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## Request for Decision

### Draft Greater Sudbury Transit Action Plan - Better Routes. Better Schedules. Better Service

#### Resolution

THAT the City of Greater Sudbury directs staff to undertake a public engagement process to provide information on the draft recommendations outlined in the Draft Greater Sudbury Transit Action Plan;

AND THAT the final Greater Sudbury Transit Action Plan recommendations be brought forward for approval by April 2018, as outlined in the report entitled "Draft Greater Sudbury Transit Action Plan", from the General Manager of Community Development, presented at the City Council meeting on January 23, 2018.

#### Relationship to the Strategic Plan / Health Impact Assessment

This report supports the Strategic Plan adopted by the City of Greater Sudbury, as it aligns with the Sustainable Infrastructure Priority, by undertaking a review of the transit system with a focus on reliability, convenience and safety, as well as connecting neighborhoods and communities. The Greater Sudbury Transit Action Plan will have a positive impact on Population Health within the Healthy Streets Priority, as it will provide recommendations to improve Transit Services with priorities identified by the Community, increasing the choices of efficient sustainable modes of transportation.

#### Report Summary

On June 13, 2017, a report was presented to Council providing information on the Greater Sudbury Transit Action Plan's objective, work plan and key milestones. On November 22, 2017, a report was presented to Council providing information on the Phase I Public Engagement Update. This report serves to provide the Draft Greater Sudbury Transit Action Plan preliminary recommendations based on Phase I and Phase II of the work plan.

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## **Financial Implications**

The cost of all projects approved under the Public Transit Infrastructure Fund program were approved under the 2017 Capital Budget.

## **Background**

In collaboration with the community and its partners, the City of Greater Sudbury (City) is undertaking a comprehensive review of the Greater Sudbury Transit System. Called the "Greater Sudbury Transit Action Plan. Better Routes. Better Schedules. Better Service", The project and its resulting recommendations seek to outline the key service, infrastructure and supporting measures the City can take immediately and into the future to further improve how transit serves and connects Greater Sudbury.

The Greater Sudbury Transit Action Plan is made possible by the Canada-Ontario Public Transit Infrastructure Fund (PTIF). The Canadian transit consulting firm Transit Consulting Network (TCN) and its associates have been retained to lead the Transit Action Plan project on behalf of the City.

This report presents the Draft Greater Sudbury Transit Action Report (Appendix A) and preliminary recommendations drafted by the Transit Action Plan project team. These recommendations address key issues and opportunities, provide system-wide service proposals and supporting strategies for proposed improvements to infrastructure, fares and customer care.

## **Transit Action Plan Goal**

Greater Sudbury Transit already provides safe, reliable and affordable transportation services to more than 4 million passengers each year. The ultimate goal of the Transit Action Plan has been focused on how the City can build on this further. It looks at how the system's existing resources (buses, staff and hours of service) can immediately be deployed differently to be as attractive as possible to customers, best serve the community now and help position the system for further improvements in the future.

The Greater Sudbury Transit Action Plan aims to:

- Undertake a comprehensive review and detailed analysis of the local public transit system: all community areas, all types of services
- Hear feedback from the transit passengers, staff, stakeholders and the larger community
- Consider all opportunities to maximize transit efficiency and effectiveness
- Identify improvements to service, infrastructure and other supporting initiatives over the short, medium and long terms, with prioritization based on citizen input
- Build public awareness and support of Greater Sudbury Transit Services

## **Project Methodology, Engagement and Analysis**

The Transit Action Plan has examined all transit services within the City of Greater Sudbury and across all of its geographic areas. It has included the full family of transit services offered by the City:

- Conventional Transit delivered by buses serving routes and stops in higher population areas.
- TransCab delivered by partner taxi companies to designated areas that are not easily accessible by Greater Sudbury Transit buses and which offer connection to Conventional Transit.
- Handi-Transit provides transportation to persons who have physical disabilities and are unable to use the Conventional Transit services.

Analysis of the system included review of the following:

- Community plans and demographics.
- Extensive engagement feedback from passengers, front-line staff, community leaders, stakeholders and the public.
- Detailed analysis of ridership and on-time performance data by service, day, route and stop and a comparison of the system to its Ontario peers.
- Site visits and fieldwork by the project team to observe the system in action.

Based on this analysis, it was observed that while the conventional system compares well to its peers in terms of the passengers it carries for every hour of service delivered (25.6 vs. the average of 22.8), there are a number of system-wide service and supporting strategies that can be undertaken to improve the service.

The analysis also found that the existing TransCab and Handi-Transit services provide very good value to the community when compared against other approaches used in peer communities. Key areas of improvement in these services include better coordination between services, making it easier to book travel and more clearly communicating to residents how these services work and that they are a viable and integral part of the system's family of services.

## Key Issues and Opportunities

The detailed analysis of service and public feedback shows that there are a number of key areas where existing system resources can be used differently to serve today's community needs, attract more customers and build a foundation for further transit system improvement and investment in the future. These include:

**System reorganization to improve clarity, directness, frequency and reliability** – Greater Sudbury's existing route structure is confusing, hard to understand for new users and dilutes potential frequency by spreading service across many streets. Focusing heavier ridership service on key corridors with complementing feeder services would enable the system to put more frequency where it is needed most, shorten travel times and provide the time necessary to improve reliability.

**A more organized and innovative approach to outlying areas** – This includes better defining and communicating the extent of these services and how Conventional transit, TransCab and potentially Handi-Transit service coordinate together to serve resident needs.



**A balance of investment** – There are two key strategies for attracting further ridership on the Greater Sudbury Transit System: [1] making it easier for existing users to take it more often; [2] attracting new users, particularly commuters. Priorities for the first centre on increasing frequency and hours of operation on Sundays. Priorities for the second focus on improving service on weekdays, particularly during the peak commuting periods. As it moves forward, the system needs to strike a balance between both types of investment in order to diversify and grow its ridership.

**A more integrated accessible service** – There are a number of strategies that will be needed to ensure that Handi-Transit services meet Accessibility for Ontarians Disability Act (AODA) requirements, improve customer booking options, customer travel experience and expand eligibility. Enhancements are also needed to better enable some registrants to use TransCab and conventional transit to complete some or all of their trip needs that precludes the need for advance bookings so that trips can be taken dynamically; this would enable qualifying registrants to be more integrated with the community.

**Integrated infrastructure, fare, customer information and policy improvements** – There are many specific improvements that can be made to each of these components that will in turn leverage the ridership gained through recommended changes to routing, schedules and service levels.

## **System-Wide Service Proposals**

A number of service changes are recommended to address issues and improve the overall effectiveness and efficiency of the Greater Sudbury Transit System. Overall, this strategy focuses on significantly restructuring the Conventional and TransCab services to make the service easier to use, more reliable and better matched with ridership. This proposed service restructuring includes:

**Reducing the overall number of routes and improve directness.** The proposed revised structure creates high frequency routes on key corridors and also combines routes so that more origins and destinations are served without transfer. The changes mean that fewer routes will need to travel to the Downtown terminal to transfer. It reduces the number of routes from 38 to 21, making it easier for customers to understand the services, plan their trip and navigate the system. To the extent possible, it will also eliminate one-way loops and low performing deviations to make service as direct as possible.

**Providing Sunday service and weekday late evening service on all routes.** Currently the existing system uses separate routes and numbering depending on when service is operating. The proposed revised service makes routing and numbering consistent throughout all days. It also increases the level of Sunday service, a key point of feedback from the community.

**Improving reliability.** All proposals will use revised schedule trip length times (also known as running times) that reflect the reality of current conditions to ensure that the new service can operate on-time and serve customers' needs reliably. Transfers will be coordinated to the extent possible and timed to reduce waiting times for customers and ensure seamless connections.

**Matching service to demand.** An overall network strategy has been developed that revises system structure and presents it in layers:

- Frequent routes to provide the most direct and highest frequency services to meet the most common travel patterns and highest ridership areas of the City. Mobility Hubs will be created along the routes, providing opportunity to coordinate other levels of service. This route layer becomes a blueprint for what could evolve into a Bus Rapid Transit system.
- Core routes to offer support to the higher frequency services in the urban core.
- Neighbourhood routes with slightly lower frequency to provide service closer to home for those who may be less able to access the frequent and core routes.
- Community Connectors to provide clear and easy-to-use connection between outlying communities and key destinations in the core.
- On-Demand (TransCab) Service Areas to provide convenient on-demand travel between homes in less-populated areas to Community Connectors or Handi-Transit services.
- Handi-Transit throughout the area for those eligible passengers with disabilities that prevent them from using the other services some or all of the time.

The key benefit of the proposed revised transit system network structure is that it reallocates service from areas with too much service to where it is needed most. It also uses coordinated combinations of service types to improve access and service levels in outlying communities based on demand.

## **Supporting Strategies: Proposed Improvements to Infrastructure, Fares and Customer Care**

Complementing the system-wide service proposals, a number of other improvements are recommended as supporting elements of the transit system. These include:

Improving infrastructure through the provision of more shelters and benches at stops and terminals. This includes a recommendation for standardizing bus stop infrastructure, and consideration of elements like improved way-finding and next-bus schedule information at terminals. Land use planning considerations and integration with continued improvement to the City's sidewalks and pedestrian/cycling infrastructure will also support transit usage.

Restructuring fares to reward regular users and encourage ridership by considering a slightly higher cash fare with lower discount fares for passes and tickets, as well as consideration around other fare pricing policies, such as easing the time restrictions on transfers and allowing transfers to be used on any route and any direction.

Improving customer experience with implementation of Smart Card technology and real-time passenger information. It is also recommended that an additional staff member be considered for Greater Sudbury Transit to provide enhanced community liaison and marketing, promotion and Transportation Demand Management initiatives and ensure overall customer care for the system. This position could also organize travel

training programs to make it easier for new customers to learn how to use the system. Security, safety and cleanliness should be considered a priority to ensure trust and comfort in the service.

Improving Handi-Transit / TransCab coordination by partnering with a third party able to provide accessible vehicles, and expanding TransCab to current Handi-Transit boundaries. This would allow TransCab to become the extension for Conventional services and for some trips Handi-Transit.

## Next Steps

The Draft Greater Sudbury Transit Action Plan is being provided to the City of Greater Sudbury Council for their consideration and approval to move forward with the next phase of public engagement. The next steps in the plan process are to:

**Conduct Public Engagement on all Proposals** – Similar to the extent of engagement used in Phase I engagement, this engagement would include on-line materials and a survey, open houses and traditional and social media to provide information on the draft proposals to the Greater Sudbury public and request their feedback.

- This engagement would include direct outreach to all people and stakeholders who were a part of Phase I engagement workshops to provide them with an update on the proposals that have resulted from their feedback to-date and to invite them to participate in the open houses and surveys.
- This phase of engagement would also include open houses at each of the City's major post-secondary institutions: Laurentian University, Collège Boréal and Cambrian College.

**Revise and Confirm Final Proposal Details** – Based on public engagement feedback, all service and supporting measure proposals will be revised and further details will be confirmed, including recommended priorities for implementation and associated refined financial implications.

**Revised and Finalize Transit Action Plan** – All materials would then be finalized and the resulting revised Greater Sudbury Transit Action Plan would be presented to Council.

## References

City Council Meeting, June 13, 2017, Greater Sudbury Transit Action Plan – Better Routes. Better Schedules. Better Service.

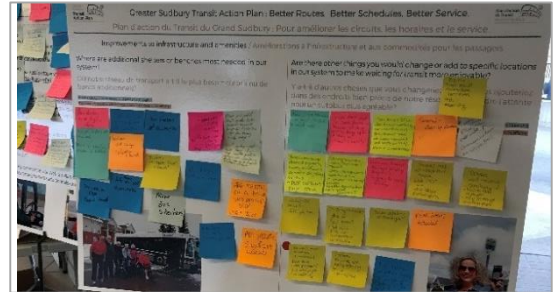
(<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1129&itemid=13378&lang=en>)

City Council Meeting, November 22, 2017, Greater Sudbury Transit Action Plan – Update (<https://agendasonline.greatersudbury.ca/index.cfm?pg=agenda&action=navigator&id=1137&itemid=14091&lang=en>)

# Greater Sudbury Transit Action Plan

## Draft Report

December 14, 2017



Transit Consulting Network

### **Acknowledgements**

In collaboration with the City of Greater Sudbury, the Transit Consulting Network and its project partners would like to thank all those Greater Sudbury-area community members who provided their feedback and ideas into this process. In particular, the residents, staff, community leaders and organizations that provided input at Transit Action Plan open houses, workshops, through online surveys and through one-on-one interviews.

The project also gratefully acknowledges the support of the the Canada-Ontario Public Transit Infrastructure Fund (PTIF).

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# 1 INTRODUCTION: GREATER SUDBURY'S TRANSIT ACTION PLAN

Connection is at the heart of great cities.

Whether it be connecting to each other, to employment and education opportunities, healthcare or the daily basics of life, that connection is what makes communities thrive.

As a fundamental part of the City of Greater Sudbury's transportation network, Greater Sudbury Transit already plays a key role in making connection possible for residents: the system provides safe, reliable and affordable transportation service for more than 4 million passengers each year. Positioning the City for further prosperity and success means celebrating the role that transit already serves and also taking the time to carefully consider how it can meet even more resident needs now and into the future.

The **Greater Sudbury Transit Action Plan** is a comprehensive review of the local public transit system with the goal of achieving better routes, schedules and overall service. Led on behalf of the City by the Transit Consulting Network (TCN), a consortium of public transit specialists from across the country, the Transit Action Plan has been collaboratively developed with City staff, community leaders, passengers, stakeholders, and the community at large. Encompassing all types of service and all areas of the community, the Transit Action Plan is the most comprehensive review of public transit in the City's history.

## Greater Sudbury Transit Action Plan Overall Objectives:

- Undertake a comprehensive analysis of Greater Sudbury Transit routes, service levels and service models, including Handi-Transit and TransCab service.
- Hear from transit passengers, staff, stakeholders and the larger community about how transit can continue to improve to meet the City's diverse transportation needs.
- Consider all potential opportunities to improve the efficiency and effectiveness of Greater Sudbury Transit.
- Identify potential recommended service, infrastructure and related improvements.
- Build public awareness and support of Greater Sudbury Transit and its services.



The objective of the study has been to develop an integrated transit service plan that undertakes a detailed analysis of the existing system and builds on the many examples of existing successes. Even more importantly, the goal of the Plan is to create an actionable path to implementing improvements to the system – Better routes. Better schedules. Better service. These improvements incorporate best practices in route/ service design, infrastructure and technology tailored to meet the unique needs and environment of Greater Sudbury and its resident and business priorities.

The project is made possible through the Canada-Ontario Public Transit Infrastructure Fund (PTIF). The Government of Canada is cost-matching a municipal investment of \$500,000 for the plan and resulting infrastructure improvements under the administration of the Ontario Ministry of Transportation.



## 1.1 Project Key Questions

A successful transit system is made up of many different components that must all function together and be at their best in order to serve people well. This includes routes, schedules, infrastructure like bus stops and terminals, vehicles, fares, customer information, supporting technology, and policies.

At the same time, a community's population, the location of its key destinations, economic factors and its physical shape and road network also influences how efficiently and effectively its transit system can perform. Creating a viable path to improving transit depends on carefully considering all of these system-level and community aspects together.

Therefore, the Greater Sudbury Transit Action Plan has considered all of these components individually and in a holistic way. The highlight box below describes some of the key questions that the project team has asked during this process to guide the Plan's development.

However, the ultimate goal and challenge of the Transit Action Plan has been focussed on how the system's existing resources—buses, staff and hours of service—can immediately be deployed differently: **How do we make adjustments to Greater Sudbury Transit that will meet community needs to the extent possible within the existing 170,000 revenue hours of transit service provided today?**

Through all of its analysis and recommendations, the Greater Sudbury Transit Action Plan has sought to answer that key framing question, as well as to create a revised structure that will serve as the foundation for future investment and improvement.

### In Focus: Transit Action Plan Key Questions

**Beyond its general goals, the Transit Action Plan also set out to seek answers to the following specific questions:**

- What is the **optimal route/ schedule design** for the short- and long-term?
- What **route design principles** and service standards should be employed moving forward?
- What transit **infrastructure** (e.g. bus stop location and design) will be needed to support the transit service plan?
- What is a best practices **transit fare pricing** policy to reduce cash, grow ridership and increase revenues?
- How will **Accessibility** for Ontarians with Disability Act (AODA) legislation impact conventional transit and specialized transit operations?
- How can **technology** build on the existing Automatic Passenger Counter (APC) system?
- How can the results of this study help the City better qualify for **future external funding** programs such as the Public Transit Infrastructure Fund?
- Are there alternatives to the **existing business model**?
- How can the City's **land use and development policies** also be refined to enhance transit?

**To address the questions, the study addressed future services relative to an action plan that will:**

- Focus on transit operations and the unique Greater Sudbury environment and roadway network.
- Update route and service design principles based on what both transit customers and non-transit users are saying to make transit more convenient and, increasingly, the mode of choice.
- Understand growing expectations of seniors who are making up a larger portion of the population.
- Appreciate the expectations of the millennial generation and new Canadians who tend to defer auto ownership and seek lifestyles less reliant on owning a car.
- Embrace the 'family of services' transit concept that provides layers of different types of transit services to best serve Greater Sudbury's diverse resident needs and development patterns within the community.

## 1.2 Project Collaborative Process and Timeline

Building community-wide support for the Greater Sudbury Transit System and this Plan's resulting recommendations has been of paramount importance. Therefore, the Transit Action Plan process has been based on unprecedented community engagement that has been inclusive and transparent.

The Transit Action Plan has heard from community leaders and staff, existing transit users and future users through a wide array of in-person and on-line techniques. These techniques have included online and paper surveys, a stakeholder workshop, post-secondary school round tables, open houses at the system's main transit terminals and "pop up" open houses at high traffic locations around the community (grocery stores, libraries, shopping centres, etc.).



*Some of the many open houses and workshop events held as part of the Transit Action Plan's Phase I engagement.*

The overall Transit Action Plan process consists of three phases:

- Phase I: Critical Evaluation of Existing Transit Issues and Opportunities** - This phase analyzed the system's current performance, documented community needs and determined the system issues and opportunities that were used to form recommendations in Phase II. The focus of engagement in this phase was on hearing from the public to tell us what's working and what's not. Data was collected and analyzed to support what is brought forward by the public, and has been used to substantiate key findings and recommendations.
- Phase II: Creation of Draft Report and Preliminary Proposals** – Building from the information collected in Phase I, this phase culminated with the development of preliminary recommendations for this system. This includes creating the draft long term and short-term route networks, service plans, policies, infrastructure and supporting measures that will be used to further improve Greater Sudbury Transit over the short, medium and long term. Engagement in this phase has been undertaking detailed refinement of preliminary proposals with transit system staff, City leaders and key community representatives. **This is the project phase currently underway.**
- Phase III: Collaboratively Refine Draft Recommendations and Finalize Review** – This phase presents the information collected to date and resulting preliminary recommendations back to the public to enable the community to help refine and prioritize proposals. The revised report is then finalized and presented based on that feedback.

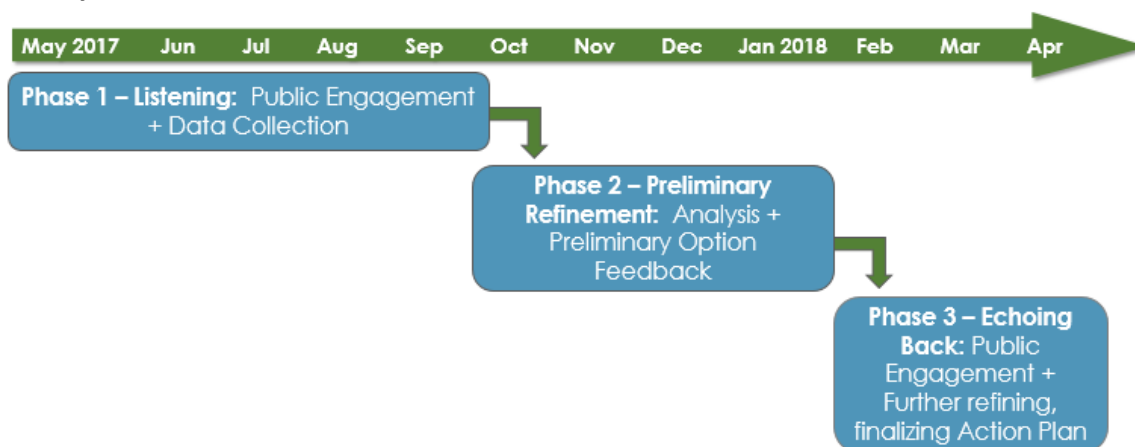
#### In Focus: Phase I Engagement Results

In Phase 1 of the Transit Action Plan, over 2,000 citizens directly provided input into the process, with an even larger informed of the process through the associated media, social media and advertising.

Greater Sudbury Transit Action Plan Phase I Engagement Quick Facts	
Online Survey Respondents	1,752
Paper Survey Respondents	23
Workshop Participants	51
Open House Participants	350+
Number of Public Open Houses	16
Number of Transit Staff Open Houses	2
Number of Advisory Panel Workshops	3

The detailed engagement results and comments have been a key source of information for the project team's further analysis recommendations. Engagement Highlights can be found following the Draft Plan Report while Section 3 summarizes key findings with respect to each aspect of existing service and current performance.

#### Project Key Phases and Timeline:





## 2 FOUNDATIONS: THE LINK BETWEEN TRANSIT AND THE COMMUNITY

In order to succeed, there must be a clear interrelationship between the larger goals and objectives of the City of Greater Sudbury, its residents and those of the transit system.

This section describes how larger community plans and goals shape the Transit Action Plan and, in turn, how a robust and healthy transit system benefits the community. The changing demographics and economic picture of the City are also explored, along with their implications for future transit passenger markets and growth.

### 2.1 Greater Together – Transit and Greater Sudbury’s Larger Strategic Goals

The City of Greater Sudbury is well known as a desirable place to live given its evolving and growing diverse economy, multiple post-secondary education institutions, status as a Northern Health Centre, and its prominence as an international centre for mining research. This overall economic picture means that transportation patterns within the region are fairly diverse and encompass many different potential passenger markets for transit.

At the same time, Greater Sudbury is a “community of communities,” with a population of over 160,000 residents spread over an area of 3,267 km<sup>2</sup>. Again, the diversity of these population centres and the scale of the overall City makes it unique. It also means that any transit solution needs to align with this diversity and balance best practices from elsewhere with the specific goals and context of the City to create a truly “Made in Greater Sudbury” approach.

To ensure that the Transit Action Plan builds on and is in line with recent municipal initiatives, the Plan process has examined how key recent City documents have provided direction with respect to transit system goals. These City of Greater Sudbury documents include *Greater Together 2015-2018 Corporate Strategic Plan*, *Greater Sudbury Transportation Master Plan Report Executive Summary* (January 2017 TMP) and *Greater Sudbury Official Plan* (2016).

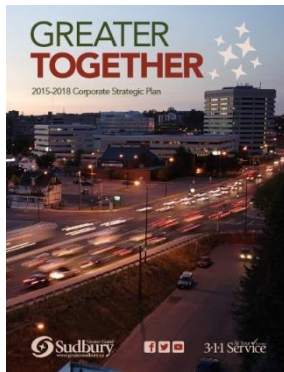
The following provides an overview of each of those documents and how they interrelate with and guide the Transit Action Plan.

#### In Focus: Overall Guiding Direction to the Transit Action Plan from Existing City Documents

When considered together, the key directives to the Transit Action Plan from the City’s *2015-2018 Corporate Strategic Plan*, *Transportation Master Plan* (2017) and *Official Plan* (2016) are as follows:

- Creating a transit system that focuses on **reliability, convenience and safety**, as well as **connecting neighbourhoods and communities** within Greater Sudbury.
- Providing **quality multimodal transportation alternatives** for roads, transit, trails, paths and sidewalks, and supporting multi-modal strategies.
- Meeting ‘**complete street**’ and **active transportation** requirements since all transit customers are pedestrians while some are bicyclists.
- Offering **more direct transit travel** so that transit can better compete with auto travel.
- Implementing **transit supportive land use** and site design guidelines that in turn support the effectiveness of transit.
- Recognizing that Greater Sudbury has transitioned to a **service-based economy**.
- Expanding employment opportunities especially for **younger persons**.
- Meeting transit expectations of many **new Canadians** who have immigrated to Sudbury from other places with high usage of transit.
- Having the **infrastructure in place to support transit** service initiatives and service expansion into new planned developments.

### Greater Together, 2015-2018 Corporate Strategic Plan<sup>1</sup>



This Strategic Plan sets out the City of Greater Sudbury's overall priorities, goals & initiatives. Sustainable Infrastructure, is one of four key pillars with Priority D, "Provide quality multi-modal transportation alternative for roads, transit, trails, paths and sidewalks and connect neighbourhoods and communities within Greater Sudbury."

This document is important to the Transit Action Plan because it provides strategic Council support for transit in Greater Sudbury, as well as the specific direction to complete the Transit Master Plan and review and modify the transit system with a focus on reliability, convenience, safety and connecting neighbourhoods and communities.

### City of Greater Sudbury, Official Plan (Updated October 2017) <sup>2</sup>



The Official Plan (The OP) is a blueprint to help guide Greater Sudbury's development over the next twenty years. It establishes the City's long-term goals, shapes policies and outlines social, economic, natural, and built environment strategies.

The Official Plan is important to the Transit Action Plan because it provides transit supportive land use and transportation policies to encourage and promote transit use. It also notes that increased transit use can help the City improve air quality and achieve Kyoto air emission targets and alleviate traffic congestion on arterial roads.

Some of the specific directions related to transit in the Official Plan include:

- Clearly stating that "public transit remains a key component of the transportation network."
- Outlining policies that increase capacity, the attractiveness and operational efficiency of transit.
- Focussing development proposals within 500 metres walk distance of a bus stops.
- Siting buildings close to the street to reduce walk distances.
- Integrating walkways with transit stops and trail systems.
- Intensifying residential development (higher densities) within existing urban areas.

#### In Focus: The Critical Link Between Land Use and Transit

A key element of the Official Plan is determining the zoning and policies for land use and development that guide how intensively areas will be used.

While "density" is relative and will look different in each community--apartment buildings in some areas, smaller houses or in-fill houses in others—in general, the more people who live and work within proximity to existing transit services, the more effective and efficient those services will be.

Besides supporting transit, focussing new development in these existing areas also tends to help create communities where residents can more easily access services by walking and the continued support of healthy, vibrant places.

<sup>1</sup> Greater Together 2015-2018 Corporate Strategic Plan:

[https://www.greatersudbury.ca/sudburyen/assets/File/Comms/2015%20Council%20Strategic%20Plan%20EN%20\(2\).pdf](https://www.greatersudbury.ca/sudburyen/assets/File/Comms/2015%20Council%20Strategic%20Plan%20EN%20(2).pdf)

<sup>2</sup> City of Greater Sudbury, Official Plan (2016):

[https://www.greatersudbury.ca/sudburyen/assets/File/Comms/2015%20Council%20Strategic%20Plan%20EN%20\(2\).pdf](https://www.greatersudbury.ca/sudburyen/assets/File/Comms/2015%20Council%20Strategic%20Plan%20EN%20(2).pdf)

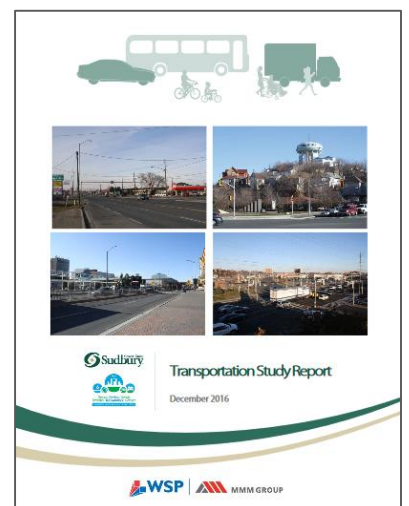
- Providing pedestrian walkways to transit stops.
- Providing transit service economically to new institutional uses.
- Creating road improvements that support transit, such as exclusive transit links or lanes.
- Improving fare collection methods.
- Introducing transit passes and other tools to promote transit.
- Expanding transit routes as part of new subdivision design.
- Improving bus stops integrated with shelters, route information displays, bus bay construction, and addition of bike racks on buses.
- Improving overall accessibility of service consistent with the City's Accessibility Plan.
- Promoting the use of alternative fuels.

### **Transportation Master Plan, City of Greater Sudbury (2016)<sup>3</sup>**

The City of Greater Sudbury's Transportation Master Plan proposes a sustainable transportation network for pedestrians, cyclists, transit and vehicles that accommodates projected demands to the year 2031.

Some of the key findings from the Transportation Master Plan include:

- Transit ridership from 2003 to 2013 has grown 20% and transit trips per capital increased 23% between 2003 and 2011 (census), while the City population increased 2.6%. Much of this increased ridership is attributed to the introduction of the U-Pass (full-time undergrad students).
- Most transit trips are between New Sudbury or Laurentian University and the downtown core.
- That in general, transit trips mirror the overall travel demand findings that the majority of afternoon peak period trips are within the City of Sudbury, followed by trips to Nickel Centre, Valley East, Walden, Rayside-Balfour, Capreol, and Onaping Falls, respectively.
- Alternatives to the South Bay Road extension include a focus on improving transit and high occupancy vehicle (HOV) access.



Key recommendations from the Transportation Master Plan which have been considered as part of the Transit Action Plan include the implementation of:

- Transit priority signals at the Ramsey Lake Road intersection and transit-only queue jump lanes.
- Increased transit frequency
- Parking policies at Laurentian University and Hospital that support higher occupancy vehicle use and other Transportation Demand Management (TDM) measures.
- Development of a comprehensive and connected sidewalk system.

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<sup>3</sup> City of Greater Sudbury, Transportation Master Plan (2016): <https://www.greatersudbury.ca/live/transportation-parking-and-roads/roads/draft-transportation-master-plan1/>

## 2.2 The Case to Support Transit Investment

As shown in the above larger strategic plans, transit is seen by the community to be an integral part of City services and the continued success of Greater Sudbury. Supporting these, there are a number of ways that investment in transit supports key City environmental, social and economic goals.

### How Transit Investment Benefits Greater Sudbury

- Improving economic and social development by enabling access to employment, education, healthcare and services, and by providing businesses with better access to employees and markets.
- Improving the development of Greater Sudbury as a livable community by encouraging more efficient and pedestrian friendly land use patterns that reduce automobile dependence.
- Improving mobility, independent living, accessibility, and civic participation for all citizens, regardless of age, ability or income.
- Reducing environmental impacts and congestion since an average transit trip results in less energy use and pollution per person than the same trip made by private automobile.
- Reducing infrastructure costs by decreasing the land, construction, and maintenance costs for expanded roadways and parking facilities.

#### In Focus: Family Economic Gains Through Reduced Need to Own Multiple Cars

The ability to reduce car ownership can have a profound effect on a household's finances and quality of life. The table below from the Canadian Automobile Association shows the true cost of car ownership using a Camry LE.

ANNUAL DRIVING COSTS – based on the Camry LE				
Km driven per year	Annual operating costs (variable)	Annual ownership costs (fixed)	Total cost	Cost per km
12,000 km	\$1,975.20	\$7,179.84	\$9,155.04	\$0.76
16,000 km	\$2,633.60	\$7,494.00	\$10,127.60	\$0.63
18,000 km	\$2,962.80	\$7,494.00	\$10,456.80	\$0.58
24,000 km	\$3,950.40	\$7,801.08	\$11,751.48	\$0.49
32,000 km	\$5,267.20	\$8,373.48	\$13,640.68	\$0.43

For auto owners that drive 24,000 kilometres per year, the total annual cost reported to own and operate a vehicle is \$11,751. Even adjusting this conservatively by 75%, this would still equate to \$8,813 per year or \$734 per month compared to a Greater Sudbury Transit monthly bus pass at \$87 for adults, saving residents \$647 per month.

The savings would likely be spent on local goods and services, improving the quality of life of residents and supporting local businesses.

"I'm 15 and this is my main mode of transportation."

"I choose to use the bus to get to work, better for environment and more economical so I don't have to pay for parking."

"...I love the transit system and wish more people would use it."

"I can collect my grandkids from daycare and bring them home."

*Some of the many participant comments from the first phase of public engagement on how they believe Greater Sudbury Transit benefits the City.*

## 2.3 Emerging Markets: Meeting Greater Sudbury's Changing Population

The table at right shows how Greater Sudbury's population has changed over the last two Statistics Canada Census periods. Age categories highlighted have been aggregated to align with typical transit markets. Total population and the number of recent immigrants—those who have migrated to the City from other countries over the previous five years—are also shown.

In general, this table shows:

Characteristics	Ontario			Greater Sudbury		
	2011	2016	% Change	2011	2016	% Change
Total private dwellings	5,308,785	5,598,391	5%	72,420	76,619	6%
Total Population	12,851,821	13,448,494	5%	163,067	164,689	1%
Average age of the population	-	41		-	42.2	
Population by Age Group						
0 to 14 years	2,180,770	2,207,970	1%	24,980	25,580	2%
15 to 24 years	1,716,545	1,706,060	-1%	21,015	20,025	-5%
25 to 59 years	6,310,535	6,436,665	2%	78,175	77,735	-1%
60 to 74 years	1,769,920	2,112,535	19%	24,295	27,950	15%
75 years and over	874,060	985,270	13%	11,840	13,395	13%
Immigration	2006-2010	2011-2016		2006-2010	2011-2016	
Number of Recent Immigrants*	463,170	472,170	2%	765	1,005	31%

\* Number of people who have immigrated to the location from other countries since the previous census.

Source: Statistics Canada Census Community Profiles, 2011, 2016

The number of youth (aged 15-24 years) who would typically include secondary and post-secondary students has declined somewhat (-5%) but the population of younger children has grown slightly (2%).

- Since younger children are growing into the youth category, this means this market will still continue to be a factor in the system.
- Millennials are by far the most transit-supportive population in decades, environmentally conscious and more technology savvy. Retaining and building on this youth market as they grow older will be key, particularly by continuing to improve frequencies at commuting times and continuing to improve the convenience of the transit experience through technology.

The number of younger seniors (age 60-74 years) and older seniors (75 years and older) are growing substantially (15% and 13%, respectively).

- People are living longer and preferring to age-in-place. In this case, continuing to improve the convenience of transit throughout the day, direct outreach to younger seniors who might not yet have acquired the habit of taking transit or lost their ability to drive, and ongoing accessibility improvements to vehicles and infrastructure can help attract and retain this market.
- Older seniors also have implications for Handi-Transit demand, which can best be supported and managed through clear eligibility guidelines and application processes that ensure that seniors are aware of the full suite of transit services (conventional, TransCab and Handi-Transit) that may be available to them.





While low in absolute numbers, recent immigrants to Greater Sudbury from other countries, as well as internal migrants within Ontario from larger centres, also are a key potential ridership market as these populations often arrive from places where good public transit is the norm. Continued outreach to these groups and development of transit convenience and frequency helps attract and retain these markets.



Beyond just the changes shown to population, Greater Sudbury's economy has also continued to evolve in terms of its diversity and movement to be more service-based. Again, continuing to develop the simplicity of the system and its clear and frequent service to key commercial, service and institutional employers enables residents to use transit to commute. A strong transit system can also be a factor in attracting new employers to the area and it is wise to ensure that any City economic development plans also consider transit as a tool to help attract businesses to fulfill its prosperity goals.

**Key Observation:** A robust policy framework supports the transit system by clearly stating how decisions are made and by creating the community conditions for its ongoing success. The Official Plan, containing goals, objectives and policies to manage and direct change and its effects on the social, economic and natural environment of the municipality should be carefully reviewed and amended to reflect the final recommendations of the Transit Action Plan.

### Summing it Up: The Link Between Transit and the Community Key Findings

- Greater Sudbury's major plans—including its Corporate Strategic Plan, Official Plan and Transportation Master Plan—note the importance of supporting transit and improved multi-modal choice for residents.
- Increasing the directness and reliability of transit travel, and creating supportive land use and infrastructure are seen as some of the key priorities.
- Increased investment in transit benefits the social, economic and environmental well-being of the community in multiple ways, and these benefits were recognized by participants in recent Transit Action Plan engagement.
- Greater Sudbury's population is changing. Improvements to the Transit Action Plan and its service strategies need to address emerging travel needs for a growing population of seniors, a younger generation that is more open and willing to take transit and the arrival within the City of many new Canadians who are already transit savvy based on their experiences in their countries of origin.

### 3 ANALYSIS OF EXISTING TRANSIT SERVICES – ISSUES AND OPPORTUNITIES

Greater Sudbury Transit today encompasses multiple types of services to serve the diverse needs of the community's land area and its population. Some of these services are operated by the City of Greater Sudbury's transit department while others are provided through contract with private operating companies.

Together, these various types of transit serve over four million customers per year. In the opinion of the Transit Consulting Network team, this existing level of ridership and the diversity of service and operating entities already in place presents a strong foundation to build from. The existing level of services dedicated to the system (approximately 170,000 hours of service already allocated per year) also presents a sizable number of resources and the recommendations presented later in this document focus on how those existing resources can be redeployed to attract and carry even more passengers.

The following sections provide first an overview of the system's service types and then a summary of performance and public feedback by service type. A summary of the existing state of infrastructure and other supporting measures (fares, passenger information, technology, etc.) is also included, as well as a comparison of the existing service against its peers.

Key themes are summarized in the last part of this section and present the main issues and opportunities that serve as the framework for the suggested transit system improvements presented in Section 6.

#### In Focus: What Methods Were Used to Analyze Existing Services?

The proposed service changes in the Transit Action Plan were the result of a process of evaluation using many different sources. These included:

- Data on ridership and on-time performance from Automated Passenger Counter (APC) units that are mounted on a selection of the system's conventional vehicles and cycled through the system's routes and trips. These provide very detailed information on system activity by route, route segment and stop.
- Data on fares and boardings from electronic fareboxes on all conventional system vehicles.
- Schedule adherence data from GPS units mounted on all conventional vehicles.
- Ongoing recording and reporting of ridership from TransCab and Handi-Transit services, as well analysis of typical schedules and dispatch sheets.
- Input from front line transit staff, passengers and the public through various methods (see Phase I Engagement Summary).
- Information from the City's Geographic Information System to plot the above attributes, as well as determine numbers of current residents residing within 400m (a typical 5-minute walk) of existing transit stops.
- Historical ridership and financial performance trend information (such as budget information the City provides annually to the Ontario Ministry of Transportation), as well as that of Canadian peers similar in size to Greater Sudbury Transit.
- Multiple site visits and field work by the Transit Consulting Network team members.

For further information, on how APC ridership information and the City's Geographic Information System are used together to analyze service, please also see the In Focus highlight in Section 3.2.

### 3.1 Overview of Existing Services

Greater Sudbury Transit currently operates a “family of services” that includes three types of transit services as detailed in the table below.

*Table 1 – Greater Sudbury Transit’s Existing Family of Transit Services*

Service Type	Description and Market Served	How Service Operates
<b>Conventional Transit</b>	Serves stops in higher population areas using “fixed routes” (i.e. routes that are published) and regularly scheduled trips.	Service is operated by City of Greater Sudbury staff and uses standard-sized (12.2m) fully accessible transit vehicles.
<b>TransCab</b>	Serves lower density and outlying communities within the City that are not easily accessible by Greater Sudbury Transit conventional buses and which offer connection to Conventional Transit at key points.	TransCab trips are contracted to local taxi companies and consist of two types of services: <ul style="list-style-type: none"> <li>• <b>On-Demand TransCab</b> provides service to any point within designated areas and operates on a call-in 90-minute advance booking basis using sedans or vans.</li> <li>• <b>Fixed-Route TransCab</b> uses smaller (7.3m) buses as part of a current pilot project, picking up at designated ‘bus stops’ on a regular schedule and feeding into Conventional Transit.</li> </ul>
<b>Handi-Transit</b> (also known as “Specialized Transit)	Provides on-demand transportation to and from accessible building entrances to persons who have physical disabilities and are unable to use the Conventional Transit services.	Handi-Transit services are operated through contract by a private operating company and use smaller buses to deliver services. Handi-Transit users must be eligible and registered with the system and call ahead to book trips.

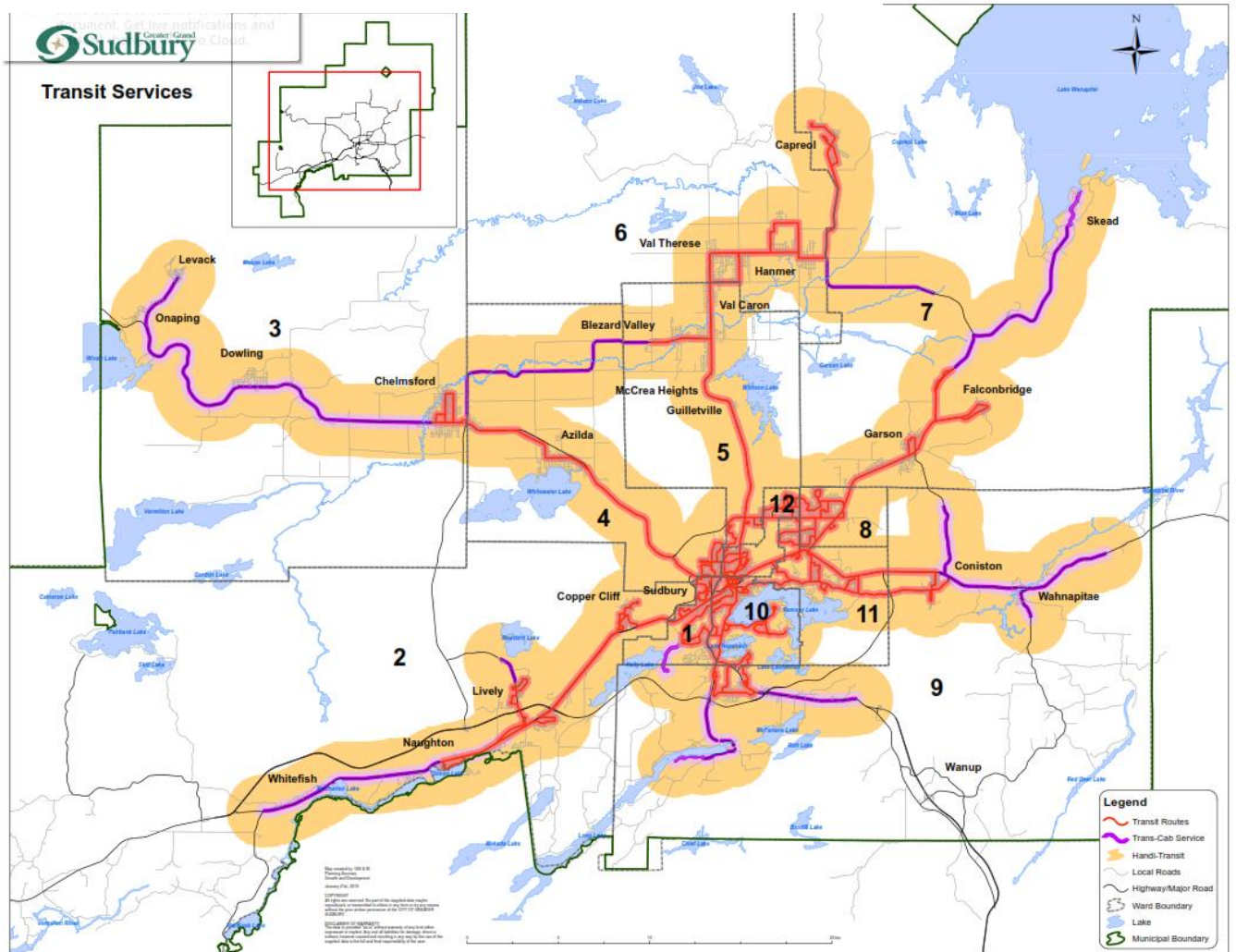
The **Conventional Transit Service** is delivered by 12.2 metre (40-foot) buses serving routes and stops in higher population areas through a regularly scheduled fixed route network system. Greater Sudbury Transit operates with a fleet of 59 accessible buses on 38 routes, seven days a week. These routes cover more than 4.2 million kilometres and provide approximately 4.5 million passenger trips on an annual basis.

Supplementing the Conventional Service, **TransCab Service** is a door-to-door demand response shared service and is delivered by partner taxi companies to nine designated areas that are not easily accessible by Greater Sudbury Transit buses and offer connection to Conventional Transit at key points.

**Handi-Transit Service** provides transportation to persons who have physical disabilities and are unable to use the Conventional Transit services. Handi-Transit services the same area as Greater Sudbury Transit buses and TransCabs, with boundaries that extend three kilometres. The service operates with 15 specialized accessible buses, supplemented with conventional taxi services when necessary. The service covers more than 1.3 million kilometres, and provides approximately 130,000 passenger trips on an annual basis.

**Figure 1 - Greater Sudbury Transit Services** shows the transit service coverage area for the City, including the extent of fixed-route conventional service, TransCab services and the Handi-Transit service area.

Figure 1 - Greater Sudbury Transit Services



### 3.2 Existing Performance by Service Type: Analysis and Public Feedback

There were two activities undertaken to assist in the analysis of the existing transit services. The first activity was to understand and analyze performance by service type based on available data and field work by Transit Consulting Network staff to observe the system in operation. The second was to collect and analyze feedback collected through engagement from front-line staff, passengers, community leaders, stakeholders and residents.

The following section presents the overview and highlights of that analysis by service type.

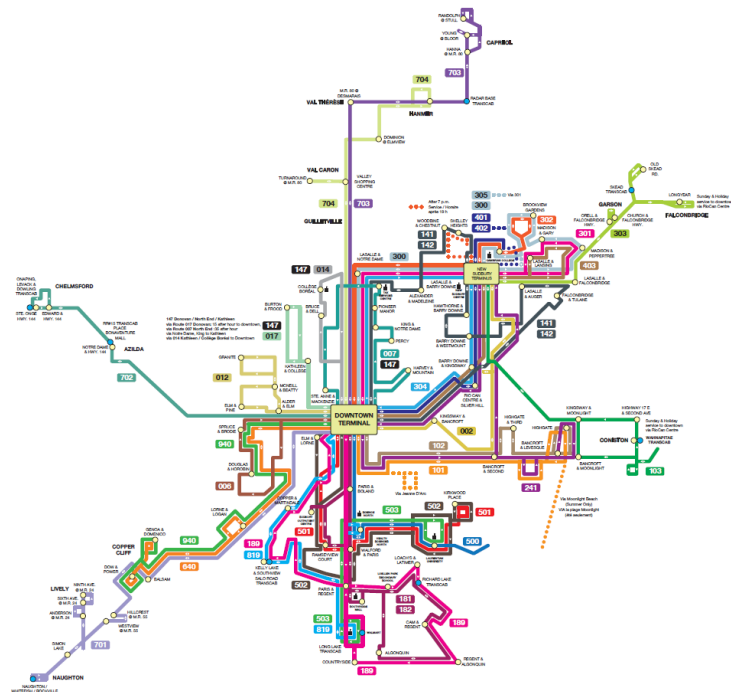
### 3.2.1 Conventional Transit Services

## Conventional Transit Overview

Greater Sudbury's existing conventional transit system operates daily with the exception of Christmas Day and its service spans from approximately 6:00am to 1:30am Monday to Saturday, with a slightly later start time (6:30am) on Sundays and Statutory Holidays.

As shown on the existing service map below, the system encompasses a very large number of routes: 38 in total. Rather than serving distinct areas, this large number of routes is mainly due to the Greater Sudbury Transit existing practice of operating slightly different routes Monday to Saturday before 10:00pm, others after 10:00pm, and others on Sundays and giving these routes corresponding different names and numbers.

Figure2 - Greater Sudbury Existing Transit Route Map



Service frequencies range substantially between routes, with some operating 15-minute service at peak commuting periods (roughly 6:00am to 9:00am and 3:00pm to 6:00pm) and others operate three trips per day. While ongoing routing adjustments to the system have been made, the conventional transit system has not been substantially altered for many years.



### In Focus: Service Area Coverage

Looking at the area covered by existing transit services in any system can provide a sense of the extent to which services are easily available to residents by a short walk. In some cases, this analysis can also illustrate the immense scale of the community served, especially if it is spread out in nature as is the case in Greater Sudbury.

To analyze service area coverage, the City provided maps from their Geographic Information System (GIS) showing the percentage of municipal address points (representing primarily households and businesses) within various actual and crow-fly walking distances to bus routes across Greater Sudbury.

Using 'As the Crow Flies' boundaries:

Distance	Address Points Captured	Total number of Address Points	Percentage
200 meters	33,725	61,972	54.42%
300 meters	40,922	61,972	66.03%
450 meters	45,712	61,972	73.76%

Using Actual Walking Distance boundaries:

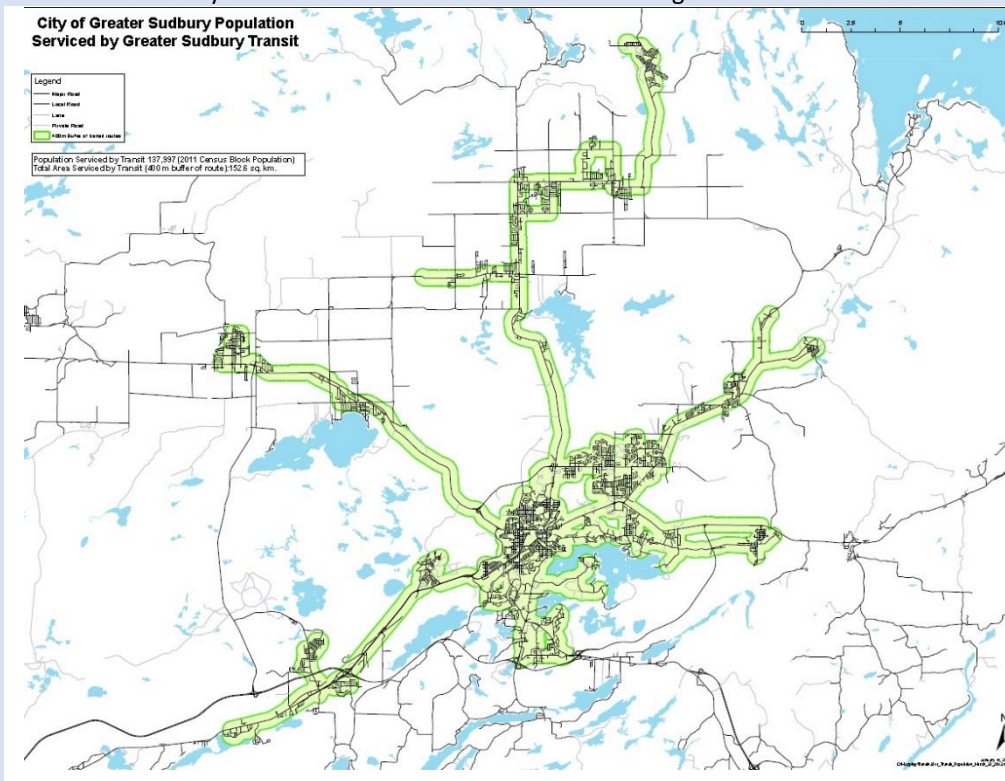
Distance	Address Points Captured	Total number of Address Points	Percentage
300 meters	29,084	61,972	46.93%
450 meters	37,876	61,972	61.12%

Table 2- Walk Distances to Greater Sudbury Transit Routes

As shown in Table 2- Walk Distances to Greater Sudbury Transit Routes, for the entire Greater Sudbury area, 73.7% of the population is within 450 m crow-fly distance and 61% within an actual walking distance of a transit route.

However, when looked at more closely using previous work and studies undertaken by the City, the more urban areas, including more urban areas in outlying communities outside of the urban core, approximately 90% of the population is within 400m walk distance of a transit stop.

This means that while there may be still opportunity to improve access to transit, the general placement of fixed-route services—which always operate most efficiently when they are focussed on higher population areas—is in an appropriate range. It also means that the City may find it useful to supplement traditional walk distance to transit metrics with those that include access to TransCab services.



The following table summarizes the system's routes and their current characteristics.

Table 3 - Schedule Service Summary - Weekdays

Summary of Existing System Service Levels				Weekday						Saturday			Sunday & Holiday			Annual Revenue Hours
				Service Span		Frequency (in minutes)				Service Span		Frequency	Service Span		Frequency	
Route #	Route Name	Area	Candidates for Integration*	First Trip	Last Trip	AM Peak	Midday	PM Peak	Evening	First Trip	Last Trip	(in minutes)	First Trip	Last Trip	(in minutes)	
2	Second Avenue/Shopping Centre	Urban		6:15	22:15	30	30	30	30	6:15	22:15	30	-	-	-	9,088
6	West End	Urban		6:45	22:15	30	30	30	60	6:45	22:15	30-60	-	-	-	3,941
7	North End	Urban		7:30	22:00	60	60	60	60	7:30	22:00	60	-	-	-	2,065
12	McKim	Urban		7:00	21:30	60	60	60	60	7:00	21:30	60	-	-	-	2,076
14	Kathleen/College Boreal	Urban		6:45	22:15	15	30	15	60	6:45	22:15	30	-	-	-	5,815
15	Taxation Special	Urban	✓	15:15	15:45	1 Trip	-	1 Trip	-	-	-	-	-	-	-	119
17	Donovan	Urban		6:23	21:45	30	30	30	60	6:23	21:45	30-60	-	-	-	3,985
101	Howey/Moonlight	Urban		6:40	22:15	60	60	60	60	6:40	22:15	60	-	-	-	4,426
102	Howey/Third Avenue	Urban	✓	7:10	18:45	60	-	60	-	-	-	-	-	-	-	1,390
103	Coniston	Commuter		6:30	1:15	60	120	60	120	6:30	1:15	120	6:40	1:15	120	4,029
141	Westmount/Shopping Centre	Urban	✓	6:40	10:15	4 Trips	-	-	-	-	-	-	-	-	-	854
142	Grandview/Shopping Centre	Urban	✓	14:45	18:45	-	-	4 Trips	-	-	-	-	-	-	-	952
147	Donovan/North End/Kathleen	Urban	*	22:30	1:30	-	-	-	60				6:15	1:30	60	1,854
181	Paris/LoEllen	Urban		6:34	22:45	30	60	30	60	6:34	22:45	60	-	-	-	5,985
182	Ramsey View/Algonquin	Urban		6:45	22:15	30	60	30	60	7:15	22:15	60	-	-	-	5,867
189	Paris/LoEllen/Four Corners	Urban	*	22:30	1:30	-	-	-	60	22:30	1:30	Night -60	6:15	1:30	60	2,142
241	Howey/Moonlight/Shopping Centre	Urban	*	22:30	1:30	-	-	-	60	22:30	1:30	Night -60	6:40	1:30	60	2,117
300	Lasalle/Madison/Cambrian	Urban	*	22:30	1:30	-	-	-	60	22:30	1:30	Night -60	6:35	1:15	60	2,122
301	Lasalle/Madison	Urban		6:12	22:45	30	30	30	30	6:12	22:45	30	-	-	-	9,354
302	Lasalle Cambrian	Urban		7:00	22:00	30	30	30	60	7:00	22:00	30-60	-	-	-	7,680
303	Garson/Falconbridge	Commuter		6:25	1:15	30	120	60	120	6:25	1:15	120	6:26	0:30	120	4,646
304	Lasalle/Shopping Centre	Urban	✓	15:15	19:00	-	-	60	-	-	-	-	-	-	-	669
400	Cambrian Express	Urban	✓	7:15	10:00	30	-	-	-	-	-	-	-	-	-	655
401	Barrydowne/Cambrian	Urban		6:50	22:30	15	15	15	30	7:05	22:30	30	-	-	-	10,983
402	Barrydowne/Shopping Centre	Urban		-	-	-	-	-	-	-	-	-	11:15	19:15	60	600
403	Barrydowne/Madison	Urban	✓	14:45	18:45	-	-	60	-	-	-	-	-	-	-	952
500	University via Paris	Urban		6:40	22:45	15	15	15	30	-	-	-	-	-	-	13,407
501	Regent/University	Urban		6:33	22:00	30	30	30	60	6:38	22:00	30-60	-	-	-	7,927
502	Regent/University/Four Corners	Urban	*	22:30	1:30	-	-	-	60	22:30	1:30	Night -60	7:15	1:30	60	2,082
503	University/South End (FRIDAY AND SAT)	Urban		12:00	19:30	-	45	45	-	12:00	19:30	30	-	-	-	2,579
640	WestEnd/Gatchell/Coppercliff	Urban	*	22:30	1:30	-	-	-	60	22:30	1:30	Night -60	6:38	1:00	60	2,100
701	Lively	Commuter		6:15	1:30	60	120	120	60	6:15	1:30	60-120	6:00	1:30	120	9,226
702	Azilda/Chelmsford	Commuter		6:25	1:30	75	90	75	120	6:25	1:30	90-120	6:20	1:30	120	7,621
703	Val Caron/Hanmer/Capreol	Commuter		6:00	1:15	30	120	60	60	6:13	1:40	75-120	6:06	1:30	120	11,314
704	Blezard/Elmview	Commuter		6:10	22:00	75	120	120	150	6:10	22:00	75-180	-	-	-	4,545
819	Copper/Four Corners	Urban		6:15	22:15	30	60	30	60	6:15	22:15	60	-	-	-	6,151
940	Gatchell/Copper Cliff	Urban		6:15	22:15	30	60	30	60	6:15	22:15	60	-	-	-	6,151
Total:																167,465
* "Candidate for Integration" refers to cases where different route names are being applied to similar services operating at different days and times:																
			✓	Daytime												
			*	Late Evening (1:15 AM & 1:30 AM)												

### Conventional Transit Performance

As described earlier, a number of different sources were used to analyze the conventional system's performance. The following **Table 4 – Annual 2016 Ridership by Day and Type** (Sorted in Ascending Order by Ridership) provides highlights of that analysis.

Route	Route Name	Areas Served	Ridership				Grand Total	% of Total		Connects with TransCab
			Weekday	Saturday	Sunday	Statutory Holidays		Incl. Transfers	Excl. Transfers	
401	Barry Downe/Cambrian	New Sudbury Shopping Centre and Cambrian College	426,386	51,854			478,240	10.4%	11.5%	No
301	Lasalle/Madison	Lasalle/Notre Dame and the New Sudbury Shopping Centre	376,855	57,707			434,562	9.4%	10.4%	No
302	Lasalle/Cambrian	Lasalle/Notre Dame, New Sudbury Shopping Centre, Cambrian College	281,897	40,885			322,782	7.0%	7.7%	No
500	University via Paris	Laurentian University	279,956	864			280,820	6.1%	6.7%	No
501	Regent/University	Laurentian University and some residential areas	226,621	32,696			259,317	5.6%	6.2%	No
2	Second Avenue/Shopping Centre	Second Avenue, Kingsway shopping area, New Sudbury Shopping Centre	195,582	30,443			226,025	4.9%	5.4%	No
819	Copper/Four Corners	South End Walmart, Regent Street, and the Four Corners Area	176,440	22,741			199,181	4.3%	4.8%	Yes
703	Val Caron/Hammer/Capreol	The Valley and residential/shopping area North of the City	156,863	17,453	12,570	2,179	189,065	4.1%	4.5%	Yes
14	Kathleen/College Boreal	Core Area of the City and Collège Boréal.	161,268	16,535			177,803	3.9%	4.3%	No
17	Donovan	Core area of the City West of Downtown	155,320	18,602			173,922	3.8%	4.2%	No
181	Paris/Lo-Ellen	Core area of the City West of Downtown	142,182	17,519			159,701	3.5%	3.8%	Yes
940	Gatchell/Copper cliff	Services Lorne Street and Copper Cliff	136,370	13,732			150,102	3.3%	3.3%	No
182	Ramsey View/Algonquin	Paris St and Regent St	124,030	15,627			139,657	3.0%	3.6%	No
6	West end	Core area of the City to the West of the Downtown	122,960	14,655			137,615	3.0%	3.3%	No
702	Azilda/Chelmsford	Azilda and Chelmsford	108,966	11,140	7,084	1,220	128,410	2.8%	3.1%	Yes
101	Howey/Moonlight	Mostly residential areas	81,014	11,691			92,705	2.0%	2.2%	No
303	Garson/Falconbridge	Shopping area on Kingsway, near New Sudbury Centre, and Falconbridge	47,538	5,899	6,805	1,228	61,470	1.3%	1.5%	Yes
701	Lively	Lorne Street and out to Lively	43,485	4,561	5,272	992	54,310	1.2%	1.3%	Yes
502	University/South end	University to the South End From 10:00 to 15:30	11,377	2,789	23,618	3,169	40,953	0.9%	1.0%	No
704	Bleazard/Elmview	The Valley area	36,062	3,929			39,991	0.9%	1.0%	Yes
12	McKim	Residential areas West of the Downtown	34,305	4,773			39,078	0.8%	0.9%	No
7	North end	North of the Downtown, residential and Notre Dame	34,281	3,672			37,953	0.8%	0.9%	No
300	Lasalle/Madison/Cambrian	Late Night/Sunday Route - Cambrian College, New Sudbury Centre, Lasalle/Notre Dame	15,228	3,099	17,206	2,072	37,605	0.8%	0.9%	No
189	Lo-Ellen/ Copper/Four Corners	Late Night/Sunday Route - South End and Four Corners	9,873	1,985	22,276	3,072	37,206	0.8%	0.9%	Yes
241	Howey/Moonlight/Shopping Centre	Late Night/Sunday Route - New Sudbury Shopping Centre, Costco area	10,856	2,039	18,928	2,628	34,451	0.7%	0.8%	No
103	Coniston	Sunday and Holiday Route - New Sudbury Shopping Centre, Costco area	24,337	2,699	4,917	559	32,512	0.7%	0.8%	Yes
147	Donovan/North end/Kathleen	Late Night/Sunday Route - Donovan, North End, and Kathleen areas	6,975	1,412	19,467	3,006	30,860	0.7%	0.7%	No
102	Howey/Third	Limited Service - 2 A.M. trips, 4 P.M. trips; services Howey Area	29,890				29,890	0.6%	0.7%	No
640	West end/Gatchell/Copper Cliff	Late Night/Sunday Route - Services areas covered by routes 6 and 940	6,678	1,407	14,545	2,201	24,831	0.5%	0.6%	No
305	Lasalle/Peppertree	Late Night/Sunday Route - Lasalle	507		19,925	2,506	22,938	0.5%	0.5%	No
402	Barry Downe/Shopping Centre	Sunday Route - Costco Area and New Sudbury Shopping Centre	595		16,568	1,824	18,987	0.4%	0.5%	No
403	Barry Downe/Madison	Limited Service - 4 trips/day, New Sudbury Centre, Barry Downe/Kingsway	17,616				17,616	0.4%	0.4%	No
304	Lasalle Shopping Centre	Limited Service - 4 trips/day, New Sudbury Centre, Barry Downe/Kingsway	16,986				16,986	0.4%	0.4%	No
141	Westmount/Shopping Centre	Residential area North of Lasalle and around Barry Downe	14,083				14,083	0.3%	0.3%	No
142	Grandview/Shopping Centre	Residential area North of Lasalle and around Barry Downe	11,520				11,520	0.2%	0.3%	No
503	University/South end	Seasonal Additional Service Sept-April - Laurentian University	3,720	4,747			8,467	0.2%	0.2%	No
400	Cambrian Express	Express / Additional Service - Cambrian College	7,576				7,576	0.2%	0.2%	No
15	Express to Tax Centre	Express Trip	4,877				4,877	0.1%	0.1%	No
	Misc		282	115	903	315	1,615	0.0%	0.0%	
	Transfers (All Routes & Service Days)*			434,765			434,765	9.4%	n/a	
	<b>Grand Total</b>		<b>3,875,307</b>	<b>456,619</b>	<b>208,009</b>	<b>29,514</b>	<b>4,610,447</b>	<b>100%</b>	<b>100%</b>	
	<b>Percent of Total</b>		<b>84%</b>	<b>10%</b>	<b>5%</b>	<b>1%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	

\* Transfers are calculated across all service days; amounts have been allocated to totals based on proportion of ridership on each day.

Note: TransCab routes not reflected in the above table.

**Key Destinations** – The largest single ridership generator for the system is the major employment area of the downtown Greater Sudbury core. Other major transit ridership generators include Laurentian University, Cambrian College and College Boreal, New Sudbury Shopping Centre, Kingsway shopping area, Health Science North and the Four Corners.

**Highest Ridership Routes** – The table shows the annual 2016 ridership in ascending order by route number and day type (weekday, Saturday, Sunday and Statutory Holidays). This table shows that the seven (7) highest ridership routes in the system represent more than half of the system's ridership including transfers (57% of total ridership). These routes include:

- **Routes 301 and 302** – providing service along Lasalle and Notre Dame between Downtown and New Sudbury Centre, with also service to the Madison and Cambrian College areas. (Together, 16.4% of total ridership).



- **Routes 501 and 502** – providing service between Downtown, Health Sciences North and Laurentian University via Paris (501) or via Regent (502). (Together, 11.7% of ridership).
- **Route 401** – providing service between Cambrian College, New Sudbury Centre and Downtown via Barry Downe. (10.4% of total ridership)
- **Route 2** – providing service between Downtown and New Sudbury Centre via Second Avenue and shopping areas on Kingsway. (4.9% of total ridership)
- **Route 819** – providing service between Downtown and the South End, WalMart and Four Corners area. (4.3% of total ridership)

The remaining thirty-one (31) routes represent the balance of ridership (43%). Of these, the next nine highest ridership routes carry 30% of total ridership, with the remaining 23 routes are each responsible for 1.5% or less of total ridership, or the remaining 13% together.

**Key Observation:** The patterns shown by destinations and route ridership indicate there are already key corridors in the system that are driving the overall performance of the service and which would likely respond well to further frequency and investment.

**Performance by Service Day** - A helpful way to review transit system performance is to not just consider ridership alone but also service hours. Each hour of service operated by a transit vehicle on the road collecting bus fares is one service hour. Ideally, hours of service (the “supply” of transit) are adjusted to match demand.

- As shown on Table 5 - 2016 Revenue Hours, Riders and Riders per Hour, Saturday ridership levels approximate 12% of weekday levels (417,270/3,541,000), however, Saturdays have 28% (151 hours) fewer daily hours of service (538 hours versus 387 hours). Sunday ridership is 46% of weekday demand (190,000/417,000) while service is 60% (323 hours) less than weekday service (538 hours versus 215 hours). Sundays also have a different routing network than the Monday to Saturday network with less coverage and service frequency resulting in transit customer comprehension challenges.

Annual (Day Type)	Revenue Hours		Riders		Riders Per Hour
	No.	%	No.	%	
Weekday (Monday - Friday)	135,740	81%	3,541,357	85%	26.1
Saturday	20,127	12%	417,270	10%	20.7
Sunday	11,229	7%	190,084	5%	16.9
Total	167,096	100%	4,148,711	100%	24.8
Average "Day"	No.	% Change with Weekday			
Weekday	538.7	n/a			
Saturday	387.1	28%			
Sunday	215.9	60%			

Table 5 - 2016 Revenue Hours, Riders and Riders per Hour

**Key Observation:** This analysis would seem to indicate that a higher level of service and coverage would be warranted on weekends, particularly Sundays.

**Route Load Profiles** - Boardings and alightings by bus route, direction (outbound from the downtown Greater Sudbury core and inbound to the core) and by bus stop were available from the Automatic Passenger Counters (APCs) installed in 10 buses (out of a total active fleet of 59 buses). In general, the route load profiles showed:

- Overall, there appears to be a high comfort level provided to transit customers with most being accommodated with seats and few standing, with the exception of standing passenger loads on some trips to Laurentian University and New Sudbury.
- In some cases, what would otherwise be standing passenger loads have been addressed through additional buses inserted into the schedules to increase the normal frequency at key times.

**Key Observation:** In certain areas, buses are following each other at the same time (known as double headers). The service hours could instead be invested in increasing the frequency in a schedule, where a passenger would then have more choices in departure times. Route loads would eventually be balanced without having to send two buses at once.

#### In Focus: How Detailed Analysis Was Conducted for Each Route

The proposed service changes in this Transit Action Plan were the result of a process of evaluation using route data on ridership from the Consat APC (Automatic Passenger Counter) system and the GFI electronic fareboxes that record passenger fares and boardings. This data is used to evaluate exactly when and where higher or lower ridership is happening so that service can be adjusted to better match demand.

As part of the analysis process for each route, the project team first examined passenger boardings in half hour intervals to identify times where ridership fell below service standard thresholds or presented anomalies. As part of the next step, they then looked at when and where ridership was occurring at bus stops using information obtained from the APCs. An example of this average bus stop level data is presented in Figure 3, below.

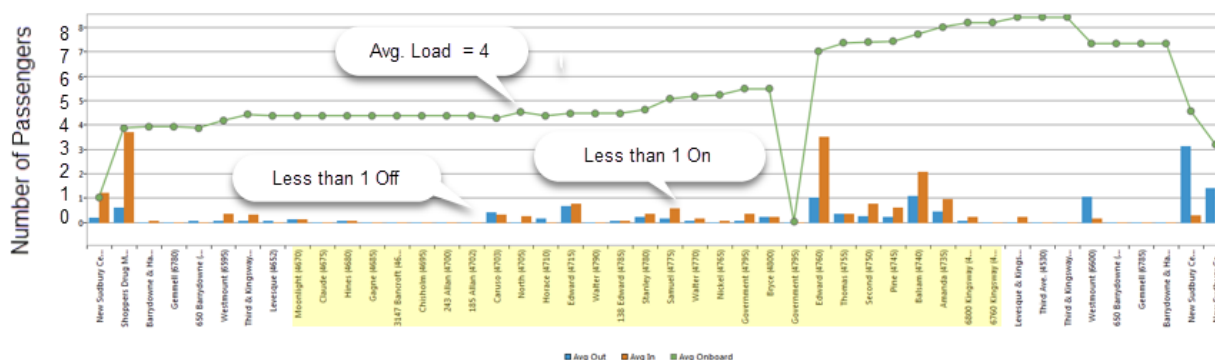


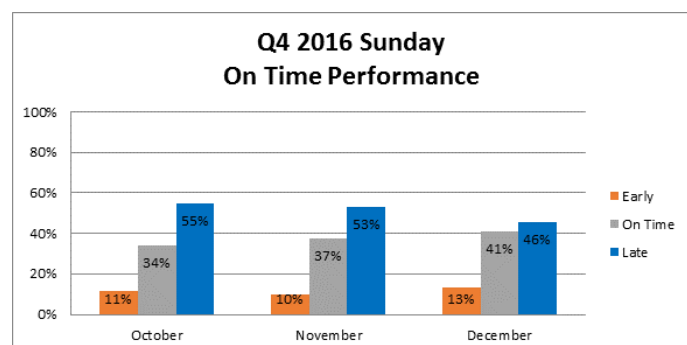
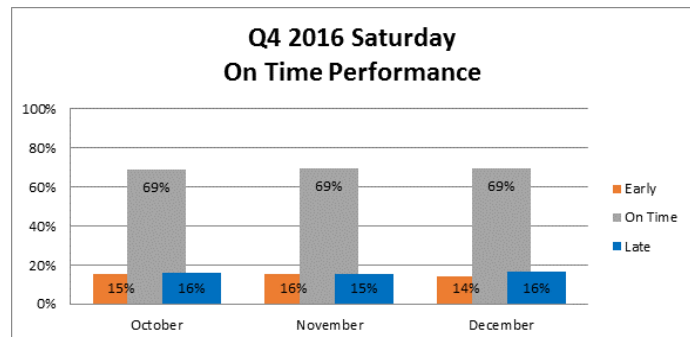
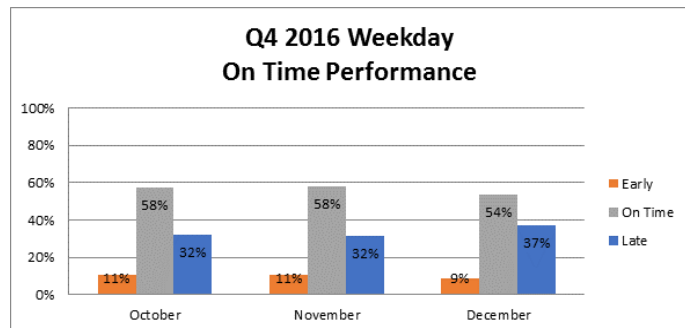
Figure 2 – Average Weekday Boardings, Alightings and Loads for Route 103 by Bus Stop, 8 a.m. – 7 p.m., Oct. 13 – Nov. 9, 2017 (Source: APCs)

This sample shows average ridership by stop on the Route 103 travelling from New Sudbury Centre to Coniston where the number of people boarding the bus (orange bars) or alighting (blue bars) are shown for each stop and where the average load is also shown as the trip progresses (green dotted line). In this case, a portion of the route that has an average load of four or less people on board could be considered for service by TransCab instead of a larger conventional vehicle.

Patterns that emerged through the stop-level analysis were then further analyzed and verified against the City's Geographic Information System (GIS) maps that show average annual boardings at the route and stop level. Again, this further analysis provided evidence on whether a route could be considered eligible to be converted to a TransCab service, or proposed for increased frequency or route restructuring in the case of higher ridership areas.

**Schedule Adherence by Route** - From the Consat GPS system, Greater Sudbury Transit staff monitor on-time performance of the conventional transit service quarterly and produce internal reports, as shown at right. For all three service day types, the transit service is not meeting the existing service standard target of 90% where buses should be “on-time” and **no more than three minutes late** of the published public timetable. The service standard is clearly not being met.

- Sunday has the least on-time performance with buses running late 55% of the time and this impression was repeatedly noted by front-line staff and passengers during the Phase I engagement. Due to the hub and spoke model and the low frequency of service, buses are held back so that customers can make connections. This is problematic and the main reason for the lack of schedule adherence.
- There were ten routes operating at less than 68% on-time, with the poorest overall on-time performance (55%) recorded by routes:
  - 2 Second Avenue/Shopping Centre
  - 101 Howey/Moonlight
  - 103 Coniston
- Even more problematic than late buses were the high percentage of early buses since an early bus is considered to be ‘no bus’ for those passengers who just miss it.



**Key Observation:** In order to address on-time performance, solutions would include adjusting all system schedule running times so that they match the reality of service on the road. Further, adjusting the system’s service standard to zero minutes early to five minutes late could also be considered, as long as sufficient layover is in place so that there is less pressure for transit drivers to meet the current three-minute guideline

### Conventional Transit Phase I Engagement Feedback

As detailed in the Phase I Engagement Summary, there were a number of key themes that emerged relating to the Conventional service across all engagement formats: open houses, surveys and workshops.

- **More frequency**, particularly on Sundays and overall
- **More timely travel**: More direct, faster routing; fewer/better connections; improved on-time performance; later evening service/ earlier morning service
- **Improved routing**: easier to understand; less need to always travel via the Downtown Terminal
- **Better access**: improved safety/security; more Park & Ride locations; continued improvements to customer information, trip planning and travel training
- **Continue to improve value to customers**: fare review; more options and locations to purchase tickets and passes; consider longer time periods for transfers

Direct engagement with front-line transit staff also provided information on specific routes and areas where on-time performance could be improved. A reduction in bus stops, priority signaling and smart card technology were provided as solutions to improve on time performance, as well as consideration of routing changes where feasible to make service more direct.

### In Focus: Priorities for Service Improvement

When Phase I Engagement Open House attendees were asked to “vote” using sticky dots on priorities for improvement, by far “more Sunday and holiday service” was a top priority for change. This was followed by “more frequent mid-day service,” “more direct / simplified routes” and “better connections.”

The table at right summarizes responses received across all areas, as well as specific routes and quadrants in the community. (Respondents had the opportunity to vote for their service improvement across the whole system or within a specific area).

For Greater Sudbury residents who are not

**Response Summary: What are your priorities for improved service?**

	Total Responses	Responses by Area				
		System Wide	Northwest Areas / Services	Northeast Areas / Services	Southwest Areas / Services	Southeast Areas / Services
More Sunday and holiday service	57	39	4	4	2	8
More frequent midday service	37	16	7	4	3	7
More direct/simplified routes	33	11	5	12	5	0
Better connections	30	12	7	2	4	5
Earlier weekday service	25	14	5	3	2	1
More frequent commuter service	24	16	4	3	1	0
Other ideas (various):	21	10	1	6	0	4
More evening service	14	8	2	3	1	0
More Saturday service	2	1	0	0	1	0

currently transit users, the online survey also asked them to identify their top five transit service improvements that would convince them to try transit more often. The most commonly-cited priorities for Non-Transit users were more direct, frequent service, improved hours of operation, and better Sunday Service coverage. These priorities mirror those provided overall throughout the engagement process from Existing Transit Customers.

### 3.2.2 TransCab Services

#### TransCab Overview

Greater Sudbury Transit has a very effective and efficient way of providing public transit services to vast lower population density areas through the integration of fixed route conventional transit services with contracted taxi services, known as TransCab. TransCab operates where implementing standard transit conventional vehicles would not be economical due to lower population densities and more dispersed ridership.

The same transit fares used on fixed route services are also used on TransCab services at no extra cost to riders. The TransCab services are shown on Figure 1 - Greater Sudbury Transit Services.

TransCab services connect with the following transit routes and destinations:

- 702 Alzilda/Chelmsford - TransCab to Dowling/Onaping/Levack
- 704 Blezard/Elmview - TransCab to Municipal Road 15
- 703 Val Caron/Hanmer/Capreol - TransCab to Radar Base
- 819 Copper/Four Corners - TransCab to Long Lake
- 819 Copper/Four corners - TransCab to Salo
- 181 Paris/Lo-Ellen - TransCab to Richard Lake
- 701 Lively - TransCab to Whitefish & Rockville
- 103 Coniston - TransCab to Whanapitae
- 303 Garson/Falconbridge - TransCab to Skead

Two types of TransCab services are operated within Greater Sudbury depending on the overall population density and level of demand:

**Demand responsive service** – In this case, a transit rider must call to reserve a TransCab trip at least 90 minutes before boarding a bus when the starting point is with the TransCab service. One single bus fare pays for both services.

- For example, if the starting point is in an area not serviced by a bus route, the customer calls 90 minutes prior to their start time, the TransCab picks them up at their home, they pay the regular transit fare to the Conventional Service Operator when boarding the bus.
- If the starting point is within walking distance of a bus route, the customer advises the operator that a TransCab is required when boarding the bus and requests a transfer, boards the bus and at the connection point, presents the transfer to the TransCab (taxi) driver that drives the customer to their endpoint (or home).

**Fixed Route TransCab** – In this case, the taxis operate similar to conventional buses on a fixed route and schedule, using a smaller 7.3 metre (24 ft.) bus and has been part of a “pilot” since February 29, 2016.

- For example, in the “pilot” service of Levack, Onaping and Dowling, TransCab operates fixed routes with 4 scheduled times throughout the day (approximately 6:00 a.m., 7:30 a.m., 2:30 p.m. and 4:30 p.m.). A customer reviews the published TransCab schedule time, walks to the nearest TransCab stop, pays their regular transit fare to Conventional Service Operator when the connections is made.
- Fixed route TransCab service does not include services to or from a person’s home.

## TransCab Performance

TransCab service is an efficient model for the City of Greater Sudbury, which provides service in areas of low population where a full sized conventional bus is not desirable.

*Table 6 – TransCab 2016 Annual Ridership and Key Performance*

The cost per trip for TransCab service varies by service area, ranging from \$9.19 per trip to \$42 per trip with an overall 2016 average cost per trip of \$21.14. Expanding services to low population density areas with TransCab is, therefore, cost effective compared to operating a standard bus, which is measured in cost per hour at approximately \$115.

2016	Ridership	Avg Cost per trip	Total KMs	Avg KM per trip
Richard Lake	4879	\$ 9.19	18736.94	4
Long Lake	2319	\$ 16.70	15691	7
Dowling, Onaping, Levack	24134	\$ 12.80	154247.57	6
Naughton, Whitefish, Rockville	1370	\$ 24.25	8094.89	6
Wahnapitae	2716	\$ 14.31	15016.699	6
Skead	915	\$ 42.61	14128.48	16
Salo	2	\$ 19.81	9.61	5
Radar Base	1113	\$ 25.79	12323.84	11
RR #15	324	\$ 24.82	3424.99	11
<b>TransCab Total</b>	<b>37772</b>	<b>\$ 21.14</b>	<b>241674.02</b>	<b>7.87</b>

For all TransCab services, the kilometres travelled per rider had a range from an average low of 4 kms to a high of 16 kms with total average of 7.9 kms per rider. Greater Sudbury Transit has a service standard whereby regular route services should be considered for conversion to TransCab service if the route's performance consistently falls below 5 boardings per hour. An area serviced by TransCab should be considered for regular route service when the cost of the TransCab contract reaches 85 percent of providing minimum base service level of a fixed route. TransCab service is monitored on an on-going basis by transit staff.

**Key Observation:** The route review points to some areas of the city which could benefit from converting conventional service to TransCab service, for some or all of the time. These options will be explored in Section 4. There is an opportunity to grow this efficient service by partnering with a third party who would be able to provide accessible vehicles. By expanding TransCab service to the boundaries serviced by Handi-Transit, coinciding with accessible vehicles, TransCab could then become the extension for both Conventional and Specialized services, reducing the demand on Handi-Transit and improving the overall effectiveness of service.

## TransCab Phase I Engagement Feedback

As detailed in the Phase I Engagement Summary, there were a number of key themes that emerged relating to the TransCab services:

- **Easier to book** through improved TransCab booking process, less lead time and use of a single telephone number and other technologies such as an app.
- **Easier access** by expanding the TransCab network.

In general, there was also a strong desire for improved service to Greater Sudbury's many outlying communities. At the same time, each has different population sizes and demographic needs. Many respondents noted that it would be good to improve how the suite of transportation services are organized, deployed and communicated in these areas. This might include potential creation of mobility hubs that make it more convenient for connections to take place, Park & Rides, improved coordination and technology with TransCab services, and potential integration with some regularly scheduled Handi-Transit services, where feasible.

### 3.2.3 Handi-Transit Services

#### Handi-Transit Overview

Greater Sudbury Hand-Transit is the division of Greater Sudbury Transit that provides demand-response specialized transit service. It operates weekdays from 6:30 am to midnight, and from 7:00 am to midnight on weekends and statutory holidays. The service is provided under contract by a third-party, which operates 15 accessible small buses, with two spares vehicles, for a total of 17 vehicles. The buses, on average, accommodate 4 wheelchair passengers and 10 ambulatory seating.

A third-party provider provides trip booking, scheduling and dispatch services, as well as vehicle ownership and maintenance, from their own facility.

#### Handi-Transit Performance

**Operating Structure** - The service configuration – contracted to a private sector provider who provides nearly 90% of the rides in its own buses, and dispatches the remaining 10 to taxis – is an excellent formula for cost-effectiveness. Trip booking is managed through RouteMatch software. Advance notice for bookings is 48 hours. Only a minimal number of same-day trips are provided. One of the impacts of this is that the capacity freed-up by advance cancellations of bookings is not re-used productively.

**Service Quality** - On-site and ride-along observations, and telephone interviews with passengers indicate a high-quality, well-managed service that operates over a very large territory. The vehicles are clean and well-appointed; drivers were courteous and capable, and apparently well-liked by the passengers. Maintenance facilities were well-organized and capably managed.

**AODA Considerations** – The Accessibility for Ontarians with Disability Act (AODA) requires that any person unable to use transit because of a disability must be eligible for the specialized service. Up to the present time, Handi-Transit has considered only physical disabilities when assessing applicant. A service review is being undertaken to review eligibility processes and the mandate, to include all disabilities.

Under the AODA, a Conditional Eligible category is required for people who only need Handi-Transit under certain conditions, such as the presence of ice and snow, or the need to make a complex trip on transit with one or more transfers. Although Conditional Eligibility may open up the eligibility door even wider, it can also be used as the foundation of dynamic eligibility determination policy, under which a Conditionally Eligible eligibility is assessed for each trip requested.

The dynamic eligibility determination policy will allow for the Reservation agent to compare the client's abilities and limitations with access barriers in the fixed route transit environment for that trip (stop location, presence or absence of shelter, etc.) and decides what service is required for the trip (Conventional, Transcab, Specialized or a combination of). This process reduces demand for specialized transit in some instances, especially when combined with a Transit Travel Training program. There are good models in the US of the trip-by-trip eligibility process that Handi-Transit could adopt. Allegheny County, Pa (Pittsburgh) is considered as one example to emulate.



### In Focus: Handi-Transit Eligibility Criteria and Application Process

There are a number of factors that are leading to increased demand for specialized transit services in the City of Greater Sudbury which is in line with the experience of other municipalities in Canada. The primary reasons are changing demographics and legislative changes. As capacity constraints become increasingly challenging, it is important to recognize that increasing costs and ridership, together with trip denials are usually a rationale for making improvements to the specialized transit's eligibility programs.

Enhancing the accuracy of eligibility processes is the most equitable and cost-effective way of serving the mobility needs of individuals who have no other mobility choice than to rely on the Handi-Transit Service. A **Specialized Service Review (Handi-Transit)** is being undertaken at the same time as the Transit Action Plan. The Transit Action Plan aims to provide a framework to build on in the future, where all service levels integrate. The Specialized Service review aims to provide recommendations on how the City of Greater Sudbury can improve on identifying an individual's environmental barriers which prevents them from taking the conventional bus for some or all of their trips.

The AODA requires that all riders of specialized transit services have their eligibility categorized under one of three types; unconditional, conditional and temporary. In Greater Sudbury Transit, the current practice in over 90 percent of situations where ridership is granted is that the rider is granted either unconditional or temporary eligibility. This is due to the limited amount of information Greater Sudbury Transit currently asks the applicant to provide in its current form-based application process.

There is a missed opportunity to provide efficient and convenient service to system riders: the best practice for application process being adopted in many transit systems is to provide more of a conversation and objective assessment process as part of applying for specialized transit services. This conversation enables the system to get a clearer picture of their abilities and needs. By requesting more information in the application process and having a better understanding of where the applicant needs to travel, system staff can more easily provide service options and guidance to passengers.

"Conditional eligibility" allows the Rider to use specialized transit but also opens up the ability, potentially, for the Rider to utilize the fully accessible conventional transit system which allows more freedom to travel independently and sporadically without having to book trips at times two days in advance.

With the aging population and the move to serve persons with cognitive disabilities, introducing a more robust Handi-Transit application process in tandem with improvements to other system services can help tailor services to the specific needs of each Rider and also ensure that precious Handi-Transit resources are preserved for those who most need them.

### Handi-Transit Phase I Engagement Feedback

"Clients just phone and are picked up – don't have to walk to a bus stop... drivers are very accommodating"

Handi-Transit clients can wait inside for their ride. The driver comes in to get them. At the destination, the driver escorts them to the door"

"They let me know in advance when my rides will be"

*The following points were raised by Handi-Transit clients who were interviewed by the consultant relative to what they appreciated about the service.*



When asked about improvements they would like to see, the following responses were given to the consultant:

- Pickup and return times should be rounded to the nearest 10 minutes to make them easier to remember, and to calculate the 'be ready 10 minutes in advance' time
- The no-show policy should be clarified and adhered to by drivers and dispatchers:
- Handi-Transit passes should be accepted for travel on Sudbury Transit and TransCab
- Consider converting the fleet to low floor buses, which are much easier for ambulatory passengers to board, faster for group boardings, and have better climate control because the doors are not open so long
- Bookings to be available on weekends, even if only by phone, email or web booking page
- Drivers taking calls from clients on weekends is not safe or practical, and does not allow for bookings 7 days a week, as they only take requests for cancellations.
- Handi-Transit should have and enforce a maximum on-board time.
- Some people with cognitive disabilities should be eligible for Handi-Transit, such as a person with dementia
- Consider accessible vehicles for TransCab so that access to bus stop is possible.



When these priorities are consolidated together with other feedback from the Phase I Engagement process, key overall themes for Handi-Transit can be summarized as follows:

- **Make Handi-Transit trips easier to book** by increasing the days when trips can be booked and reducing the lead time before travel.
- **Provide more options** for passengers by making it easier to also use Transcab and the accessible Conventional Transit services, encouraging their use, and providing travel training that would be required.

**Key Observation:** The Transit Action Plan aims to provide a framework to build on in the future, where all service levels integrate. The Specialized Service review will provide recommendations on how the City of Greater Sudbury can improve on identifying an individual's environmental barriers which prevents them from taking the conventional bus for some or all of their trips through a dynamic eligibility process. It will also provide recommendations to policy changes which will answer many of the questions above.

## 3.3 Assessment of Existing Infrastructure and Supporting Measures

A number of different supporting components complement the various service types, including infrastructure (bus stops, terminals, transit vehicle maintenance facilities), fares, public information and so on. The following section summarizes the existing state of these supporting measures plus provides feedback from recent engagement.

### 3.3.1 Infrastructure

#### Current Conditions

**Bus Stops** - The City currently has an inventory of 1,365 bus stop locations that are in a basic database consisting of the bus stop name, a unique 4-digit identification number and longitude and latitude coordinates, which is required for the transit AVL (Automated Vehicle Location) system. The City also has a spreadsheet listing of 119 transit shelters, representing 8.7% of total bus stops with transit shelters and is considered a low level by transit service best practices. In this regard, municipal transit systems typically strive to have at least 20% of total bus stop locations with transit shelters.



The majority of bus stops in Sudbury are well established and marked throughout the urban areas. In some areas of outlying communities, transit passengers are picked up and dropped off on a request basis through the TransCab services that connect to and facilitate transfers to and from the conventional fixed route transit services. There are also locations in the urban area of the transit network with multiple stops within a short distance that was a cause of passenger concerns which were expressed during the first round of community engagement of the study.

Well in advance of the start of the Transit Action Plan study in 2016, the City had placed new bright fluorescent yellow decals with black font 4-digit bus stop identification numbers on every bus stop to allow the public access via the internet and smartphone apps to the transit system's Automated Vehicle Location (AVL-GPS) that provides customers with real time schedule departure times ([mybus.greatersudbury.ca](http://mybus.greatersudbury.ca)). The City also had a small annual ongoing program of transit shelter refurbishment and replacement, including the objective of achieving compliance with the AODA (Accessibility for Ontarians with Disabilities Act).

**Key Observation:** With available funding through the Canada-Ontario Public Transit Investment Fund (PTIF), there is an opportunity to review bus stop inventory and enhance the infrastructure to reach a more appropriate level of shelter inventory. It is also an opportune time to create bus stop standards in order to provide consistency and accessibility at a stop level. Focus should be placed on the newly identified mobility hubs to ensure customers have the proper amenities during their trip.

**Transit Terminals** –The Greater Sudbury Downtown Transit Centre is the main hub of the route network where thousands of people converge to transfer from one route to another on a daily basis. The terminal provides amenities to



passengers such as information, kiosk, telephones, washroom facilities, and protection from the elements. Renovations are underway and are scheduled to be completed by the spring of 2018.

With the recommended route network being presented by the Transit Network Consulting team, multiple hubs will be required where timed transfers will occur. Although these hubs will not require a full facility such as the one in the downtown core, infrastructure as well as safety and security should be addressed from the onset.

Cameras are a good way to capture incidents to be reviewed at a later date during investigations. Other measures should be reviewed to ensure transit customers feel safe waiting for the bus. Some municipalities have a Transit By-Law which can be enforced by Municipal Transit by-law officers. These officers can support operators and passengers by enforcing the rules and regulations governing the use of the Transit system by issuing offence notices to those contravening the By-Law, thereby providing a deterrent to undesirable behavior at terminals, as well as vehicles.

#### **In Focus: Enhancing System Safety and Security**

In conjunction with the Transit Action Plan, Greater Sudbury Transit (Transit) is undertaking a number of initiatives and service reviews with a significant emphasis on enhancing customer experience. One of these initiatives consists of a review of security and safety practices both at the Transit Terminal and onboard Transit buses. Safety and Security is an important aspect of service delivery, as actual or perceived lack of safety has a negative effect on use of Transit services, and affects employee's health and morale.

In support of this, the transit system has been undertaking renovations to the Transit Terminal and has also recently established a Downtown Transit Area Working Group to review current safety management practices and make recommendations to enhance safety and security for City Employees, passengers and residents. The Downtown Transit Area Working Group consists of members with expertise in CPTED audits, Security/Surveillance, Landscaping, Community Outreach, Police Services, Long Term Planning and Transit Services.

The Working Group has developed a report of recommendations and these are being integrated into Transit Action Plan recommendations as both projects move forward. Greater Sudbury Transit understands the significant impact that the perception of security and safety has on the use of our transit system and is taking clear steps to address this.

**Key Observation:** The Safety and Security review and recommended Transit Safety Plan is the appropriate direction for ensuring customers feel safe using the system

**Operations and Maintenance Facility** – The Transit and Fleet Maintenance Facility can hold 70 transit buses, and could accommodate articulated buses or other types of transit vehicles in the future. With 28 repair bays, a welding shop, parts inventory room, tire bay, and body shop, the facility is well equipped and large enough to accommodate repairs and maintenance of all municipal vehicles and equipment. It is also in a position to properly detail buses with a fully equipped wash bay.



**Key Observation:** During the engagement process, concerns relating to bus cleanliness were heard from both customers and employees. In order to keep a fleet appropriately clean, there should be a daily vehicle cleaning practice where buses are washed on the outside, thoroughly wiped down throughout, garbage picked up, floors swept, and major spills washed. Detailing of buses—where windows, walls, and all areas that are hard to reach are cleaned—should be undertaken on a rotating basis.

### Infrastructure Phase I Engagement Feedback

**Engagement Results** – As detailed in the Phase I Engagement Summary, when asked about improvements to bus stop and terminals, including benches, shelters and other passenger amenities, the top five improvements identified by engagement participants were:

- Increase security at the Transit Terminal and on buses
- Increase number of benches at shelters
- Provide additional shelters
- Improve bus cleanliness
- Increase winter maintenance at bus stops.

### 3.3.2 Fares

#### Current Conditions

The adult cash fare reported in 2011 was \$2.60 while the average fare paid was \$1.57. When the adult cash fare increased each year to \$3.00 in 2015, the 15% increase is in line with the average fare increase of 12.1 % by 2015, which reflects concession fares to various passengers such as seniors and students. This steady and similar increase across all fare categories is a commendable approach to setting fares since inflation can take its toll on budgets if concession fares or period pass prices do not keep pace. Although fare increases are unpopular, they are necessary to offset inflation and to maintain service levels; otherwise, increased municipal taxes are needed to support transit. As a rule, transit customers are less sensitive to fare increases if it means maintaining or expanding transit service. Since the vast majority of transit customers are captive to transit, it is logical to assume that the ability to get to and from work or travelling for other trip purposes takes precedence over the transit fare price.

#### Fare Structure Phase I Engagement Feedback

**Engagement Results** – As detailed in the Phase I Engagement Summary, when asked for any other ideas or comments to improve Greater Sudbury Transit, comments were mostly relating to fare structure:

- Extend time allowed on transfers
- Provide incentives for seniors to use the service
- Wherever possible, link fare increases to coincide with service improvements
- Make purchasing fare media more convenient
- Provide a family pass or free transit for children under 12
- Increase winter maintenance at bus stops.

**Key Observation** – Fare policies should be reviewed and discussed with Council to provide a well-balanced fee structure which will provide incentives to attract new riders; assist those in most need for further subsidy; and ensure that operating requirements can be met.

### 3.3.3 Customer Information

#### Current Conditions

Transit systems are complex to navigate, and lack of sufficient wayfinding supports such as signage, maps, visual and audio cues, create a barrier to transit use. An effective wayfinding system provides users with an understanding of the coverage area of the transit network, the path of an individual route, the locations they are able to board and alight, the times that the services operate, and the rules and procedures for accessing the transit service. At interchange points, such as the Transit Terminal or other major landmarks, travelers need to be able to navigate to the correct bus. Good wayfinding systems are consistent, seamless, accessible and provide travelers with information throughout their journey.

Greater Sudbury Transit currently provides information in various forms. Coordination of the information being published is overlooked by several Transit employees with the assistance of the Communications department. The following are examples of information is provided to the public:

- A network map
- Individual pamphlets with route information



- Real-time feed with Google Map Trip Planner
- MyBus application
- In person and telephone customer care through Kiosk Staff and information clerk

### **In Focus: Enhancing Customer Information and Outreach Through Improved Staffing**

As described above and in the preceding sections, many of the components most desired by the public relate to increased promotion of the system and customer care. However, existing staffing levels for Greater Sudbury Transit do not provide the necessary resources to address these key opportunities and areas for growth.

The system is now of a size where a staff person dedicated to transit system outreach and customer care would be typically be available. Particularly if the City moves forward with implementing the revised service structure outlined in later sections of this Plan, it is strongly recommended that an additional full-time position be created within the Greater Sudbury Transit Team specifically focussed on leading the system's customer information and customer care programs.

Suggested roles for this position would include:

- **Leading outreach initiatives** to help promote the service, such as liaising with schools, post-secondary institutions and major employers to provide information, events and programs to help promote the transit service and how it can be used as a part of a suite of sustainable transportation options and a healthy lifestyle.
- **Leading and organizing travel training** to help teach individuals and groups (such as seniors programs organized through the City's recreation department) on how to use the fully accessible conventional transit system.
- **Overseeing customer information tools and the customer complaint process** to identify ways that these processes can be as responsive as possible to citizen travel needs and to also ensure that feedback received from customers and front-line staff has a clear process to go back into further improving and revising the system.

In addition to a full-time staffing position, a number of systems have also had good experience with creating several "community liaison" positions for transit operators to help support these initiatives. These programs create resources to occasionally cover shifts of transit operators selected for the program so they can assist in community outreach.

### **Customer Care Phase I Engagement Feedback**

**Engagement Results** – As detailed in the Phase I Engagement Process, the top priorities requested for improvement to customer information were identified as:

- Improve wayfinding and wayfinding technology to make it easier to access the system's services.
- Improve customer service levels and complaint process.
- Promote services and co-ordinate travel training.
- Provide information on policies and procedures.

**Recommendation** - It is recommended that an additional full-time position be created within the Greater Sudbury Transit Team specifically focussed on leading the system's customer information and customer care programs.



### 3.4 How Greater Sudbury Transit Compares to Its Peers

The Canadian Urban Transit Association (CUTA) has kept records of individual transit systems and their performance across Canada since 1980 when transit systems began reporting data annually. The data is summarized in the Canadian Urban Transit Fact Book. This mature database has evolved over the years, and is consistent and is designed for industry professionals. The Ministry of Transportation of Ontario requires Ontario municipalities that apply for the 2-cent per litre dedicated gas tax funding to report similar statistics as a condition of funding. The Ontario database is managed by CUTA.

The data was analyzed for two purposes:

- To measure Greater Sudbury Transit performance over a 5-year period; this answers the question “How are we doing?”
- To assess how Greater Sudbury Transit performed in relation to its peer group in 2015; this answers the question “How do we compare to others?”

#### 3.4.1 2011-2015 Greater Sudbury Transit Report Card

The 2011-2015 Greater Sudbury Transit Performance Data below quantifies the change in performance over the five-year period.

2011 to 2015 CUTA Statistics - Sudbury Report Card														
Year	Total Population	Service Area Population	Ridership	Fleet Size	Total Direct Operating Expense	Passenger Revenues	Revenue Vehicle Hours	Cost Efficiency (Cost per Hour)	Revenue Passengers per Revenue Hour	Revenue Vehicle Hours per Capita	Revenue Passengers per Capita	Net Investment per Capita	Adult Cash Fare	Average Fare
2011	160,000	129,600	4,468,760	61	\$17,054,937	\$7,010,449	159,119	\$106.74	28.1	1.23	34.48	\$69.70	\$2.60	\$1.57
2012	161,900	138,000	4,444,719	61	\$18,468,203	\$7,414,102	159,119	\$107.96	27.9	1.15	32.21	\$72.91	\$2.70	\$1.67
2013	161,900	138,000	4,362,683	64	\$18,940,806	\$7,381,107	158,756	\$115.43	27.5	1.15	31.61	\$79.15	\$2.70	\$1.69
2014	161,900	138,000	4,457,779	64	\$19,419,539	\$7,583,142	158,756	\$118.00	28.1	1.15	32.30	\$80.62	\$2.90	\$1.70
2015	160,274	138,000	4,263,622	61	\$19,561,737	\$7,492,728	166,715	\$114.22	25.6	1.21	30.90	\$77.97	\$3.00	\$1.76
Change 2014 Vs 2010	274	8,400	-205,138	0	\$2,506,800	\$482,279.00	7,596	\$7.48	-2.5	-0.02	-3.58	\$8.27	\$0.40	\$0.19
% Change 2014 Vs 2010	0.2%	6.5%	-4.6%	0.0%	14.7%	6.9%	4.8%	7.0%	-8.9%	-1.6%	-10.4%	11.9%	15.4%	12.1%

#### 3.4.2 2015 Greater Sudbury Transit Peer Review

Comparisons were made of the various operating, service performance and financial data. Caution should be exercised when assessing peer review statistics since the peer review only provides a high-level assessment of transit service levels and costs in other comparable jurisdictions. The peer reviews are also provided to help to understand transit industry statistics reported elsewhere for accountability and to identify the levels of local investment, which tend to drive the decision-making process relative to service quantity.

The criteria guiding the selection of peer review jurisdictions for comparison purposes with the City of Greater Sudbury were Ontario municipalities with a service area population between 50,000 and 150,000. Individual transit system statistics across Ontario can vary significantly due to factors such as:

- Local labour costs
- Population and population density
- Municipally operated versus contracted services
- Climate and topography
- Local financial commitment to transit and bus fare policies

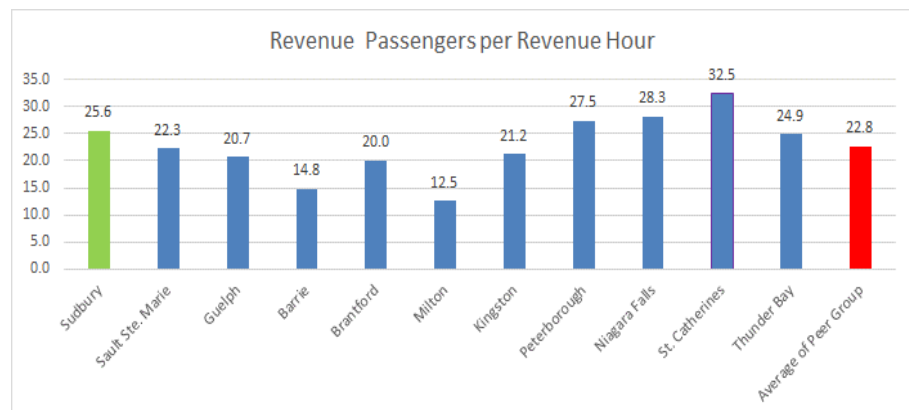
Ten (10) Ontario municipal jurisdictions were selected and the data illustrated below.

Jurisdiction	Municipal Population	Service Area Population	Service Area Size	Density	Ridership (revenue passengers)	Revenue Vehicle Hours	Cost Efficiency (Cost per Hour)	Revenue Passengers per Revenue Hour	Revenue Vehicle Hours per Capita	Revenue Passengers per Capita	Municipal Operating Contribution per Capita	Adult Cash Fare	Average Fare
Sudbury	160,274	138,000	152.6	1,050	4,263,622	166,715	\$114.22	25.6	1.21	30.9	\$77.97	\$3.00	\$1.76
Sault Ste. Marie	74,200	69,900	223.5	332	1,877,639	84,153	\$97.04	22.3	1.20	26.9	\$71.78	\$2.50	\$1.22
Guelph	141,097	141,097	87.0	1,622	6,386,104	308,800	\$82.26	20.7	2.19	45.3	\$92.12	\$3.00	\$1.61
Barrie	142,000	135,543	113.0	1,257	2,539,382	172,049	\$94.30	14.8	1.27	18.7	\$70.90	\$3.00	\$2.00
Brantford	97,862	97,862	75.1	1,303	1,521,531	76,149	\$115.53	20.0	0.78	15.6	\$46.72	\$3.00	\$1.87
Milton	103,700	84,973	35.6	2,913	418,055	33,338	\$112.29	12.5	0.39	4.9	\$29.09	\$3.25	\$2.47
Kingston	127,250	115,142	131.7	966	4,659,300	219,323	\$84.34	21.2	1.90	40.5	\$111.68	\$2.75	\$1.35
Peterborough	80,000	80,000	67.4	1,187	3,404,333	122,639	\$85.06	27.5	1.53	42.6	\$60.03	\$2.50	\$1.38
Niagara Falls	85,000	80,000	80.9	1,051	2,258,555	79,949	\$113.88	28.3	1.00	28.2	\$73.63	\$2.75	\$0.61
St. Catharines	149,331	149,331	179.1	834	5,489,764	168,704	\$108.35	32.5	1.13	36.8	\$59.14	\$3.00	\$1.63
Thunder Bay	146,000	109,000	256.0	570	3,600,425	144,378	\$106.27	24.9	1.32	33.0	\$92.46	\$2.65	\$1.43
Average of Peer Group	118,792	109,168	127.4	1,190	3,310,792	143,291	\$101.23	22.8	1.27	29.4	\$71.41	\$2.85	\$1.58

In general, the following trends can be noted from the comparison to peers and the system's historic trend:

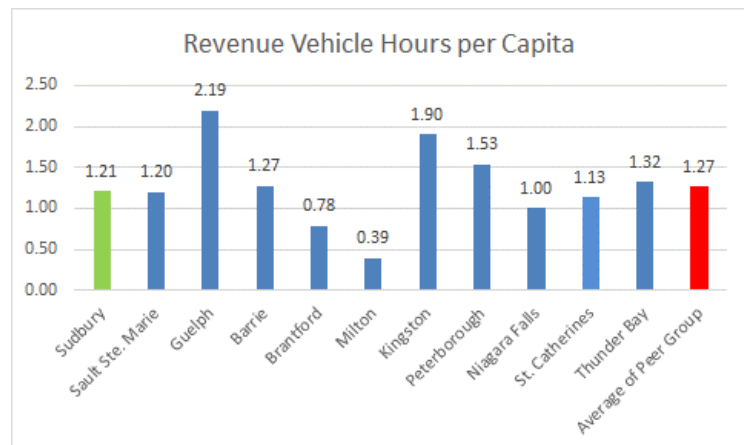
- **Ridership Trend** - Overall system ridership over the 5-year period fell marginally by 4.6%, with the biggest drop reported from 2014 to 2015, which is not considered significant; however, it does indicate that steps should be explored to reverse the trend. Indeed, the City has shown that it is proactively addressing this situation through undertaking this Transit Action Plan.
- **Service Hours Trend** - While there is an increase of 8,000 service hours shown in 2014 to 2015, this is actually a correction to underreporting in previous years and service levels have been somewhat static. It should be stressed that the corrected 2015 service hour amounts form the basis for all calculations for service improvement recommendations within the Transit Action Plan.

- **Service Efficiency** - Transit systems across Canada use the Revenue Passengers per Hour of Service metric as one measure to quantify transit efficiency across systems and routes. Even with the trends noted in ridership and service hours



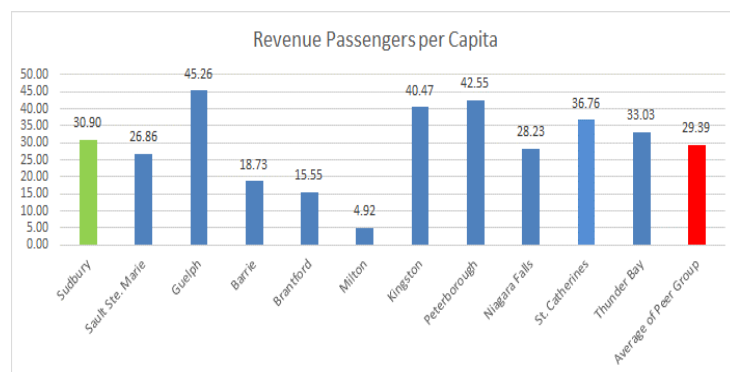
reporting, Greater Sudbury Transit's efficiency was an impressive 13.2% higher than the peer group's average value. The ridership per service hour is even more impressive given the scale of the system and the geographic area covered. While there are variations at the route level, the system's overall current ridership per hour means there is an existing strong foundation for further improvement in the system, particularly as service levels are adjusted by route, day, time of day and season through Transit Action Plan recommendations to ensure that service matches demand as best as possible at all times.

- Service Quality** - To quantify the relative amount of service provided by the City of Greater Sudbury—which can roughly translate into the quality of service that is able to be provided - the Revenue Hours of Service Hours per Capita measure has been developed in the industry, which is simply the number of annual hours of revenue service divided by the service area population. Greater Sudbury Transit



was somewhat in-line with the peer group average in 2015, although it provided slightly less (-4%) service hours per capita. To be equal to the peer group, Greater Sudbury Transit would have to increase service by approximately 0.5%. Although 0.5% seems nominal, it does equate to adding 6,700 hours of service per year and to put this in perspective, 6,700 hours per year equates to one bus operating over 18 hours per day, 365 days a year.

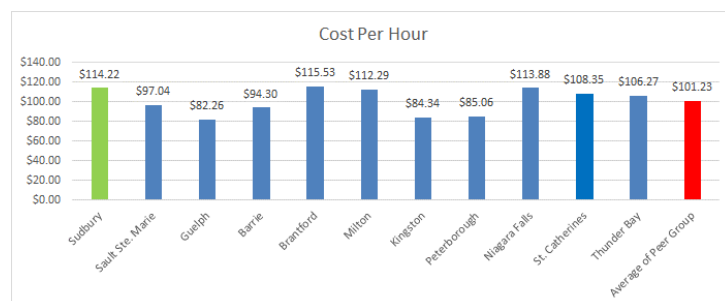
- Service Effectiveness** - A key measure of a transit system's effectiveness is how many trips are taken annually based on the population served in a given year. If transit ridership growth exceeds population growth then service is deemed to be more effective and as such, transit becomes a more integral component of urban travel. The



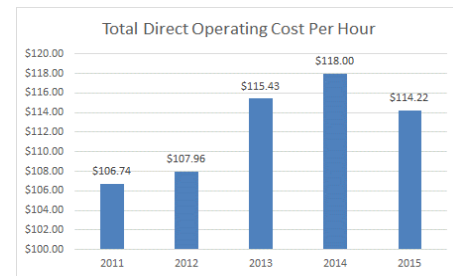
graph at right shows that Greater Sudbury Transit's effectiveness was 30.9 trips per capita in 2015, slightly higher than the peer group average in 2015.

- Cost per Hour** - A key metric that transit systems use to track financial performance is the 'total direct and auxiliary operating expense' in a given year divided by the total vehicle hours, which can be expressed simply as Cost per Hour or hourly operating cost. The annual cost per hour cost has two components – fixed costs and variable costs:

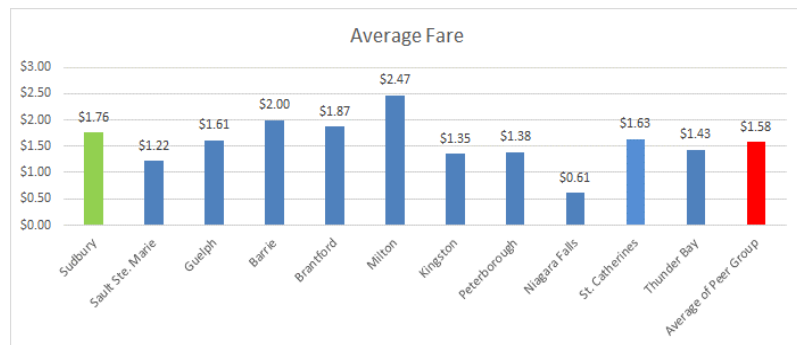
- Fixed costs are expenditures that do not vary regardless of the amount of service delivered such as facilities, administration, marketing, etc.



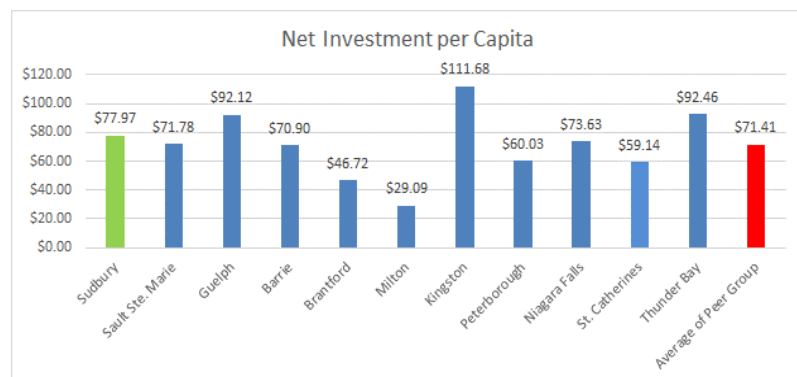
- Variable hourly costs are expenditures that are incurred based on the quantity of service that is provided such as bus operator wages, fuel consumed, maintenance costs, etc. Costs can vary significantly between transit systems due to differences in operating environments since transit system wage rates, local climate, topography, etc. and as such, the hourly cost of service is more accurately compared within each transit system over time rather than between systems. In general, Greater Sudbury Transit showed a 7% increase in the cost per hour over from 2011 to 2015. This is nominal and acceptable, with variations in cost attributed to vehicle maintenance and fuel costs. In comparison to the 2015 Peer Group, the Greater Sudbury Transit cost of \$114.22 per hour is 12.8% higher; however, the reduction from \$118.00 per hour in 2014 is encouraging and is within the range of the transit peer group.



- Average Fare** – Average fare is calculated by dividing total passenger revenue by total ridership. It is impacted not only by the cash fare but also lower pricing for tickets, passes and some fare categories. In comparison to the 2015 Peer Group, the Greater Sudbury Transit average fare was well within the range from a low of \$0.61 in Niagara Falls to a high of \$2.47 in Milton. There may be opportunity to increase Greater Sudbury Transit's revenue yield per passenger by carefully reconsidering some aspects of its fare policy, as provided in this Plan's recommendations.

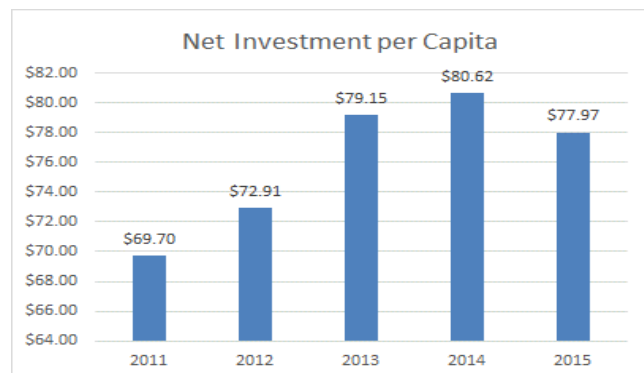


- Net Municipal Investment per Capita** - A municipality's commitment to transit is reflected by the quality of the transit service (e.g. service reliability) and the quantity of the transit service provided (e.g. hours of service per capita), which is dictated by the financial resources made



available. The municipal operating contribution per capita is a key measure of the local municipal investment that is calculated using net transit costs (total direct operating costs less revenues received) and dividing by the population served by transit. Since transit operates at a deficit – not unlike other municipal services – the net cost per capita can also be expressed as the net investment per capita.

The City of Greater Sudbury's net investment per capita jumped from \$69.70 per capita in 2011 to \$80.62 in 2014 then stabilized to \$77.97 in 2015, which is 9.2% higher than the peer group average value of \$71.41. The 9.2% higher net investment per hour of service is considered encouraging since the increase is less than the transit cost per hour increase of 12.2% than the peer group over the same 5-year period.



#### Key Observations:

- Ridership Trend shows a small decline; steps should be explored to reverse the trend.
- Service Efficiency is 13.2% higher than peer average value
- Service Quality is in line with peer average, with 4% less service hours per capita
- Service Effectiveness of 30.9 trips per capita is slightly higher than peer average
- Cost per Hour is within range of the peer group
- Average Fare is well within range of the peer group
- Net Municipal Investment per Capita is 9.2% higher

### 3.4.3 Specialized Transit Report Card and Peer Review

The report card below traces the development of Handi-Transit performance indicators from 2011 through 2015.

2015 MTO Specialized Transit Fact Book Statistics - Greater Sudbury										
Jurisdiction	Ridership (passenger trips)	Passenger Revenues	Revenue Vehicle Hours	Cost per Hour	Cost per Passenger	Passengers per Hour (Dedicated)	Registrants per Capita	Passenger Trips per Registrant	Net Operating Cost per Capita	Kms per Passenger
2011	125,242	\$262,269	47,741	\$59.16	\$25.42	2.33	0.0367	21.33	\$16.01	9.30
2012	134,294	\$246,454	48,451	\$55.06	\$23.51	2.25	0.0379	25.71	\$19.16	9.96
2013	133,133	\$281,021	51,839	\$54.59	\$23.79	2.29	0.0420	22.99	\$20.01	9.62
2014	134,925	\$236,141	51,940	\$51.38	\$22.54	2.28	0.0580	16.86	\$20.98	10.81
2015	130,549	\$262,743	50,503	\$55.05	\$23.28	2.29	0.0514	18.42	\$20.12	11.76
%Change 2011 vs 2015	4.1%	0.2%	5.5%	-7.5%	-9.2%	-1.7%	28.6%	-15.8%	20.4%	20.9%

Highlights of the 5-year period are:

- Ridership has increased by 4% compared to 2011
- Revenues have stayed the same as a result of fare parity
- Total expenses were held to the rate of inflation (7% in four years) even though service hours increased by nearly 6%, and the length of the average trip increased by 20%
- Cost per passenger declined by 9%
- There has been a 28% increase in registrants per capita since 2011

Key findings of the 2015 Handi-Transit performance were then compared to select transit systems as well as the average of all specialized transit systems with a service area population of 50,000 to 150,000 residents, summarized in the table below.

2015 MTO Specialized Transit Fact Book Statistics Peer Review									
Jurisdiction	Service Area Population	Ridership	Cost Per Hour	Cost per Passenger	Dedicated Passengers per Hour	Registrants per Capita	Passenger Trips per Registrant	Net Operating Cost per Capita	Kms per Passenger
Greater Sudbury	138,000	130,549	\$55.05	\$23.28	2.3	0.0514	18.4	\$20.12	11.8
Sault Ste. Marie	69,900	46,790	\$66.10	\$24.16	2.0	0.0405	16.5	\$15.06	7.5
Guelph	141,097	47,229	\$56.74	\$35.33	3.2	0.0095	35.3	\$11.37	5.7
Barrie	135,543	48,452	\$47.61	\$27.64	2.1	0.0385	8.9	\$9.00	3.0
Kingston	115,142	80,117	\$55.74	\$28.34	2.3	0.0234	27.8	\$16.77	7.9
Thunder Bay	109,000	75,567	\$48.07	\$25.54	2.5	0.0065	79.8	\$11.20	5.1
Average of Peer Group	118,114	71,451	\$54.89	\$27.38	2.4	0.0283	31.1	\$13.92	6.8
ON 50K to 150K Pop.	1,926,739	928,100	\$56.74	\$25.55	2.3	0.0264	18.3	\$11.13	9.0
Variance from Peer Avg	16.8%	82.7%	0.3%	-15.0%	-4.6%	81.6%	-40.8%	44.5%	72.6%

#### Key Observations:

- Higher Direct Operating Expense, Ridership, Registrants Per Capita
- Handi-Transit efficiency in Cost per Hour was near the peer average, but its Cost per Passenger was well below average (-13.3%), which suggests a highly efficient service.
- Handi-Transit exceeds the peer average in Passenger Trips (90%), and Registrants per Capita (92%), but is markedly below the peer average in Trips per Registrant (-35%). This suggests that relatively more people are registered with the system but then may find it harder to take trips at their desired times. These two trends seem to indicate the need for the system to review its registration processes—to ensure the Handi-Transit service focusses on those who need it most—and also consider further investments in service capacity.
- Another factor in the lower number of Trips per Registrant is that trips are much longer (76%) than the peer average because Handi-Transit serves such a vast municipality (3,267 square km). In tandem with the fact that Handi-Transit has lower than average unit costs, this would suggest that opportunities to combine TransCab and Handi-Transit services in less-populated areas could also provide more capacity and improved flexibility to system users.



### 3.5 Summary: Existing Key Service Issues and Opportunities

As shown in the comparison against its peers, Greater Sudbury Transit's ridership and performance has been fairly steady. Even more encouraging, the system's transit efficiency (passengers per hour) and transit effectiveness (passengers per capita) performance measures was better than the average of its peers even though there was a slight downturn in 2015 performance over 2014.

Likewise, the TransCab operating model seems to efficiently serve areas with lower populations and Handi-Transit has a high level of service with comparatively good service quality when compared to its peers. All of this means that there is a solid foundation for further improvement to the system.

However, the detailed analysis of service and public feedback shows that there are a number of key areas where existing system resources can be used differently to serve today's community needs, attract more customers and build a foundation for further transit system improvement and investment in the future. These include:

- **System reorganization to improve clarity, directness, frequency and reliability** – Greater Sudbury's existing route structure is confusing, hard to understand for new users and dilutes potential frequency by spreading service across many streets. Focusing heavier ridership service on key corridors with complementing feeder services would enable the system to put more frequency where it is needed most, shorten travel times and provide the time necessary to improve reliability.
- **A more organized and innovative approach to outlying areas** – This includes better defining and communicating the extent of these services and how Conventional transit, TransCab and potentially Handi-Transit service coordinate together to serve resident needs.
- **A balance of investment** – There are two key strategies for attracting further ridership on the Greater Sudbury Transit System: [1] making it easier for *existing users* to take it more often; [2] attracting *new users*, particularly commuters. Priorities for the first centre on increasing frequency and hours of operation on Sundays. Priorities for the second focus on improving service on weekdays, particularly during the peak commuting periods. As it moves forward, the system needs to strike a balance between both types of investment in order to diversify and grow its ridership.
- **A more integrated accessible service** – There are a number of strategies that will be needed to ensure that Handi-Transit services meet Accessibility for Ontarians Disability Act (AODA) requirements, improve customer booking options, customer travel experience and expand eligibility. Enhancements are also needed to better enable some registrants to use TransCab and conventional transit to complete some or all of their trip needs that precludes the need for advance bookings so that trips can be taken dynamically; this would enable qualifying registrants to be more integrated with the community.
- **Integrated infrastructure, fare, customer information and policy improvements** – There are many specific improvements that can be made to each of these components that will in turn leverage the ridership gained through recommended changes to routing, schedules and service levels.

## 4 SYSTEM-WIDE SERVICE PROPOSALS

A number of service changes are recommended to address issues and improve the overall effectiveness and efficiency of the Greater Sudbury Transit System. This section describes the proposed overarching approaches and detailed proposed changes to routes.

### 4.1 Transit Service Design Types

Transit system design draws from a suite of service types. These range based on the degree that service is fixed or flexible. Fixed services operate using a published schedule and route map with set bus stops whereas demand responsive services offer service to specific locations and times as need arises.

Each of these service design types may be used to serve specific community needs based on expected ridership and commonality of travel patterns, the land use and layout of communities and the level of physical mobility for passengers. They may also be layered together. Using several different types has advantages since fixed route options will normally carry more passengers for a lower cost than demand responsive options but will not meet all community needs.

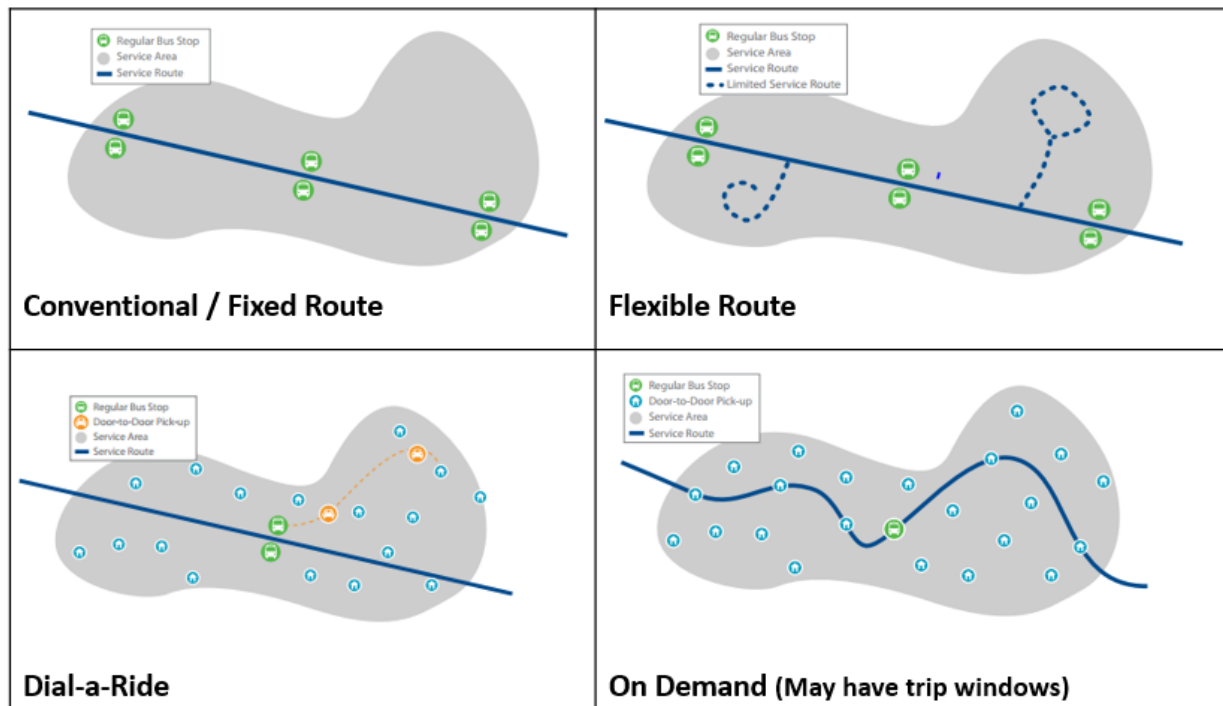
As a foundation for the proposed network and service changes, the table below provides an overview of the palette of service design types that potentially could be applied in Greater Sudbury. A number of these are already established in the area, particularly conventional service and demand responsive service, fixed route and conventional transit express and demand responsive services (e.g., TransCab, Handi-Transit), in some cases with trip windows.

#### TRANSIT SERVICE DESIGN TYPES OVERVIEW

Service Type	Description	Stop Pattern	Notes
<b>Conventional / Fixed Route</b>	Service operates on a fixed route and schedule.	Regular stop spacing (approximately every 400m in urban areas)	<ul style="list-style-type: none"> <li>Offers clarity and ease of use for passengers but is less flexible to accommodate other passenger needs. May not be suitable for lower densities.</li> <li>Any type of transit vehicle may be used.</li> </ul>
<b>Deviated Service</b>	Service generally operates on a fixed route or schedule but enables the bus to deviate off route to serve a <u>specific destination</u> on a “by request” or limited basis.	Regular stop spacing (approximately every 400m in urban areas), with signage often at the deviated destination indicating it is “by request” and how to contact dispatch.	<ul style="list-style-type: none"> <li>Can be a good option to provide some level of service to lower ridership areas between key points as the bus only deviates if there are passengers.</li> <li>Can use standard transit vehicles but more commonly uses medium-sized buses (&lt;10.7m / 35 ft in length) or smaller.</li> </ul>
<b>Flex-Route</b>	Service operates on a general route or schedule, but may deviate off route <u>at multiple points as needed</u> to provide service.	May serve bus stops as well as deviate off route at any point to serve on-demand locations.	<ul style="list-style-type: none"> <li>Usually the amount of flex-route available is limited by time, distance and/or passenger type. For instance, service will specify that flex routing is only available during mid-days or evenings, within a 1.5km distance of the route or only for people with a disability registered with the system.</li> <li>Typically uses smaller buses less than 9.1m/ 30 ft in length</li> </ul>

**TRANSIT SERVICE DESIGN TYPES OVERVIEW**

Service Type	Description	Stop Pattern	Notes
<b>Demand Responsive / Dial-a-Ride with Trip Windows</b>	Service operates door-to-door, but is clustered around specific “trip window” times to help passengers align travel together. For instance, service may be published as operating on specific weekdays or available from 8:00am to 9:00am and 2:00pm to 3:00pm.	Serves on-demand locations. In some cases, may also serve specific bus stops, particularly terminus points.	<ul style="list-style-type: none"> <li>Particularly for trips that have a longer intervening travel time (such as longer distance travel between communities), and is generally a more efficient way to provide service with a demand responsive component since it clusters similar trips together. It also offers better convenience for passengers as they have a sense ahead of time when transit might be available and can plan their appointments around that.</li> <li>Typically uses smaller buses less than 9.1m/ 30 ft in length, vans or taxi sedan vehicles.</li> </ul>
<b>Demand Responsive / Dial-a-Ride</b>	Service is dispatched as needed and serves door-to-door locations. Trips are booked ahead of time by clients.	Serves on demand locations. May also provide connection to specific bus stops, particularly terminus points.	<ul style="list-style-type: none"> <li>Is best used for cases where passengers may not be able to use other services (such as Handi-Transit) or where other types of transit is not practical due to land use/population density.</li> <li>Typically uses smaller buses less than 9.1m/ 30 ft in length, vans or taxi sedan vehicles.</li> </ul>



## 4.2 Proposed Revised System Structure

Building from the service design types and approved long term community land use and transportation plans, the following section describes the proposed revised network strategy and layers of transit service for Greater Sudbury.

It should be underscored that this strategy is flexible and is based on showing how the different types of service work together to serve different passenger needs and land use patterns. It also shows the key corridors for transit, enabling future development and road network improvement decisions to reinforce them where possible. In the case of lower density areas served by on-demand transit (by TransCab or Handi-Transit) it also better shows to passengers how service coordinates.

This network strategy is complemented by other system-wide changes proposed in Section 5.3. a number of service changes are recommended to address issues and improve the overall effectiveness and efficiency of the Greater Sudbury Transit System. Overall, this strategy focusses on **significantly restructuring the Conventional and TransCab services** to make the service easier to use, more reliable and better matched with ridership.



There are currently approximately 170,000 annual hours of service in the Greater Sudbury Transit system that would need to be maintained with 80% of service costs allocated to the urban area and 20% allocated to the outlying communities. Transit Consulting Network worked with Greater Sudbury Transit staff to develop a new route network and service design based on best practices to address community-wide stakeholder priorities. **The changes proposed here work within those existing resources to deliver service that will be easier to use, put service where it is needed most and overall be more attractive to passengers.**





**This proposed service restructuring includes:**

**Reducing the overall number of routes and improve directness.** The proposed revised structure creates high frequency routes on key corridors and also combines routes so that more origins and destinations are served without transfer. The changes mean that fewer routes will need to travel to the Downtown terminal to transfer. It reduces the number of routes from 38 to 21, making it easier for customers to understand the services, plan their trip and navigate the system. To the extent possible, it will also eliminate one-way loops and low performing deviations to make service as direct as possible.

**Providing Sunday service and weekday late evening service on all routes.** Currently the existing system uses separate routes and numbering depending on when service is operating. The proposed revised service makes routing and numbering consistent throughout all days. It also increases the level of Sunday service, a key point of feedback from the community.

**Improving reliability.** All proposals will use revised schedule trip length times (also known as “running times”) that reflect the reality of current conditions to ensure that the new service can operate on-time and serve customers’ needs reliably. Transfers will be coordinated to the extent possible and timed to reduce waiting times for customers and ensure seamless connections.

**Matching service to demand.** An overall network strategy has been developed that revises system structure and presents it in layers:

- **Frequent** routes to provide the most direct and highest frequency services to meet the most common travel patterns and highest ridership areas of the City. Mobility Hubs will be created along the routes, providing opportunity to coordinate other levels of service. This route layer becomes a blueprint for what could evolve into a Bus Rapid Transit system.
- **Core** routes to offer support to the higher frequency services in the urban core.
- **Neighbourhood** routes with slightly lower frequency to provide service closer to home for those who may be less able to access the frequent and core routes.
- **Community Connectors** to provide clear and easy-to-use connection between outlying communities and key destinations in the core.
- **On-Demand (TransCab) Service Areas** to provide convenient on-demand travel between homes in less-populated areas to Community Connectors or Handi-Transit services.
- **Handi-Transit** throughout the area for those eligible passengers with disabilities that prevent them from using the other services some or all of the time.

The key benefit of the proposed revised transit system network structure is that it reallocates service from areas with too much service to where it is needed most. It also uses coordinated combinations of service types to improve access and service levels in outlying communities based on demand.

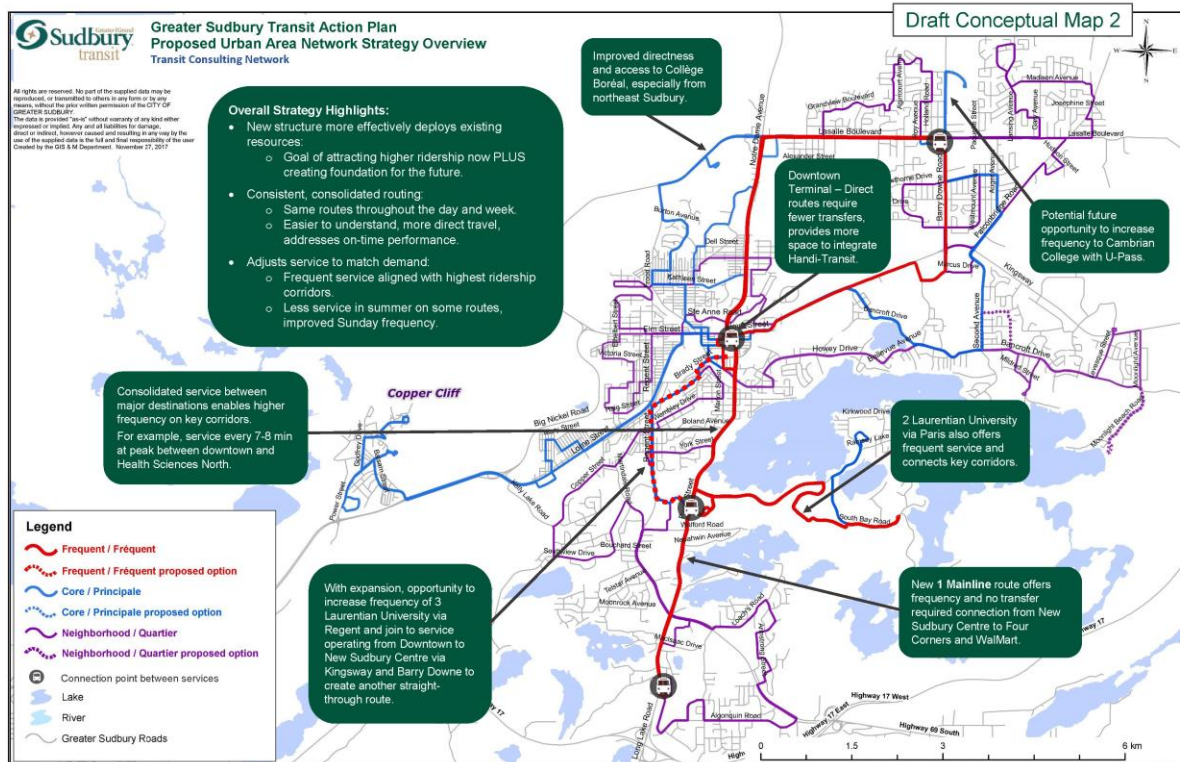
### Proposed Service Layers

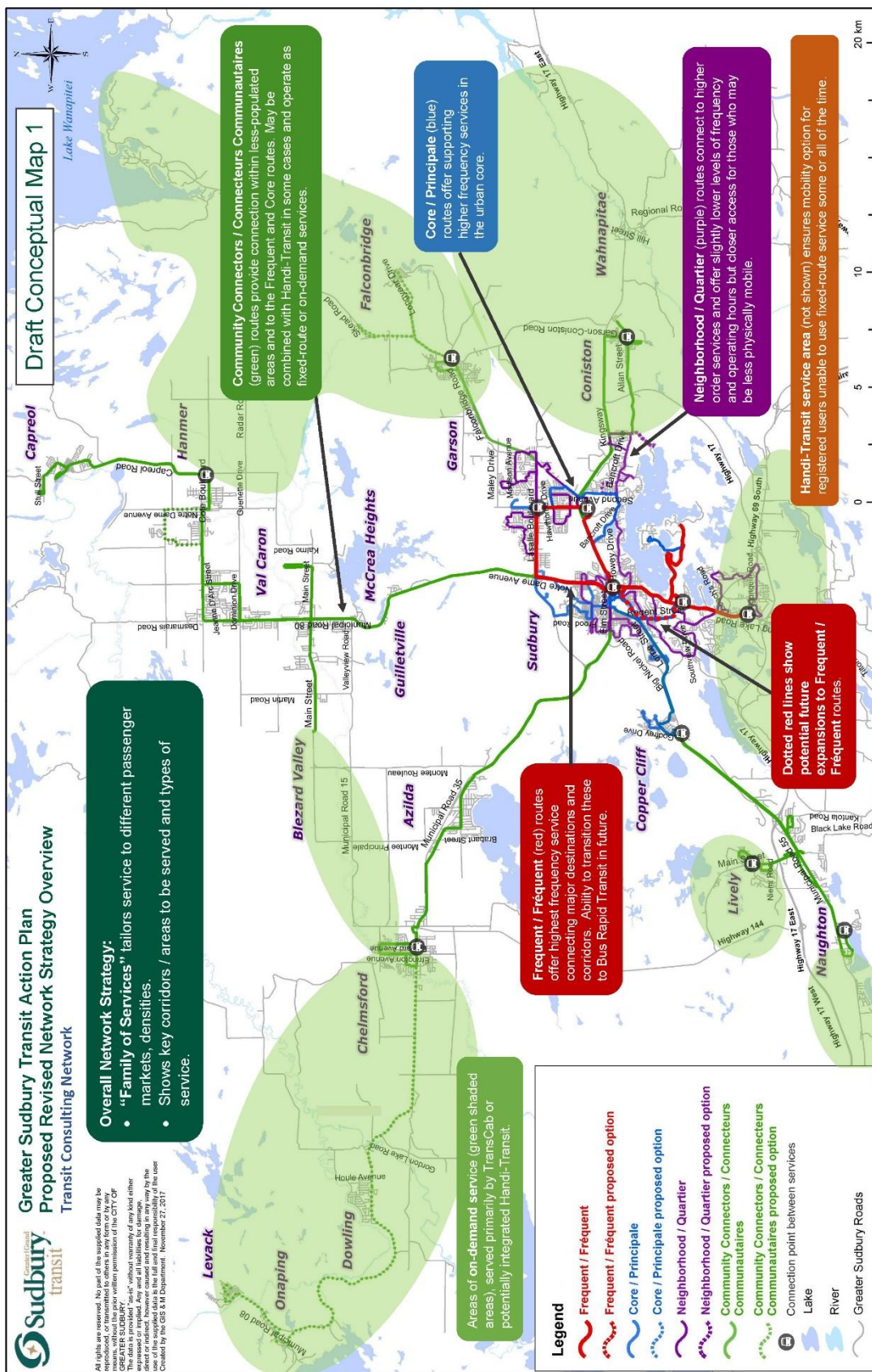
The table below and the following map provides an overview of the proposed transit service layers for the City of Greater Sudbury's transit network structure:

Service Layer	Definition	Service Types	Frequency
<b>Frequent / Fréquent</b>	Highest frequency service connecting major destinations and corridors.	<ul style="list-style-type: none"> <li>Fixed route</li> <li>Ability to evolve to Bus Rapid Transit</li> </ul>	To start: 15 min peak Future: 15 min or better, 7am-7pm
<b>Core / Principale</b>	Supporting higher frequency routes in the urban core.	<ul style="list-style-type: none"> <li>Fixed route</li> </ul>	To start: 15/30 min peak Future: 15 min or better at peak
<b>Neighborhood / Quartier</b>	Local service within urban neighbourhoods connecting to the Frequent and Core routes.	<ul style="list-style-type: none"> <li>Fixed route</li> <li>Fixed route delivered with smaller vehicles</li> </ul>	To start: 60 min all day Future: 30 min peak where warranted by demand
<b>Community Connectors / Connecteurs Communautaires</b>	Connection between outlying communities to the Frequent and Core routes.	<ul style="list-style-type: none"> <li>Fixed route</li> <li>Fixed route delivered with smaller vehicles</li> </ul>	Service levels vary based on demand.
<b>On Demand / À la Demande</b>	Connects people in less-populated areas from their homes to key services and transit connection points in outlying communities.	<ul style="list-style-type: none"> <li>Uses TransCab or combined Handi-Transit on some trips.</li> </ul>	Service levels vary based on demand.
<b>Handi-Transit / Service Handi-Transit</b>	Service for eligible, registered users unable to use the fully accessible fixed route system some or all of the time.	<ul style="list-style-type: none"> <li>On demand</li> </ul>	Service levels vary based on demand.

**PLEASE NOTE** that the new route structure and proposed changes are preliminary only and will be further revised based on interim engagement underway right now with front-line transit staff and community leaders, as well as the further phase of engagement to take place in February-March 2018.







### 4.2.1 Route Level Service Change Details

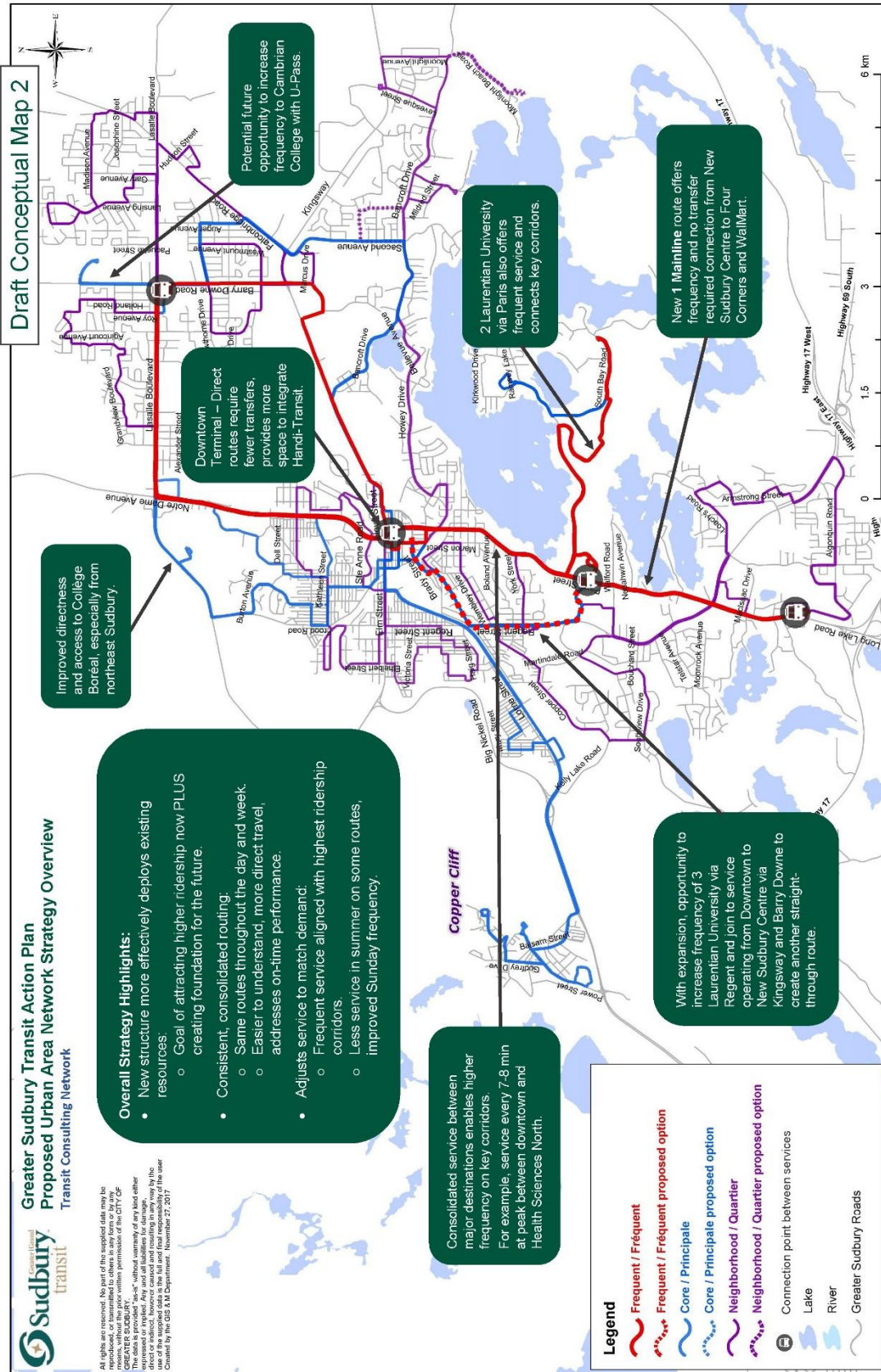
Specific changes are recommended to each route within the overall revised network structure and proposed layers of service types. The following table provides an overview of each new route, its relation to existing routes, and key changes incorporated. The following maps also show preliminary details for the new route structure. Detailed information and route level maps will be provided to review during public engagement process.

New Route Number vs. Existing Routes Impacted	Comments
<b>Route #1 Mainline</b> <ul style="list-style-type: none"> <li>Frequent service</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Links six key destinations –New Sudbury Centre, Kingsway Shopping area, Downtown Transit Terminal, Health Sciences North, Four Corners and Walmart in the South End. These coincide with highest ridership stops.</li> <li>Establishes high speed high capacity corridor for future Bus Rapid Transit (BRT)</li> <li>Highest frequency as budgets permit</li> <li>Increases transit use: Customers will walk farther to access high frequency corridors</li> <li>Can be interlined with other routes for seamless travel where required</li> </ul>
<b>Route #2 Laurentian U. via Paris</b> <ul style="list-style-type: none"> <li>Frequent service (per UPASS)</li> <li>Replaces Route 500</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Retains existing well-utilized service to Laurentian University</li> <li>Service from downtown to Health Sciences North portion of route is also served by Route #1 Mainline and as such, potential to have 7-8-minute service between downtown and hospital</li> </ul>
<b>Route #3 Laurentian U. via Regent</b> <ul style="list-style-type: none"> <li>Core service</li> <li>Replaces Route 501</li> <li>Route changes</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Retains existing well-utilized service to Laurentian University with slight modification to route pattern (via Centennial Dr.) to improve schedule adherence</li> <li>Route 502 evening service eliminated</li> <li>With expansion, future opportunity to connect this route to #1 Mainline and implement a second BRT line within the City</li> </ul>
<b>Route #4 North-east</b> <ul style="list-style-type: none"> <li>Neighborhood service</li> <li>Replaces portions of Route 300, 301, 302, 402,403</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Transfers made at New Sudbury Centre; however, opportunity to join or “interline” trips with the same buses also serving route #1 Mainline or route #5 to College Boreal for seamless travel where required</li> </ul>
<b>Route #5 TC – Boreal - NSSC</b> <ul style="list-style-type: none"> <li>Core service</li> <li>Replaces portion of Route 014</li> <li>Eliminates 147</li> <li>New route pattern</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>New route pattern provides direct travel to and from New Sudbury Centre and the Downtown Terminal for Collège Boréal students and high ridership areas of previous route 014</li> <li>Can be interlined to Route #4 North-East to eliminate need to transfer</li> </ul>
<b>Route #6 TC – CRA</b> <ul style="list-style-type: none"> <li>Core service</li> <li>Replaces Route 014</li> <li>Eliminates 147</li> <li>New route pattern</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Serves the Canada Revenue Agency and Pioneer Manor and offers two-way service to key residential and commercial corridors</li> </ul>
<b>Route #7 TC-NST via Bancroft</b> <ul style="list-style-type: none"> <li>Core service</li> <li>Replaces Route 002</li> <li>New route pattern</li> <li>Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>Removes service to Marcus Dr. and Donna Dr. to improve schedule adherence</li> </ul>

New Route Number vs. Existing Routes Impacted	Comments
<b>Route #8 – New Sudbury Local</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces 141, 142, 302</li> <li>▪ New route pattern</li> <li>▪ One-way loop service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides coverage to shopping destinations for those passengers unable to walk to other high frequency routes servicing the areas.</li> <li>▪ Passengers can connect to other routes and services at Kingsway shopping area and New Sudbury Centre.</li> </ul>
<b>Route #9 McKim-N. End</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces Route 007, 012, 147</li> <li>▪ New route pattern</li> <li>▪ Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides coverage to residential areas and focuses on connections to other high frequency routes servicing the areas.</li> <li>▪ No service to CRA (Canada Revenue Agency) as transfers can be made to new Route #1 Mainline if customers cannot access new Route #6 day service</li> <li>▪ Winter months operates via Louis Street, with service at other times via Mountain Street with potential to provide service with smaller vehicle</li> </ul>
<b>Route #10 West End</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces 006</li> <li>▪ New route pattern</li> <li>▪ Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Route pattern modified to streamline service currently provided by Route 006 to improve coverage to both sides of Regent St.</li> <li>▪ Some bus stops eliminated; however, additional walk distance for some customers is considered reasonable considering increased access for other side of Regent</li> </ul>
<b>Route #11 Four Corners</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces 181,182,189, 819</li> <li>▪ New route pattern</li> <li>▪ Two-way Service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Two-way route with timed transfers at Four Corners</li> <li>▪ More origins and destinations accommodated</li> <li>▪ South End destinations accommodated with transfers to new Route 12</li> </ul>
<b>Route #12 South End</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces 181,182,189</li> <li>▪ New route pattern</li> <li>▪ Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Links residents to Walmart, Four Corners and Health Science North</li> <li>▪ Enables connections to new Route #1 Mainline to other key community destinations</li> <li>▪ Offers connections to Laurentian University services at Health Sciences North</li> </ul>
<b>Route #13 Bancroft</b> <ul style="list-style-type: none"> <li>▪ Neighborhood service</li> <li>▪ Replaces 101, 102</li> <li>▪ New route pattern</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minor changes to combine former route coverage</li> <li>▪ Future extension to new Events Centre on Kingsway at Levesque St.</li> <li>▪ Summer route access to Moonlight beach</li> </ul>
<b>Route #14 Copper Cliff</b> <ul style="list-style-type: none"> <li>▪ Core service</li> <li>▪ Replaces 940</li> <li>▪ Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Streamlined to reduce travel time</li> <li>▪ Potential TransCab connection to be created for on demand service</li> </ul>
<b>Route #15 Cambrian</b> <ul style="list-style-type: none"> <li>▪ Core service</li> <li>▪ Replaces 401</li> <li>▪ Two-way service</li> </ul>	<ul style="list-style-type: none"> <li>▪ To be interlined with Mainline #1</li> <li>▪ Potential to connect trips to routes serving Laurentian University. In particular, future opportunity to join to proposed Route #3 to create a second BRT route for the system.</li> </ul>
<b>Route #101 Coniston</b> <ul style="list-style-type: none"> <li>▪ Community Connector service</li> <li>▪ Replaces 103</li> <li>▪ Proposed fixed TransCab + Dial a ride</li> </ul>	<ul style="list-style-type: none"> <li>▪ Converts commuter bus to fixed-route TransCab during peak periods</li> <li>▪ Transfer to urban routes at Kingsway Shopping area transfer location</li> <li>▪ Provides TransCab Dial-a-Ride service at all other hours</li> <li>▪ Enables TransCab to serve Handi-Transit customers that do not require door-to-door service</li> </ul>
<b>Route #102 Garson/ Falconbridge</b> <ul style="list-style-type: none"> <li>▪ Community Connector service</li> <li>▪ Replaces 303</li> <li>▪ New TransCab zone</li> </ul>	<ul style="list-style-type: none"> <li>▪ Moves TransCab connection point to Garson</li> <li>▪ Expands Transcab zone to connect to Hanmer</li> <li>▪ Transfer to Route #1 Mainline at New Sudbury Shopping Centre</li> </ul>



New Route Number vs. Existing Routes Impacted	Comments
<b>Route #103 Lively</b> <ul style="list-style-type: none"> <li>▪ Community Connector service</li> <li>▪ Replaces 701</li> <li>▪ New route pattern</li> <li>▪ Proposed fixed TransCab</li> </ul>	<ul style="list-style-type: none"> <li>▪ Slight route modification near Hillcrest</li> <li>▪ After 7 pm have fixed-route TransCab that connects Route #14 in Copper Cliff.</li> </ul>
<b>Route #104 Azilda/ Chelmsford</b> <ul style="list-style-type: none"> <li>▪ Community Connector service</li> <li>▪ Replaces 702</li> </ul>	<ul style="list-style-type: none"> <li>▪ Relocates TransCab connection point to Place Bonaventure</li> <li>▪ Makes fixed-route TransCab permanent</li> </ul>
<b>Route #105A Val Caron/ Hanmer/ Capreol and #105B Hanmer Shopping Centre to Downtown</b> <ul style="list-style-type: none"> <li>▪ Community Connector service</li> <li>▪ Replaces 703 and 704</li> <li>▪ Route modifications</li> </ul>	<ul style="list-style-type: none"> <li>▪ One route – 105A-105B replaces route 703 and 704</li> <li>▪ Schedules to be revised to reflect higher demand times, with more frequency provided rather than two buses at the same trip time.</li> <li>▪ Introduces local bus service (via 105A) that connects all existing Route #703 and Route #704 communities while maintaining service between Hanmer Shopping Centre to downtown Sudbury (via 105B)</li> <li>▪ Ability to keep 703A within community when required, and express into Frequent route system</li> <li>▪ Route modifications in Capreol for two-way service via Hanna, and extension on Main street to Elm</li> </ul>





## 5 SUPPORTING STRATEGIES: PROPOSED IMPROVEMENTS TO INFRASTRUCTURE, FARES AND CUSTOMER CARE

Complementing the system-wide changes to service proposed in Section 5, a number of other improvements are proposed to supporting elements of the transit system. These include improvements to infrastructure (bus stops and terminals), fare media, customer information and outreach measures.



**The proposed supporting strategies include:**

**Improving infrastructure** through the provision of more shelters, benches, and information at stops and terminals. Further to the key observations in Section 3, this includes a recommendation for standardizing bus stop infrastructure, to enhance the consistency of stop placement and accessibility. In these standards, bus stop information requirements should be clearly identified. Greater Sudbury Transit should undertake a re-branding strategy to update all wayfinding, promotional and infrastructure based on the new network service and route structure. Bike racks complement the system and should be placed on all conventional buses.

**Restructuring fares to reward regular users and encourage ridership** by considering a slightly higher cash fare with lower discount fares for passes and tickets, as well as consideration around other fare pricing policies, such as easing the time restrictions on transfers and allowing transfers to be used on any route and any direction. Implementation of Smart card technology would provide the ability to monitor ridership trends and revenues more closely, promote and create incentives more easily, and would improve customer experience.

**Improving customer experience** with additional Mobility Training Program. Create a municipal staff and community liaison position to address the following gaps in service to customers as heard through the engagement process:

- **Leading outreach initiatives** to help promote the service, such as liaising with schools, post-secondary institutions and major employers to provide information, events and programs to help promote the transit service and how it can be used as a part of a suite of sustainable transportation options and a healthy lifestyle.
- **Leading and organizing travel training** to help teach individuals and groups (such as seniors programs organized through the City's recreation department) on how to use the fully accessible conventional transit system.
- **Overseeing customer information tools and the customer complaint process** to identify ways that these processes can be as responsive as possible to citizen travel needs and to also ensure that feedback received from customers and front line staff has a clear process to go back into further improving and revising the system.

The following sections provide details on each of these areas.

## 5.1 Proposed Infrastructure Improvements

### 5.1.1 Improved Bus Stop Amenities and Standardization

Citizens who may consider riding transit, especially those who have the option to drive, may be deterred by the unfamiliarity of the transit system (where it goes, the fare collection, the boarding process) – basically every aspect of using it. The following information should be available where feasible:

#### Minimum

- Name or Identification number of the stop (i.e. 4-digit existing I.D. number)
- Routes that serve the stop by posting each route number
- Decals providing high tonal contrast colours for easy viewing by persons with low visibility
- Bus stop signs should be double sided with the international bus pictogram, so prospective customers may see the location of the bus stop from 2 directions
- Bus stop signs should use 3M reflective sheeting material (similar to other traffic signs) to enable bus drivers to easily view them during nighttime and low visibility periods.

#### At Major (busy) Bus Stops

- Schedule departure times (see example from Burlington Transit in Figure 3)
- Route map
- Fare information
- Phone number (to access transit information)
- Website addresses to link to Greater Sudbury Transit's GPS/Real time application ([mybus.greatersudbury.ca](http://mybus.greatersudbury.ca)) and other information about transit (fares, hours of service, routes, etc.)

#### At Transit Shelter Locations

- Same information as above
- Transit system map



Figure 3 - Posted Schedules at Bus Stops

**Recommendation:** Further to the recommendation in Section 3, it is recommended that bus stop standards should be developed to enhance the consistency of stop placement and accessibility. In these standards, bus stop information requirements should be clearly identified.

### 5.1.2 Improved Bus Stop Branding and Consistency

With the implementation of new transit service improvements, including bus stop infrastructure, there is now an opportunity to brand the entire transit system by adopting clear and consistent messaging and information through a communications plan. Branding builds and enhances transit system visibility by communicating a clear message to existing and potential transit customers that this is their transit service.

Branding transit for Greater Sudbury Transit is a separate study in itself and is beyond the scope of this report, however, the very basic aspects of branding would consist of common and universal images throughout the following components of the transit system:

- Greater Sudbury Transit logo (consistent colour & shapes for all material and new vehicles)
- Website
- Fonts (including AODA compliance with font size and contrasting colours)
- System route maps (printed, online and posted in transit shelters)
- Bus stops (and posted schedules at major busy stops) and shelters
- Service announcements, detours, route changes, etc.
- All promotional and marketing materials
- Fare media (including transit fare smartcards).

**Recommendation:** It is recommended to take advantage of the momentum built with the restructuring of the Transit Network, and undertake a branding strategy for Greater Sudbury Transit's family of services.

### 5.1.3 Bike Racks on Buses

Active transportation has been playing a significant role in the overall transportation choice across Canada. Since all transit customers are pedestrians, they benefit from walk distance guidelines as proposed in this report. One active transportation market that has not been accommodated are those that travel by bicycle, which was made clear through the community engagement process. Bike racks on buses are now becoming the norm for public transit systems.



Bike racks allow transit customers to bicycle to transit stops, mount their bicycle on one of two bike mounts then board the bus. At the end of a trip, the bicyclist can then continue travel. Doing so expands the transit market potential and is a step towards a successful active transportation strategy that does not unduly burden the ability of buses to maintain schedules. With the advent of bike racks on buses, bike storage facilities should then be available at all key transit 'mobility' hubs – Transit Centre, New Sudbury Terminal, Costco, Four Corners, Costco, and Walmart – and at major transit generators.

**Recommendation:** It is recommended that bike racks should be placed on all conventional transit buses.

## 5.2 Proposed Fare Policy Improvements

### 5.2.1 Fare Pricing Policy Best Practice

Transit fare revenues are needed to off-set transit costs. A best practices philosophy with respect to balancing transit costs with revenues is to have a fare pricing policy which:

- Reward frequent transit customers;
- Provide discounts to those that need it the most;
- Increases transit use;
- Simple to administer; and
- Is not complicated

At a highest level, the best practice in fare pricing is to have higher fare for the infrequent transit customer (base cash fare) and a reward system for frequent transit customers (concession fares). Although affordability is key, transit customers are less sensitive to fare increases when they are coupled with improved transit service. A number of strategies that support the best practices are described in the following sections. It is important to note that an analysis of the expected impact on revenue should be undertaken when considering any changes in fare structure.

### 5.2.2 Single Cash Fare for all Passenger Categories

It is suggested that the base cash transit fare (\$3.20 currently) be applied to all fare categories while only concession fare discounts be available to customer who pre-purchase tickets and passes. This strategy is in line with fare pricing strategies of many transit systems to encourage prepaid fares. Increased revenues can be expected since those that use the bus less are far less price sensitive to the higher cash payment. For those who are price sensitive, discount fares are still available.

**Recommendation:** Implement a single cash fare price for all passenger categories.

### 5.2.3 Multi-Ride Ticket Pricing

Based on best practices, prepaid adult and student fares should be priced at a 20% discount to the base cash fare. For other passengers, an additional 10% discount (concession fare) would be offered for those who most need it (older adults, disability pensioners)

**Recommendation:** Provide a 20% discount on tickets to the base cash fare, plus an additional 10% for concession fare categories.

### 5.2.4 90-minute Transfer/ Period Pass

Currently, transfers are only valid for the first available bus travelling to the customer's destination and are not transferable. A transfer time of 90 minutes is recommended along with the ability of the transit customer to return via the same bus route or continue their travel on another connecting bus within 90 minutes of their original boarding. The transfer would, in effect, act as a period pass.

One example of the benefit of the extended transfer time is that a customer can board an urban bus to the downtown, shop and then continue their journey or return home on a single bus fare. When introduced in Kitchener-Waterloo, which was one of the first transit system in Ontario to do so, the strategy was found to increase transit use yet it was revenue neutral. This transfer policy was in most part designed to meet the needs of single parents who could drop off their child at daycare then resume travel to work on the next bus and stay at home parent who needed to have a short-trip to a store with their pre-school child during the day and return home on a single fare.

**Recommendation:** Allow a transfer time of 90 minutes and provide ability for customers to return via the same bus route or continue travel on another bus.

### 5.2.5 Children and Older Adult Fares

Throughout the engagement process, two particular types of groups provided detailed feedback on fares. First, many older adults (and other community members) identified the “Free Monday” program that the City of Greater Sudbury piloted as a benefit and would like to see this program returned. Second, parents with children identified that taking transit is a financial barrier due to the fact that they not only need to pay their fare, but also those of their children 5 and up who cannot be left alone at home. Both of these recommendations are examples of fare pricing strategies that can benefit the community and especially those who most need it. As they both result in lost revenue, it is important to provide information to Council regarding the health and community benefits of providing the discount, and the impact to the budget so that an informed choice can be made.

**Recommendation:** Consider these programs as a means to help those with financial barriers.

### 5.2.6 High School Activity Pass

A discounted high school activities monthly pass can be made available to students to use for after school should they remain to participate in school hours activities or travel to their part time job. For example, a deep discount of \$30 per month would provide for very inexpensive travel when bus capacity is available (e.g. evenings and weekends). The pass would also benefit parents who, in turn, would not have to pick up their high school family members after school.

**Recommendation:** Consider implementation of a High School Activity Pass for evenings and weekends.

### 5.2.7 Transferable Monthly Pass

The current monthly pass is not transferable, which means that under a new pricing formula, if a transit customer is unable to use the pass on some days, the discount would not be as great. A transferable pass could then be given to another person or member of the household to use. Generally, passes are purchased for travel to and from work or school, which means that additional trips are generally taken outside the peak hours when seating capacity is available.

**Recommendation:** Consider allowing 31-Day Adult passes to be transferable.

### 5.2.8 Universal Bus Pass (U-Pass)

The successful and popular program with Laurentian University students is an advantage to transit ridership and transit revenues. Although the U-pass price is deeply discounted, it is considered reasonable since there is full participation of students, which provides the City of Greater Sudbury with a sustainable revenue source. The increase in revenues also makes it more affordable for the City to increase service to better accommodate students while other customer groups would benefit as well that will, in turn, increase transit use further.

Efforts to extend the program to Cambrian College and College Boreal should continue by focussing on the financial savings to students and the benefits of the added revenues that could be applied to improved service. The U-Pass can also be extended to faculty and post-secondary school support personnel as well, which would require a similar pricing structure and conditions (i.e. full participation).

**Recommendation:** Continue efforts to implement a Universal Pass Program with Cambrian College and Collège Boréal.

### 5.2.9 Smart Card Technology

Transit smart card systems are growing in popularity to replace the need for transit customers to carry exact cash fares, tickets or passes and the need to purchase far more expensive electronic registering fareboxes that can count coins and paper currency. A transit smart card system enables transit customers to load value on a microchip-based card that acts like an electronic purse (e-purse), also referred to as a farecard. The transit farecard has monetary value similar to those typical of retail sector loyalty cards; however, that's where the similarity ends.

What differentiates the transit farecard from a retail card is the back-end software that consists of 'business rules' such as a complex fare pricing system built in to the farecard. Value can also be reloaded onto the (re-usable) farecard, as required. Transit farecards have the potential to reduce the cost of the revenue management process (RMS) – fare collection and coin counting, printing and distribution of paper media (e.g. tickets and passes), commissions paid to sell fare media, and farebox maintenance in the case of registering fareboxes. Transit farecards also reduce or eliminate the revenues lost to fare evasion.

The use of smart cards can also help reduce transit boarding times. For example, the time taken to deposit and verify cash fares, tickets, passes, and transfers can take an estimated 5 seconds average per boarding. In comparison, boarding with a transit farecard will take an estimated 1.5 seconds. If, for example, 50 passengers boarded a bus during a 30-minute peak trip, the current payment process will take an estimated 4.2 minutes. If all 50 passengers boarded with a farecard, the total time attributed to boardings would approximate 1.25 minutes; this would save an approximately 3 minutes per trip, sufficient to address many schedule adherence problems.

A number of small transit systems in Ontario such as Midland, Penetanguishene, Bradford West Gwillimbury, Woodstock, and Chatham utilize low-cost fare collection technology that is integrated with GPS. The technology is considered a transit ridership growth strategy by the Province of Ontario given its ease of use and eliminating the need for exact cash fare. By integrating with GPS, the City of Greater Sudbury would be able to track transit use by bus stop, direction and time period (by trip, by hour, time of day, week, month, and annually).



Benefits of using smart cards are summarized as follows:

- Eliminating the need to print and distribute tickets, passes and transfers, thereby reducing fare collection costs
- Eliminates fare evasion
- Reduced boarding times
- Tracking of smart card use through embedded serial numbers
- Flexibility in fare pricing
- Ease of implementing fare changes

Another critical benefit of an integrated smart card-GPS system is that the City of Greater Sudbury would not only be able to monitor bus stop activities, schedule adherence performance data would also be provided. This would provide the information needed to adjust schedules, as required, and provide the City of Greater Sudbury with the ability to monitor the performance of all services.

**Recommendation:** It is strongly recommended that the smart-card technology be adopted. Financial implications will be provided in the final Transit Action Plan report.

### 5.2.10 Summary of Fare Pricing Strategy

Addressing changes to the fare pricing policy is always a sensitive issue. The pricing strategies discussed above provide for many changes which aim to:

- Simplify fare pricing;
- Reward frequent transit customers;
- Encourage transit use through less restrictive transfer policies;
- Provide more flexible pass use;
- Increase transit revenues fairly;
- Provides a basis for increasing fares equally across all fare categories

While the recommended strategies will reduce bus fares for some transit customers, others will need to pay more, albeit they benefit in other ways. If the increase is considered high, the increase can take place over a few years rather than overnight. These are all considerations which Council must take when reviewing Transit Fare proposals to changes in fare structure.

Greater Sudbury Transit, under the Community Services Division has been asked by Council to look at fare pricing for those that can least afford bus fares. These recommendations can be considered further as the City of Greater Sudbury looks to assist those in need, but these initiatives should all be done with proper planning of implementation.

With the advent of smart card technology, Greater Sudbury transit could use the technology to properly monitor transit use closely and be able to better quantify the impact to fare system changes and the impact on the Operating Budget.

## 5.3 Proposed Transit Information and Customer Care Improvements

### 5.3.1 Mobility Training Programs

Greater Sudbury Transit has developed and introduced a Mobility Training Program (also known as “travel training”) to assist people with disabilities and older adults who are hesitant to try transit on their own and are unaware of the accessibility features of the conventional transit vehicles. This training has been introduced in group formats and thus far is reported to be well received in the community.

As part of the 2017-2018 Transit Accessibility Plan, Greater Sudbury Transit has committed to “building on the success of the Mobility Training Program thus far and keeping in mind the goal of better integration of conventional transit services and specialized transit services, continuation of this training will provide passengers with disabilities and seniors with choices of transportation that best suits their needs.”

Best practices in the industry rely heavily on Travel Training Programs to provide support to the community and promote the use of Transit Services to all types of groups:

Examples of people who could benefit from travel training are:

- High school and elementary students
- People with physical disabilities, who may be transported by family and/or special needs school bus, and who, with appropriate familiarization/ training could learn how to use conventional transit and become more independent.
- Adults with physical disabilities who may be able to travel on conventional services, at least for some of their trips.
- Older adults who suddenly find themselves either unable or unwilling to drive, and if never having used transit, simply do not know how, and may feel intimidated and reluctant to use a system they do not understand.
- People with cognitive or learning disabilities who, although possessing the physical ability to use conventional transit, lack the knowledge and skills to do so currently, but who are capable of assimilating training so as to at least be capable of making a regular, unvarying one-way or return trip.
- Citizens new to the city or new to transit altogether.

Training these customers to use conventional transit, in addition to the mobility advantages for the individual, allows Greater Sudbury Transit to use its services in the most cost- effective manner and helps to protect specialized service for customers who have no other travel options due to the more constricting nature of their disabilities.

**Recommendation:** Continue to grow the Mobility Training Program with consideration to impact on time required by staff to book and provide the training.

### 5.3.2 Municipal Staff and Community Liaison

As recommended in Section 3, many of the components most desired by the public relate to increased promotion of the system and customer care. However, existing staffing levels for Greater Sudbury Transit do not provide the resources to address these key opportunities and areas for growth.

Stakeholders during the Engagement Process highlighted the need to create partnership, promote, and create incentives to encourage people to take Transit. Communication to the public was seen as a priority which needs to be addressed and customer satisfaction is of utmost importance in order to retain and increase the ridership base.

**Recommendation:** Create a position to address the following needs:

- **Leading outreach initiatives** to help promote the service, such as liaising with schools, post-secondary institutions and major employers to provide information, events and programs to help promote the transit service and how it can be used as a part of a suite of sustainable transportation options and a healthy lifestyle.
- **Leading and organizing travel training** to help teach individuals and groups (such as seniors programs organized through the City's recreation department) on how to use the fully accessible conventional transit system.
- **Overseeing customer information tools and the customer complaint process** to identify ways that these processes can be as responsive as possible to citizen travel needs and to also ensure that feedback received from customers and front line staff has a clear process to go back into further improving and revising the system.

## 6 SUMMARY: HOW TRANSIT ACTION PLAN RECOMMENDATIONS ALIGN WITH THE CITY'S VISION

The aforementioned strategies address public transportation priorities; however, it is equally important that the Transit Action Plan strategies also align with the City of Greater Sudbury vision, mission statement and values. The following describes how the Transit Action Plan preliminary recommendations align with the City's Strategic Goals.

Current City of Greater Sudbury Strategic Direction	How Greater Sudbury's Transit Action Plan Recommendations Meet These Goals
<b>VISION</b> A growing community, recognized for innovation, leadership, resourcefulness and a great northern lifestyle.	<ul style="list-style-type: none"> <li>▪ Resourcefulness through existing and proposed low-cost service delivery</li> <li>▪ Innovation in technology such as smart card, mobile apps, passenger information systems</li> <li>▪ Transit service is restructured to foster continued economic growth and civic participation and use City resources as effectively and efficiently as possible.</li> </ul>
<b>MISSION</b> Providing quality municipal services and leadership in the social, environmental and economic development of the City of Greater Sudbury.	<ul style="list-style-type: none"> <li>▪ Improved schedule reliability</li> <li>▪ Linking all members of the community to have access to goods and services and social/recreational designations</li> <li>▪ Providing businesses with increased access to employees by improving hours, operation and route coverage</li> <li>▪ A service plan developed to improve the environment by reducing the need for high auto ownership and complementing other active modes of transportation.</li> </ul>
<b>VALUES</b> As stewards of the City of Greater Sudbury, we believe in recognizing the specific needs of all our citizens in urban, rural and suburban areas, and are guided by our belief in: <ul style="list-style-type: none"> <li>▪ Acting today in the interests of tomorrow</li> <li>▪ Providing quality service with a citizen focus</li> <li>▪ Embodying openness and transparency</li> <li>▪ Communicating honestly and effectively</li> <li>▪ Creating a climate of trust and a collegial working environment to manage our resources efficiently, responsibly and effectively</li> <li>▪ Encouraging innovation, continuous improvement and creativity               <ul style="list-style-type: none"> <li>• Fostering a culture of collaboration</li> <li>• Ensuring an inclusive, accessible community for all</li> <li>• Respecting our people and our places.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Transit Action Plan can easily adapt to future development</li> <li>▪ Improved bus schedule adherence</li> <li>▪ Transparency attained through service policies and standards that balance community needs with fiscal responsibilities</li> <li>▪ Communicating honestly through unprecedented transit community engagement undertaken</li> <li>▪ An action plan that incorporated input from not only the public but also the front-line and support staff that have to make it work to:               <ul style="list-style-type: none"> <li>- Reallocate existing resources where they provide the best return on the dollar</li> <li>- Measure progress through detailed passenger counting and system monitoring on an ongoing basis</li> </ul> </li> <li>▪ Inclusive accessible community through Handi-Transit and fully accessible buses to enable those with mobility devices to integrate with the community</li> <li>▪ Enhanced community-wide accountability through additional staff member to go to the community</li> </ul>

## 7 MOVING FORWARD: NEXT STEPS

The Draft Greater Sudbury Transit Action Plan is being provided to the City of Greater Sudbury Council for their consideration and approval to move forward with the next phase of public engagement. The next steps in the plan process are to:

**Conduct Public Engagement on all Proposals** – Similar to the extent of methods used in Phase I engagement, this engagement would include on-line materials and a survey, open houses and traditional and social media to provide information on the draft proposals to the Greater Sudbury public and request their feedback.

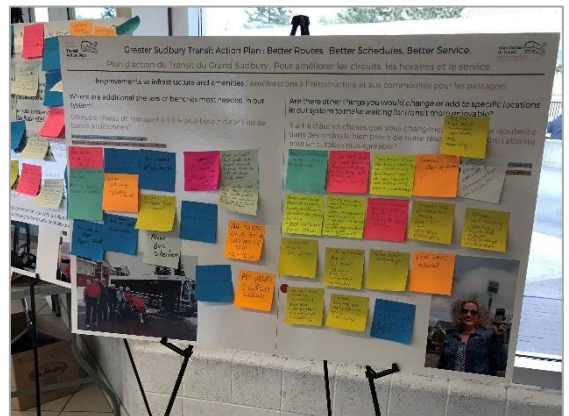
- This engagement would include direct outreach to all people and stakeholders who were a part of Phase I engagement workshops to provide them with an update on the proposals that have resulted from their feedback to-date and to invite them to participate in the open houses and survey.
- This phase of engagement would also include open houses at each of the City's major post-secondary institutions: Laurentian University, Collège Boréal and Cambrian College.

**Revise and Confirm Final Proposal Details** – Based on public engagement feedback, all service and supporting measure proposals will be revised and further details will be confirmed, including recommended priorities for implementation and associated refined financial implications.

**Revised and Finalize Transit Action Plan** – All materials would then be finalized and the resulting revised Greater Sudbury Transit Action Plan would be presented to Council.

# Greater Sudbury Transit Action Plan

## Public Engagement Phase 1 Results Summary



October 2017

Transit Consulting Network



### **Acknowledgements**

In collaboration with the City of Greater Sudbury, the Transit Consulting Network and its project partners would like to thank all those Greater Sudbury-area community members who provided their feedback and ideas into this process. In particular, the residents, staff, community leaders and organizations that provided input at Transit Action Plan open houses, workshops, through online surveys and through one-on-one interviews.

The project also gratefully acknowledges the support of the the Canada-Ontario Public Transit Infrastructure Fund (PTIF).

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## 1.0 INTRODUCTION

In collaboration with the community and its partners, the City of Greater Sudbury is undertaking a comprehensive review of the Greater Sudbury Transit System. Called the “Greater Sudbury Transit Action Plan,” the project and its resulting recommendations seek to outline the key service, infrastructure and supporting measures the City can take immediately and into the future to further improve how transit serves and connects Greater Sudbury.

The Greater Sudbury Transit Action Plan is made possible by the Canada-Ontario Public Transit Infrastructure Fund (PTIF). The Canadian transit consulting firm Transit Consulting Network (TCN) and its associates have been retained to lead the Transit Action Plan project on behalf of the City.

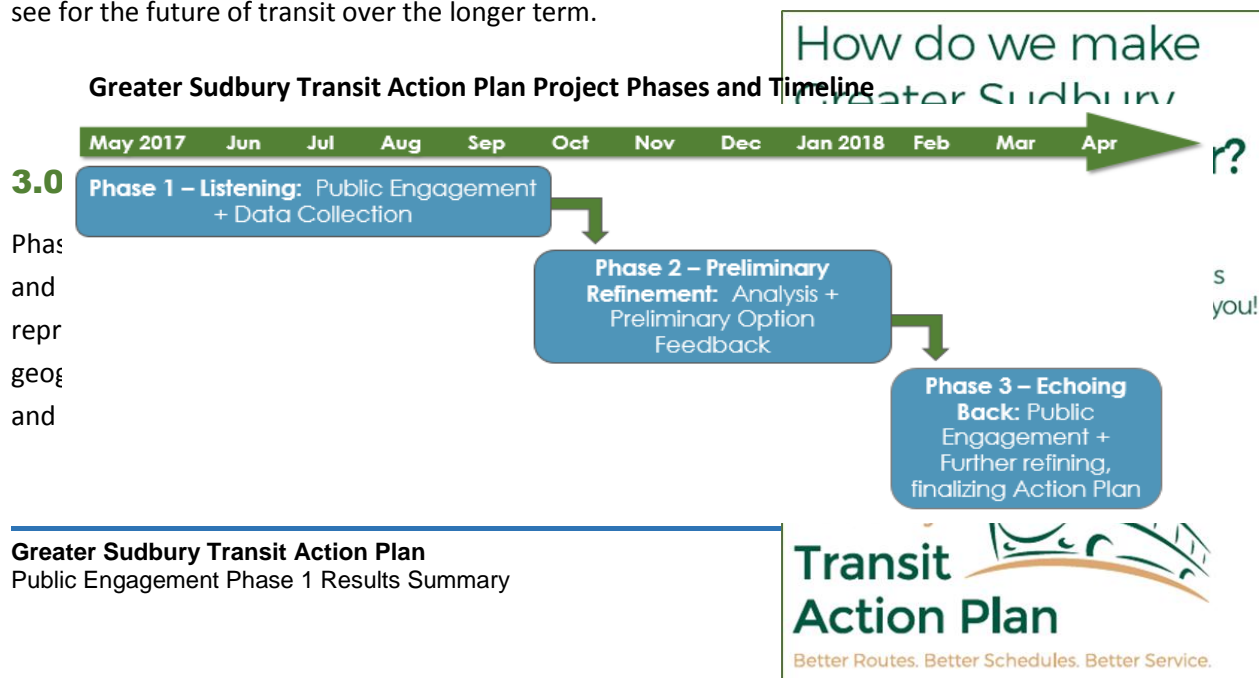
This first phase of the Greater Sudbury Transit Action Plan focused on gathering ideas and feedback from the community, particularly through a series of events and surveys which took place from June 18 to July 9, 2017. This information is now being used to help draft recommendations to improve public transit for a second round of public feedback in February and March, 2017.

### Greater Sudbury Transit Action Plan Overall Objectives:

- Undertake a comprehensive analysis of Greater Sudbury Transit routes, service levels and service models, including Handi-Transit and TransCab service.
- Hear from transit passengers, staff, stakeholders and the larger community about how transit can continue to improve to meet the City’s diverse transportation needs.
- Consider all potential opportunities to improve the efficiency and effectiveness of Greater Sudbury Transit.
- Identify potential recommended service, infrastructure and related improvements.
- Build public awareness and support of Greater Sudbury Transit and its services.

## 2.0 PURPOSE AND SCOPE

The objective of Public Engagement Phase 1 was to provide information about the existing transit system and Transit Action Plan process and ask the public for their feedback on how the existing transit system is performing, to what degree it meets or does not meet their needs and what they would like to see for the future of transit over the longer term.



in both English and French. The following describes each of the elements of the engagement strategy.

### Transit Action Plan Website

A dedicated web page (both in English and French) was set up to inform the public of the ongoing Transit Action Plan (English: [www.greatersudbury.ca/TAP](http://www.greatersudbury.ca/TAP) French: [www.grandsudbury.ca/PAT](http://www.grandsudbury.ca/PAT) ). The web page provided information on the upcoming open houses across the City and linked to an online survey (further details below).

### Greater Sudbury Transit Action Plan Webpage



## 4.0 GREATER SUDBURY TRANSIT ACTION PLAN OPEN HOUSES

Sixteen (16) open houses were held from June 19-30, 2017 across the City to collect people's opinions on the current transit situation in Greater Sudbury and ways to improve the service. Interactive presentation boards were used at the events to collect feedback from participants shared through conversations, as well as the use of post it notes and sticky dots for voting. The boards sought feedback on participants' specific ideas for improving routes and schedules, infrastructure such as passenger amenities at stops and terminals, technology enhancements, customer information, as well as other priorities for improvement, and general comments.



The following table shows the open house schedule and areas covered:

Open House Locations and Times			
<b>Tuesday, June 20</b>	1:30pm – 3:30pm	Lively	Battistelli's Your Independent Grocer, 65 M.R. 24
<b>Wednesday, June 21</b>	9:30am – 11:30am	Sudbury	Dumas' Your Independent Grocer, 82 Lorne Street
	9:30am – 11:30am	Azilda	Desjardins caisse populaire, 43 rue Notre-Dame
	1:00pm – 3:00pm	Chelmsford	Place Bonaventure Mall, M.R. 15
	1:30pm – 3:30pm	Garson	Foodland, 3098 Falconbridge Hwy
	4:30pm – 6:00pm	Dowling	Chris' Valu-Mart, 30 Main St E
	5:00pm – 7:00pm	Coniston	Toe Blake Memorial Arena, 1 Government Rd.
	7:00pm – 8:30pm	Onaping	Onaping Falls Community Centre, 2 Hillside Dr.
<b>Thursday, June 22</b>	1:30pm – 5:30pm	Sudbury	Downtown Transit Terminal, 9 Elm St.
	4:30pm – 6:30pm	Hanmer	Neil's Your Independent Grocer, 5200 Hwy. 69 N
<b>Friday, June 23</b>	9:30am – 11:30am	Capreol	Foodland, 85 Young St.
	9:30am-11:30am	Sudbury	Vrab's Your Independent Grocer, 1836 Regent St. S.
	1:30pm – 3:30pm	Val Caron	Metro Val Est, Val-Est Mall, Hwy. 69 N.
	1:30pm – 3:30pm	Sudbury	Real Canadian Superstore, 1485 Lasalle Blvd.
	5:00pm – 7:00pm	Sudbury	Carmichael Arena, 1298 Bancroft Dr.
<b>Friday June 30</b>	10:00am – 11:30am	Copper Cliff	McClelland Community Centre Arena, 37 Veterans Road

### **Transit Staff Open Houses and Survey**

Two open houses were conducted for transit employees and a detailed paper survey was handed out to collect their feedback and suggestions. The transit staff was also given the opportunity to attend public open houses and complete the online survey.

The open houses were conducted at the transit garage during times structured around Transit Operator shifts to make it as convenient as possible for employees to attend:

- 5:00am to 7:00am, June 12, 2017
- 2:00pm to 4:00pm, June 14, 2017

### **Handi-Transit Ride-alongs**

Transit Consulting Network staff boarded Handi-Transit service on May 16-17, 2017 to interview Handi-Transit customers and drivers to seek their input on improvements in all areas of the Specialized Transit Service. This was complemented by further one-on-one telephone conversations with Handi-Transit staff and key stakeholders held at a later date.

### **Community Action Network, Advisory Committees and Stakeholder Outreach / Workshops**

Information on the Transit Action Plan was sent to all area Community Action Networks and major post-secondary institutions (Collège Boréal, Laurentian University and Cambrian College), as well as 29 other Stakeholder Group Organizations that spanned the areas of transportation, sustainability, health, education, major employers, seniors, people with a disability, youth and community services. Council members and City employees from relevant departments (Recreation, Roads, Planning, etc.) were also invited to attend the workshops. All of these networks and Organizations were invited to send a representative to one of two open houses that were held:

- 6:30pm to 8:30pm on June 20, 2017
- 10:00am to noon on June 22, 2017

Each workshop involved a series of small roundtable discussions that gathered participant input on larger issues and opportunities facing the transit system, key travel times and destinations for different segments of the population, specific route, schedule and infrastructure suggestions, and ideas for marketing the system. The open house presentation boards were also available at the workshops for participants.

Separate meetings were also held with the Accessibility, Seniors and Sustainable Mobility Advisory Panels that sought their feedback to similar questions as those at the workshop. All meeting and workshop invitees were informed of the open houses and online survey and invited to help promote them across their larger organizations and networks.



### Online/Paper Survey

A survey was produced in both English and French to understand citizen concerns and their opinions on making the transit system better. The survey covered similar questions and themes as those covered in the open house boards and workshop questions. The survey was available online as part of the Transit Action Plan webpage from June 18, 2017 to July 9, 2017 and paper copies of the survey were also available at the open house events and at public locations around the City, such as libraries and Community Service Centres.

### Sample of Photos from the Various Open Houses and Workshops



### Additional Conversations and Input

Through the various scheduled engagement activities, other opportunities arose to hear from citizens and organizations about how to improve Greater Sudbury Transit. This included input received via email and other follow up phone conversations with the engagement team. One such example was the provision by Friends of Sudbury Transit of information to the project and result highlights from a 2015 survey which that group had previously conducted that garnered 800 responses.

### Supporting Advertising, Media and Promotion

In addition to the means noted above, the engagement events and opportunities were promoted through a variety of methods, including:

- News releases
- Advertising in local newspapers and radio and TV stations
- The City's Facebook and Twitter feeds, as well as Facebook ads
- Posters onboard all Greater Sudbury Transit vehicles
- Bookmarks advertising the online survey that were available for Transit Operators and open house staff to hand out to customers



Some examples of these activities and resulting publicity are shown here.





## Results

The table on the right provides a summary of response rates to the various engagement activities. Over 2,000 citizens directly provided input into the process. This does not include the larger Greater Sudbury population who would have been informed of the Transit Action Plan and the Greater Sudbury Transit System through the associated media, social media and advertising.

Engagement Quick Facts	
Online Survey Respondents	1,752
Paper Survey Respondents	23
Workshop Participants	51
Open House Participants	350+
Number of Public Open Houses	16
Number of Transit Staff Open Houses	2
Number of Advisory Panel Workshops	3

The detailed results and comments from all activities have been captured and have been a key source of information for the project team's further analysis and incorporation into the Transit Action Plan's recommendations. The following provides highlights from common themes heard from the three main streams of activities: Open Houses, Survey and Workshops.

### 4.1 PUBLIC OPEN HOUSE RESULT HIGHLIGHTS

Response themes had some slight variations across the 16 public open houses but generally there were strong commonalities in the feedback received across the City.

**Priorities for Service** - When asked to "vote" using sticky dots on priorities for improvement, by far "more Sunday and holiday service" was a top priority for change among open house participants, followed by "more frequent mid-day service," "more direct / simplified routes" and "better connections." The following table summarizes responses received across all areas, as well as specific routes and quadrants in the community. (Respondents had the opportunity to vote for their service improvement across the whole system or within a specific area).

**Response Summary: What are your priorities for improved service?**

	Total Responses	System Wide	Northwest Areas / Services	Northeast Areas / Services	Southwest Areas / Services	Southeast Areas / Services
More Sunday and holiday service	57	39	4	4	2	8
More frequent midday service	37	16	7	4	3	7
More direct/simplified routes	33	11	5	12	5	0
Better connections	30	12	7	2	4	5
Earlier weekday service	25	14	5	3	2	1
More frequent commuter service	24	16	4	3	1	0
Other ideas (various):	21	10	1	6	0	4
More evening service	14	8	2	3	1	0
More Saturday service	2	1	0	0	1	0

Comments received through one on one conversations and recorded with post it notes provided a greater insight into specific priorities. The information was gathered into five areas of improvement; Routing and Service Levels, Infrastructure, Customer Information, Specialized Transit Services and General Comments.

**Routing and Service Levels** - When asked to provide specific ideas to improve Greater Sudbury Transit routes and service levels, the top five improvements were identified as:

- Improve and increase service on Sunday
- Increase frequency especially during peak time and midday
- Provide direct routing and express buses
- Improve on-time performance
- Increase service to South End

**Infrastructure** - When asked about improvements to bus stop and terminals, including benches, shelters and other passenger amenities, the top five improvements were identified as:

- Increase security at the Transit Terminal and on buses
- Increase number of benches at shelters
- Provide additional shelters
- Improve bus cleanliness
- Increase winter maintenance at bus stops.

**Customer Information** – The top priorities requested for improvement to customer information were identified as:

- Improve wayfinding and wayfinding technology to make it easier to access the system's services
- Improve customer service levels and complaint process
- Promote services and provide travel training
- Provide information on policies and procedures

**Specialized Transit Services (Handi-Transit)** – The priorities requested by Handi-Transit customers during the ride-alongs and telephone interviews included:

- Expand the hours that trip-bookings can be made
- Provide the ability to book trips on weekends
- Accept Handi-Transit passes for travel on TransCab and Greater Sudbury Transit
- Reduce the length of time a Handi-Transit customer needs to complete their trip

**General Comments** – When asked for any other ideas or comments to improve Greater Sudbury Transit, comments were mostly relating to fare structure:

- Extend time allowed on transfers
- Provide incentives for seniors to use the service
- Wherever possible, link fare increases to coincide with service improvements

- Make purchasing fare media more convenient
- Provide a family pass or free transit for children under 12

## **4.2 TRANSIT STAFF OPEN HOUSE AND SURVEY RESULT HIGHLIGHTS**

Many of the Greater Sudbury Transit employee comments were similar to those received at the public open houses. Some of the additional general key themes include:

- On time performance is an issue, which needs to be addressed. Additional time is required on many routes to ensure that the system can operate on time, offer good customer service and meet connections. A reduction in bus stops, priority signaling and smart card technology were provided as solutions to improve on time performance, as well as consideration of routing changes where feasible to make service more direct.
- Complementing the discussion on on-time performance, Transit Operators provided many specific ideas for streamlining routes to make them more direct and customer-friendly, as well as ideas for infrastructure improvements. This input has been incorporated throughout the project team's subsequent analysis and development of options.
- When asked which areas of the community most needed additional service, the South End was the most common response.
- When asked which area had too much service, New Sudbury was the most common response.
- Many employees also noted the opportunity to create more hubs in the system where community routes could connect, particularly at New Sudbury Centre and the South End within the urban areas, and potentially the Valley area for commuter routes.
- Similar to comments received by passengers, other key areas of feedback from transit staff included safety and security issues and the desire to extend the time allowed for transfers.

## **4.3 WORKSHOP RESPONSE HIGHLIGHTS**

Five separate workshops engaging different sets of participants were conducted. The nature of these workshops was more conversational in nature, enabling facilitators to further clarify and capture specific ideas, as well as ask broader questions.

In particular, specific comments were captured in each group relating to what would be taken into consideration during the analysis of the service:

- Key travel times and destinations for each of the potential transit customer markets in Greater Sudbury (commuters of all types, including adults, youths, seniors, persons with a disability)
- Marketing and promotional ideas
- Specific improvements desired for routes, frequency and infrastructure.
- Larger commuter trends and opportunities that the transit system needs to address over the longer term.



Generally, the comments provided by members of all workshops align with those described for the open house and survey, and so have not been repeated here; however, some particular themes that were more pronounced for each group need to be highlighted:

### **Community Action Network and Transit Stakeholder Workshops:**

- The most common themes within the discussions related to Transportation Demand Management programs and policies. Examples include:
  - Providing service to target audiences such as students and seniors
  - Providing incentives through fares to encourage transit use
  - Providing travel training to seniors, young students and those new to the City of Greater Sudbury
- Improvements to amenities and technology to improve customer experience. Examples include more shelters, benches, smart card technology, charging stations for personal electronic mobile devices, music and art.
- Offers from stakeholder groups and organizations were made to collaborate with Greater Sudbury Transit to improve transit's links to the community. Examples include linking services to community events; providing opportunities to attract tourists; promoting services by providing support to stakeholder initiatives, etc.

### **Accessibility Advisory Panel Workshop:**

- It was noted that 100% accessibility should be a system goal.
- Participants emphasized the need for 100% accessible design of stops and sidewalk connections that make it easier for all Greater Sudbury residents to access transit.
- Technology improvements should be made to make the system accessible for the visually impaired.
- Other key themes during the discussion included opportunities to better integrate use of both Handi-Transit and conventional transit; improved travel training for customers, especially young students/seniors/persons with disabilities; and suggestions to make Handi-Transit and conventional transit vehicles more comfortable.

### **Senior Advisory Panel Workshop:**

- Bringing back free Transit for Seniors on Mondays was identified as a priority.
- Participants focused on customer service levels and comfort as being very important. Many of the suggestions related to accessible shelters and stops, and the provision of benches. Although the group shared interest in receiving a higher frequency of service (which is often most cost-effectively created by focusing routes on main roads), maintaining some level of service coverage within neighbourhoods at a lesser frequency was identified as being equally important.

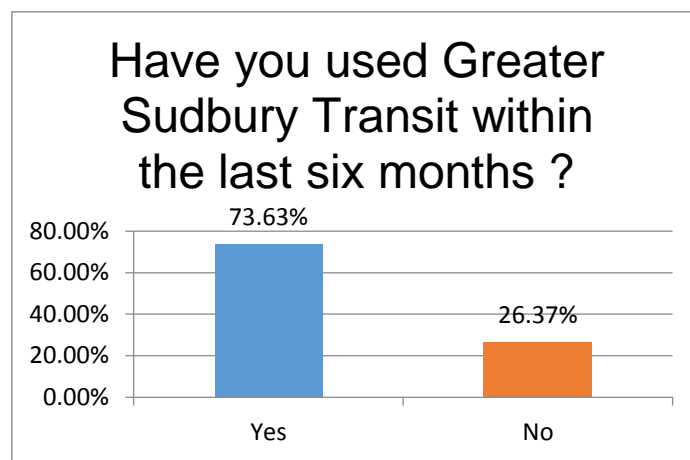
- Many shared interest in promoting Transit services through collaboration efforts with community stakeholders, and highlighted that one on one and/or group Travel Training was very important to familiarize seniors on using the service.
- Handi-Transit services was praised for its effectiveness; however, the two-day advance booking required for the service was identified as an inconvenience. It was also expressed that the eligibility process should consider all types of disabilities—not just those of a physical mobility nature—that prevent a person from taking the accessible conventional system.
- Safety and security at the Downtown Transit Terminal was identified as a barrier to transit use for many seniors. There is perception that the area is unsafe and they prefer to stay away from the Terminal due to this reason.

### Sustainable Mobility Advisory Panel

- Priorities included an increase in wayfinding and transit information tools that make it easier for new users to take transit and for all passengers to access services.
- Need to improve cycling infrastructure near transit hubs and relation of transit routes to key cycling infrastructure, and to introduce more Transportation Demand Management policies to encourage all modes of active transportation.
- Changing perception of Transit services through branding and promotion is key to attract new users.
- Bus stop and shelter infrastructure improvements were identified as a priority, particularly the need to review existing bus stop amenities and location to increase safety and passenger convenience.
- Members would like to see a route structure that features timed connections at several key hubs and where not all connecting trips need to route via the Downtown Terminal. Park and ride facilities would also be a benefit.

## 4.4 ONLINE AND PAPER SURVEY HIGHLIGHTS

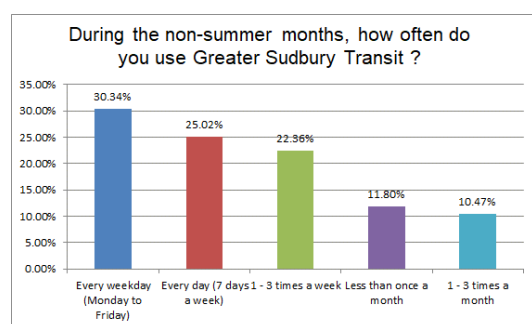
A total of 1,775 responses were collected through the online and hardcopy surveys; this represents a 1.1% sample of the total population of Greater Sudbury. Three-quarters responded that they used Greater Sudbury Transit within the last six non-summer months (considered existing transit customers) while one-quarter did not, which are surmised to be non-transit customers. Tapping into this group of residents who do not currently use transit represents Greater Sudbury Transit's largest market potential. Increasing the use of transit by existing users also appears to be a potential focus. The on-line survey offers a snapshot of the



total Greater Sudbury Transit market, which can be compared to the information received during the workshops and public open houses. The following presents response highlights for each group of current users or non- users.

#### 4.4.1 TRANSIT ACTION PLAN ON-LINE SURVEY FOR TRANSIT CUSTOMERS

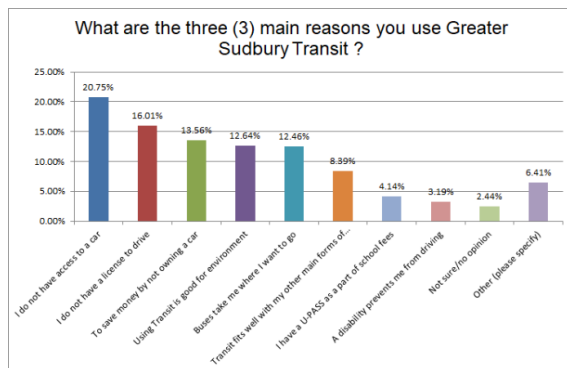
The majority of Transit Customers reported they used transit every weekday, which typically represents the work and school trip market and people for whom transit is their sole or primary form of transportation. The 45% that reported they used transit less frequently is significant primarily because the non-frequent Transit Customer is already familiar with transit and better meeting their needs can convert them to become more frequent Transit Customers.



Of

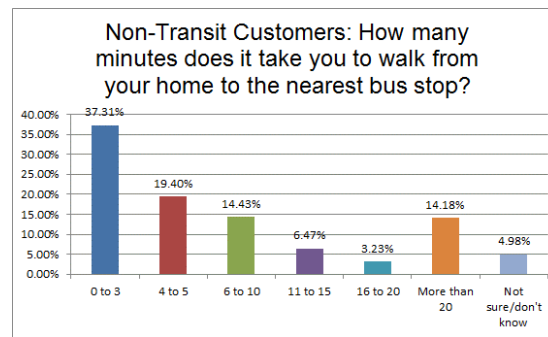
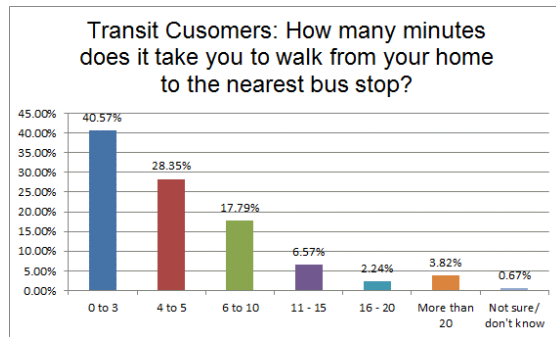
During the non-summer months, how often do you use Greater Sudbury Transit ?		
Answer Choices	Responses	
Every weekday (Monday to Friday)	30.34%	365
Every day (7 days a week)	25.02%	301
1 - 3 times a week	22.36%	269
Less than once a month	11.80%	142
1 - 3 times a month	10.47%	126
	<b>Answered</b>	<b>1203</b>
	<b>Skipped</b>	<b>562</b>

the 1,203 Transit Customer respondents, approximately 40% of the responses indicated they did not have a car or license or they were unable to drive due to a disability. What is considered significant is that almost 14% indicated that it saved them money by not owning a car while 12.6% indicated environmental reasons were their priority for using transit; this is in line with common worldview of the emerging millennial generation and indicates potential messages to emphasize in future transit promotions.



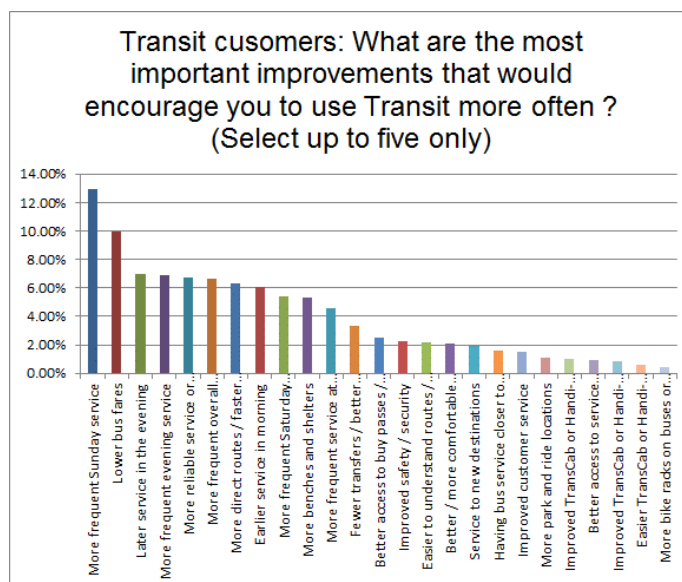
What are the three (3) main reasons you use Greater Sudbury Transit ?		
Answer Choices	Responses	
I do not have access to a car	20.75%	586
I do not have a license to drive	16.01%	452
To save money by not owning a car	13.56%	383
Using Transit is good for environment	12.64%	357
Buses take me where I want to go	12.46%	352
Transit fits well with my other main forms of transportation (walking, biking, etc.)	8.39%	237
I have a U-PASS as a part of school fees	4.14%	117
A disability prevents me from driving	3.19%	90
Not sure/no opinion	2.44%	69
Other (please specify)	6.41%	181
	<b>Answered</b>	<b>1203</b>
	<b>Skipped</b>	<b>562</b>

One of the most significant factors in determining whether or not one can or will choose to use transit is the walk distance to the nearest bus stop, as well as the relative frequency of the transit service provided there. As a guide, transit bus stops are considered to be easily accessible to residents when they are within a 5-minute walk, or approximately 450 metres. Bearing in mind the 450-metre walk distance standard, the following responses are considered significant.



Of the 1,203 Transit Customers that responded, only 69% reported they were within a 5-minute walk to a bus stop compared to 57% of the 402 Non-Transit Customers. The numbers provide a clear indication of what needs to be overcome, namely, improving route coverage to enable easier access to services. It also means that one of the most significant ways that the City can increase the effectiveness of its transit system is by focussing new housing and development on the key corridors where transit already operates, such as through supportive zoning that makes increased density and walkability a priority. In the case of more rural areas where residential development and therefore transit coverage is actually spread out, the use of low-cost feeder services such as Trans Cab, coupled with good route design principle, can go a long way to improving access to transit to grow ridership.

While reasonable walking distance access to transit is a priority based on industry best practices, transit customers are also sensitive to the need for other improvements, which they were able to select up to five.

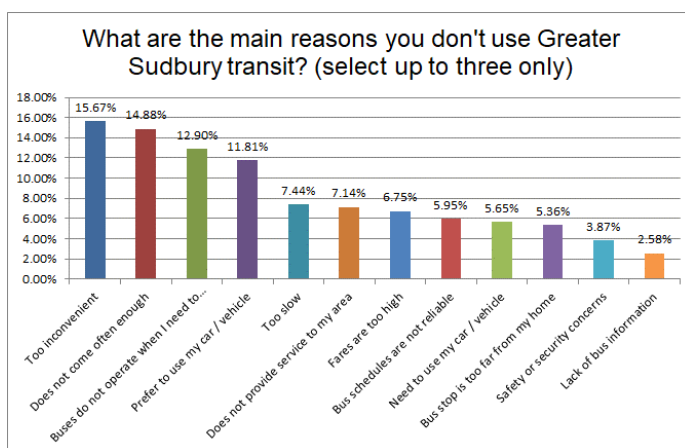


Transit Customers: What are the most important improvements that would encourage you to use Transit more often ? (Select up to five only)	
Answer Choices	Responses
More frequent Sunday service	12.95% 684
Lower bus fares	9.92% 524
Later service in the evening	6.97% 368
More frequent evening service	6.89% 364
More reliable service or buses being on time	6.72% 355
More frequent overall weekday service	6.67% 352
More direct routes / faster travel time	6.29% 332
Earlier service in morning	6.08% 321
More frequent Saturday service	5.36% 283
More benches and shelters	5.32% 281
More frequent service at peak work or school travel times	4.55% 240
Fewer transfers / better connections	3.31% 175
Better access to buy passes / tickets	2.54% 134
Improved safety / security	2.22% 117
Easier to understand routes / service	2.14% 113
Better / more comfortable buses	2.08% 110
Service to new destinations	1.91% 101
Having bus service closer to home	1.55% 82
Improved customer service	1.52% 80
More park and ride locations	1.10% 58
Improved TransCab or Handi-Transit hours of service	1.02% 54
Better access to service information	0.97% 51
Improved TransCab or Handi-Transit availability during existing hours	0.85% 45
Easier TransCab or Handi-Transit trip booking	0.61% 32
More bike racks on buses or at terminals	0.45% 24
<b>Answered</b>	<b>1203</b>
<b>Skipped</b>	<b>662</b>

More frequent Sunday service, reduced fares, improved evening services and on-time performance topped out the list. The need for shorter travel times, more frequency and better connections are somewhat related and represent almost 10% of the responses. These priorities are very much in line with those heard from participants of Open Houses, Surveys and Workshops.

#### 4.4.2 TRANSIT ACTION PLAN ON-LINE SURVEY FOR NON-TRANSIT CUSTOMERS

When Non-Transit Customers were asked why they don't use Greater Sudbury Transit, it is clear that travelling by car is the preferred choice for a number of reasons. Generally, Transit's ability to compete with a personal automobile is limited by the fact that most people feel their automobile is more convenient and the service does not meet their travel patterns and needs. Most importantly, bus stops being too far from their home or lack of service are barriers which must be overcome to change choice in mode of transportation for Non-Transit Customers. There are a number of reasons given that can be addressed by Greater Sudbury Transit, such as improving access to some areas, improved service frequency, reduced bus travel times, and improving service quality/ reliability.



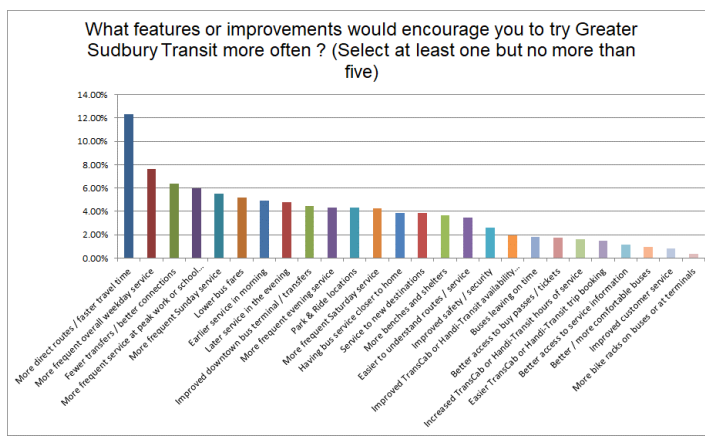
What are the main reasons you don't use Greater Sudbury transit? (select up to three only)		
Answer Choices	Responses	
Too inconvenient	15.67%	158
Does not come often enough	14.88%	150
Buses do not operate when I need to travel	12.90%	130
Prefer to use my car / vehicle	11.81%	119
Too slow	7.44%	75
Does not provide service to my area	7.14%	72
Fares are too high	6.75%	68
Bus schedules are not reliable	5.95%	60
Need to use my car / vehicle	5.65%	57
Bus stop is too far from my home	5.36%	54
Safety or security concerns	3.87%	39
Lack of bus information	2.58%	26
<b>Answered</b>		<b>402</b>
<b>Skipped</b>		<b>1363</b>

It is clear that addressing the reasons that residents reported they don't use transit will not change travel habits overnight. A question asked to Non-Transit Customers was to select up to five transit service improvements that would convince them to try transit more often. Non-Transit users want more direct, frequent service, improved hours of operation, and better Sunday Service coverage. These priorities mirror those provided overall throughout the engagement process from Existing Transit Customers.

#### 4.4.3 ALL SURVEY RESPONDENTS

Several survey question responses were common to all respondents. The key conclusions that were drawn are:

- Nearly all respondents agree to the positive aspects of taking transit, namely benefits to the environment, reduction in road congestion,



What features or improvements would encourage you to try Greater Sudbury Transit more often? (Select at least one but no more than five)		
Answer Choices	Responses	
More direct routes / faster travel time	12.33%	187
More frequent overall weekday service	7.65%	116
Fewer transfers / better connections	6.39%	97
More frequent service at peak work or school travel times	6.00%	91
More frequent Sunday service	5.54%	84
Lower bus fares	5.21%	79
Earlier service in morning	4.94%	75
Later service in the evening	4.81%	73
Improved downtown bus terminal / transfers	4.48%	68
More frequent evening service	4.35%	66
Park & Ride locations	4.35%	66
More frequent Saturday service	4.28%	65
Having bus service closer to home	3.89%	59
Service to new destinations	3.89%	59
More benches and shelters	3.69%	56
Easier to understand routes / service	3.49%	53
Improved safety / security	2.64%	40
Improved TransCab or Handi-Transit availability during existing hours	1.98%	30
Buses leaving on time	1.85%	28
Better access to buy passes / tickets	1.78%	27
Increased TransCab or Handi-Transit hours of service	1.65%	25
Easier TransCab or Handi-Transit trip booking	1.52%	23
Better access to service information	1.19%	18
Better / more comfortable buses	0.99%	15
Improved customer service	0.79%	12
Better / more comfortable buses	0.79%	12
More bike racks on buses or at terminals	0.33%	5
<b>Answered</b>		<b>402</b>
<b>Skipped</b>		<b>1363</b>



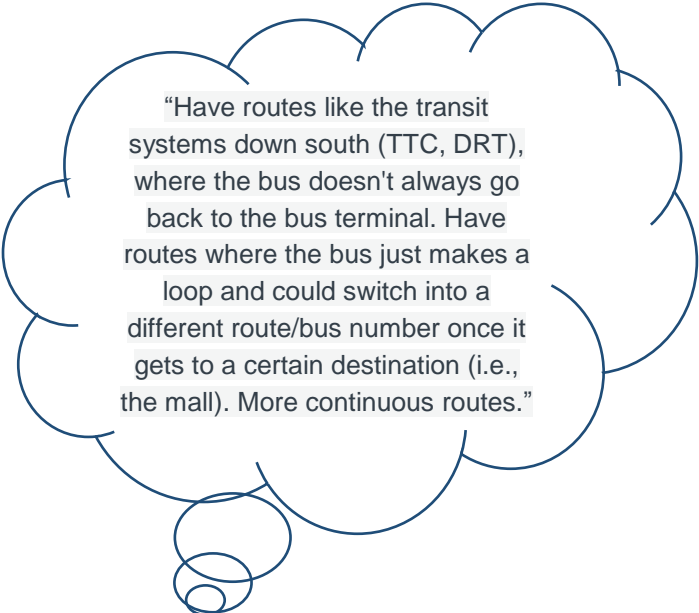
personal cost savings and ability to access the services.

- Nearly 54% of the total respondents felt that the system could use some improvement.
- 65% of the respondents would not mind a minor increase in taxes if assured an increased transit service.

**Thousands of comments were also received** in the survey in terms of how the system should improve routes, schedules, infrastructure, customer information and other attributes. Common themes similar to those heard in the Open Houses and Workshops are as follows:

#### **Improvements to Routing**

- Improve Sunday service as people avoid the service on this day due to its inconvenience.
- More overall frequency, earlier weekday buses and better evening service.
- Improved service in outlying communities, by establishing local transit hubs—with Park & Rides--and provide connections between these hubs so that not all trips need to go via Downtown.



“Have routes like the transit systems down south (TTC, DRT), where the bus doesn’t always go back to the bus terminal. Have routes where the bus just makes a loop and could switch into a different route/bus number once it gets to a certain destination (i.e., the mall). More continuous routes.”

#### **Infrastructure Improvements:**

- More bus stops with shelters, benches, stop numbers and posted route schedules, as well as prioritized stops for snow removal.
- Improve safety, security and maintenance at the Downtown Transit Terminal.

#### **Customer Information Improvements:**

- Real-time information screens at the Downtown Terminal
- Printed route book with all routes; use a.m./p.m. rather than 24 hour time
- Expanded hours of operation at Downtown Kiosk.

#### **Fares:**

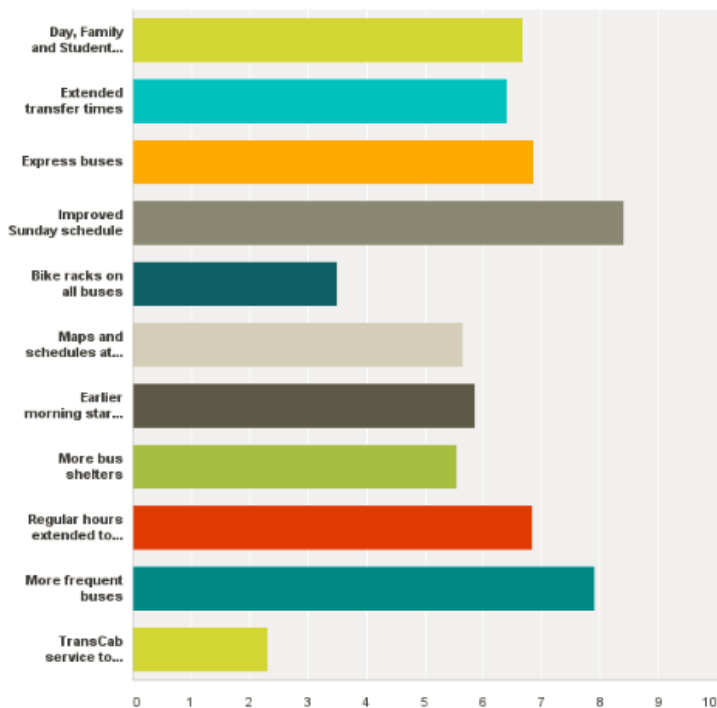
- Increase the number of locations selling transit passes/tickets. Longer transfer time allowances given size of system, multiple connections

It is also notable that many of the priorities shown in this survey align with those seen in a 2015 survey undertaken by The Friends of Sudbury Transit, which were provided by that group to the Transit Action Plan project team. An excerpt from those survey results are shown to the right.

For comparison, excerpt from 2015 survey conducted by Friends of Sudbury Transit.

**Q9 Transit needs a few changes. Which ones should be made first? Please rank your preferences with 1 being the most important to you.**

Answered: 795 Skipped: 30



## 5.0 KEY CONCLUSIONS: ISSUES AND OPPORTUNITIES

Response rates to the Transit Action Plan Phase 1 Engagement have been among the highest ever received in a City of Greater Sudbury Engagement Process. While there are specific, detailed suggestions that project staff will look to incorporate into recommendations, there was also a resounding similarity to key themes heard from the various sources. The extent of participation and the commonality of priorities mean that the City and project team members should feel reasonably confident around the recommended direction for the system.

Based on overall public feedback heard and system analysis to date, some of the main issues and opportunities that the Transit Action Plan recommendations will need to address are as follows:

- **System reorganization to improve clarity, directness, frequency and reliability** – Greater Sudbury’s existing route structure is confusing, hard to understand for new users and dilutes potential frequency by spreading service across many streets. Focusing heavier ridership service on key corridors with complementing feeder services would enable the system to put more frequency where it is needed most, shorten travel times and provide the time necessary to improve reliability.
- **A more organized and innovative approach to outlying areas** – There is strong desire for improved service to Greater Sudbury’s many outlying neighbourhoods. At the same time, each has different population sizes and demographic needs.
  - Creating service standards that clearly show minimum acceptable service that can be consistently applied across the City--as well as the criteria used to recommend further service improvements--would be helpful in fairly allocating service and ensuring it meets the needs of as many residents as possible.
  - At the same time, further approaches should be explored to improve how the suite of transportation services are organized, deployed and communicated in these areas. This might include potential creation of mobility hubs that make it more convenient for connections to take place, Park & Rides, improved coordination and technology with TransCab services and potentially integration with some regularly scheduled Handi-Transit services, where feasible.
- **A balance of investment** – There are two key strategies for attracting further ridership on the Greater Sudbury Transit System: [1] making it easier for *existing users* to take it more often; [2] attracting *new users*, particularly commuters. Priorities for the first centre on increasing frequency and hours of operation on Sundays. Priorities for the second focus on improving service on weekdays, particularly during the peak commuting periods. As it moves forward, the system needs to strike a balance between both types of investment in order to diversify and grow its ridership.

- **A more integrated accessible service** – There are a number of strategies that will be needed to ensure that Handi-Transit services meet Accessibility for Ontarians Disability Act (AODA) requirements, improve customer booking options, customer travel experience and expand eligibility. Enhancements are also needed to better enable some registrants to use TransCab and conventional transit to complete some or all of their trip needs that precludes the need for advance bookings so that trips can be taken dynamically; this would enable qualifying registrants to be more integrated with the community.
- **Integrated infrastructure, fare, customer information and policy improvements** – There are many specific improvements that can be made to each of these components, which have been captured in the detailed responses being analyzed for recommendation by the project team. The resulting Transit Action Plan will include a prioritized list of improvements for each of these elements and their implementation should be considered in tandem with resulting prioritized list of service improvements.

## 6.0 SUMMARY

The 1,775 respondents to the online and hard copy transit survey provided quality feedback that complemented the feedback provided by over 400 participants at public Open Houses and Workshops. The information gathered through the engagement process from Transit Customers, Non-Transit Customers and Community Stakeholders is integral to creating a plan that accurately identifies opportunities and solutions.

In order to grow transit ridership and make transit more effective in the City of Greater Sudbury, it is clear that by addressing the transit service improvement priorities, existing Transit Customers will ride it more often and the current Non-Transit Customers – the largest market potential – will at least take transit sometimes and, over time, more frequently. In this regard, it is recognized that transforming Greater Sudbury Transit will not result in residents reducing car ownership levels overnight. However, there is opportunity to restructure the Greater Sudbury Transit system to better serve existing and future residents and create the framework to effect ridership growth over time and make it easier for residents to reduce their reliance on automobiles.

## 7.0 PRELIMINARY TRANSIT ACTION PLAN STRATEGIES

In order to meet the community priorities identified through the engagement process for both Transit Customers and Non-Transit Customers, a list of action items have been identified for the Transit Action Plan initiatives. The action items would build on existing strengths of the service and incorporate best practices.

The following lists outlines the key themes and community priorities by service type which will be reviewed in depth and incorporated in the Draft Recommendation Report. It is important to note that not all priorities may be achieved within the existing budget, however strategies to implement in an efficient way will be provided.

### Conventional Transit Service

- **More frequency**, particularly on Sundays and overall
- **More timely travel**: More direct, faster routing; fewer/better connections; improved on-time performance; later evening service/ earlier morning service
- **Improved routing**: easier to understand; stops and service closer to home; less to need to always travel via the Downtown Terminal
- **Better access**: improved safety/security; more Park & Ride locations; continued improvements to customer information, trip planning and travel training
- **Continue to improve value to customers**: fare review; more options and locations to purchase tickets and passes; consider longer time periods for transfers

### TransCab Services

- **Easier to book** through improved Transcab booking process, less lead time and use of a single telephone number and other technologies.
- **Easier access** by expanding the Transcab network

### Handi-Transit Services

- **Easier to book** by increasing the days when trips can be booked and reducing the lead time before travel
- **Provide more options** for passengers by making it easier to also use Transcab and the accessible Conventional Transit services, encouraging their use, and providing travel training that would be required



## **8.0 NEXT STEPS**

Building from the information collected in Phase I, the next phase of the Greater Sudbury Transit Action Plan involves the development of the preliminary proposed recommendations for the system. This includes creating the draft long term and short-term route networks, service plans, policies, infrastructure, and supporting measures that will be used to further improve Greater Sudbury Transit over the short, medium and long term. The Transit Action Plan will build on what is working well today, incorporating best practices from other communities and other solutions that would be customized for the Greater Sudbury's unique environment, community and opportunities.

It is expected that resulting preliminary proposals will be further refined with transit system staff, City leaders and key community representatives. Once feedback has been received, a Draft Interim Recommendation Report will be presented to Council for consideration by the end of January, 2018.

Once Council has approved the draft recommendations, a third round of public engagement will occur in February, 2018. With feedback received through the engagement process, the report will be refined and finalized for Council's consideration in April 2018.

# Greater Sudbury Transit Action Plan.

Better Routes.

Better Schedules.

Better Service.

Presentation to City Council January 23, 2018

# WHAT WE WANT TO ACHIEVE

- Improve route network to meet travel patterns
- Improve schedules to meet demand
- Identify infrastructure improvements, as well as other supporting initiatives
- Increase ridership

How do we make adjustments that will meet community needs to the extent possible within the existing 170,000 revenue hours of transit service provided today?

# WHAT WE LEARNED

## What we heard

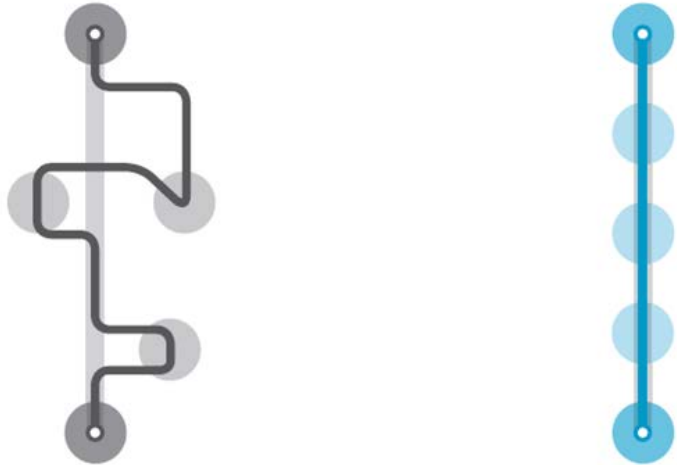
- Frequency
- Better Sunday Service
- Direct routing and connections
- Confusing system
- Not reliable

## What data tells us

- Conventional service compares well to peers (25.6 vs 22.8 Pass/Hr)
- Opportunity to reallocate resources from where there is too much, to where it is needed
- Efficient on demand services with an opportunity to better serve outlying communities

# UNDERSTAND THERE ARE TRADE OFFS

## Coverage vs Ridership



Streamlining some routes may mean a slightly longer walk to the bus stop but provides resources for more frequency.



# BETTER ROUTES : NEW ROUTE NETWORK

- Address Frequency
- Improve Directness
- One Route Network
- Improve Reliability
- Match Service to Demand

# BETTER SCHEDULES : REVISED SERVICE LEVELS

Use different types of services to meet different needs, accessibility and land use patterns

Greater Sudbury Transit

Frequent Routes

Core Routes

Neighborhood Routes

Community Connectors

On-Demand TransCab Service

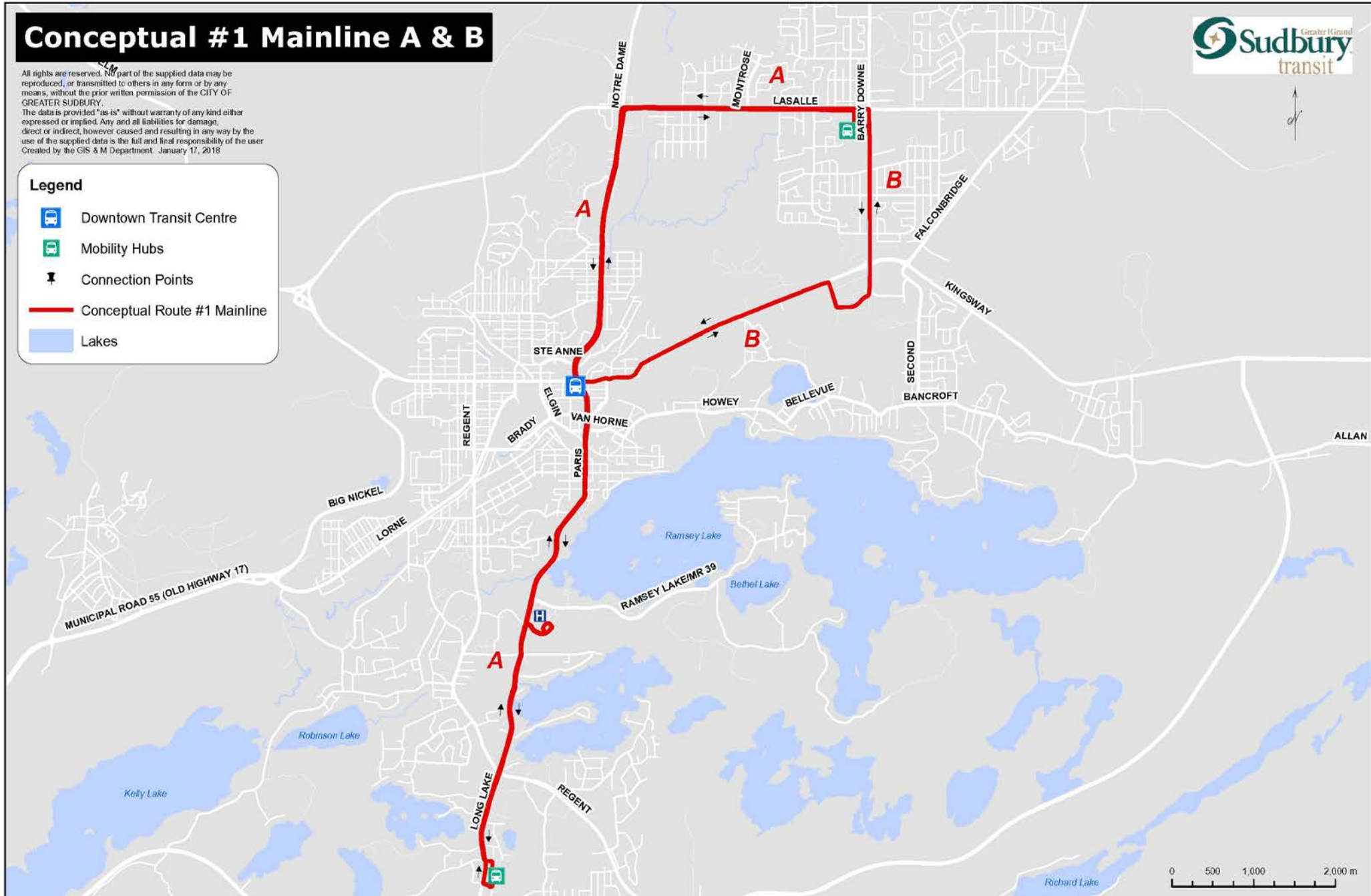
On-Demand Specialized Service

# Conceptual #1 Mainline A & B

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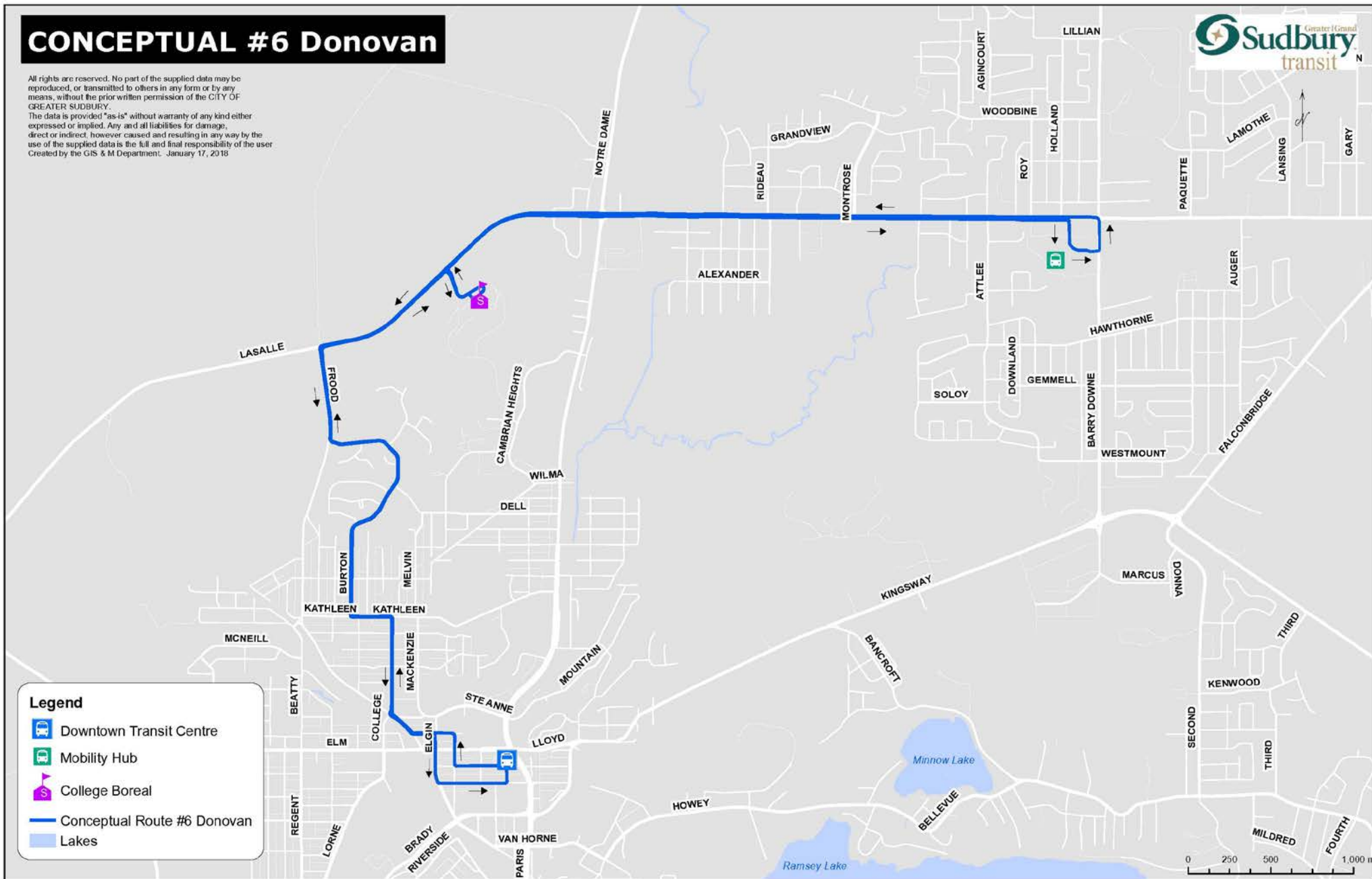
## Legend

-  Downtown Transit Centre
-  Mobility Hubs
-  Connection Points
-  Conceptual Route #1 Mainline
-  Lakes



# CONCEPTUAL #6 Donovan

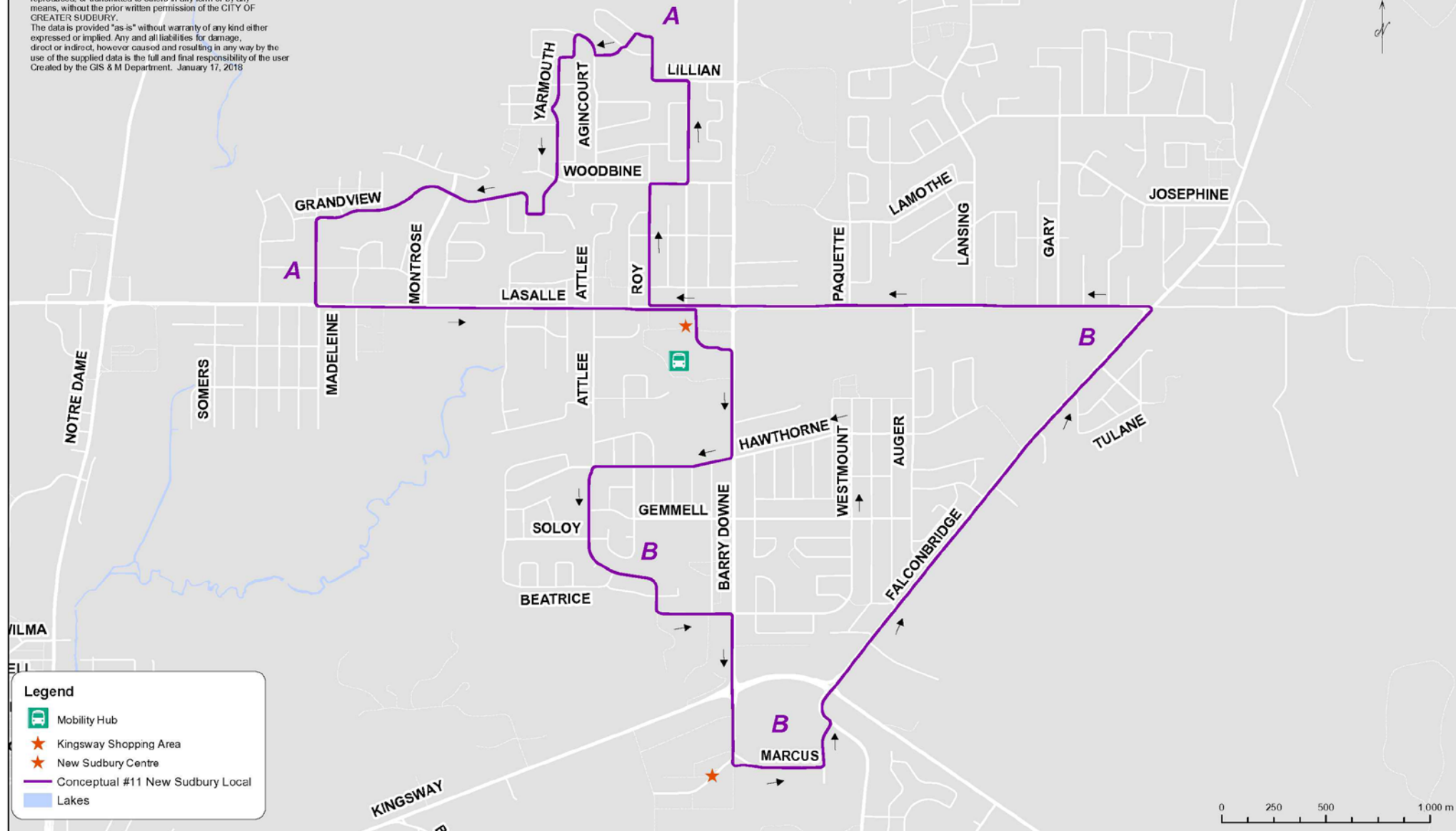
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# Conceptual #11 New Sudbury Local A & B

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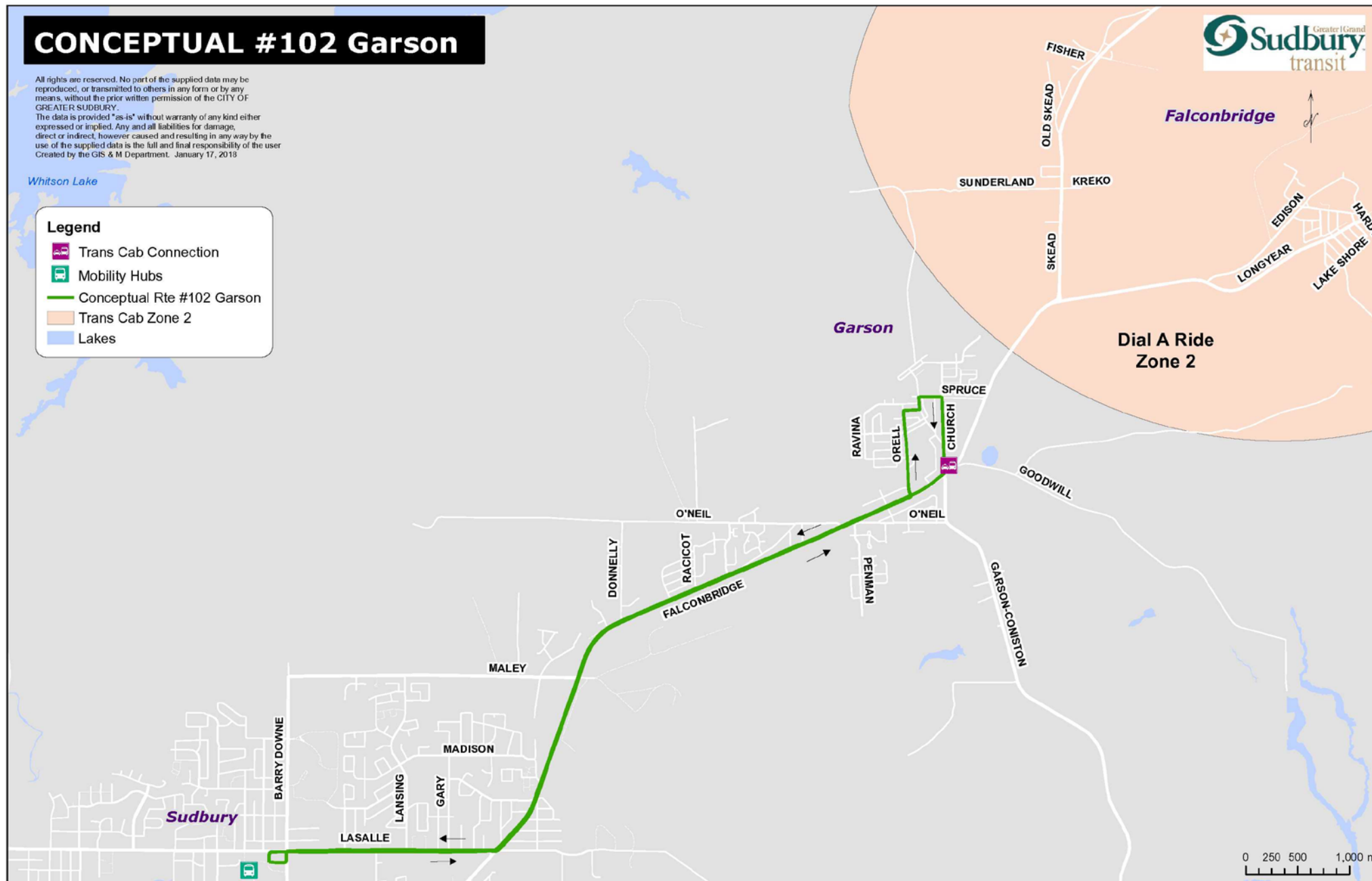
# CONCEPTUAL #102 Garson

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## Legend

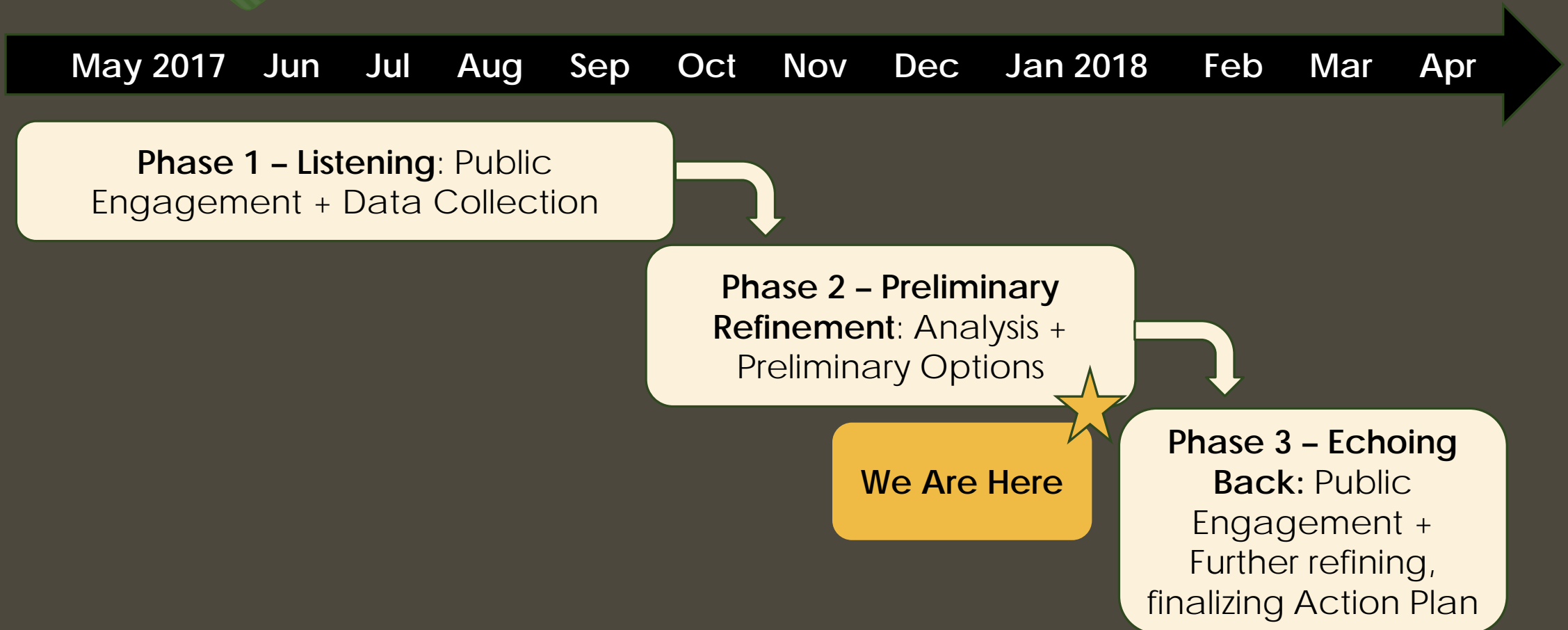
- Trans Cab Connection
- Mobility Hubs
- Conceptual Rte #102 Garson
- Trans Cab Zone 2
- Lakes



# BETTER SERVICE: IMPROVED CUSTOMER EXPERIENCE

- Improve Infrastructure
- Fare Review
- Customer Comfort, Security and Service

# WHERE WE ARE TODAY



# OUR NEXT STEPS

## Phase 3 – Echoing Back

- Public Engagement
- Revise and confirm final details
- Final Greater Sudbury Transit Action Plan in April 2018

Thank you

