliot Lake's vision of being a modern, resilient, and affordable community that embraces future opportunities.

The City of Elliot Lake's Strategic Plan for 2023 justifies its targeted actions and goals for enhancing the transit system by emphasizing a community-centric approach that prioritizes residents' needs and preferences. The plan commits to reviewing the transit system's direction, focusing on user-friendliness, competitive fare rates, and effective cost management for the municipality.

The Plan highlights:

- Improving user experience to ensure accessibility and convenience,
- Assessing and revising fare structures for competitiveness and affordability,
- Managing costs to align with the city's budget for financial sustainability and
- Developing targeted marketing strategies to promote transit benefits.

The plan includes continued investment in infrastructure, such as new bus shelters and vehicles, and emphasizes community involvement by integrating public feedback into future planning.

2.3. 2020-2025 City of Elliot Lake Multi-Year Accessibility Plan

The 2020-2025 City of Elliot Lake Multi-Year Accessibility Plan is a strategic initiative to enhance the city's transit system and overall accessibility. It aims to:

- Improve the accessibility of taxis and ensure that public spaces are user-friendly.
- Incorporate accessibility considerations in the procurement of new equipment.
- Provide clear and comprehensible information to facilitate easy use of the transit system by all, including individuals with disabilities.
- Support the employment of people with disabilities by improving their access to transportation.

Elliot Lake is committed to becoming a barrier-free, age-friendly community, following federal and provincial laws like Bill C-81 ACA and the Accessibility for Ontarians with Disabilities Act (2005). These laws aim to remove barriers and create inclusive environments.

2.4. Asset Management Plan for Maintenance and Renewal of Transit Infrastructure

The 2013-2022 Asset Management Plan of Elliot Lake emphasizes the importance of systematic asset management, particularly for maintaining and renewing transit infrastructure. In the 'Fleet' section, the plan outlines strategies for the upkeep of transit vehicles, including preventative maintenance and necessary repairs to meet safety and operational standards. Although the plan is now dated, its principles remain vital. It emphasizes consistent infrastructure renewal and maintenance, which is essential for safeguarding the city's financial stability and complying with Ontario's Regulation 588/17.

3. Current State Analysis

3.1. Existing Service

A thorough understanding of the current transit services in Elliot Lake is vital for developing well-informed and effective strategic recommendations. This section provides a detailed overview of the existing transit system, including key information on service routes, fare structures, fleet, ridership, accessibility features, and intercity connectivity. It also provides a review and insights that together paint an accurate representation of how the system operates and serves the community. These insights form the foundation for the strategic recommendations outlined in Section 5.

3.1.1. Transit Routes

The City of Elliot Lake currently operates four bus routes that run on a half-hour cycle from a central hub at Pearson Plaza on Hillside Drive South, providing passengers with convenient navigation.

1. **Westhill Route:** This route begins and ends at Pearson Plaza, with departure times starting at 7:30 am and ending at 5:30 pm from Monday to Saturday. On Thursdays and Fridays, additional services run until 8:30 pm. On Sundays, the route operates from 8:30 am to 3:30 pm. It includes stops such as Rexall Pharmacy, Horne Walk, and various points along Dieppe Ave, Axmith Ave, Westhill Rd, and Mississauga Ave.
2. **Central Route:** Departing from Pearson Plaza at similar times to the Westhill Route, the Central Route includes stops like Veterans' Way at Legion Hall, Centennial Arena, the Hospital at Spine Rd., Hillside Dr. N, and Highway 108.
3. **Esten Route:** This route departs from Pearson Plaza at 7:00 am and ends at 6:00 pm from Monday to Saturday. On Thursdays and Fridays, additional services run until 9:00 pm. On Sundays, it operates from 9:00 am to 4:00 pm. This route ensures connectivity to key destinations such as City Hall and the Hospital, covering areas like Esten Dr. S and Pearson Drive.
4. **Lakeside Route:** Similar to the Esten Route in terms of departure times from Pearson Plaza, the Lakeside Route provides scenic views and access to lakeside communities, covering areas like Spine Road, Hillside Drive South, Roman Avenue, and Ontario Avenue.

A detailed review of the transit routes helps identify coverage gaps and areas for potential improvement. The review indicates that the City of Elliot Lake's transit routes are designed to follow a synchronized schedule, ensuring that buses return to the bus stop at their designated times. Overall, the routes provide comprehensive coverage throughout the city, making key destinations easily accessible. Passengers expect buses to run on a half-hourly basis from the central hub to meet their commuting needs. Most routes have travel times of less than 30 minutes, with the exception of the Esten Route, which may occasionally take longer.

While the city effectively serves all areas, the high number of stops can lead to longer travel times. This extensive coverage enhances accessibility but can affect overall route efficiency, particularly on the Esten Route. The Lakeside route is especially popular, serving areas with dense senior populations and including several critical stops in one journey. In contrast, the lower usage of the Central route indicates a disconnect with community needs, signalling the need for reassessment to align the transit system with local travel patterns and to maintain accessible public transportation for all residents.

Exhibits 5 to 8 feature detailed maps for each route, showcasing key landmarks, destinations, and essential features. Exhibit 9 depicts a clear and comprehensive overview of the city's entire transit network.

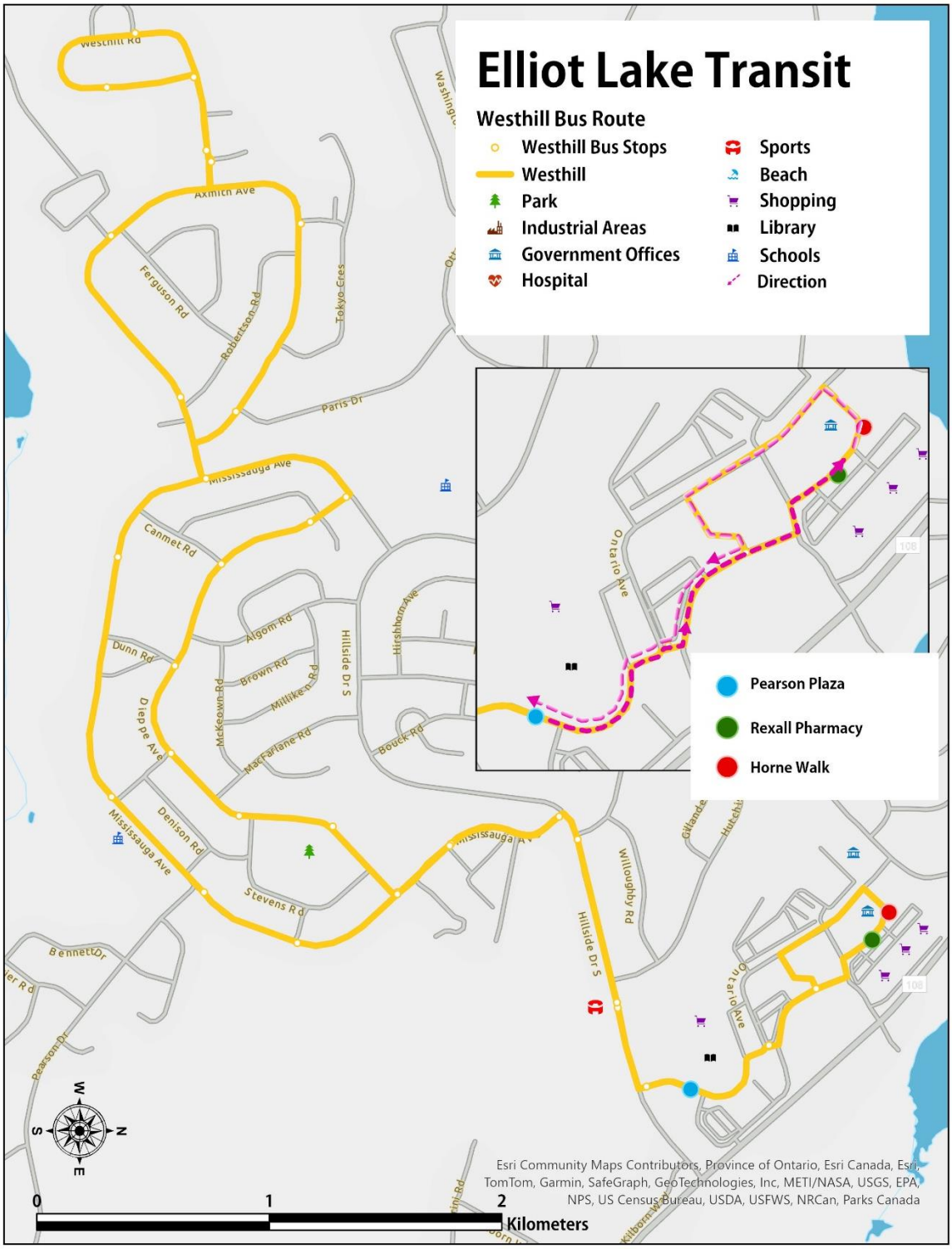


Exhibit 5: Existing Route Map- Westhill

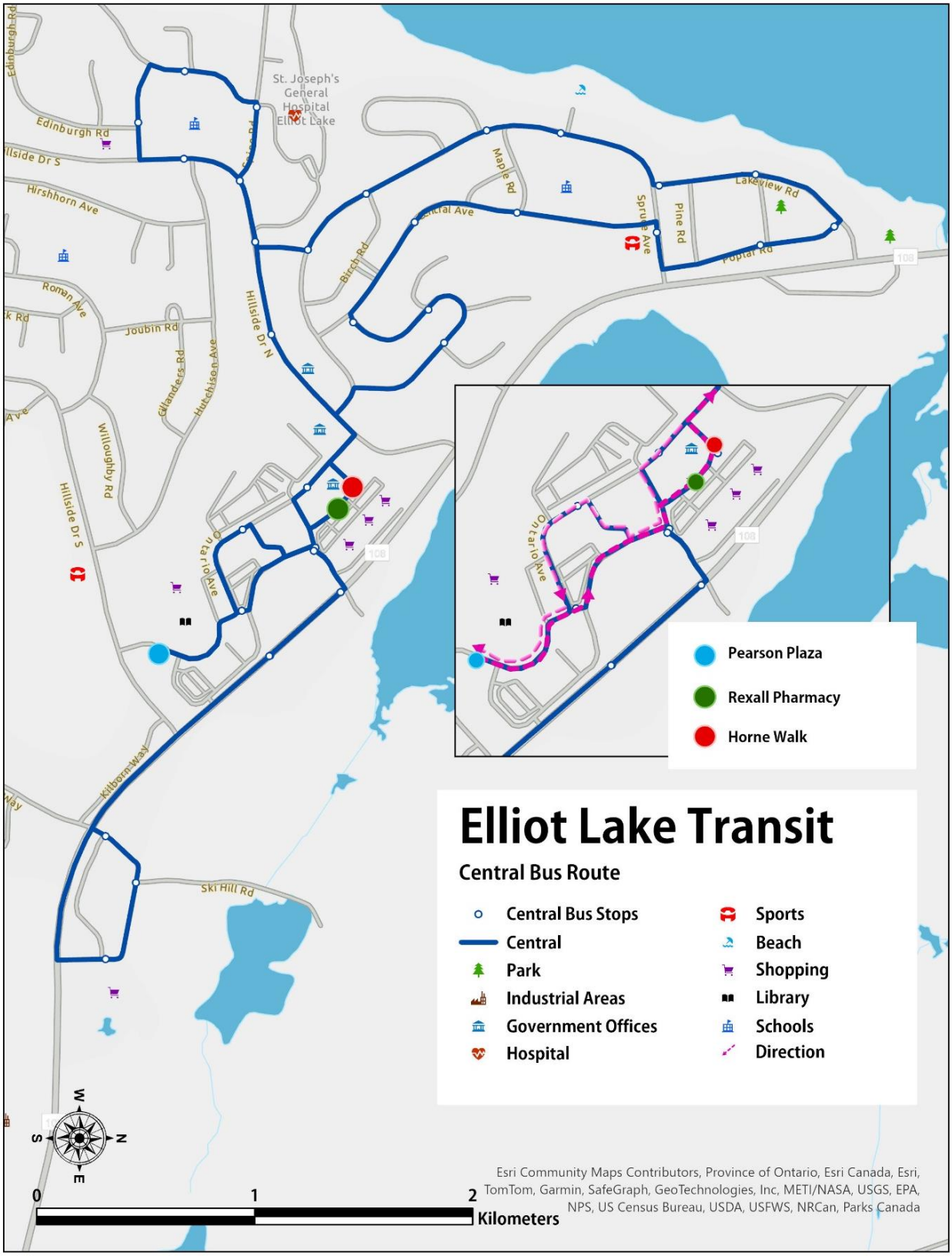


Exhibit 6: Existing Route Map- Central

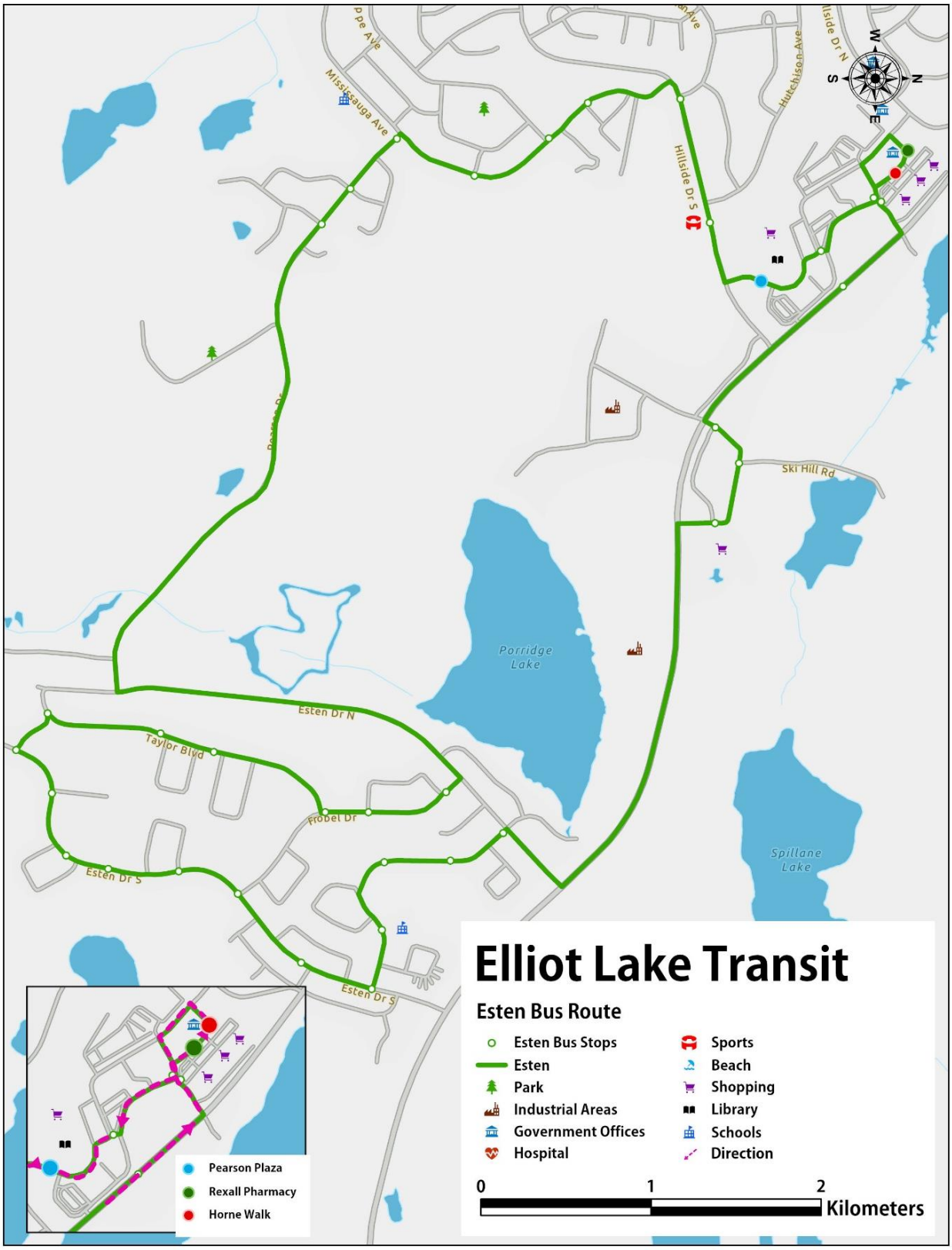


Exhibit 7: Existing Route Map- Esten

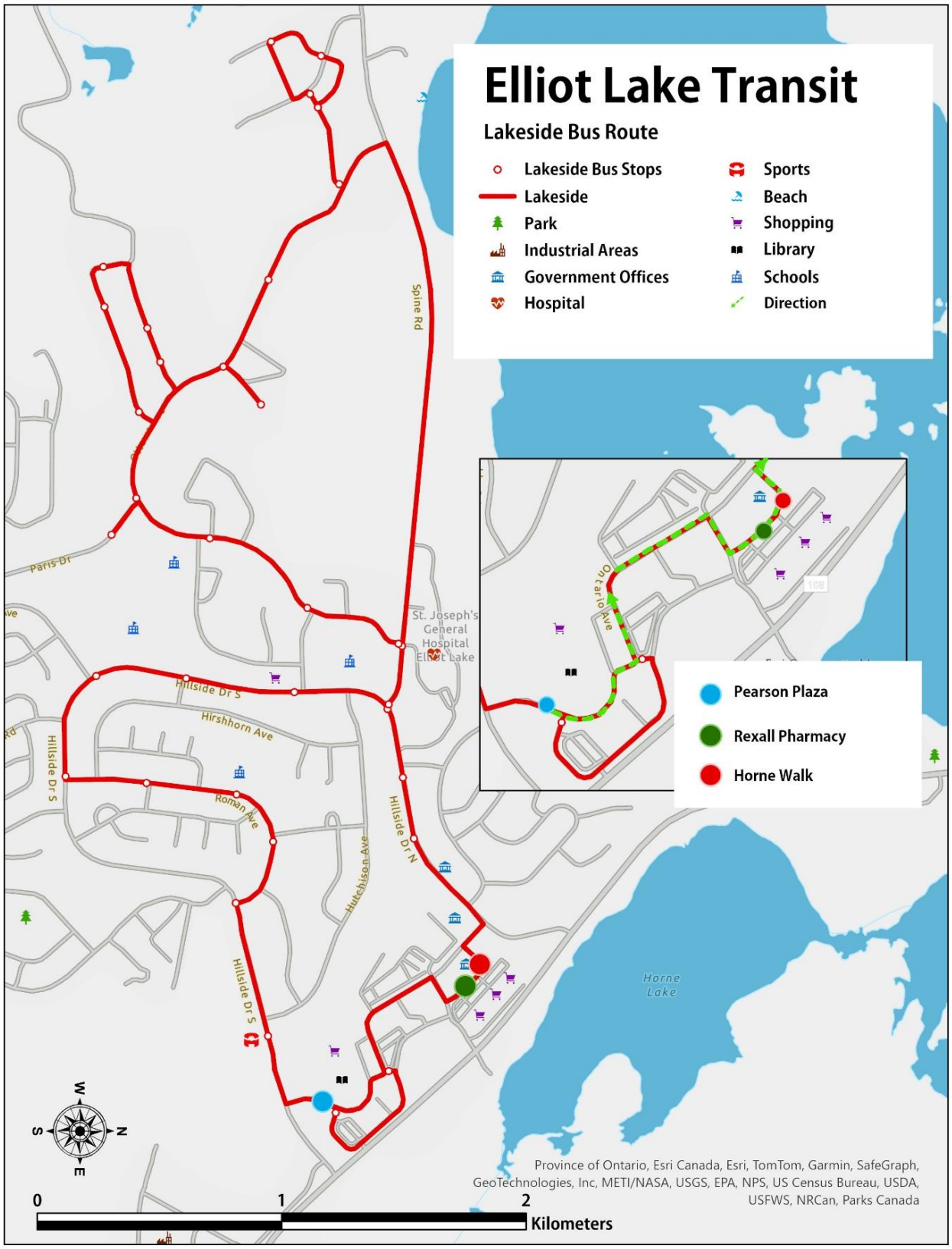


Exhibit 8: Existing Route Map- Lakeside

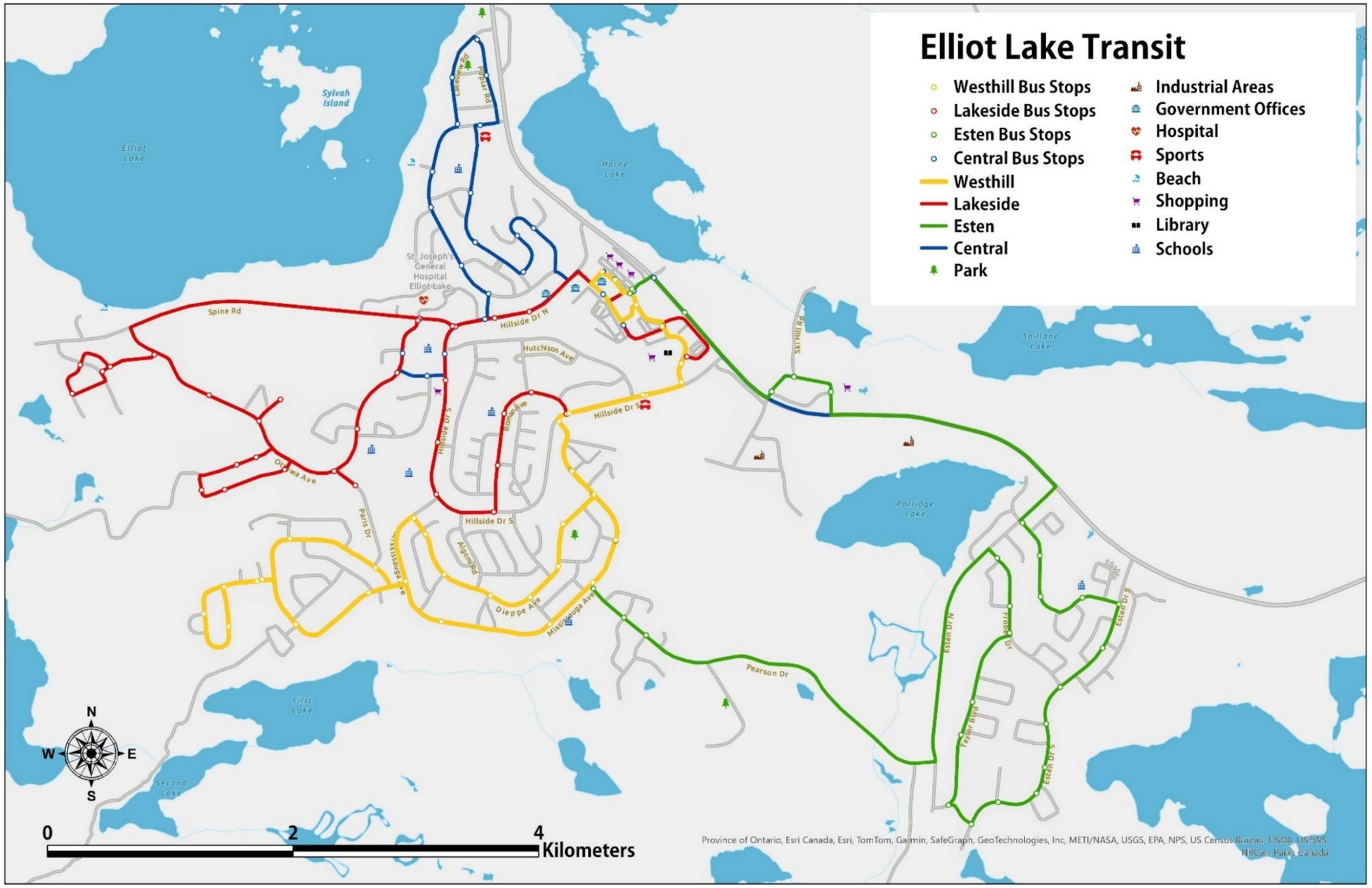


Exhibit 9: Map of Elliot Lake's Transit Routes

3.1.2. Fares

Examining fare structures is essential to understanding the affordability of transit services for users and assessing the revenue generated, which is crucial for operational sustainability.

In Elliot Lake, fares are structured to accommodate various demographics, with adult fares set at $2.50 per ride and seniors and students at $2.25 per ride. Additionally, discounted options include blocks of 12 tickets for $24 and monthly passes priced at $62.00 for adults and $52.00 for seniors and students. Passengers using bus passes are required to possess Pass ID cards, obtainable at City Hall with proper identification.

Transit fares

- Adults: $2.50
- Seniors: $2.25
- Students: $2.25

Monthly passes

- Adults: $62.00
- Seniors: $52.00
- Students: $52.00

The review of the transit fares reveals that a well-structured fare system effectively accommodates a wide range of user demographics, promoting broader access to public transportation.

3.1.3. Transit Fleet

Assessing the condition and capacity of the transit fleet is essential to ensure that the system can meet current and future transportation needs. The City of Elliot Lake's transit system relies on its fleet to support the community's diverse transportation requirements.

Conventional Transit Fleet:

The City of Elliot Lake operates four standard buses as part of its conventional transit fleet. Three of these buses were recently purchased in 2023, and each is equipped to carry up to 25 passengers, with 18 passenger seats, including 2 wheelchair spaces. These vehicles feature wide entryways with double-leaf outward-opening doors, providing full visibility of the loading zone. The interiors are spacious and adaptable, accommodating various seating arrangements to suit different passenger needs.

The fourth bus, an older vehicle kept in the fleet to ensure service continuity, has 17 passenger seats, including 5 wheelchair spaces. This bus plays a crucial role in maintaining reliable service, especially during maintenance or when additional capacity is required.

Specialized Transit Fleet:

The City of Elliot Lake also operates a specialized transit service known as Handilift service, which provides accessible transportation for riders with disabilities or mobility limitations. This service currently runs two specialized vehicles. The first vehicle, a 2017 RAM Handilift, can accommodate up to 12 passenger seats, including 2 wheelchair spots. The second vehicle, a 2017 CHEV ETV Handilift, has a capacity for 10 passenger seats, including 4 wheelchair spots.

Table 1: Transit Fleet in Elliot Lake

Model Year	Vehicle Type	Vehicle Capacity
2024	BUS, G5 Ford E450	passenger seats: 18 seats, including 2 wheelchair spots
2024	BUS, G5 Ford E450	passenger seats: 18 seats, including 2 wheelchair spots
2024	BUS, G5 Ford E450	passenger seats: 18 seats, including 2 wheelchair spots
2019	BUS, Ford E series	passenger seats: 17 seats, including 5 wheelchair spots
2017	RAM Handilift	passenger seats: 12 seats, including 2 wheelchair spots
2017	CHEV, ETV Handilift	passenger seats: 10 seats, including 4 wheelchair spots

The review of the City of Elliot Lake's transit fleet highlights its commitment to providing accessible and reliable transportation for all residents. The conventional transit fleet, with three newly acquired buses and an older vehicle retained for service continuity, shows that the city prioritizes modern, adaptable, and inclusive options for public use. The configuration of these buses ensures that both seated and wheelchair passengers can be accommodated, promoting inclusivity. The specialized Handilift service underscores the city's dedication to supporting those with disabilities or mobility limitations, ensuring they have dependable transit options.

Exhibit 10: Transit Vehicles in Elliot Lake

3.1.4. Ridership

Analyzing ridership patterns is vital for transit planning and optimizing routes. Understanding how, when, and where passengers use the transit system helps identify peak times and assess demand. This information supports better route planning and allows for the optimization of services to cater to areas with high ridership. Additionally, it helps improve overall efficiency by identifying underutilized routes or stops, enabling resources to be reallocated to more frequently used routes to enhance service where it is most needed.

Ridership data

Detailed ridership data is collected via the City's Automatic Passenger Counting (APC) system, accessible through Strategic Mapping's online platform at https://elt.mapstrat.com. The APC system records passenger counts at specific stops and correlates them with scheduled routes, allowing for accurate real-time monitoring and analysis of transit usage patterns. This information is used to analyze ridership trends and provide insights into typical travel demands. The data available for extraction from this system spanned from 2021 to 2023.

Data Analysis

September data provides a stable representation of transit ridership, reflecting typical demand and avoiding the variability caused by summer tourism. This period offers a snapshot of consistent and predictable travel behaviour, making it ideal for analysis. Consequently, September was chosen for the analysis.

Table 2 displays the average monthly ridership per trip for September (2021-2023), with the maximum on board on the Esten route and the minimum on board on the Central route. The maximum ridership ranges from 18 to 21 people per trip, while the minimum is consistently 2. This variability shows that during peak times, the Esten route reaches near capacity with 21 passengers, but during non-peak hours, ridership can drop to as low as 2, underutilizing vehicle capacity.

Table 2 Average Monthly Ridership Per Trip for September (2021-2023)

Route	Max # On Board	Min # On Board
Central	18	2
Westhill	19	2
Lakeside	20	2
Esten	21	2

Table 3 displays distinct patterns in peak hour volumes across different routes. The Central and Esten routes show consistent peak hours around 14:00, indicating stable afternoon demand, while the Westhill route exhibits variability with peak times shifting from early morning to afternoon, suggesting fluctuating demand influenced by external factors. The Lakeside route's peak hour has shifted earlier in the day over the years, indicating a trend towards morning travel. These insights highlight the need for tailored strategies to manage peak demand effectively, as a uniform approach may not address the unique patterns observed on each route.

Table 3: Peak Hour Volume

	2021	2022	2023
Central	14:00	13:00	14:00
Westhill	8:00	14:00	9:00
Lakeside	13:00	10:00	10:00
Esten	14:00	14:00	14:00

Appendix A provides a detailed summary of average ridership for each route.

- Average Daytime/Evening Ridership on West Hill (September 2021-2023)- The analysis of average daytime and evening ridership on the West Hill route from September 2021 to 2023 reveals a trend of increasing ridership during the day over the three-year period. This indicates a growing demand for daytime travel on this route. In contrast, evening ridership remains lower but steady, with slight fluctuations. This suggests that while the route is popular during the day, there is less demand in the evenings, which could guide decisions about service frequency during these times.

- Peak ridership trends indicate that the highest demand is seen in employment centers (such as Pearson Plaza), shopping areas (notably Oakland Boulevard), and dense residential areas (including Mississauga Avenue, Ottawa Avenue, and Hillside Drive South). Among these, Mississauga Avenue records particularly high ridership levels. Appendix A contains a comprehensive breakdown of ridership data for each of these corridors, further detailing transit use across the city.

Table 4 summarizes yearly ridership from 2021 to 2023 for each route. The data reveals a lower ridership in 2021, with a total of 58,943 passengers. This was followed by an increase to 97,710 passengers in 2022 and a slight decrease to 97,066 passengers in 2023. The COVID-19 pandemic likely had a significant impact on public transportation ridership, as many people stayed home, leading to a decrease in the number of passengers using the service in the year 2021. This decline occurred despite the municipal transit fees being waived from March 2020 to April 1, 2022.

Table 4: Summary of Yearly Ridership for each route

	2021	2022	2023
Esten	16,516	27,293	28,922
Westhill	15,530	25,508	24,120
Lakeside	19,097	32,216	31,160
Central	7,800	12,693	12,864
Total Ridership	**58,943**	**97,710**	**97,066**

To facilitate a more comprehensive and accurate analysis of long-term transit trends, data prior to 2021 was assessed. The city provided data on the total number of linked trips (individual trips connected to form a complete journey from an origin to a final destination) from 2018 to 2022, as shown in Table 4. This data was collected through Farebox counting.

The data reveals that the number of linked trips varied across categories, such as Adult/General, Student, Senior, and others. Notably, no farebox data was available for 2021 due to the waiver of municipal transit fees from March 2020 to April 1, 2022. Despite this, an estimate of 125,315 total linked trips was reported for 2021. This estimate likely relied on budgeted projections based on pre-COVID ridership patterns and financial forecasts rather than actual fare revenue calculations.

Typically, the methodology for calculating linked trips involves dividing fare revenue by the average fare and capturing transfers as a single trip. However, given the absence of farebox data in 2021, the

estimation process would have required assumptions and adjustments to account for the lack of direct passenger counts.

Table 5: Total Linked Trips 2018-2022

	2018	2019	2020	2021	2022
Adult/General	49,403	49,192	49,684	0	41,606
Child/Youth	0	0	0	0	0
Student	1,858	1,792	1,810	0	8,491
Senior	34,034	33,644	33,980	0	34,813
Others Number of Tickets Sold (Collected through Farebox counting)	21,000	19,392	19,586	0	16,344
Total Concession Linked Trips (All Trips excluding adult/general)	56,892	54,828	55,376	0	59,648
Total Linked Trips (Adult/ General plus Concession)	**106,295**	**104,020**	**105,060**	**125,315**	**101,254**

The data from Table 5 reveals that seniors consistently rely heavily on transit, making up around 32% to 34% of trips from 2018 to 2022, which is significantly higher than their proportion in the general population. In contrast, the proportion of trips by the adult/general population dropped from about 47% to 41% in 2022, indicating decreased reliance on transit compared to their demographic proportion. Students, who previously accounted for around 1.7% of trips, saw a significant increase to 8.4% in 2022, showing a higher reliance on transit than before. These insights highlight that seniors and, increasingly, students are more reliant on transit than other demographic groups.

This ridership data has been essential for evaluating the performance of each route and identifying potential modifications in route design. Additionally, it has provided a solid foundation for transit planning efforts, ensuring that services are aligned with the needs of riders in Elliot Lake and shaping the recommendations in section 5.

3.1.5. Accessibility of the Current Transit System in Elliot Lake

Handilift, a specialized transit service tailored to individuals with disabilities and mobility limitations, plays a vital role in ensuring accessible transportation within the city. It caters to those who may struggle to walk long distances (around 150 meters or 500 feet) or board conventional buses.

A comprehensive review was conducted to evaluate its effectiveness and identify opportunities for improvement. This analysis included a public survey examining the service's key aspects, such as its accessibility features, booking procedures, and service hours. User feedback was integral to the process, helping to highlight areas for enhancement to improve accessibility and the overall user experience. Further details, including insights from stakeholder interviews and survey results, are provided in Section 4: Public Engagement.

3.1.6. Intercity bus service - Connection to Ontario Northland

The City of Elliot Lake's transit system includes a partnership with Ontario Northland to provide intercity transportation through a coordinated shuttle bus service. This shuttle connects passengers travelling to or from Elliot Lake with intercity buses at a transfer station in Spragge, located 30 minutes outside the city.

An analysis of this service, based on stakeholder interviews, highlighted its operational efficiency and effective communication protocols. Buses are dispatched only when necessary, as drivers confirm passenger bookings in advance, minimizing unnecessary trips. The service is operated by AJ Bus Lines, which uses school buses for the shuttle due to the daytime allocation of transit buses for city operations. The shuttle runs twice daily, except on Saturdays, with tickets available for purchase online through the Ontario Northland website or in person at Jack's Bike Shop on Ontario Street. The pickup location is conveniently situated at the entrance of Rexall Pharmacy.

For passengers requiring accessible transportation, AJ Bus Lines provides mini school buses equipped with lifts, although demand for these vehicles is reportedly low.

Ontario Northland is also advancing its ticketing system to include integrated ticket purchases for local transit agencies. This initiative aims to streamline the travel process, allowing passengers to book their entire journey, including the shuttle service, in one transaction without the need for additional payments during transfers.

Further analysis includes ongoing discussions about incorporating local bus fares into intercity bus tickets. This approach could enhance regional connectivity by offering passengers a seamless travel experience to their final destinations.

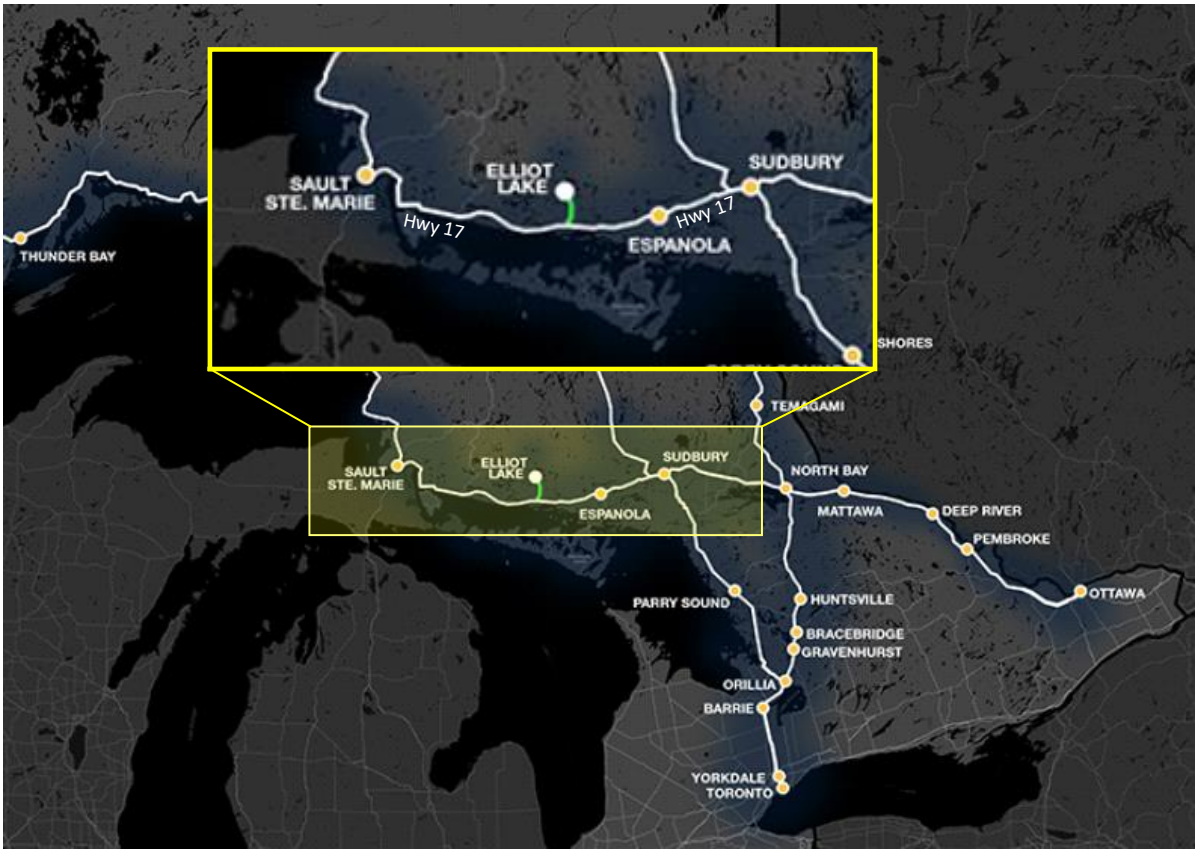


Exhibit 11: Major City Connections to Elliot Lake

3.2. Built-Environment Overview

The transportation network and land use context are integral and highly influential on municipal transit systems. Generally, municipalities with a higher concentration of origins and destinations close to each other create a more favourable environment for quality transit services compared to more spread-out areas.

3.2.1. Land Use and Population Density of Elliot Lake

Elliot Lake is relatively compact and has a significant population density in comparison to most Canadian municipalities with similar population levels. This environment is encouraging, potentially giving the city an advantage over other municipalities in extracting higher value from transit investments than other less compact municipal environments.

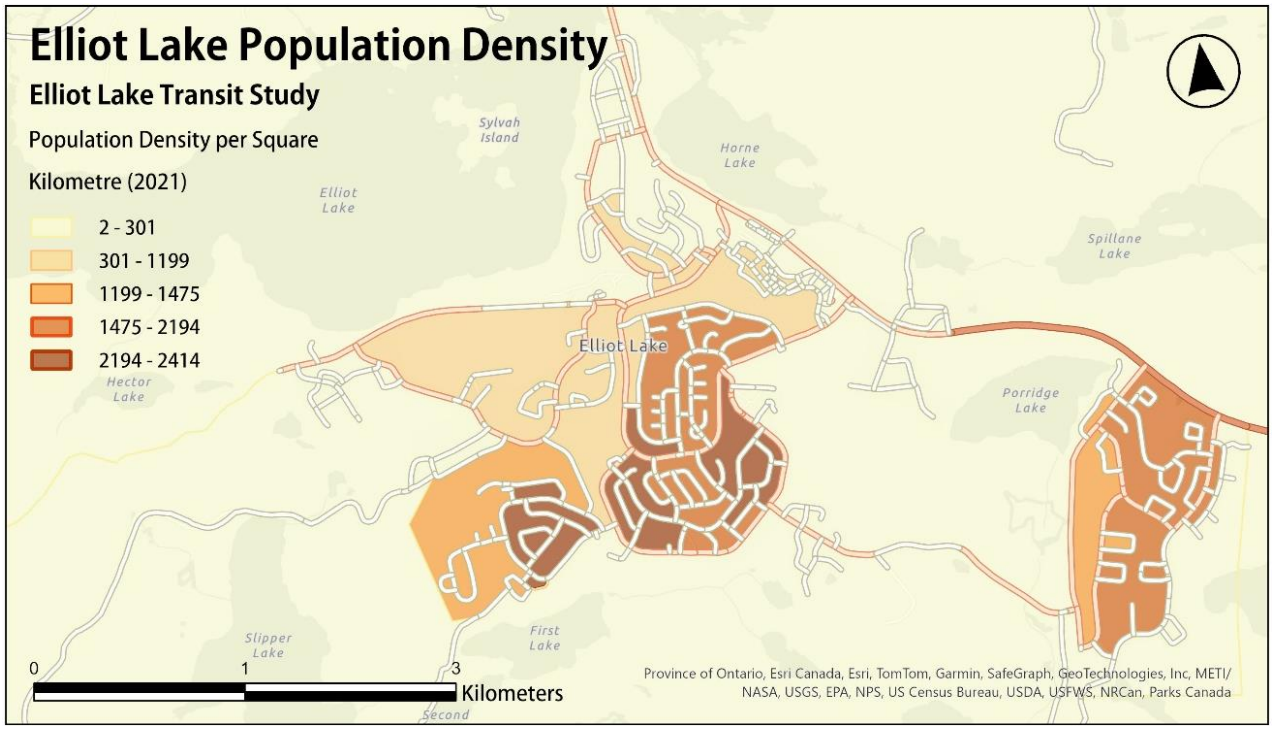


Exhibit 12: Population Density per square km in Elliot Lake

In general, the population of Elliot Lake resides within a 1 to 2 Km radius of the Pearson Plaza – the largest trip origin/destination on the network. Major trip generators such as local stores, sports complexes and employment are located within walking distance of this station.

When considering the population density (illustrated in Exhibit 12 above) and existing route alignments, it appears that all routes cover central population areas within the city.

3.3. Demographic Analysis

The demographic profile of Elliot Lake plays a critical role in shaping transit services to meet the specific needs of its diverse population segments. Recognizing the unique requirements of groups such as seniors, students, and low-income households is essential for effective transit planning. For instance, seniors may benefit from accessible vehicles and routes connecting to healthcare facilities, while students require transit schedules aligned with school hours and locations.

To evaluate these needs, a demographic analysis of Elliot Lake was conducted using 2021 Census data from Statistics Canada at the Dissemination Area (DA)[5] Level. This assessment geospatially mapped population segments and communities with heightened reliance on public transit services within the city. Key factors such as population density, employment rates, and income levels were analyzed to identify areas where transit improvements or expansions could have the greatest impact.

These findings provide valuable insights into travel demand and help prioritize resource allocation, ensuring reliable and frequent service for populations most dependent on public transit. This forms the foundation for understanding and addressing the needs of Elliot Lake residents.

[5] Specific geographic units defined by Statistics Canada

3.3.1. Population Density

Elliot Lake's history as a mining community in the 1950s and 60s significantly influenced its demographic and urban development. The economic boom during that era attracted families seeking employment opportunities, leading to the creation of single-family neighborhoods in key areas such as Central Avenue, Frobel and Esten Drive, Hillside Drive, and Mississauga Avenue. These neighborhoods remain residential hubs with notable populations of younger families and children who rely on accessible and frequent transit services.

As shown in Exhibit 13, the central and eastern parts of Elliot Lake currently have relatively older populations, with average ages in the 55–59 range. Conversely, neighbourhoods with lower average ages, around 47–51, may still house younger families, indicating a demand for accessible and frequent transit services in these regions.

The population density is concentrated along the primary roadways and near areas with key services. This clustering might reflect the importance of transit accessibility in these regions, as families and older residents depend on public transportation for their daily activities.

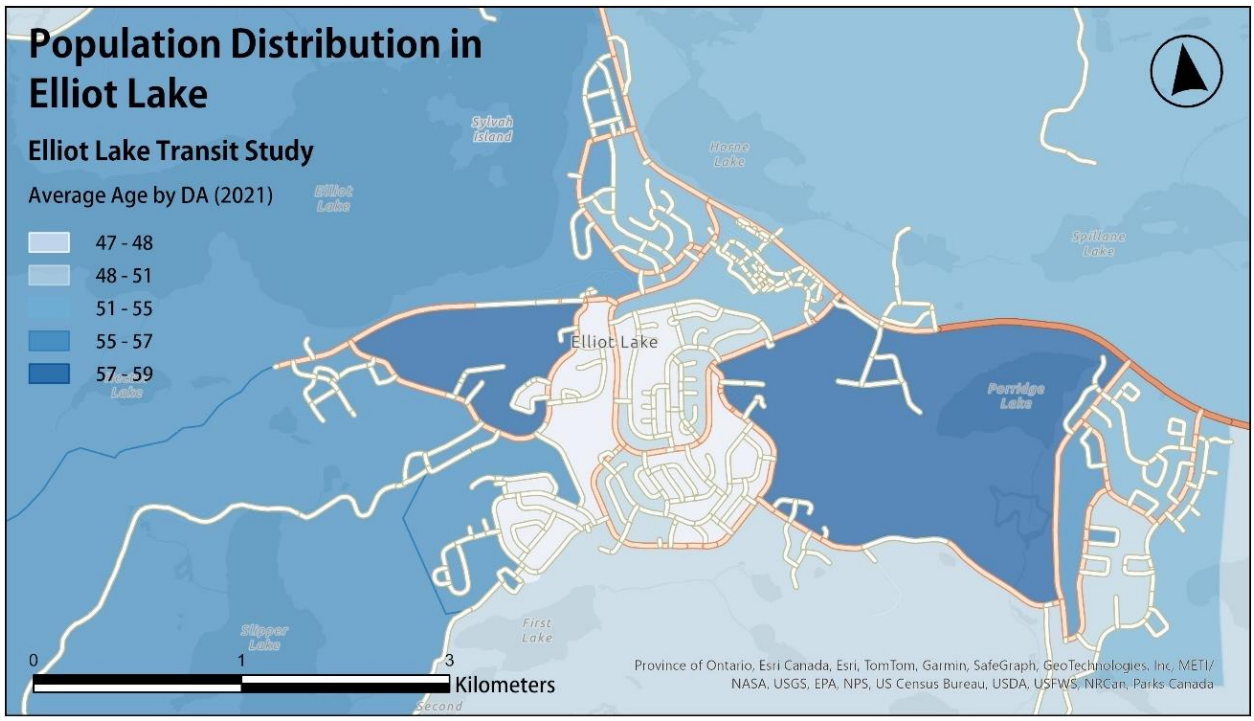


Exhibit 13: Population Distribution in Elliot Lake

3.3.2. Senior Population

The growing senior population in Elliot Lake has driven the need to enhance transit accessibility throughout the city. Ensuring convenient and reliable transportation options is essential to support seniors, who often rely on public transit for their mobility needs. This is critical for enabling access to essential services and maintaining their public and social well-being.

Exhibit 14 highlights the distribution of seniors (65+) in Elliot Lake as a percentage of the total population, with darker green areas indicating higher concentrations (46.4%–53.2%) and lighter green areas showing lower concentrations (27.6%–30.2%).

Many seniors are less car-dependent and rely on public transit. When accessible infrastructure is located within a comfortable distance, seniors are more inclined to use public transit regularly. Given that a significant portion of Elliot Lake's population is over 65, retirees represent the largest group of transit users. Key retiree communities are concentrated in areas such as Warsaw Place, Willoughby Road, and Hillside Road, all of which are currently served by the city's bus network.

Most trips in Elliot Lake are typically made to access medical appointments, grocery shopping and recreational activities. The city's centralized layout enhances connectivity, enabling residents to meet multiple travel needs within a single trip. This arrangement is particularly beneficial for the elderly, as it simplifies access to essential services and amenities, improving their quality of life and fostering independence.

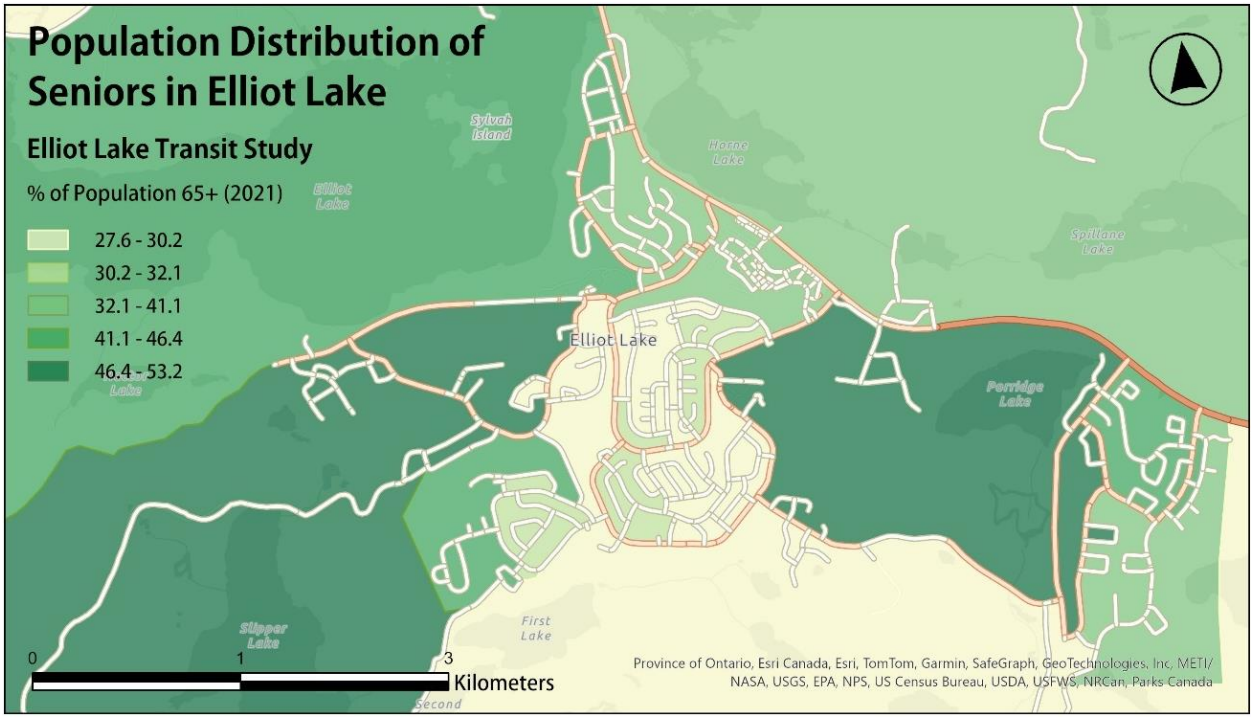


Exhibit 14: Population Distribution of Seniors in Elliot Lake

3.3.3. Employment Rates

Historically known as the "Uranium Capital of the World," Elliot Lake's economy has undergone significant transformation since the decline of the mining industry. The city has diversified its employment opportunities into sectors such as fishery, forestry, advanced manufacturing, and tourism.

The employment rate distribution, as shown in Exhibit 15, highlights notable patterns across the city. Areas with higher concentrations of seniors, such as near Hillside Drive South/North and Ottawa Avenue, also exhibit higher employment rates, largely driven by jobs in retirement and elderly care facilities. Similarly, rural areas along Highway 108, associated with forestry and manufacturing industries, display elevated employment levels.

Younger groups, including those under 14, also contribute to transit demand. Unlike older populations who may prioritize healthcare or recreational destinations, younger groups typically require transit for education and employment-related travel. This demographic's mobility needs are an important consideration for transit planning to ensure access to schools, job opportunities, and community services.

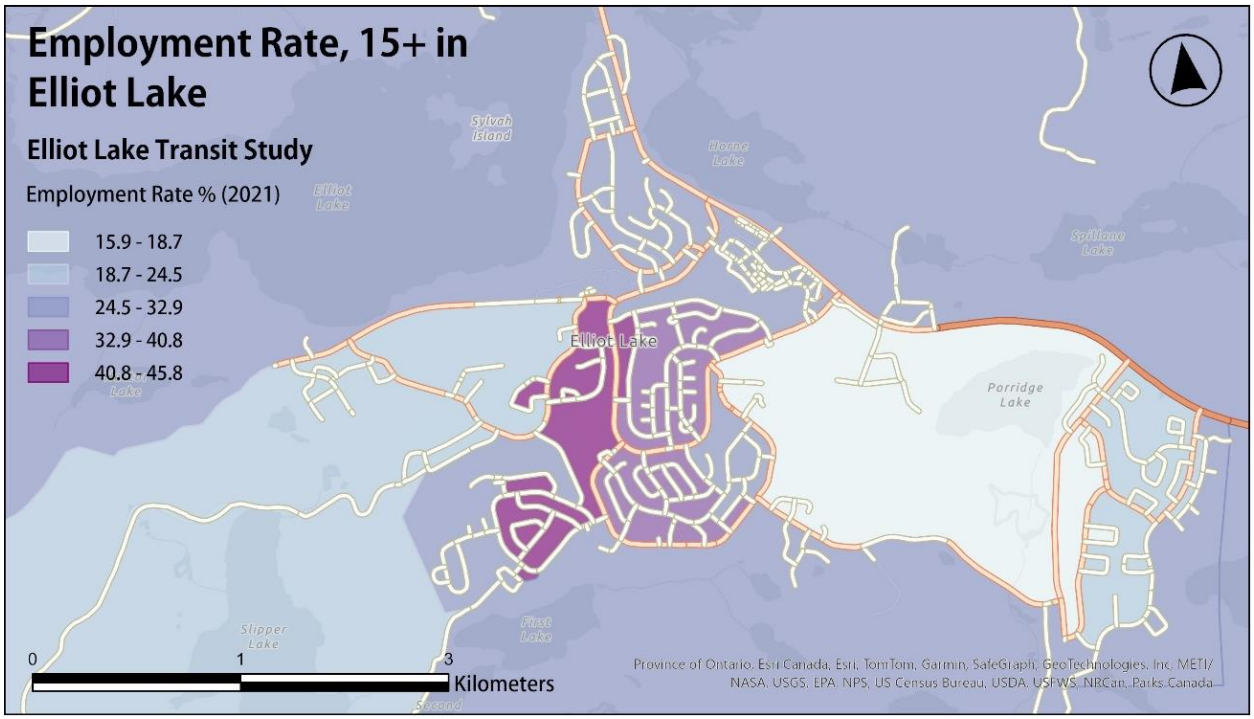


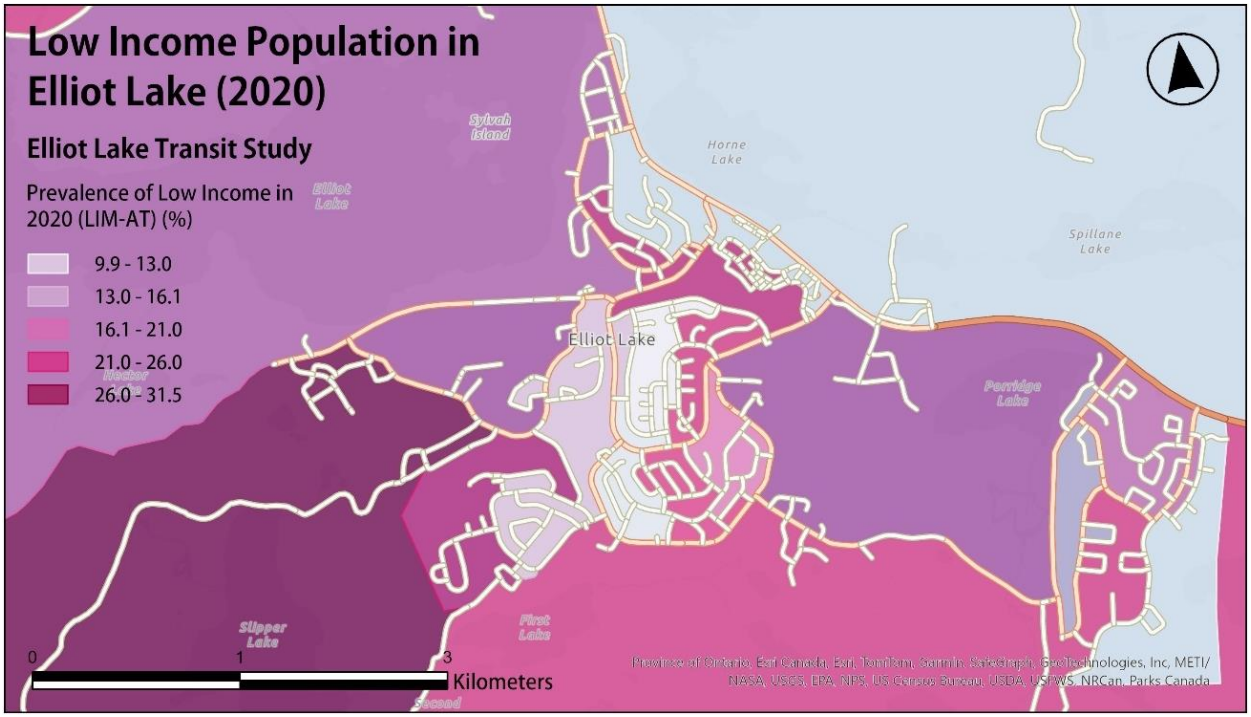
Exhibit 15: Employment Rate for Individuals Aged 15 and Older in 2021

3.3.4. Income Levels

Exhibit 16 illustrates the distribution of low-income residents in Elliot Lake, measured using the Low-Income Measure After-Tax (LIM-AT). Low-income communities often face travel difficulties and disparities due to the costs and limited equitable access to mobility options.

Exhibit 16: Low-Income Population measured in Low-income measures -After-tax (LIM-AT)

3.4. Travel Demand Analysis



An analysis covering travel patterns has been conducted to understand how, where and when residents and visitors travel in Elliot Lake. Maps highlighting high-demand locations have been created to indicate where travel is most frequent within Elliot Lake Transit. A service area analysis was also conducted to determine walkability and appropriate spacing between stops.

How many people are travelling in the City of Elliot Lake, and When?

The travel demand analysis provides insights into the current utilization of existing travel routes, showing where and potentially why people travel. It identifies high-demand areas and accessibility patterns, indicating latent usage patterns based on ridership volumes extracted from the city.

3.4.1. Most frequented Routes

Exhibit 17 shows the average transit ridership on Elliot Lake from 2021 to 2022, covering onboard passenger counts for each day in September during the Daytime[6] and Evening[7] service hours. Since the analysis period spans the month of September over three years, the data aims to capture regular transit and trip patterns beyond seasonal and recreational activities.

Exhibit 17 highlights the contrasting characteristics of the Central and Lakeside Routes. Among the four routes, the Central Route consistently records the lowest ridership for both daytime and evening travel over the three-year period. This route serves the north end of the city, providing access to public schools, Centennial Arena, Spruce Beach, and St. Joseph's General Elliot Lake Hospital. Despite connecting to many prime destinations, the area it serves is predominantly home to families and has a significantly low retirement population. Typically, connections to these specific land uses would generate substantial ridership; however, in a city with a high retirement population, these destinations are not appealing to seniors, resulting in low ridership levels.

In contrast to the Central Route, the Lakeside Route passes through several areas with high senior populations, providing access to shopping, medical appointments, and recreational activities along the same corridor. Its extensive service area offers a variety of travel opportunities, enabling riders to access multiple amenities in a single trip.

Ridership on the Westhill and Esten Routes maintain equivalent ridership levels. The Westhill Route traverses from east to west, passing through residential areas along Axmith and Mississauga Avenue and ending at Pearson Plaza. It attracts an average annual ridership of 1250 to 2000 passengers between 2021 and 2023. Westhill route primarily caters to family-oriented communities and does not intersect with any major service areas, resulting in lower usage compared to the Esten Route. The Esten Route, on the other hand, provides access to NoFrills located on the city's northwest side.

Public engagement feedback indicates that Central and Westhill operate as "feeder routes", facilitating access to essential services and locations throughout the city. Our observations confirm that the Lakeside and Esten routes are the most frequently used, which is understandable given their extensive coverage and long operating hours.

[6] The Daytime route schedule runs from 7:30 AM to 5:30 PM for Westhill & Central, 7:00 AM to 6:00 PM for Esten & Lakeside

[7] The Evening route schedule runs from 5:30 PM to 8:30 PM for Westhill & Central, 6:00 AM to 9:00 PM for Esten & Lakeside

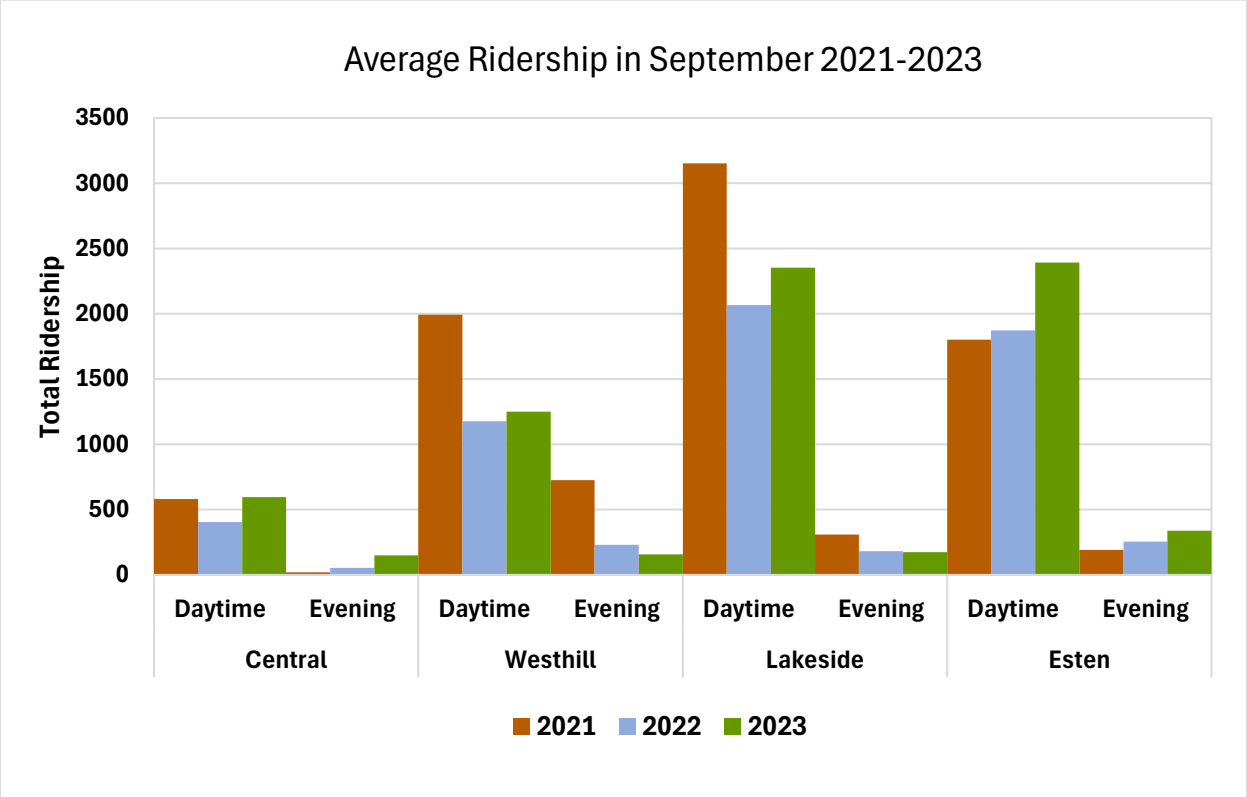


Exhibit 17: Average Ridership Volume in Four Routes in Elliot Lake, 2021- 2023

3.4.2. High Transit Demand in Elliot Lake

Exhibit 18 illustrates high transit demand points in Elliot Lake and highlights places of interest that attract numerous trips based on average transit ridership data collected in September from 2021 to 2023. As indicated in Exhibit 18, these high-demand areas include Pearson Plaza, Paris Plaza and Oakland Boulevard, which are mixed retail centres with a variety of shops, recreational opportunities and services. Other high-demand areas include key retirement communities and St. Joseph's General Elliot Lake Hospital. While all transit routes serve these locations, Exhibit 18 also indicates that the high-demand areas are primarily served by the Lakeside or Esten routes.

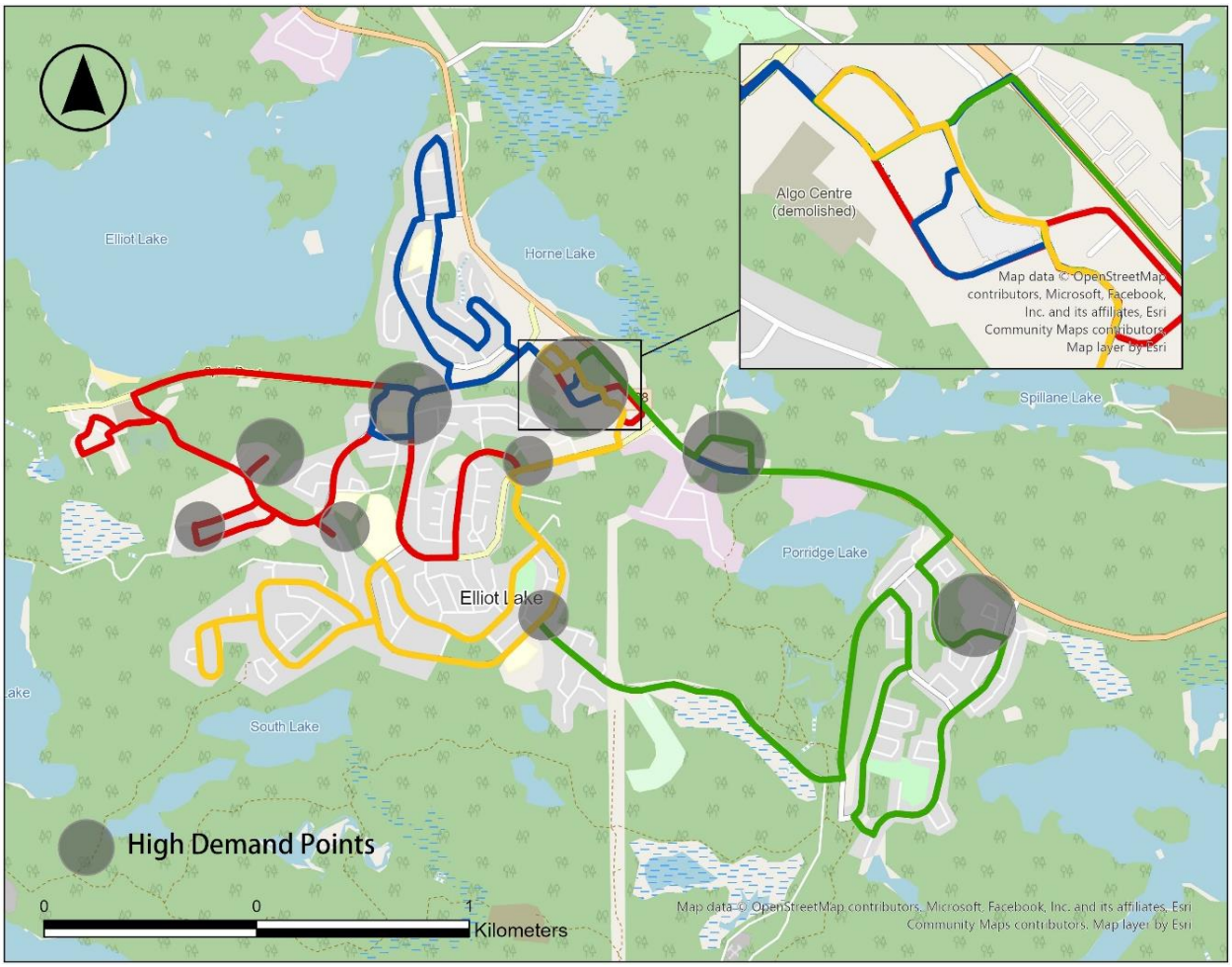


Exhibit 18: High Transit Demand Points in Elliot Lake's Existing Route

3.4.3. Proximity of Transit Locations in Elliot Lake

A 150-metre radius defines a reasonable walking distance for older adults to access transit locations. However, guidelines recommend an upper limit of 250 to 400 metres to ensure adequate accessibility and efficient service coverage for all demographics. Elliot Lake Transit operates 117 bus stops across four routes, ensuring city-wide coverage.

A service area analysis, utilizing census data, examined the distribution of bus stops within 250- and 400-metre buffers to evaluate service coverage for both elderly populations and the general public. The analysis revealed an average of seven bus stops per census boundary, indicating a high density of transit options and robust accessibility.

In terms of walking distance, the study found that within a 250-metre buffer, residents have access to four or more bus stops. Expanding to a 400-metre buffer increases accessibility to eight or more stops within walking distance from each census boundary. Therefore, it is reasonable to conclude that Elliot Lake provides optimal transit service coverage, meeting walkability standards for the majority of residents while ensuring strong connectivity throughout the community.

3.4.4. Transit-Linked Health Care Accessibility in Elliot Lake

This study by Rachel Barber from Queens University assesses the accessibility of healthcare facilities for older adults using public transportation in Elliot Lake. The study found that the two main healthcare facilities are not conveniently within walking distance for most neighborhoods with significant older adult populations. However, a buffer analysis revealed that 76% of older adults live within 150 meters of a bus stop, and 96% live within 400 meters.

Using the Older Persons Walking and Transit Audit, the study identified that inconsistent age-friendly amenities, such as bus shelters, sidewalks, and proper lighting, hinder the use of public transportation by older adults, limiting their access to healthcare services. To address these issues, the study proposes municipal-level recommendations to improve healthcare access through public transportation.

Despite the challenges posed by its unique situation and the accelerated aging due to the decline of the mining industry, Elliot Lake is committed to becoming a healthy, age-friendly community. The city's transportation services to its main healthcare facilities are generally accessible to older residents and include various age-friendly elements. The suggested improvements, along with ongoing initiatives in the Age-Friendly Action Plan, aim to make Elliot Lake a leading example of age-friendly transportation for other shrinking cities and rural areas.

3.5. Operational Budget and Capital Expenditures

3.5.1. Operational Budget for the Existing Transit System

The City of Elliot Lake Transit System's recent operational budgets and capital expenses are outlined in the tables below. Table 6 presents the operational budget for the transit system over the past five years. This table includes various service types and their respective budgets from 2020 to 2024.

Table 6: Operational Budget for the Transit System[8]

Service Type	2024 Budget	2023 Budget	2022 Budget	2021 Budget	2020 Budget
Gas	$105,118.44	$122,354.25	$107,212.69	$55,000.00	$50,000.00
General stationery & office	$3,265.68	$2,551.74	$4,762.31	$7,000.00	$7,000.00
Water	$983.78	$921.45	$863.36	$806.00	$800.00
Tags & Licenses	$834.37	$712.32	$1,000.00	$1,500.00	$1,500.00
Contracted Services- Conventional Transit and Specialized Transit	$333,720.00	$320,000.00	$320,000.00	$312,000.00	$360,000.00
Ontario Northland Link	$82,925.53	$78,764.80	$74,400.00	$74,400.00	$73,000.00
Vehicle Maintenance	$46,286.52	$43,401.39	$36,180.59	$25,000.00	$25,000.00
Total	**$573,134.32**	**$568,705.95**	**$544,418.95**	**$475,706.00**	**$517,300.00**

The operating budget for Elliot Lake's transit system encompasses the following key components:

1. **Gas (Fuel for Vehicles):** Costs associated with fueling the transit vehicles, which can fluctuate based on fuel prices and consumption rates.
2. **General Stationery and Office Supplies:** Costs for office supplies and stationery include Pass cards and other administrative materials necessary for day-to-day operations.
3. **Water:** Utility costs for water used in transit facilities.
4. **Tags and Licenses:** Expenses for vehicle tags and vehicle licenses, permits, and other regulatory fees required to operate the transit service.
5. **Contracted Services:** Payments for external services, including:
   - ***Conventional Transit:*** Regular transit services operated by contracted providers, primarily covering the compensation for drivers.
   - ***Specialized Transit:*** Services tailored for accessible transit for individuals with disabilities, which includes providing service for Handlilift and fees for contracted operators and drivers.
6. **Ontario Northland Link*:*** Costs associated with the Ontario Northland Link, which include service fees and partnership expenses.
7. **Vehicle Maintenance*:*** Regular maintenance and repair costs to keep the transit fleet in optimal condition, including parts, labour, and preventive maintenance.

[8] Extracted from information provided by City Staff.

The budget data reveals a consistent increase in overall expenses, rising from $475,706 in 2021 to $573,134.32 in 2024, driven by growing operational demands and inflationary pressures. Gas expenses more than doubled from $50,000 in 2020 to $105,118.44 in 2024, reflecting increased fuel costs or expanded usage. Contracted services for transit remain the largest expenditure, steadily growing from $312,000 in 2021 to $333,720 in 2024. Vehicle maintenance costs also saw significant growth. Conversely, stationery and water expenses show stability or slight declines.

3.5.2. Capital Expenditures for the Transit System

Table 7 details the capital expenses collected for Elliot Lake's Transit System. This table highlights significant investments in vehicle and equipment replacement, and buses.

Table 7: Capital Expenditures for the Transit System

Service Type	2024 Actual	2023 Actual	2022	2021	2020
Vehicle & Equipment Replacement	148,850.44	297,700.88	N/A	N/A	N/A
Buses		281,315.19	N/A	N/A	149,382.98

3.5.3. Funding Source and Revenue

Table 8 provides a comprehensive breakdown of the funding sources and revenue generated for Elliot Lake's Transit System over the past five years. This table includes budget allocations from various grants and revenue generated from operations.

Table 8: Funding Source and Revenue Collected for the Transit System

	2024 Budget	2023 Budget	2022 Budget	2021 Budget	2020 Budget
Budget and Grants					
Dedicated Gas Tax funds	$140,817.00	$140,817.00	$128,881.00	$129,080.00	$130,000.00
Miscellaneous Provincial Grants	$48,431.00	$43,960.00	$49,340.75	$46,659.25	$55,000.00
Transfer to Reserve	$75,000.00	$75,000.00	$75,000.00	$75,000.00	$75,000.00
Revenue from Operations					
Ontario Northland Shuttle Revenue	$15,168.15	$12,466.67	$12,603.33	$11,000.00	$12,000.00
Advertising Revenue	$4,000.00	$4,000.00	$4,000.00	$4,000.00	$4,000.00
Admission - Tickets	$44,049.60	$41,952.00	$27,584.00	N/A	$37,000.00
Cash Admission Fees	$82,194.36	$78,280.35	$36,986.07	N/A	$60,000.00
Memberships - Adults	$18,362.54	$17,488.13	$20,933.27	N/A	$35,000.00
Memberships - Seniors	$23,501.10	$22,382.00	$21,647.33	N/A	$32,000.00
Memberships - Students	$2,631.72	$2,506.40	$1,832.13	N/A	$3,000.00
Total	**$454,155.47**	**$438,852.55**	**$378,807.88**	**$265,739.25**	**$443,000.00**

The data indicates that over the past five years, the City has consistently benefited from funding through dedicated gas tax funds and miscellaneous provincial grants. Additional revenue has come from operations, including the Ontario Northland Shuttle, advertising, and various admission and membership fees. However, revenue from ticket sales was unavailable for 2021 and 2020 due to municipal transit fees being waived from March 2020 to April 1, 2022, providing free transit to the public during 2021.

Table 9 provides a detailed analysis of the fare revenue generated from annual ridership between 2022 and 2024, encompassing both conventional and specialized transit services as well as the Ontario Northland shuttle. Over this three-year period, fare revenue shows a steady upward trend, increasing from $121,586.13 in 2022 to $175,075.55 in 2023 and reaching $185,907.47 in 2024. This growth reflects a recovery in ridership and fare collection following the disruptions caused by the COVID-19 pandemic, during which transit fees were waived, resulting in significantly lower revenue of $11,000.00 in 2021. Notably, fare revenue in 2020 was higher at $179,000.00, prior to the fee waivers. The sharp decline to $11,000.00 in 2021 highlights the impact of offering free transit to support the public during the pandemic. The recovery trend seen from 2022 onward indicates a gradual return to pre-pandemic revenue levels

Table 9: Fare Revenue from Annual Ridership

City	2024	2023	2022	2021	2020
Fare Revenue from Annual Ridership- including both conventional and specialized services, as well as Ontario Northland shuttle revenue.	$185,907.47	$175,075.55	$121,586.13	$11,000.00	$179,000.00

4. Public Engagement

4.1. Stakeholder Interviews

EXP conducted an interview with stakeholders who contributed to the delivery of transit services in Elliot Lake. These interviews were used to gain insights into transit operations and to understand the experiences and needs of transit customers. Interviews were held with the following stakeholders:

- A.J. Bus Lines (Louis Ucci and Tracy Beckerton).
- Huron Lodge (Norman Mann); and
- Ontario Northland (Bob Sloss, Jennifer Buchanan).

A summary of the feedback received is provided below.

4.1.1. Customer Needs

Transit and Handilift Users

- It was reported that average transit users do not own or have access to a vehicle and, as such, rely on transit services for transportation.
- Bus transit customers span a wide range of ages, including young people, young families, and seniors. However, usage is relatively low among younger demographics, with the average transit user being between 55 and 60 years old. Additionally, about half of the bus transit users reportedly have some mobility challenges.
- Most customers seem to live in rental housing. For example, it was noted that the Lakeside route is the busiest, mainly due to the apartment buildings along the route. The Central route was said to be the least used route. Handilift customers were said to be distributed across the city, with some clusters living in senior high-rise buildings, long-term care facilities, retirement homes, and clinics.
- The reasons for using transit vary, but the common reasons appear to be going to medical appointments, grocery shopping, and other destinations in the city. It was also observed that it provides an opportunity for social interaction.

- Handilift customers are primarily seniors, especially those with mobility issues who use assistive devices or need door-to-door service. It was noted that some Handilift customers also use the regular bus service.

Customer Feedback / Issues

- Accessibility of the buses – in particular, getting on and off the bus was said to be a common issue raised by the public and observed by the operators. The current buses are difficult for someone with mobility challenges to get on and off the bus without assistance.
- Bus delays are another source of complaints. The causes of delays vary, but they can be due to mechanical issues or additional time required to help customers get on or off the bus. Stakeholders suggested that if a bus is delayed by more than 15 or 20 minutes, the route should be cancelled until the next scheduled bus.
- Bus stops were noted to lack amenities and infrastructure, such as shelters, benches, and signage, potentially affecting the comfort and safety of customers.
- Some customers suggested that individuals needing extra assistance should use Handilift, as the additional help required can cause delays. The use of wheelchair lifts can significantly extend boarding times, causing delays that affect other passengers, including those relying on transit for work or appointments.
- The limited availability of Handilift for certain times or destinations was noted, especially when multiple customers have conflicting requests.
- Stakeholders noted that while the city offers a Handilift service, passengers often prefer not to use it due to the inconvenience of needing to pre-book. This requirement can be a barrier for those who need more spontaneous or flexible transportation options, leading to underutilization of the service. As a result, passengers might opt for regular bus routes, even if they are less convenient or accessible.

4.1.2. Accessibility

- The interview did not explore specific mobility challenges, but it was noted that customers of all ages, from senior citizens to younger individuals, experience these issues.
- Accessibility and mobility challenges were noted to extend beyond health-related issues, including difficulties faced by passengers navigating the transit system with children or heavy belongings.
- The physical design of the buses has been reported to contribute significantly to accessibility challenges. For instance:
    - The buses offer less space compared to those previously used by the city, leading to crowded conditions, especially during grocery shopping trips. This often results in complaints about insufficient room for carts and personal belongings.
    - The aisles are too narrow for many passengers, particularly those using portable folding shopping carts, walkers, or canes, which cannot be stored outside the aisle.

  - The steps at the front of the bus make boarding and alighting difficult, while the rear ramp, although available, is slow and noisy, adding to the inconvenience.

- Additionally, safety concerns were raised regarding the use of metal-sided shopping carts, which have been banned from buses due to incidents of injuries caused by their sharp edges. The stakeholders mentioned that passengers are now encouraged to use soft-sided carts to mitigate safety risks.

4.1.3. Routing

- Bus routes reportedly cover most of the city, allowing access to main destinations every half-hour. However, delays can occur, causing customers to be late.
- It was also noted that some bus stops might not be conveniently located near certain customers' homes or addresses, particularly for those living on steep or rough streets that are not well-serviced by plows or sidewalks.
- Operational issues such as vehicle breakdowns and inefficient bus switching were said to contribute to delays. It was suggested that improved coordination with maintenance teams and timing adjustments may help address this.
- An issue was raised regarding the transit route, specifically on the lakeside route, where buses navigate through a parking lot to minimize the walking distance for passengers. This route passes by two large apartment buildings where passengers frequently board and alight. However, navigating through the parking lot can cause delays, especially when encountering other vehicles in the narrow lanes. Concerns have also been raised about the efficiency of the lakeside route, particularly due to a stop at Paris Plaza. Drivers have expressed reluctance to continue using this route because of the additional time it adds to their journey. The delays are exacerbated by the congestion within the parking lot.
- Passengers face limited opportunities to purchase tickets, such as being unable to buy them after library hours.
- Suggestions for improving routing and access to buses included:
  - Adding a third location for ticket or pass purchases that remains open later, such as a community center.
  - Adjusting the scheduling of routes and/or the spacing of stops to minimize potential delays, particularly those caused by boarding passengers in wheelchairs or with walkers.
  - Relocating the stop from the Lakeside route to the Westhill route, which travels on a different street and has fewer passengers, may alleviate congestion and delays associated with navigating through a parking lot while still maintaining accessibility for passengers.
- Stakeholders generally rated the city's route as relatively effective, with ratings ranging from seven to nine out of ten. While there was recognition that the city has evolved to improve routing efficiency, there was also a sense that the extensive coverage may contribute to longer routes and more stops, potentially affecting overall efficiency. Despite this, the consensus was that the city has generally done well in accommodating the public's transit needs.

4.1.4. Transit Vehicles

- Stakeholders noted that the current, smaller buses lack the accessibility features of the previous, larger buses, which had ramps and kneelers to accommodate passengers with mobility issues. Additionally, the current buses can be uncomfortable, particularly when travelling over bumpy roads.
- Stakeholders expressed concerns about the potential use of low-floor vehicles. While these options may be available, there are worries about their durability and performance, particularly in harsh winter conditions. For instance, low-floor vehicles might struggle in snowy or icy conditions, which could lead to issues with getting stuck.

4.2. Survey

An online survey was conducted from April 29 to May 20, 2024, and promoted through local media releases and the City's social media platforms. City staff also provided in-person assistance to residents to help them complete the survey. In total, 359 surveys were completed. The detailed findings of the survey are in **Appendix B - Public Engagement Overview** and the summary of responses are summarized below.

4.2.1. Summary of Responses

Respondents were provided an opportunity to share additional feedback at the end of the survey. Key issues or concerns raised included:

- **Uncomfortable ride:** Some respondents noted the buses were uncomfortable, with rough suspension and poor shock absorption. This can cause bouncing and jarring over bumps and potholes on rough roads, which is uncomfortable and painful.
- **Inadequate accessibility:** Accessibility of the buses was reported to be an issue. Respondents said passengers with mobility issues find it difficult to board the buses due to steep steps and narrow aisles. It was reported that the buses are not designed to accommodate walkers or shopping carts, and this presents a challenge to bring belongings on board.
- **Infrequent schedule:** It was suggested that the buses run more frequently, as waiting times of one hour or longer between buses are considered too long, especially when respondents have time-sensitive commitments.
- **Lack of bus shelters:** It was noted that many stops do not have shelters, which in the winter means passengers have to wait on the street, and this was said to be dangerous.
- **Bus stop safety concerns:** It was noted that some bus stops have safety concerns due to their location or lack of amenities. For example, the stop near the Curling Rink was mentioned as being on a hill with heavy and fast traffic, and the stop at Mountain@Oakland was said to be far from No Frills, making it difficult for passengers to carry their groceries that distance, especially in the dark and if there are bears in the area. The stop on Saskatchewan Street is mentioned as a location where vehicles often go around the bus despite signage, endangering pedestrians crossing at the crosswalk. The curb area at this stop is also described as uneven and not suitable for passengers to walk on.
- **Inadequate maintenance:** It was noted that bus shelters need to be better maintained and were described as dirty and neglected.

Suggestions for improvements included:

- **Improved accessibility:** Make the buses more accessible for individuals with mobility issues by implementing kneeling buses or ramps. This would make it easier for passengers with walkers, canes, or wheelchairs to board and disembark from the buses. Buses with wider aisles and designated spaces for walkers and shopping carts were also noted.
- **Enhanced comfort:** Improve the suspension of the buses to provide a smoother and more comfortable ride.
- **Expanded bus routes and schedule**s: Provide a more frequent bus service, particularly during peak hours and on weekends. Suggestions include running buses every half hour instead of every hour, extending hours of operation until later, and providing service on holidays. New stops were suggested: the North Industrial Park, Cousins Garden Center, Sheriff Creek walking trails, and closer to City Hall and No Frills.
- **Upgraded bus stops and shelters:** Improve bus stops, including installing more shelters to protect passengers from the weather. Add larger and more visible bus stop signs that include important information, such as smoking restrictions and safety guidelines. Additionally, there are requests for bus stops to be located in more convenient and accessible areas.
- **Better communication and information:** Consider implementing real-time GPS tracking or a notification system to inform riders of any delays or cancellations. Integrate bus routes into Google Maps offering riders a convenient way to access route information, plan trips, and receive real-time updates.
- **Consideration for specific needs:** Some suggestions focus on catering to specific needs, such as providing more Handilift services for individuals with disabilities, ensuring Handilift applications are easily accessible, and offering more seating options for seniors and individuals with mobility challenges.

4.3. Integration of Stakeholder and Community Feedback

The feedback from the community and stakeholders offers valuable insights into the relationship between the City's transit system and its users, highlighting who relies on it, their reasons for using it, and the challenges they encounter. The main observations from the feedback can be summarized into two key points:

- The City's transit system serves as a vital connection for customers to access essential services, with many relying on it as their primary mode of transportation.
- Accessibility remains a significant challenge for individuals with permanent or temporary mobility challenges. This is largely due to the physical design of the current buses and the infrastructure at bus stop locations. Additionally, the city's hilly terrain and harsh winter conditions further complicate access to bus stops and limit the effectiveness of buses that might otherwise be more accessible.

5. Transit Service Recommendations

5.1. Guiding principles

The insights gathered from the consultation process have been analyzed and integrated into the development of a set of guiding principles, ensuring they are well-aligned with the community's needs and aspirations.

The **guiding principles**, along with the **current state analysis in section 3,** which identifies the current state, gaps and needs, have shaped the recommendations.

The Guiding Principles include:

1. **Reliability and Frequency:** Ensure transit services are reliable and frequent to accommodate varying schedules and promote seamless connectivity within the transit network.
2. **Accessibility and Safety:** Prioritize transit solutions that enhance accessibility to key destinations, ensuring that the needs of all community members, including individuals with disabilities and those with limited mobility, are met.
3. **Community Engagement:** Foster transparent communication and active community engagement to solicit feedback, build trust, and ensure alignment with the needs and preferences of the community.

5.2. Transit Service Components

Based on guiding principles and a thorough analysis of the current state, key **Transit Service Components** have been identified as essential elements for structuring efficient and user-focused transit services. These components form the foundation for delivering reliable and inclusive public transportation and ensure that service design meets the needs of various stakeholders, including riders, operators, and the city. The four main components include:

1. **Service Delivery Model:** This component describes how transit services are structured and presented to users, whether as conventional fixed-routes or demand-responsive options. It includes adjusting bus stop locations, modifying routes, and ensuring timely arrivals to enhance user experience.

2. **Vehicle Type:** This refers to the modes of operation, determining the types of vehicles used in the service.

3. **Operator Model:** This component addresses the management and operational structure of the service. It outlines whether the transit system is run by the city or by a private contractor through partnerships or outsourcing.

4. **Service Options:** This encompasses both Accessibility and Engagement Strategies.

    - Accessibility involves improving physical infrastructure at bus stops, retrofitting buses with essential accessibility features, and ensuring regular vehicle maintenance.

- Engagement strategies focus on marketing efforts, providing consistent updates, and creating open forums for community discussions.

5.3. Service Delivery Model

This section will detail the proposed changes and explain the rationale behind their implementation. The adjustments aim to enhance service efficiency and meet the evolving transportation needs of the community.

5.3.1. Conventional, Fixed Route Transit Service

A comprehensive evaluation was conducted to improve the efficiency of Elliot Lake's conventional fixed-route transit service. This involved identifying transit corridors with poor road conditions and low ridership and proposing potential bypasses and new routes to redistribute traffic.

As discussed in section 3.1.1 and supported by community feedback gathered through public engagement on existing services, specific areas were pinpointed for potential route modifications. Routes were assessed for possible cuts based on the presence of underutilized bus stops, particularly those situated within a 400-meter walking distance from key service area destinations. This review aimed to streamline services by focusing on routes that could maintain accessibility while improving efficiency.

Key factors in determining which routes were candidates for modification included service frequency, route length and speed, operational performance, stakeholder feedback, and mapping and scheduling considerations.

The feasibility listed below was used to evaluate various bus routes by outlining different improvement options. These options included:

- Streamlining routes through reductions or consolidations
- Adjusting routes to operate on a half-hour schedule
- Identifying and potentially removing underused bus stops
- Transferring stops between routes for optimized coverage
- Redirecting routes to enhance traffic flow

The feasibility matrix used color-coded indicators to represent the viability of each option:

- **Green** signifies feasibility and recommendations,
- **Red** indicates infeasible or unrecommended options, and
- **Yellow** suggests options to be considered for potential future implementation

Each color-coded recommendation included an explanatory note. Findings from the matrix indicated that while several routes could benefit from adjustments to boost efficiency, others, such as the Westhill Route, were functioning optimally and did not require modifications.

Option / Route	Streamlining through route reduction	Streamlining through route consolidation	Adjusting for half-hour routes	Identifying underused stops for potential removal	Transferring bus stops between routes	Redirecting routes
Lakeside	There is potential to remove bus stops at locations that are underused or that are already well-serviced by complementary routes. However, these locations will still require demand from the Lakeside route.	Any route consolidated with Lakeside would exceed the maximum route time of 30 minutes.	Lakeside provides direct service to high-demand areas. The route experiences delay often, which exceeds the maximum route time limit of 30 minutes. Adjustments can be made to meet the 30-minute target.	Lakeside serves many areas with high ridership; stops should not be removed.	Service overlaps with the Central route. Opportunities to transfer demand to the Central route exist.	Move service through Hutchinson Avenue. Redirect service from Spine Road to Ottawa Avenue enroute communities at Spine Beach.
Esten	The route is long; for increased efficiency and fewer delays, there is a potential to decrease service.	Any route consolidated with Esten would exceed the maximum route time of 30 minutes.	Esten provides direct service to high-demand areas. The route experiences delay often, which exceeds the maximum route time limit of 30 minutes. Adjustments can be made to meet the 30-minute target.	Stops are spaced at effective distances where there is a potential to move stops.	Ridership at Oakland Boulevard could be transferred to the Central route but may increase passenger loads substantially.	Add a stop at Willoughby Road to accommodate senior residents. Remove the stop at Hergott Avenue and Pearson Drive.
Westhill	The route is regularly completed within 30 minutes, and service is isolated around Axmith and Mississauga Avenue. There is potential for streamlining. However, it may be unnecessary.	Westhill is central to Axmith and Mississauga Avenue, with minimal overlaps to adjacent routes. Consolidation could be challenging but applicable.	The route runs within 30 minutes.	Stops are spaced at effective distances where there is a potential to move stops.	Service is isolated around Axmith and Mississauga Avenue. Removing or transferring service would create network gaps in the existing network.	Unnecessary

Option / Route	Streamlining through route reduction	Streamlining through route consolidation	Adjusting for half-hour routes	Identifying underused stops for potential removal	Transferring bus stops between routes	Redirecting routes
Central	 The route is usually completed within 30 minutes.	 Service is under half an hour, with connections to Esten and Lakeside	 The route runs within 30 minutes.	 Stops are spaced at effective distances where there is a potential to move stops.	 Service overlaps with the Lakeside route. Opportunities to transfer demand to the Central route exist.	 Redirect service through Hillside Drive South.

Yes =  **No =**  **Under Consideration =** 

Exhibit 19: Feasibility Matrix for Route Evaluation

In considering route consolidation to improve transit efficiency, the study balanced the need for streamlined routes with community preferences and the requirement for tailored solutions that address local transit needs. The unique characteristics of a smaller community face challenges in optimizing transit, as any potential adjustments, like reducing routes or increasing service frequency, may conflict with the current users' reliance on established routes. Therefore, route consolidation was ultimately not pursued since it would have extended route times beyond 40 minutes. Instead, this study focused on optimizing the existing half-hour routes, allowing sufficient recovery time between loops to avoid scheduling issues and reduce the likelihood of route cancellations due to delays. The current flexibility of cancelling trips on the Central Route when necessary for scheduled recovery was identified as beneficial. Any updated system should consider maintaining service resilience and handling service disruptions without significantly impacting passengers.

Options to combine the Lakeside Route with the Central Route or the Esten Route with the Central Route were explored due to overlapping service areas and lower ridership frequencies on the Central Route. However, since consolidation would have added an additional 20-30 minutes of service time, further analysis was not pursued. The primary goal was to enhance service through practical changes, benefiting the community rather than addressing every minor issue.

Here's an in-depth look at each route considered for optimization in the study, including the proposed changes and the rationale behind them.

1. **Lakeside Route**

Current Configuration:

The Lakeside Route is a primary link between residential areas and popular locations such as Spine Beach, covering approximately 17.4 km. It currently uses Spine Road solely as a connector, with no stops along it, raising concerns among residents due to roadway conditions and safety issues.

Proposed Changes:

- **Re-route via Ottawa Avenue:** Due to safety concerns expressed by residents about Spine Road, the study suggested diverting the Lakeside Route to Ottawa Avenue instead. This change would allow the route to continue serving Spine Beach while also adding stops along Ottawa Avenue's north side, enhancing accessibility and potentially increasing ridership
- **Shift from Hillside Drive South to Hutchinson Avenue:** Redirecting part of the Lakeside Route through Hutchinson Avenue aims to reduce travel time and distance on the Lakeside Route, making the loop more efficient while maintaining access to essential areas.

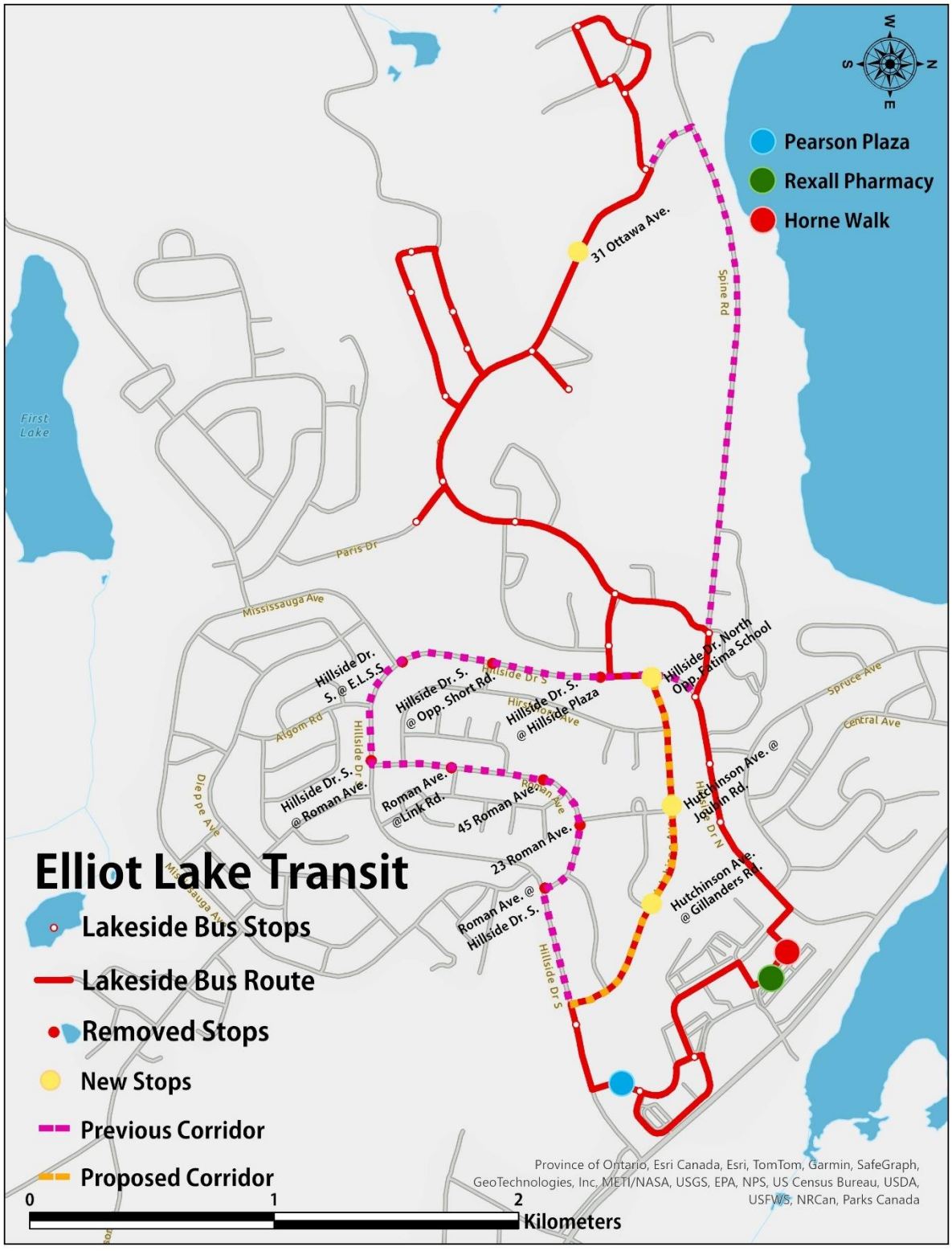


Exhibit 20: New Route Configuration - Lakeside

2. Central Route

Current Configuration:
The Central Route covers around 15 km, offering transit access through key city areas with overlapping service areas shared with both the Lakeside and Esten routes. Its high accessibility in some areas leads to stop redundancy and potential inefficiencies.

Proposed Changes:

- **Redirection to Hillside Drive South and Roman Avenue:** Shifting the Central Route to cover Hillside Drive South and Roman Avenue relieves the Lakeside Route of these areas, allowing the Central Route to capitalize on its overlap with essential stops and reduce its travel time by rebalancing passenger loads.
- **Stop Removal on Valley Crescent:** Two stops are proposed to be removed from Valley Crescent to eliminate redundancy in this well-served area, improving route flow and decreasing the likelihood of delays.
- **Stop Removal at Ontario Avenue Opposite Maple Restaurant:** Removing this stop further optimizes the route by consolidating bus stops, ensuring riders are within a reasonable walking distance while streamlining operations.

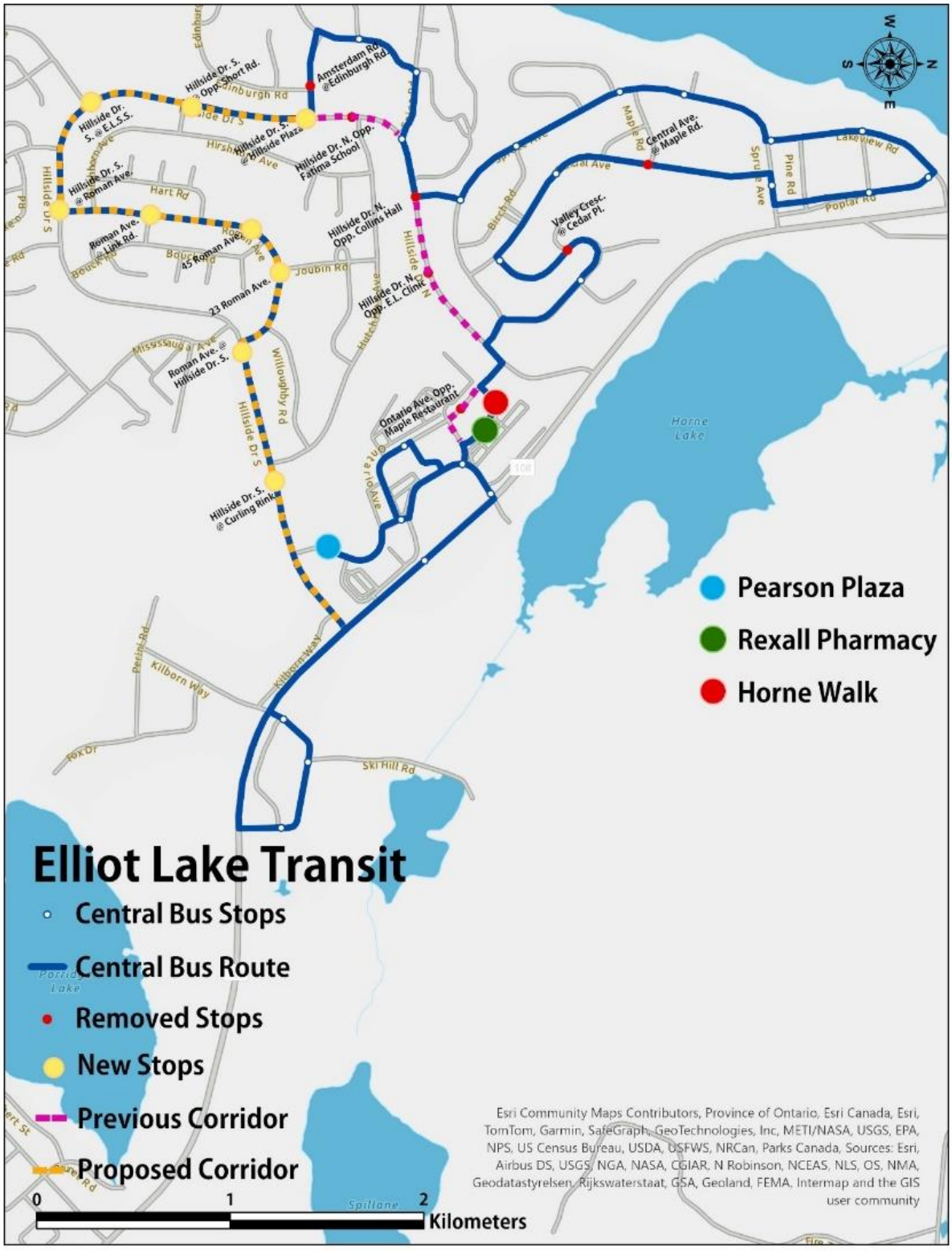


Exhibit 21: New Route Configuration - Central

3. Esten Route

Current Configuration:
The Esten Route, approximately 18.5 km, serves several residential areas and overlaps with both the Central and Lakeside routes. It covers a broad area and plays an essential role in providing transit access to residents across different neighbourhoods.

Proposed Changes:

- **Remove Stops on Hergott Avenue and Pearson Drive:** Hergott Avenue and Pearson Drive have a high density of stops, leading to redundant service. Removing these stops will reduce travel time and streamline the route, making it more efficient while maintaining adequate access across the area.
- **Addition of a Stop near Willoughby Road Senior Residence:** A new stop is recommended near the senior residence on Willoughby Road due to reported difficulties from residents accessing the current stops on Roman Avenue and Hillside Drive South because of steep inclines. This addition supports greater accessibility for seniors and those with mobility challenges.

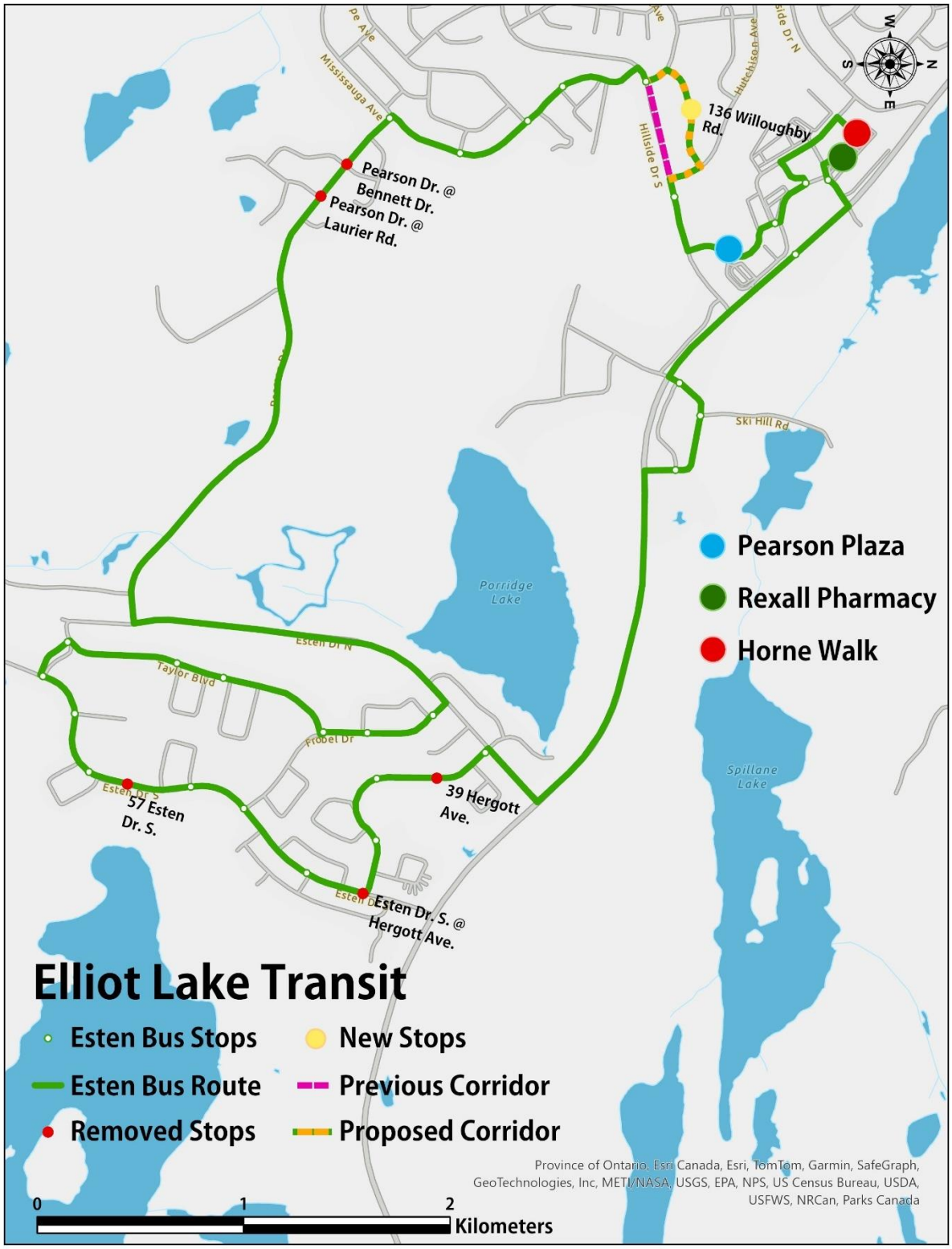


Exhibit 22: New Route Configuration – Esten

4. Westhill Route

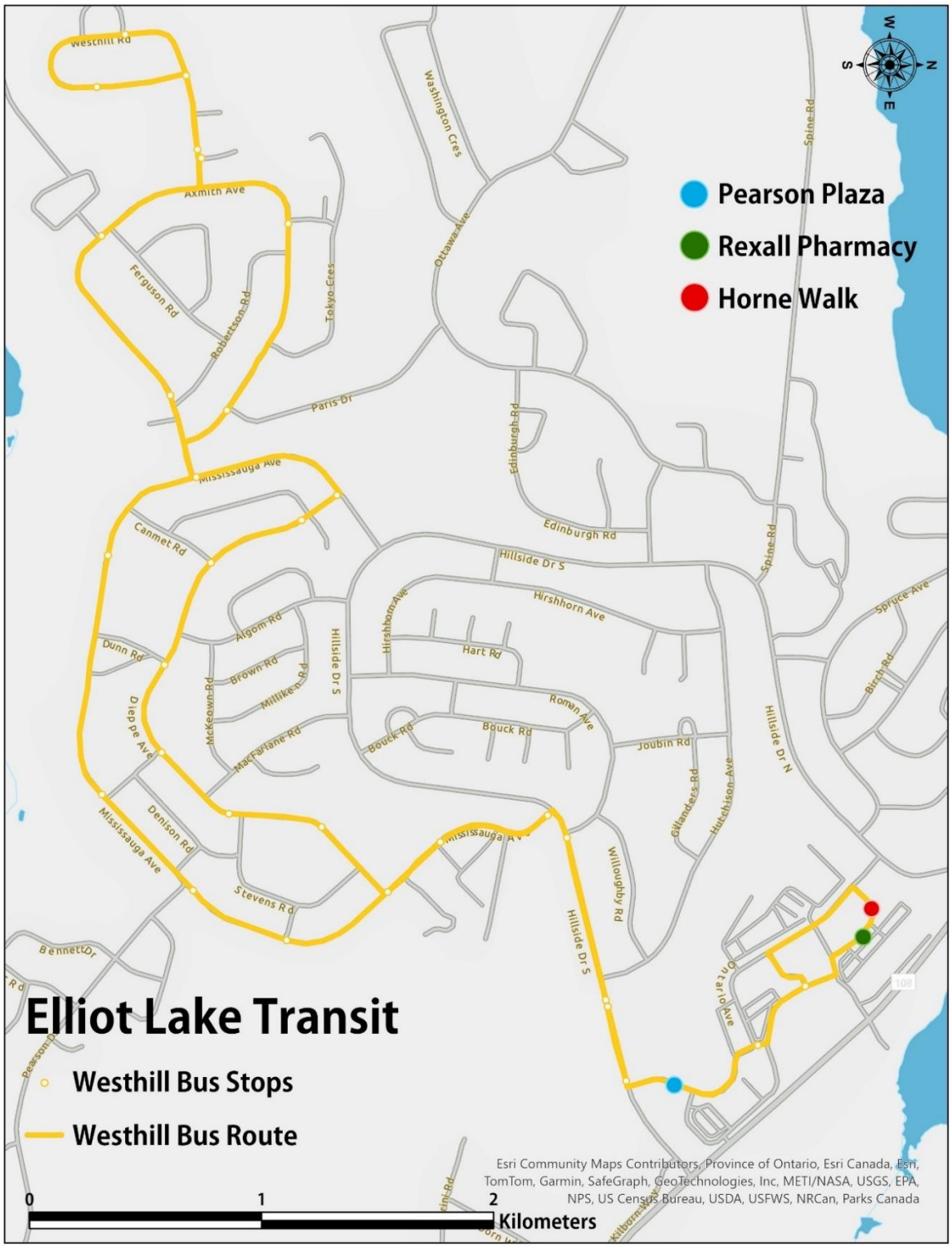


Exhibit 23: New Route Configuration - Westhill

Current Configuration:

The Westhill Route covering about 15.1 km serves a distinct part of the community and does not overlap with the other routes. Its configuration is already optimized, and it operates independently from other routes without causing scheduling or coverage issues.

Proposed Changes:

- **No Modifications:** The Westhill Route functions efficiently with its current setup and experiences consistent ridership, the study did not propose any changes. With no significant issues or redundancies identified, the Westhill Route remains unchanged, preserving its reliability and operational efficiency.

These recommendations are mapped in Exhibit 15-19 and reflect the city's transit needs, ensuring that routes connect high-density residential areas to key destinations, such as the hospital, recreational facilities, and shopping centers.

Key adjustments ensure that the network's concentration of bus stops within 250- and 400-meter service areas remains intact. These proposed modifications focus on balancing efficiency improvements with service reliability and safety, ensuring Elliot Lake Transit continues to meet community needs effectively.

Current and Proposed Route Travel Times and Route Lengths

Elliot Lake Transit currently operates with buses departing from Pearson Plaza every half-hour. The service relies on short, half-hour loops, offering a predictable schedule. The Central Route covers approximately 15 kilometers, while other routes range from 15 to 18 kilometers. Buses complete their loops in about half an hour, implying an average speed of roughly 30 kilometers per hour. Different operating speeds, such as 30 and 35 km/h, were explored to determine the best fit for the desired loop times while maintaining service reliability and scheduling patterns. Figure 1 and Figure 2 show the details of existing travel time and updated travel time at those operating speeds. The average operating speed includes stop times for passenger boarding, but this can drop when routes become busier, leading to potential delays. Adjustments to reduce service speed may be considered to prioritize safety and ensure reliable scheduling if necessary.

Table 10: Current and Proposed Route Travel Times and Route Lengths at 30 Km/h Operating Speed

Service Speed @ 30 km/h	Existing			Future	
Route Name	Travel Time (min)	Route length (km)	Median Dwell Time (s)	Updated Travel Time (min)	Updated Route Length (km)
Lakeside	32:25	17.4	6	29:27	15.9
Esten	36:06	18.5	6	36:06	18.5
Central	29:08	14.9	6	31.11	16.0
Westhill	29:02	15.1	7	29:02	15.1

Table 11: Current and Proposed Route Travel Times and Route Lengths at 35 Km/h Operating Speed

Service Speed @ 35 km/h	Existing			Future	
Route Name	**Travel Time (min)**	**Route length (km)**	**Median Dwell Time (s)**	**Updated Travel Time (min)**	**Updated Route Length (km)**
Lakeside	32:25	17.4	6	25.15	15.9
Esten	36:06	18.5	6	32.16	18.8
Central	29:08	14.9	6	26.44	16.0
Westhill	29:02	15.1	7	29:02	15.1

Proposed Adjustments and Considerations:

- **Service Frequency:** Maintaining a 30-minute service frequency is essential for consistency and reliability, as any changes to loop duration should still align with passenger expectations for frequent service.
- **Route Lengths and Service Speed:** Maintaining route lengths between 15-18 km is optimal for achieving an efficient and safe service speed throughout the network. The current structure balances this well but could benefit from slight route reductions where feasible to maintain the desired schedule.
- **Operational Flexibility:** The current system's flexibility in schedule recovery—such as cancelling low-demand trips on the Central Route—supports overall consistency and reduces the impact of delays. Any proposed route restructuring should retain operational flexibility to manage delays effectively.

5.3.2. Demand responsive models- Specialised On-Demand Transit Service

Currently, Elliot Lake's established conventional fixed-route service meets the city's demands. However, transitioning to an on-demand service could be a cost-saving measure, offering a direct, transfer-free experience similar to ride-sharing platforms like Uber.

EXP conducted an analysis to guide the decision-making process regarding whether to retain fixed routes or shift to an on-demand system, considering ridership patterns and operational efficiency.

1. **On-Demand Service Considerations**

- **Pilot Project for On-Demand Service:** It is recommended that an on-demand service be launched in the evenings and weekends as a pilot project. The on-demand app to be designed to enhance routing efficiency and reduce vehicle mileage by operating only where it is requested. Initially, it is suggested that two vehicles be deployed for the On-Demand service.

- **Combining Specialized Transit System with proposed On-Demand Services:** It is recommended that a Specialized Transit System, like the Handilift accessible transit, be integrated with the proposed On-Demand services. Currently, maintaining separate systems for Conventional fixed-route services and Handilift in Elliot Lake results in higher operational costs. By combining proposed on-demand and accessible transit services, both types of riders could utilize the same vehicles, reducing the total fleet size required.

    - This **unified approach** optimizes vehicle usage and simplifies service operations, leading to cost savings. Furthermore, it ensures that all passengers, including those with disabilities, have access to a high-quality, inclusive transit experience without needing separate systems. This model enhances overall service delivery, making it more efficient and cost-effective for the community.
    - It is recommended that Elliot Lake's on-demand transit service be expanded to allow for same-day trip requests across the entire municipality. This expansion should particularly focus on ensuring **accessibility for residents in rural areas**, providing them with convenient and timely transportation options. By broadening the reach of the service, the municipality can better meet the diverse needs of its community, enhancing mobility and connectivity for all residents.
    - It is also proposed that technological solutions for on-demand services, including online booking tools, mobile applications, and call-in options, be implemented to **ensure accessibility for all users**. These solutions should include online booking platforms, mobile applications, and a call-in option to ensure that all users, regardless of their access to technology, can easily schedule trips.
    - An essential feature of the proposed on-demand service is the ability to assign trips to available vehicles in real-time. Leveraging technology to allocate trips automatically will enhance **operational efficiency by reducing wait times** and optimizing vehicle usage. For ease of use, a traditional self-serve booking system is recommended, allowing users to book and schedule trips in advance. For non-accessible riders, same-day booking should be the primary option to maintain flexibility. However, advanced booking should be available for users requiring medical appointments or those eligible for accessible transit services, ensuring that essential trips are prioritized.
    - Response times for on-demand services will vary depending on the level of investment in technology and the number of vehicles assigned to the service. **Expanding the fleet** and

investing in an efficient dispatching system will be critical for minimizing waiting times and meeting the demand for prompt, same-day service.

- **Community Preferences:** Recognize that the community may prefer existing fixed-route services over new models.

2. **Benefits of On-Demand Service:**

- **Flexibility and Cost Efficiency:** On-demand transit provides greater flexibility compared to fixed-route services by adjusting to fluctuating passenger demand. This adaptability can reduce delays and increase operational efficiency, especially for longer routes. This adaptability can also result in cost savings by optimizing vehicle usage and reducing unnecessary mileage.

- **Enhanced Door-to-Door Service:** This model offers a seamless door-to-door service, eliminating the need for transfers. Utilizing algorithms similar to those of ride-sharing services like Uber, on-demand systems efficiently match passengers with optimal routes, offering a personalized and direct travel experience that boosts customer satisfaction.

3. **Implementing On-demand Transit Services**

- **Adapting to Varying Demand:** Similar to ride-hailing services, on-demand transit allows passengers to schedule trips through a smartphone app, effectively managing the service to respond to changing demand levels.

- **Utilizing Technology:** Real-time scheduling technology enables responsive ride allocation, with information relayed directly to drivers via a smartphone app. This system helps prevent overcrowding and provides better service to passengers with accessibility needs, improving overall experience and efficiency.

- **Balancing Cost and Reliability:** The goal is to maintain a balance between affordability and reliable service, especially crucial for passengers without alternative transportation options. Ensuring that on-demand services remain accessible and dependable helps to enhance service equity and community satisfaction.

4. **Operational Feasibility:**

- **Evening and Weekend Service Analysis:** Assessing the feasibility of on-demand service during evening hours, extended operations (Thursdays and Fridays), and weekends (Saturday and Sunday) can provide insights into resource needs and scheduling adjustments.

- **Passenger Capacity Evaluation:** Establishing a maximum passenger capacity per hour is essential to assess the viability of on-demand services. Evaluating the maximum number of passengers per hour using the service will inform decisions regarding the feasibility of the on-demand service. The decision to implement an on-demand service will depend on whether it can adequately meet the service demand. The feasibility of this approach depends on accommodating the maximum number of passengers per hour during evening service.

5. **Comparative Analysis:**

Several cities in the region have successfully transitioned to on-demand transit services, indicating that this model may be well-suited for Elliot Lake as well. The experiences of nearby municipalities

demonstrate the effectiveness and practicality of on-demand transit solutions in areas with varying passenger demands and geographic challenges.

To ensure a successful transition to on-demand transit, it is essential to consider experienced service providers specializing in this area. Below are some key potential providers for Elliot Lake, with a summary of their services and relevant experience in other cities:

Potential On-Demand Service Providers for Elliot Lake

- **Via**: As the largest potential service provider, Via is currently contracted with the cities of Sault Ste. Marie and North Bay in Ontario. Their extensive experience and resources could be invaluable for developing a comprehensive on-demand service in Elliot Lake. Via's platform is designed to improve routing efficiency, reduce vehicle mileage, and develop self-improvement efficiencies over time.
- **RideCo**: RideCo is another strong candidate, already working with the cities of Guelph, St. Catharines, and the Niagara Region. Their on-demand transit solutions have proven effective in these areas, offering flexible and efficient transportation options that could be replicated in Elliot Lake.
- **Blaise Transit**: Providing services in North Grenville Township, Town of Tecumseh, Simcoe County, Ville de Laval QC, and City of Dieppe NB, Blaise Transit specializes in on-demand transit solutions that optimize routes and reduce operational costs. Their experience in diverse regions makes them a suitable option for Elliot Lake.
- **Pantonium:** Known for their work in Belleville, Fort Erie, and Stratford, Pantonium's macrotransit software allows cities to deploy on-demand services using existing infrastructure. This approach could help Elliot Lake transition smoothly from fixed-route to on-demand services.
- **SpareLabs:** Although currently based in Vancouver with no presence in Ontario, SpareLabs offers innovative on-demand and microtransit solutions. Their platform could bring advanced technology and efficiency to Elliot Lake's transit system.
- **CTS:** Based in North Carolina, CTS provides a range of services but has yet to establish a presence in Ontario. Their experience in other regions could offer valuable insights and potential for future expansion into Elliot Lake

Appendix C provides a comprehensive information list on various App Development Technology Providers.

Elliot Lake's Unique Position and Considerations for Transitioning to On-Demand Transit:

Elliot Lake's existing conventional fixed-route transit system provides comprehensive coverage, which presents both advantages and challenges when considering a shift to on-demand service. On-demand transit could enhance flexibility, efficiency, and cost-effectiveness, especially during off-peak periods like evenings and weekends. However, successfully transitioning to this model requires a thorough evaluation of community demand, vehicle capacity needs, and customer satisfaction levels. A pilot program focused on evening and weekend service could help the city gauge the viability of on-demand transit, collecting user feedback and allowing for adjustments to ensure the service aligns with the needs and preferences of residents. Engaging the community and stakeholders throughout the process would be essential to foster support and tailor the service model to meet the unique demands of Elliot Lake.

Consolidating all transit services under a single provider using a standardized fleet that supports both on-demand and accessible transit needs could drive substantial long-term cost savings for Elliot Lake. This streamlined approach would reduce overhead, simplify operational logistics, and allow for consistent maintenance, making the transit system more efficient overall. While there would be initial setup costs, such as upgrading fleet and technology, long-term gains from optimized routing could offset these upfront expenses. The City's phased and thoughtful approach to transitioning to on-demand transit could ultimately result in a more sustainable, equitable, and financially viable transit solution, benefiting Elliot Lake's residents and addressing their diverse transportation needs.

5.4. Transit Vehicle Type

This section focuses on the capacity of transit vehicles, examining the suitability of current vehicle sizes, analyzing peak passenger numbers, and exploring the impact on future vehicle procurement and service operations.

Category	Details
Evaluating High and Low-Floor Vehicles	**High-Floor Vehicles:** High-floor vehicles offer more seating capacity and durability but are less accessible. Less expensive to purchase and maintain, as the technology is more established, and parts are more readily available. **Low-Floor Vehicles:** Adoption of fully low-floor vehicles increases space and improves accessibility and boarding efficiency but reduces seating capacity. More expensive
Balancing Vehicle Size and Passenger Comfort	**Seating vs. Space:** Low-floor vehicles offer more open space, but they come with fewer seats, which could impact passenger satisfaction if standing becomes frequent.
Assessing the Need for Larger Vehicles	**Investment Decisions:** The decision to acquire larger buses or retain 28-foot cutaway vans depends on maximum passenger load analysis. **Capacity Analysis:** Consider larger vehicles if the maximum load exceeds 15 passengers regularly.
Analyzing Maximum Passenger Load	**Data Collection**: Gathering accurate peak ridership data is crucial. Currently, the maximum passenger loads range from 18 to 21 on four main routes. **Vehicle Size Consideration**: Persistent ridership over 15 passengers, particularly in the 20-30 range, may justify larger vehicles.
Considering Operations	**Leisure Ridership Impact:** The social dimension of bus travel, including leisurely rides, must be factored into capacity planning. Leisure riders increase ridership numbers. **Hourly Fare Policy:** Passengers ride up to an hour per fare. Introducing additional fares for longer or linked trips could be a potential policy change.
Standardizing Vehicles	**Resource Management:** Standardizing the fleet can streamline operations, reduce service disruptions, and increase flexibility in resource allocation.

Table 12: Decision Matrix for Vehicle Options

Criteria	**Conventional Bus** 	**Community Bus** 	**Large Van** 
Capacity	26 or 42 + standees	10-20 passengers	10 + 2 to 4 Wheelchairs
Passenger Comfort	High	Moderate	Moderate
Cost (New)	$535,000	$220,000	$90,000
Cost (Used)	$45,000 - $65,000	$18,000 - $40,000	$16,000 - $32,000
Driver's License Requirement	Class 2	Class 5	Class 5
Operational Flexibility	Limited	Moderate	High
Maintenance Costs	High	Moderate	Low
Ease of Boarding (Low-Floor)	Yes	Yes	Yes
Vehicle Lifespan	10+ years	7-10 years	5-7 years
Service Suitability (Off-Peak)	Low	Moderate	High
Future Scalability	Limited	Moderate	High

Conventional Buses (Large) are ideal for handling high passenger loads and peak ridership periods. However, they are not cost-effective for off-peak and on-demand services due to their high upfront and maintenance costs. Additionally, their limited flexibility makes them less suitable for Elliot Lake's needs.

Community Buses strike a good balance between cost and capacity, offering high operational flexibility. They are more cost-effective than large conventional buses and have lower maintenance costs, making them a viable option for both peak and off-peak hours. Their adaptability makes them well-suited for the Fixed-route transit demands of Elliot Lake.

Large vans are highly cost-effective for low to moderate ridership levels and offer significant flexibility. They are recommended for on-demand and off-peak services due to their lower upfront costs and maintenance needs and provide cost-efficiency and flexibility. Large vans align well with Elliot Lake's current and projected transit demands, offering a practical solution with low initial and operational costs and high suitability for off-peak services.

Recommendation for Vehicle Selection

Based on the analysis of current transit needs, passenger capacity, and operational considerations, it is recommended that Elliot Lake consider a phased approach to vehicle procurement, focusing on versatile and cost-effective options that can meet the community's unique transit demands. The main recommendation is to standardize the fleet with low-floor vehicles, which will facilitate easier boarding, reduce dwell times, and support both conventional and specialized services. The transition should balance immediate costs with long-term benefits, aiming to acquire vehicles that are suited to peak ridership levels while maintaining comfort and operational efficiency.

For future purchases, it is advised to consider larger, purpose-built buses only if ridership data consistently shows passenger loads above 15-20 during peak hours. Meanwhile, smaller cutaway vans or community buses could fulfill the need for flexibility, cost-efficiency, and moderate passenger loads. Implementing a phased procurement strategy by acquiring one or two vehicles annually would prevent simultaneous replacement needs and enable better resource allocation. This recommendation aligns with Elliot Lake's goals to ensure both cost savings and high service quality while enhancing the overall passenger experience.

Appendix C provides detailed information about various vehicle suppliers.

5.5. Operational Models for Transit Services

5.5.1. In-House Operation

In-house operation involves the city directly managing all aspects of the transit service. This includes owning the vehicles, conducting maintenance, employing drivers, and handling day-to-day operations. The benefits of this model include greater control over service quality, flexibility in making operational changes, and potentially lower costs by eliminating the profit margin required by private contractors. However, it also requires significant investment in infrastructure, staff, and ongoing operational management. For a smaller city like Elliot Lake, which currently outsources its transit services, this model may not be feasible due to the lack of necessary resources and infrastructure.

5.5.2. Private Contractor

Using a private contractor involves outsourcing the day-to-day operations of the transit service to a third-party company. The contractor would be responsible for providing vehicles, maintenance, and drivers and managing daily operations. This model can offer cost savings through economies of scale and professional expertise in transit operations. It also reduces the administrative burden on the city. However, it may result in less control over service quality and responsiveness. For Elliot Lake, partnering with a reputable contractor could provide efficient and reliable service while allowing the city to focus on strategic planning and oversight.

For on-demand services specifically, a private contractor can be instrumental in developing and managing the necessary technology. This includes creating and maintaining the on-demand app, which passengers use to schedule trips. The contractor would ensure the app is user-friendly, reliable, and capable of optimizing routing efficiency. Additionally, the contractor would handle real-time ride scheduling, vehicle dispatching, and customer service, ensuring a seamless experience for passengers. **Section 5.3.2** has information on service providers.

This approach is a Hybrid Operating Model[9] where a transit service is managed collaboratively by both the city and a contracted third-party provider. This model leverages the strengths of both the public and private sectors to deliver an efficient and reliable transit service.

5.5.3. Non-operational management

Non-operational management refers to the city retaining ownership and strategic control of the transit service while outsourcing specific operational tasks. This could include vehicle maintenance or fare collection. This hybrid approach allows the city to maintain control over key aspects of the service while leveraging external expertise for specialized tasks. For Elliot Lake, this model could provide a balance between control and efficiency, ensuring high service standards while optimizing operational costs.

Currently, Elliot Lake operates under this model, utilizing contractors such as AJ Bus Lines and Huron Lodge for specific services. AJ Bus Lines is responsible for providing drivers and managing the day-to-day operations of the transit service. Huron Lodge, on the other hand, offers specialized services, particularly in providing accessible transportation for high-risk seniors and individuals with disabilities. They manage the employment of drivers and ensure that vehicles are maintained to meet the specific needs of their passengers. This partnership allows Elliot Lake to offer a high level of accessibility and care, enhancing the quality of life for its residents.

5.5.4. Assessments

Regular assessments are crucial to ensure the transit service meets the community's needs and operates efficiently. This involves evaluating service performance, customer satisfaction, and financial sustainability. Assessments can identify areas for improvement, inform decision-making, and justify investments in the transit system. For Elliot Lake, conducting periodic assessments will help in adapting the service to changing demands, ensuring it remains effective and responsive to the community's needs.

It is suggested that **contracts be consolidated** to avoid having multiple service providers and using a single contract for all services. Elliot Lake can achieve greater flexibility in vehicle usage and assignment. This approach allows for better resource management, as transit vehicles can be assigned based on availability and demand, ensuring that vehicles are available for both regular and on-demand services. This consolidation not only streamlines operations but also reduces administrative overhead, leading to cost savings and improved service delivery.

5.6. Improving Accessibility

The proposed shift towards an improved accessibility model for Elliot Lake's public transportation involves several critical factors:

5.6.1. Accessibility – Vehicles

1. **Integrating Low-Floor Vehicles**: The integration of low-floor vehicles is essential to improve access for all passengers, particularly those with mobility challenges. Low-floor vehicles facilitate easier boarding and alighting, reducing dwell times and increasing independence for passengers with disabilities. This transition will ensure that the transit system is more inclusive and user-friendly.

[9] CUTA-On-demand-transit-toolkit.pdf

2. **Effective Capacity Management**: Ensuring that vehicles can accommodate all passengers comfortably, especially during peak hours, is crucial. This involves analyzing ridership patterns and adjusting the fleet size and vehicle types accordingly. Effective capacity management helps prevent overcrowding and ensures a pleasant travel experience for all passengers.

3. **Improving Handilift Services**: By increasing the use of low-floor vehicles, the system can better serve passengers with disabilities. This approach offers more adaptable options for all riders, ensuring that those with special needs are not left behind. Enhancing Handilift services by including more accessible features on all buses also contributes to a more flexible and responsive transit system and can help to lessen peak demands for Handilift services.

The goal is to find a balance between cost-efficiency and high-quality service by considering factors like usage trends, passenger convenience, and overall accessibility. Pilot projects are recommended to explore new solutions, innovate, and refine the transit service. These projects are crucial for gathering community feedback and tailoring the service to meet the distinct needs of Elliot Lake's residents.

5.6.2. Accessibility – Bus Stops

1. **Implementing an Annual Bus Stop Improvement Program:** Focus on accessibility by implementing an annual bus stop improvement program. This program should prioritize stops based on funding availability and community needs. Improvements may include installing ramps, tactile paving, and better lighting to ensure that all passengers, including those with disabilities, can access bus stops safely and comfortably.

2. **Prioritizing Stops Based on Community Needs:** Evaluate and prioritize bus stops for improvements based on community feedback and usage data. This ensures that the most frequently used and critical stops are upgraded first, maximizing the impact of the improvements.

3. **Exploring Advertising Contracts for Shelter Provision and Maintenance:** To fund and maintain bus stop shelters, explore advertising contracts. These contracts can provide a steady revenue stream for the installation and upkeep of shelters, ensuring that passengers have a comfortable and protected waiting area. This approach not only enhances the passenger experience but also ensures the sustainability of the bus stop improvement program.

Appendix D contains detailed designs for bus pads tailored to the context of Elliot Lake. These designs are crucial for ensuring that bus stops are accessible, safe, and convenient for all users.

6. Fare Review Analysis and Cost Estimation

6.1. Fare Revenue Analysis

In order to estimate the impact on transit ridership and revenues, the following assumptions have been made:

Service Hours per Day

Weekdays (Monday to Saturday):

Westhill and Central Routes operate between 7:30 AM and 5:30 PM when running only for 30 minutes at each hourly interval- 7:30, 8:30, etc.

1. Duration of Operation: From 7:30 AM to 5:30 PM is 10 hours.
2. Operating Schedule: The buses operate for 30 minutes every hour.
3. Total Operating Time: Since the buses run for only 30 minutes out of each hour over a 10-hour period: Total operating time=10 hours×0.5= 5 hours

Esten and Lakeside Routes, operating from 7:00 AM to 6:00 PM (a total of 11 hours) with a schedule running for only 30 minutes at hourly intervals- 7:00, 8:00

1. Duration of Operation: From 7:00 AM to 6:00 PM is 11 hours.
2. Operating Schedule: The buses operate for 30 minutes every hour.
3. Total Operating Time: Since the buses run for only 30 minutes out of each hour over an 11-hour period: Total operating time=11 hours×0.5= 5.5 hours

Additional Hours (Thursday and Friday):

Westhill and Central Routes: 5:30 PM to 8:30 PM, Operating Time=1.5 hrs
Esten and Lakeside Routes: 6:00 PM to 9:00 PM, Operating Time=1.5 hrs

Sunday:

Westhill and Central Routes: 8:30 AM to 3:30 PM, Operating Time=3.5 hrs
Esten and Lakeside Routes: 9:00 AM to 4:00 PM, Operating Time=3.5 hrs

Table 13: Current hours of operation for four routes

Route	Weekly Hours	Annual Hours
Westhill Route	38 hours	1,976 hours
Central Route	38 hours	1,976 hours
Esten Route	41 hours	2,132 hours
Lakeside Route	41 hours	2,132 hours
Total	**158 hours**	**8,216 hours**

Total weekly hours for Westhill Route: 38 hours, Central Route: 38 hours, Esten Route: 41 hours, Lakeside Route: 41 hours, of a total 158 hours/ week, Annual hours are: 158 hours/ week *52 weeks =8,216 hours To estimate the impact on transit ridership and revenues, the following assumptions were made:

To estimate the impact on transit ridership and revenues, the following assumptions were made:

- With an average of **12 passengers per hour** and **8,216 hours** of service, the total number of passengers is calculated as follows:
  12 passengers/hour × 8,216 hours = 98,592 passengers.
- To **calculate the revenue per passenger**, divide the total fare revenue by the total number of passengers. For 2023, this is:

  $175,075.55/98,592 passengers ≈ $1.78 per passenger

This analysis tells us that, on average, each passenger contributes approximately $1.78 in fare revenue. This figure helps in understanding the financial performance of the transit system and can be used for future budgeting and planning.

6.1.1. Significance of Fare Revenue

Fare revenue is essential for the financial sustainability of transit services. It offsets operational costs, reduces the need for subsidies or external funding, and allows the service to function efficiently without over-reliance on taxpayer support. A healthy farebox recovery ratio (revenue generated from fares divided by total operating costs) improves a transit system's viability and provides funds that can be reinvested into service improvements, maintenance, or expansion.

Table 14: Existing Annual Fare Revenue, Operating Budget, Fare Revenue/Cost Ratio

Year	Annual Fare Revenue	Annual Operating Budget	Fare Revenue/ Cost Ratio
2024	$185,907.47	$573,134.32	0.32
2023	$175,075.55	$568,705.95	0.31
2022	$121,586.13	$544,418.95	0.22

From 2022 to 2024, the financial health of Elliot Lake's transit services has gradually improved, as shown by an increasing revenue-to-cost ratio. In 2022, fare revenues covered only 22% of operating costs due to a fare-free initiative during COVID-19, highlighting heavy reliance on subsidies. By 2023, the ratio improved to 0.31, reflecting the beginning of revenue recovery and cost control efforts. This positive trend continued in 2024, reaching a ratio of 0.32, indicating gradual progress in financial performance.

Despite these improvements, 68% of the transit system's operating costs still rely on external funding, underscoring the need for sustained financial strategies. Strategic measures to increase revenues such as marketing to boost ridership and fare adjustments—can further close this gap. Additionally, cost-control initiatives, like optimizing routes and leveraging technology, could improve efficiency. While progress is evident, a long-term goal of achieving a break-even ratio would enhance the system's financial sustainability and reduce dependency on external support.

6.1.2. Current Fare Models in Northern Ontario

Elliot Lake currently employs a flat fare model, where a single fare is charged regardless of the distance travelled. This model is common among smaller municipalities due to its simplicity and ease of implementation. To provide a comprehensive fare review, we compared Elliot Lake with similar municipalities in Northern Ontario, such as Sault Ste. Marie and Sudbury, considering factors like population size, geographic location, and demographic characteristics.

Comparative Analysis

1. **Affordability**: Elliot Lake's base fare of $2.50 is lower than both Timmins and North Bay, making it more affordable for single rides. This affordability is crucial for residents, especially given the city's aging population and rural setting.
2. **Monthly Passes**: Elliot Lake offers a more affordable monthly pass compared to other municipalities. For example, the monthly pass in Elliot Lake is $62.00, whereas in North Bay, it is $93.00. This lower cost can encourage more frequent use of public transit.
3. **Discounts**: The discount rate for seniors and students in Elliot Lake is competitive, though North Bay offers a slightly higher discount. Ensuring that these discounts remain attractive is important for maintaining ridership among these groups.

A comparison with municipalities of similar sizes is made in the table below.

Table 15: Fare Comparison with Similar-Sized Municipalities

City	Single Fare (Adult)	Single Fare (Senior/Youth)	Single Fare (Student)	Day Pass	Monthly Pass (Adult)	Monthly Pass (Senior/Youth)	Monthly Pass (Student)	Ticket Book (20 Rides - General)	Special Offers
Elliot Lake (Current)	2.50	2.25	2.25	-	62.00	52.00	52.00	-	12 tickets for $24 (Adults, Seniors and Students)
Sault Ste. Marie	3.25	3.25	3.25	-	77.00	66.00	33.50	53.00	Semester Pass (Algoma U & Sault College) - $210.00
Greater Sudbury	4.00	3.50	4.00	11.50	100.50	56.00	85.75	-	Children 4 and under ride free
North Bay	3.25	2.50	3.25	9.00	93.00	66.00	77.00	-	Children 12 & under free Up to three children under the age of 16 can ride free with their fare paying parent(s) or guardian(s): Weekdays Monday to Thursday from 5:00 p.m. until the end of day service and weekends beginning Friday at 5:00 p.m. through until the end of day service Sunday
Timmins	3.75	3.00	3.50	-	85.00	60.50	69.00	-	Children 4 and under ride free
Thunder Bay	3.25	3.25	3.25	9.00	87.00	60.00	72.00	-	Children under 12 free
Kenora	2.50	2.50	2.50	-	-	-	-	-	17 Rides for $37.50, 22 rides for $50.00 Infants under 1 year - Free
Temiskaming Shores	4.00	3.75	3.75	-	100.00	80.00	80.00	-	5 years & under free
Elliot Lake Suggested Fares	3.00	2.75	2.75	-	75.00	62.00	62.00	-	12 tickets for $30 (Adults, Seniors and Students)

Factors Influencing Fare Structures

Fare structures are shaped by several factors. Government funding and subsidies significantly impact fare levels. Operational costs, such as those associated with maintaining and running the transit system, play a key role in determining fare levels alongside ridership levels, where higher passenger volumes can help distribute operational expenses across a broader base, potentially leading to more affordable fare structures.

6.1.3. Recommendations on Fares

1. **Increment of Fares**: To ensure the financial sustainability of the transit system, it is recommended to implement a tentative 20-22% fare increase across all categories. The old and new fares with this increment are as follows: General/Adult tickets will increase from $2.50 to $3.00; Single Fare (Senior/Youth) will rise from $2.25 to $2.75; Single Fare (Student) will also go from $2.25 to $2.75; Monthly Pass (Adult) will change from $62.00 to $75.00, and Monthly Pass (Senior/Youth/Student) will increase from $52.00 to $62.00. Additionally, 12 tickets for $24.00 (Adults, Seniors, and Students) will increase to 12 tickets for $30.00 (Adults, Seniors, and Students).

2. **Exploring Additional Funding**: Seek more government subsidies or grants to support the transit system. Additional funding can help offset operational costs and keep fares affordable.

3. **Improving Service Quality**: Enhance the reliability and coverage of the transit system to retain riders and possibly attract new riders. Improved service quality can justify fare increases and boost ridership.

4. **Fare Capping**:
   Fare capping is an innovative approach to setting transit fares that ensures riders do not pay for additional rides above a certain amount during a given time period. This system tracks usage through a smart card, credit card, or debit card and charges to the card either a daily or monthly maximum. For example, under a monthly fare-capping policy of fifty rides, transit riders would only pay for the first fifty rides they take in any given month. Any rides beyond the 50^{th} would be free for the rest of that month. This method encourages multiple uses of the fare card and promotes card sharing, making transit more affordable for frequent users.

   Introducing fare capping in Elliot Lake would align with the practices seen in larger cities and offer significant benefits. It would provide a transparent and fair pricing structure, ensuring that frequent riders are not overcharged. This system can also boost ridership by making public transit a more attractive option for daily commuters.

5. **Implementing a Smart Card System for Streamlined Fare Collection**

   To modernize fare collection, Elliot Lake could explore implementing a Smart Card system for its transit services. This technology would allow passengers to load funds onto reusable cards and simply tap them upon boarding, streamlining the payment process and reducing reliance on cash transactions. The result would be quicker boarding times, greater convenience for riders, and a smoother operation for drivers.

A Smart Card system could introduce flexible fare options, such as daily, weekly, or monthly caps, making transit more convenient and potentially more affordable for frequent riders. Additionally, the system could support discounts for seniors, students, and low-income residents by enabling eligible users to register their cards for reduced rates, enhancing accessibility across the community.

From an operational perspective, the system would provide detailed ridership data, offering insights into travel patterns, peak usage times, and revenue trends. This information could guide service planning and ensure transit offerings align with the needs of Elliot Lake residents.

Although initial investments in Smart Card technology, card readers, and potentially a mobile app would be required, long-term benefits—such as lower fare-handling costs, improved operational efficiency, and data-driven service enhancements—could outweigh these expenses.

6. Justification of Fare Increment

1. **Operational Costs**: The proposed 20% fare increase is essential to cover the rising operational costs associated with maintaining and running the transit system. These costs include fuel, vehicle maintenance, driver salaries, and administrative expenses. As operational costs continue to rise, the additional revenue from the fare increase will ensure that the transit system can maintain its current level of service without compromising quality or reliability.
2. **Service Improvements**: The additional revenue generated from the fare increase can be reinvested into the transit system to enhance service quality. This includes purchasing newer buses, and upgrading facilities.
3. **Inflation**: Aligning fare increases with inflation rates is crucial to ensure the transit system remains financially sustainable over the long term. Inflation affects all aspects of the economy, including the costs of goods and services required to operate the transit system. By adjusting fares in line with inflation, the transit system can maintain its purchasing power and continue to provide high-quality services without facing financial shortfalls.

6.1.4. On-Demand Service Fares

To align with the recent 20% fare, increase for conventional fixed-route services, on-demand service rates for the pilot project will be set at $3.00 per trip for General/ Adult and $2.75 for Senior/Youth/ Student. This fare structure ensures consistency across the transit system, providing passengers with a straightforward and predictable cost, regardless of whether they choose fixed-route or on-demand options. While on-demand trips on Elliot Lake may cover longer distances to destinations like Cousins Garden Center or Sheriff Creek Walking Trails, this flat fare reflects the operational costs associated with flexible, demand-responsive services, including additional fuel and vehicle wear.

The $3.00 fare enables the on-demand service to operate efficiently and sustainably, balancing financial viability with accessibility for riders. As the pilot progresses, the city will gather data and feedback to evaluate the fare structure's effectiveness, refining it as needed to meet community needs and ensure long-term operational sustainability.

Additionally, in compliance with the Accessibility for Ontarians with Disabilities Act (AODA), on-demand trips for eligible AODA customers are set at the same rate as for other passengers, maintaining equality and affordability across the system. Door-to-door trips within Elliot Lake will therefore be priced at $3.00 per single trip, with a monthly pass available for $75, ensuring accessibility and consistency in fare policies for all users.

6.2. Cost Estimation for the Transit System

In our analysis of the City of Elliot Lake Transit System, we examined the essential components of both the operating and capital budgets. The following sections detail the various costs involved in establishing and maintaining a public transit system.

6.2.1. Analysis of Annual Transit Operating Costs

Table 16: Hourly Cost Analysis for Conventional and Specialized Transit Services.

Year	Annual Operating Budget	Total Hours of Service for Conventional and Specialized Transit System	Cost per Hour
2024	$573,134.32	12,116	$47.30
2023	$568,705.95	12,116	$46.94
2022	$544,418.95	12,116	$44.93

The City of Elliot Lake's operating budget totals $573,134.32 for 2024, $568,705.95 for 2023, and $544,418.95 for 2022, showing a slight increase in operating costs each year. These budgets cover 12,116 hours of service annually, which includes 8,216 hours for conventional transit and 3,900 hours for specialized transit services based on the current contract.

The estimated cost per hour is $47.30 for 2024, $46.94 for 2023, and $44.93 for 2022, reflecting the rising expenses associated with maintaining and operating the transit system. For conservative budgeting, an estimated cost of $48 per hour is assumed for Conventional and Specialized Transit Services.

6.2.2. Cost Estimation for Operational and Capital Budgeting

Operational Budget

As detailed in section 3.2.1, operational costs for a transit system encompass several key components essential for ensuring reliable and efficient service. First, driver salaries form a major portion of these expenses, calculated based on the hours worked and aligned with local wage standards or contractual agreements with service partners, such as Huron Lodge or AJ Buslines. Additionally, fuel and maintenance costs are variable and fluctuate depending on factors like vehicle usage, fuel prices, and service demands. These ongoing expenses for fuel, vehicle upkeep, and repairs are critical to maintaining service dependability and extending the vehicle lifespan. Moreover, insurance, licensing, and regulatory compliance include securing adequate insurance coverage, paying for vehicle licensing and registration, and adhering to industry regulations and safety standards.

Table 17: Cost Estimation for Operational Budget for Conventional Fixed Route

Item	Cost	Details
Gas	$50,000.00	Fuel costs can fluctuate, but let's estimate an average of $25,000 per bus annually for conventional fixed routes based on usage and fuel price estimates. With two buses in operation, this would total $50,000 per year. This estimate is based on the city's current operations.
General Stationery & Office	$1750.00	Total operational cost of $3,500 for both conventional and specialized services is evenly split, allocating $1,750 to the conventional fixed-route service. (As per section 6.2.2, current budget)
Water	$500.00	Total operational cost of $1,000 for both conventional and specialized services is evenly split, allocating $5,00 to the conventional fixed-route service. (As per section 6.2.2, current budget)
Tags & Licenses	$900.00	Costs for vehicle tags, licensing, and registration compliance. Assuming $200.00 per bus (As per section 6.2.2, current budget) Total for 3 buses = $300 * 3 = $900.00
AJ Bus Lines – Contract Value	$316,870.00	Extracted from staff Report dated June 14th, 2022- Report of the director of public works for the consideration of Council re: specialized and conventional transit services contract. For Estimation of Driver Fees.
Vehicle Maintenance and Repairs	$27,000.00	Regular maintenance and repairs are critical and vary based on mileage and vehicle type, estimated at an average of $9,000 per bus annually. Total for 3 buses = $9,000 * 3 = $27,000.
Regulatory Compliance & Other Miscellaneous Costs including Insurance	$6,000.00	Other compliance costs may include safety inspections and certifications, estimated at $2,000 per bus annually. Total for 3 buses = $2,000 * 3 = $6,000.

The estimated operational budget for the conventional fixed-route service is $403,020.00.

Table 18: Cost Estimation for Operational Budget for Specialized Service

Item	Cost	Details
Gas	$50,000.00	Fuel costs can fluctuate, but let's estimate an average of $25,000 per bus annually for Specialized Transit System services based on usage and fuel price estimates. With two buses in operation, this would total $50,000 per year. This estimate is based on the city's current operations.
General Stationery & Office	$1750.00	Total operational cost of $3,500 for both conventional and specialized services is evenly split, allocating $1,750 to the Specialized service. (As per section 6.2.2, current budget)
Water	$500.00	Total operational cost of $1,000 for both conventional and specialized services is evenly split, allocating $5,00 to the Specialized service. (As per section 6.2.2, current budget)
Tags & Licenses	$600.00	Costs for vehicle tags, licensing, and registration compliance. Assuming $200.00 per bus (As per section 6.2.2, current budget) Total for 2 buses = $200 * 3 = $600.00
Huron Lodge – Contract Value	$176,966.00	Extracted from staff Report dated June 14th, 2022- Report of the director of public works for the consideration of Council re: specialized and conventional transit services contract. For Estimation of Driver Fees.
Vehicle Maintenance and Repairs	$18,000.00	Regular maintenance and repairs are critical and vary based on mileage and vehicle type, estimated at an average of $9,000 per bus annually. Total for 3 buses = $9,000 * 2 = $18,000.
Regulatory Compliance & Other Miscellaneous Costs including Insurance	$4,000.00	Other compliance costs may include safety inspections and certifications, estimated at $2,000 per bus annually. Total for 2 buses = $2,000 * 2 = $4,000.

The estimated operational budget for the Specialized Service is $251,816.00.

Capital Budget

Capital budgeting for a transit system includes the acquisition of buses and specialized vehicles to meet fleet demands, as well as the construction and enhancement of transit facilities like bus stops, bus pads, terminals, and accessible shelters. The budgeting process also covers the implementation or upgrade of fare collection systems, including automated ticketing and Smart Card technology, ensuring secure and efficient revenue collection. Initial marketing and advertising efforts are also included to introduce new routes or services, promote public awareness and encourage ridership.

Table 19: Cost Estimation for Capital Budget for Conventional Fixed Route

Item	Cost	Details
Vehicle Purchase Cost	$80,000.00- 150,000.00 - High Floor $120,000.00- 250,000.00 - Low Floor	Cost for purchasing each vehicle.
Fare Box Cost	$5,000.00 per box	Cost for each fare box installed in the vehicle.
Smart Card System Installation	$10,000.00 - $20,000.00 per bus	Cost range for installing a smart card system on each bus.
Bus Stop Signs Cost	$500.00 per bus stop	Estimated cost for each bus stop, with an estimate of 10 stops per year.
Bus Pads	$5,000.00 per stop	Starting cost for each bus pad installation.
Marketing and Advertising Cost	$5,000.00 - $10,000.00 per year	Annual cost range for marketing and advertising.

6.2.3. On-Demand Service: Initial Capital and Operation Costs- Key Considerations

Initial Setup Costs:

1. **Project Management Service Costs for Implementing an On-Demand Transit Service**
    - The costs associated with project management (PM) for the implementation of an On-Demand Transit Service can vary significantly depending on whether the city decides to manage the project internally or outsource it to an external provider.
    - If the city opts to outsource the project management, the associated costs will encompass several critical activities, which include-
        i. **Contract Finalization:** This involves negotiating and finalizing the contract with the selected service provider, ensuring all terms and conditions are clearly defined and agreed upon.

ii. **Communication Channels:** Establishing clear and effective communication channels between all stakeholders to facilitate smooth coordination and information flow throughout the project lifecycle.
iii. **Monitoring System Setup:** Implementing a robust monitoring system to oversee the performance of the transit service. This system will track key performance indicators (KPIs) and ensure that the service meets the established standards and objectives.
iv. **Staff Training:** Providing comprehensive training for the City's staff involved in the operation and management of the On-Demand Transit Service.

The estimated cost for these outsourced project management services ranges from $50,000 to $100,000

2. **Technology Platform:**

- If the City of Elliot Lake utilizes contract providers like Via or RideCo, for its On-Demand Transit Service, as described in **section 5.3.2**, the key components of the technology platform would include the development and maintenance of a user-friendly mobile app for scheduling trips, dynamic routing and scheduling to optimize vehicle dispatch, comprehensive fleet management tools, robust data analytics and reporting systems, and integrated customer service features. These components ensure an efficient and reliable delivery service.

- The cost of such contracts varies based on the specific needs and scale of the service. For example, Milton's[10] partnership with RideCo for an on-demand transit program costs approximately $338,000 annually, covering the technology platform but excluding vehicle operation expenses. Similarly, Guelph's[11] pilot program with Via for on-demand transit services was reported to cost approximately $1.2 million over two years, including both technology and operational costs.

3. **Vehicles:**

- **Vehicle Modifications:** Modifying vehicles to meet the requirements of the new service, including marketing, internet connectivity, and hardware upgrades, can add between $5,000 and $15,000 per vehicle.

- Outsourcing the operation and maintenance of vehicles and drivers to a service provider like Via or RideCo can be a viable alternative. This approach involves contracting a third-party provider to handle the operation and upkeep of the vehicles, ensuring they meet all necessary standards and service requirements.

[10] https://www.milton.ca/en/living-in-milton/milton-transit-ondemand.aspx
[11] https://guelphpolitico.ca/2022/12/13/staff-says-new-transit-initiatives-are-a-success/

4. **Driver Recruitment and Training:**

    - **Recruitment Costs:** Contract with existing partners for driver training or recruitment and training costs for drivers can cost from $5000.00- $15,000.00 per driver.

5. **Marketing and Promotion:**

    - **Initial Marketing Campaign:** Launching a marketing campaign to promote the new service, including traditional and digital media, can cost between $10,000 and $20,000. Creating brochures, flyers, and other promotional materials can add another $1000.

Operational Cost for On-Demand Services:

1. **Driver Salaries:**

    - **On-demand buses (2 buses):** On-demand services may operate on variable schedules, potentially requiring fewer hours. If each bus requires a dedicated driver and additional coverage for breaks, shifts, or off-days, we might factor in an additional 1.2 drivers per bus

    - Assuming one driver works approximately 40 hours per week and is paid an average hourly wage of $30/hour. For a single driver: $30 * 40 hours/week * 52 weeks = $62,400 annually

    - Annual driver's cost per bus: $62,400 * 1.2 = $74,880.00

    - Total for 2 buses: $74,880 * 2 = $149,760.00

2. **Fuel:**

    - These may have lower mileage due to less consistent operation. Estimating $20,000 per bus annually.
    - Total for 2 on-demand buses = $20,000 * 2 = $40,000.
3. **Maintenance and Repairs**:
    - Likely lower maintenance due to variable usage. Estimating $9,000 per bus annually.
    - Total for 2 on-demand buses = $9,000 * 2 = $18,000.
4. **Tags & Licenses:**
    - Given cost is $1,500 per bus.
    - Total for 2 buses = $1,500 * 2 = $3,000.

5. **Regulatory Compliance & Other Miscellaneous Costs including insurance:** Insurance costs an average of $2,000 per year. For two vehicles and Misc. costs $5000.00

Table 20: On-Demand Service: Initial Capital Cost (One-Time, 2025)

Category	Description	Cost (Maximum)
Initial Setup Costs		
Project Management Service	Project Management Service	$75,000
Technology Platform	Contracting Service provider (Eg: Via, RideCo)	$150,000
Vehicles	Vehicle Modifications (per vehicle, assuming two)	$10,000
Driver Recruitment and Training	Recruitment and Training Costs	$20,000
Marketing	Initial Marketing Campaign	$20,000
Promotional Materials	Promotional Materials	$1,000
Total Initial Setup Costs (Capital Costs)		***$276,000***

The capital cost is $276,000 in 2025, as they are one-time investments for setting up the on-demand transit system, covering project management, technology, vehicle modifications, and recruitment.

Table 21: On-Demand Service: Operational Costs

Category	Description	Cost (Maximum)
Gas (Fuel)	Estimated Annual Fuel Costs	$40,000
General Stationery & Office	Office Supplies and Related Costs	$3,000.00
Water	Annual Water Expenses	$500.00
Tags & Licenses	Registration Costs	$3,000
Driver's Salary (estimated annual)	Annual Salary for Drivers	$149,760
Vehicle Maintenance and Repairs	Maintenance and Repairs	$18,000
Regulatory Compliance & Other Miscellaneous Costs including Insurance	Miscellaneous Compliance Costs	$5,000
Total Operating Costs		***$219,260.00***

Total First-Year Cost		**$495,260.00**

6.3. Revenue Streams

1. **Advertising:** Advertising can serve as a significant source of revenue generation for Elliot Lake. One common approach is selling advertising space on the exterior of buses. However, it is important to consider the staff time and expenses involved in selling and maintaining these ads. Additionally, developing policies around the types of advertising that will be accepted is crucial. For example, decisions need to be made regarding whether to allow political ads or ads for alcohol. In some cases, using space to promote the transit system's own brand and services might be a more effective use of space, potentially increasing ridership and community engagement.

   Another effective form of transit advertising is through **bus shelters**. Many transit agencies contract with advertising firms to construct and maintain bus shelters along their routes in exchange for the right to sell ad space. This arrangement not only generates revenue but also ensures the availability of well-maintained shelters, which are highly valued by riders. These contracts often include provisions that allow the transit system to use unsold ad panels for its own promotional purposes, providing a highly visible medium for advertising.

   In Northern Ontario, the presence of major outdoor advertising companies such as Pattison, CBS, and Lamar is relatively limited. This presents an opportunity for Elliot Lake to explore partnerships with local or regional advertising firms. For instance, Northern Transit & Sports Venue Advertising (NTAAA) has successfully partnered with communities like Sault Ste. Marie and Greater Sudbury. Given that Elliot Lake owns its transit vehicles and passenger shelters, it could directly contract with NTAAA to provide advertising services. This partnership could result in new shelters or additional revenue for the transit system, even if the amounts are modest. By leveraging local advertising opportunities, Elliot Lake can enhance its revenue streams while also supporting regional businesses. This approach not only generates income but also contributes to the visibility and branding of the transit system within the community.

   Other companies that do transit advertising include Pattison Outdoor Advertising and Astral Media, which have exclusive rights within the City of Toronto. These companies could also be considered for potential partnerships.

2. **Accessible Taxicab Vans:** To enhance revenue generation while meeting the needs of residents requiring accessible transportation, it is recommended that local cab companies be mandated to include at least one accessible Taxicab van in their fleet. This initiative would not only address peak demand for accessible travel but also open up new revenue streams through a subsidy program for fares, strategic dispatching during high-demand times, and potential partnerships with healthcare providers and senior centers. By promoting the availability of accessible taxicab vans and implementing targeted marketing campaigns, the City can improve the inclusivity and accessibility of its transportation services while contributing to the financial sustainability of the transit system.

6.4. Funding Sources

The Gas Tax Funds are sourced from the province's gas tax program. This program allocates funding to municipalities based on the volume of gasoline sold in the province during the previous year. Specifically, municipalities that support public transit services receive a portion of this revenue, calculated at two cents per litre of provincial gas tax collected. This funding mechanism ensures that communities investing in public transit benefit directly from the province's gas tax revenues, helping to sustain and enhance their transit services.

Infrastructure Canada's Rural Transit Solutions Fund (RTSF) is an ideal funding source for developing transit solutions in rural and remote communities. As the first federal fund specifically targeting these areas, the RTSF provides grants of up to $50,000 to support planning and design projects. These grants aim to foster the development of locally driven transit solutions that enhance mobility for residents in rural communities, helping them access work, school, medical appointments, and social visits.

The RTSF is designed to address the unique transportation challenges faced by rural areas, ensuring that residents have reliable and efficient transit options. By leveraging the RTSF, Elliot Lake can enhance its transit services, making it easier for residents to access essential destinations and helping the community develop locally driven transit solutions that improve mobility and overall quality of life.

For comprehensive details on the various types of funding that Elliot Lake can pursue, please refer to **Appendix E**. This section provides an in-depth overview of potential funding sources, including grants, subsidies, and other financial support programs tailored to the needs of rural and remote communities.

7. Service Plan

7.1. Short Term (0- 2 Years)

This phase emphasizes immediate actions and foundational changes essential for initiating the transformation of the transit system. Key activities include developing detailed transit implementation plans, securing necessary endorsements, and implementing initial improvements such as route enhancements and preparations for launching the pilot program. The objective is to establish a robust foundation for future developments.

Table 22: Short-Term Service Plan (0-2 Years) - Actions and Impacts

Action	Impact
Prepare a Transit Implement Plan for the City of Elliot Lake based on recommendations from the Conventional and Specialized Transit System Review Study	City staff need to work on finalizing the Transit Implementation Plan
Obtain Council endorsement for the Transit Plan	Council Endorsement for Transit Roadmap
Restructure Routes based on Recommendations	Improved route efficiency and service coverage
Initiate the implementation of an On-Demand Service by integrating evening and weekend conventional fixed-route services. This approach will employ an on-demand service model for route planning, dispatching, and vehicle utilization.	Enhanced service flexibility, accessibility and streamlined operations
Draft and publish the Request for Proposal (RFP) for the service provider for the on-demand service model transit service	Initiate the process of finding suitable service operators
Market the RFP to potential service providers, evaluate proposals, and complete reference checks- Ensure a competitive selection process and select the most suitable service operator	Ensure a competitive selection process and select the most suitable service operators.
Receive Council endorsement of the preferred proponent	Secure a service operator through a successful procurement process and finalize the selection process
Enter final contract negotiations with the successful proponent- Establish clear terms and conditions for service delivery	Establish clear terms and conditions for service delivery
Launch the initial pilot service	Begin operations in the 3rd quarter of 2026
Maintain Bus Stops and Shelters at Major Destinations	Ensure passenger comfort and convenience
Fare Review: Increase fares initially and review periodically	Keep up with inflation and rising costs, ensure financial sustainability

7.2. Medium Term (5 Years)

This phase aims to build on initial short-term initiatives by expanding and enhancing transit services. Key elements include acquiring low-floor vehicles to improve accessibility, integrating conventional evening and weekend operation services with specialized transit, and utilizing advertising contracts to generate additional revenue.

Table 23: Medium- Term Service Plan (5 Years) - Actions and Impacts

Action	Impact
Stage bus purchases- consider buying one vehicle per year or use the Metrolinx joint procurement program	Avoid simultaneous breakdowns and replacements. Take advantage of joint procurement opportunities, secure funding sources, and ensure efficient vehicle procurement
Focus future bus purchases on low-floor vehicles	Easier boarding and alighting, reduced dwell time, increased passenger independence, and ability to serve both conventional and specialized services
Integrate conventional evening and weekend operation services with specialized transit	This approach will streamline services, enhancing efficiency and flexibility by combining resources and optimizing vehicle utilization.
Explore advertising contracts for shelter provision and maintenance	Additional revenue for shelter provision and maintenance
Continue to monitor announcements from higher levels of government for funding	Identify opportunities for one-time or recurring grant funding and ensure continued funding for transit services
Ensure that all areas of the city are connected to essential services, catering to the needs of all residents, including seasonal workers and students.	Address the transportation needs of various worker groups and enhance mobility
Maintain Bus Stops and Shelters at Major Destinations	Ensure passenger comfort and convenience
Implement feedback mechanisms	Continuously improving service based on user feedback

7.3. Long-Term (10 Years or More)

This phase focuses on implementing key actions to enhance transit services and ensure sustainability. Key elements include launching an annual bus stop improvement program to prioritize accessibility, conducting periodic fare analyses to align revenues with operational costs, exploring cashless payment systems to simplify fare collection, and continuously applying for grants to secure additional funding without overburdening local budgets.

Table 24: Long-Term Service Plan (0-2 Years) - Actions and Impacts

Action	Impact
Implement an annual bus stop improvement program	Focus on accessibility, prioritize stops based on funding availability and community needs
Fare Analysis: Review periodically to keep up with inflation and rising costs	Ensure that fare revenues remain aligned with operational costs, maintaining financial sustainability
Explore the cashless payment systems	Simplify fare collection, reduce costs, and streamline operations
Grant Applications: Continuously apply for relevant grants to support transit initiatives.	Secures additional funding to enhance and expand transit services without overburdening local budgets.
Move transit systems to one service provider and towards an On-Demand Service based on ridership number and demand	Achieve significant long-term cost savings and serve everyone equally, despite short-term implementation costs
Expand the ridesharing (On Demand) Services	Increase driver pool and service coverage

2025: Initial Preparation and Transition Year

In 2025, the groundwork for Elliot Lake's transit system development begins, focusing on laying the foundation for upcoming changes. Key activities include preparing a comprehensive transit implementation plan, involving staff time. Efforts will also be made to obtain council endorsement through presentation materials and council sessions.

This year marks a pivotal transition phase for the transit system. Critical actions include restructuring routes to optimize efficiency and dedicating staff hours to scheduling, implementation, and public communications. The implementation of an On-Demand Service will commence, requiring significant investment in software and infrastructure for dispatching. This process involves drafting and publishing a Request for Proposal (RFP), marketing the RFP, and selecting a service operator. Council endorsement and final contract negotiations will ensure clear terms for service delivery. The following year will culminate with the launch of a pilot service in Q3 2026, involving initial operations setup, testing, and marketing. Throughout the year 2025, maintenance of bus stops and shelters, as well as fare review and adjustments, will be ongoing to ensure the system remains functional and responsive to user needs.

2026-2030: Implementation and Expansion

From 2026 to 2030, the focus will shift to the implementation and expansion of the transit system. This period will see the annual purchase of low-floor vehicles to enhance accessibility and dual-service use. Strategic planning will be employed to stage bus purchases, avoiding simultaneous breakdowns and ensuring a steady upgrade of the fleet. Efforts to consolidate services to one provider for on-demand transit will be made, involving transition costs for integrating into a single service provider. Revenue from advertising contracts for shelter maintenance will be utilized to fund maintenance or reinvest in service improvements. Continuous monitoring of government funding opportunities will enable capital support for projects such as new vehicles and shelter upgrades. Ensuring municipality-wide connectivity will be a priority, with costs allocated to extend service areas for seasonal workers and students. Implementing feedback mechanisms through software or surveys will facilitate continuous improvement based on passenger input.

2031-2035: Long-Term Sustainability and Modernization

The period from 2031 to 2035 will focus on sustaining and modernizing the transit system. Annual improvements and maintenance will be a key focus, with an ongoing bus stop improvement program aimed at enhancing accessibility. Periodic fare analysis will be conducted every two years to align fare structures with inflation and operational expenses, ensuring financial stability. Continuous grant applications will be pursued to secure funding support for both capital and operational expenses. Modernization efforts will include exploring cashless payment systems, involving initial setup costs for hardware, software, and staff training, followed by annual maintenance. Service consolidation for the on-demand model will be completed, transitioning to a single service provider and on-demand system, which may require new contracts, scheduling software, and additional staff training. These efforts will ensure that the transit system remains efficient, accessible, and responsive to the evolving needs of the community.

For a comprehensive breakdown of the costs associated with the service plan actions, please refer to **Appendix F: Financial Considerations**. This section provides detailed financial analysis and projections to support informed decision-making and future planning.

7.4. Financial Projections

Table 25: Financial Projections for Conventional Fixed-Route Service Operational Costs

Service Type	2024 Budget	2025 Projected Budget	2030 Projected Budget	2035 Projected Budget
Gas	$50,000.00	$51,500.00	$59,702.61	$69,211.69
General Stationery & Office	$1,750.00	$1,802.50	$2,089.59	$2,422.41
Water	$500.00	$515.00	$597.03	$692.12
Tags & Licenses	$900.00	$927.00	$1,074.65	$1,245.81
AJ Bus Lines – Contract Value	$316,870.00	$326,376.10	$378,359.35	$438,622.19
Vehicle Maintenance and Repairs	$27,000.00	$27,810.00	$32,239.41	$37,374.31
Regulatory Compliance & Other Miscellaneous Costs including Insurance	$6,000.00	$6,180.00	$7,164.31	$8,305.40
Total	$403,020.00	$415,110.60	$481,226.96	$557,873.93

Explanation of Projections:

1. **Gas**: The 2024 cost of $50,000 was increased annually by 2.5%, reflecting expected inflation in fuel prices. This adjustment accounts for steady price increases over time due to market trends.
2. **General Stationery & Office Costs**: Starting with $1,750 in 2024, this was also projected with a 2.5% annual inflation rate. This cost assumes minor but consistent increases due to the rising costs of supplies and materials.
3. **Water**: Beginning at $500 in 2024, water costs were adjusted by 2.5% annually to reflect expected increases in utility charges over time.
4. **Tags & Licenses**: Starting at $900 in 2024, this cost was projected with the same inflation rate, representing the likely rise in vehicle registration and licensing fees.
5. **AJ Bus Lines – Contract Value**: The contract value of $316,870 in 2024 was increased at a 3% annual rate, slightly higher than inflation, to account for rising labor costs, service improvements, and other operational factors.
6. **Vehicle Maintenance and Repairs:** Maintenance costs began at $27,000 in 2024 and were adjusted at a 2.5% rate annually, reflecting increasing costs for parts, labor, and maintenance services.
7. **Regulatory Compliance & Miscellaneous Costs, including Insurance:** The 2024 cost of $6,000 was increased annually by 2.5% to reflect changes in insurance premiums, inspection fees, and compliance-related expenses.

Table 26: Financial Projections for Specialized Transit Service Operational Costs

Service Type	2024 Budget	2025 Projected Budget	2030 Projected Budget	2035 Projected Budget
Gas	$50,000.00	$51,250.00	$57,984.67	$ 65,604.33
General Stationery & Office	$1,750.00	$1,793.75	$2,029.46	$ 2,296.15
Water	$500.00	$512.50	$579.85	$656.04
Tags & Licenses	$600.00	$615.00	$695.82	$787.25
Huron Lodge – Contract Value	$176,966.00	$182,274.98	$211,306.66	$244,962.33
Vehicle Maintenance and Repairs	$18,000.00	$18,450.00	$20,874.48	$23,617.56
Regulatory Compliance & Other Miscellaneous Costs including Insurance	$4,000.00	$4,100.00	$4,638.77	$5,248.35
Total	**$251,816.00**	**$258,996.23**	**$298,109.71**	**$343,172.02**

The projected costs account for annual increases due to inflation and operational demands. Gas, general stationery, water, tags & licenses, vehicle maintenance, and regulatory compliance are all estimated to rise by 2.5% annually, reflecting historical trends and the need for sustained service quality. The Huron Lodge contract value is projected to grow by 3% per year, considering rising labour costs and potential service expansions.

For the proposed On Demand service

The operational costs reflect the new baseline from 2025 and grow by 2.5% annually, as shown below.

Table 27: Financial Projections for Proposed On-Demand Service Operational Costs

Category	2025	2030 (Projected)	2035 (Projected)
Gas (Fuel)	$40,000.00	$45,256.00	$51,203.00
General Stationery & Office	$3,000.00	$3,394.00	$3,844.00
Water	$500.00	$566.00	$640.00
Tags & Licenses	$3,000.00	$3,394.00	$3,844.00
Driver's Salary	$149,760.00	$169,424.00	$191,598.00
Vehicle Maintenance and Repairs	$18,000.00	$20,362.00	$23,024.00
Regulatory Compliance	$5,000.00	$5,656.00	$6,395.00
Total Operating Costs	$219,260.00	$248,052.00	$280,548.00

7.4.1. Analyzing Long-Term Cost Benefits of On-Demand Transit

To demonstrate the long-term cost benefits of an on-demand transit system over a specialized transit system, we analyzed financial data.

Operational Cost Comparison: On-Demand vs. Specialized Services

Transitioning from Specialized Services to On-Demand Services demonstrates significant cost-effectiveness. In 2025 alone, On-Demand Services are projected to save approximately $32,556 annually. These savings are expected to increase to $50,057 by 2030 and $62,624 by 2035.

Key cost reductions stem from more efficient driver salary allocation and fuel savings through dynamic routing. Additionally, On-Demand services provide the flexibility to operate during evenings and weekends without significantly increasing costs, ensuring broader coverage and better resource utilization. Over time, On-Demand systems offer a scalable, efficient, and adaptable alternative, making them a financially sustainable and practical solution for meeting transit needs.

Proposed Operating Hours for On-Demand Service

When specialized transit is integrated with on-demand services, the proposed operating hours would be as follows:

- **Monday to Wednesday and Saturday**: 7:00 AM to 6:00 PM (11 hours per day)
- **Thursday and Friday**: 7:00 AM to 9:00 PM (14 hours per day)
- **Sunday**: 8:30 AM to 4:00 PM (7.5 hours per day)

This schedule encompasses 4,134 hours of operation annually. With an annual operating cost of $219,260.00, the cost per hour is calculated by dividing the total operating cost by the total hours, resulting in $53.04 per hour.

On-demand transit presents a compelling case as a cost-effective and adaptable alternative to traditional conventional and specialized transit systems. While the annual operating budgets for the conventional system appear lower—$573,134.32 in 2024 with a cost per hour of $47.30—the flexibility and efficiency of on-demand services offset this apparent advantage. On-demand transit's calculated cost of $53.04 per hour remains competitive when compared to other municipalities like Belleville ($60/hour), Calgary ($80/hour), and Niagara Region ($70/hour)[12].

The slightly higher cost per hour for on-demand services is justified by their ability to optimize service delivery, eliminate underutilized routes, and extend coverage to evenings and weekends without incurring substantial additional expenses. Unlike conventional transit systems, on-demand models tailor services to real-time demand, reducing unnecessary mileage and fuel costs while enhancing accessibility for users.

Given its efficiency, scalability, and ability to integrate with existing networks, on-demand transit is well-suited for replacing specialized services and supplementing conventional transit. This shift not only ensures a higher level of service quality and accessibility but also offers long-term cost savings through operational optimization and reduced overhead.

[12] https://cutaactu.ca/wp-content/uploads/2023/08/CUTA-On-demand-transit-toolkit.pdf

8. Marketing Strategies

A comprehensive marketing strategy is essential to raise awareness of both existing services and proposed changes and encourage greater usage of Elliot Lake's public transit. This strategy will emphasize the key benefits of using public transit, such as cost savings, positive environmental impact, and overall convenience, to enhance user satisfaction and community engagement further.

To reach diverse audiences, we recommend using a blend of traditional and digital marketing channels. Traditional media like flyers, local newspapers, and radio ads can connect with residents who may not actively engage online. Meanwhile, digital channels, including social media, the City's website, and email newsletters, will help reach a broader audience and drive engagement with younger and more tech-savvy riders.

Marketing Channels

- Utilize a mix of traditional (flyers, local newspapers, radio) and digital channels (social media, email newsletters, website).
- Partner with community leaders to amplify transit awareness through budget-friendly strategies such as traditional media, social platforms, and community outreach events. These methods, though not financially demanding, rely on dedicated staff time for effective implementation and public education.
- A coordinated approach can streamline communications across multiple non-paid channels, leveraging internal resources and free local media exposure. This strategy includes timely updates on the city's website, regular email blasts, and digital newsletters to keep the community informed. Public service announcements can be strategically released to reach a broader audience, while social media platforms—such as Facebook, Instagram, LinkedIn, and X (formerly known as Twitter)—enable consistent and engaging outreach. Adding video content across these channels can further enhance engagement, offering a visually appealing way to share transit updates and initiatives with the public.

To ensure organized and targeted outreach, develop a clear plan for each marketing campaign by outlining specific goals, timelines, and budget allocations. Define the target audience and key messaging for each campaign, focusing on the benefits of the transit services, such as cost savings, convenience, and environmental impact. Assign team members specific responsibilities, from content creation to distribution, to ensure efficient execution and accountability.

Establish a tracking system to monitor each campaign's progress and performance, using metrics such as audience reach, engagement levels, and ridership changes. Set up regular check-ins to review these metrics and make adjustments to the strategy as needed. By carefully tracking progress and measuring success, the team can refine future campaigns, ensuring they are cost-effective and resonate with the community.

News Release Guidelines:

Issuing a news release at key moments can help maintain public interest and awareness about transit developments in Elliot Lake. News releases should be strategically timed to highlight notable updates as these news releases inform the community of service improvements and changes that directly impact their commute, such as

- acquisition of new vehicles

- transition to environmentally friendly options, such as zero-emission vehicles
- Introduction of a new route, adjusting existing routes, or adding on-demand transit options

Each campaign should be launched with clear objectives and a plan for tracking its effectiveness. Monitoring performance metrics, such as media coverage, public engagement, and ridership impact, will help gauge the success of each release. Gathering community feedback is equally crucial, as it offers insights into public perception and areas for improvement. Based on this feedback, make any necessary adjustments to ensure that future releases resonate with the community and support Elliot Lake Transit's goals for growth and accessibility. Some of the examples of news releases are presented below.

Radio Ad: Discover the convenience of Elliot Lake Transit! Our reliable and fast transit service is here to get you where you need to go. With regular routes running Monday to Wednesday and our new On-Demand Service available Thursday and Friday evenings, as well as weekends, we're making it easier than ever to travel across town on your schedule. Whether it's shopping, visiting friends, or a night out, Elliot Lake Transit has you covered! Learn more about schedules and routes at https://www.elliotlake.ca/ Your ride, your way—only with Elliot Lake Transit

Public Service Announcements (PSA)

Effective Date: Starting April 15:

The City of Elliot Lake Transit is excited to announce expanded services to better meet the needs of our community! Beginning April 15, we're offering daily transit service across all four routes for an affordable fare of just $3. Regular bus service will be available from Monday to Wednesday, from 7 AM to 6 PM. For added convenience, our new On-Demand Service will be available on Thursday and Friday evenings as well as weekends, providing flexible transportation options that work around your schedule.

Explore Elliot Lake with ease and affordability! For more details on routes, schedules, and how to book an on-demand ride, visit us at https://www.elliotlake.ca/