Regional Municipality of Wood Buffalo

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan | 2023

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

2023

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Definitions

Conventional (Transit)
Transit services that follow a fixed-route at times specified in a timetable.

CUTA
Canadian Urban Transit Association.

Demand Responsive (Transit)
Umbrella term for all transit services, including SMART Bus and On Demand, which operate only when requested, and are not restricted to any pre-defined routing.

Headway
Time interval between trips on the same transit route. For example, if the next bus comes one hour after the previous bus, the headway is 60 minutes.

Mode (of transportation)
Ways of moving people or freight. Common urban modes include car, taxi, motorcycle, bicycle, walking, and transit.

On Demand (Transit)
A type of demand responsive transit service available to all passenger types. They use mobile-technology to book and optimize shared-ride trips and operate only when requested. They are not SMART Bus specialized transit services as they are available to all passengers and operate to and from designated bus stops only.

Revenue Service Hour
An hour that a transit vehicle is operating and available to passengers.

Shadow Population
Residents whose permanent homes are outside the Region, but who work in the Region at least 30 days a year.

SMART Bus
Special Mobility Assistance Required Transportation (SMART Bus) - the acronym for specialized transit services provided in the Regional Municipality of Wood Buffalo. These are a type of demand responsive transit.

Specialized Transit
Demand responsive transit services that operate on request and provide door-to-door service for eligible registered riders, where eligibility is determined by the rider's inability to use other transit services.

Travel Training

An education program provided on the use of available transit service modes available to residents. (Conventional or demand responsive).

RMWB Transit

The public transportation system operated by the Regional Municipality of Wood Buffalo, commonly referred to as WOOSH Transit currently.

Executive Summary

The Transit Master Plan (Plan) for the Regional Municipality of Wood Buffalo (RMWB or Wood Buffalo) has been developed to respond to issues and opportunities with the existing service and address changing travel behaviours and trends. In doing so, the Plan identifies actions based upon assessment of the current system, community feedback and looking at future plans that are under development to provide a solid and sustainable operational foundation for RMWB to address the concerns of today, and grow in the future. The Plan will be transformative for Wood Buffalo, introducing several new service typologies including core (high frequency), neighbourhood, and On Demand transit services and reducing operating costs for the municipality. Through these near term operational changes the system will have the adaptability to work with current and future plans the Municipality is proposing that would include potential for Bus Rapid Transit, Park and Ride Systems and potential integration into the regional private transportation networks.

The existing transit system in Wood Buffalo features 16 circuitous and low frequency routes within Fort McMurray, SMART Bus specialized transit services, and limited services to some rural communities within the municipality. While several services underperform, the overall system operates roughly on par with similar transit systems across the country. Key differences are that RMWB Transit faces above average staff costs, and the lowest fares of similar systems. This results in a system that is expensive to operate, with a low revenue to cost ratio. Additionally, changing growth and evolving needs over the years have resulted in a fleet that is currently over-sized, and a network of services that no longer effectively serve the primary market of Fort McMurray. (See Appendix A and F for further details)

Built using community feedback and a travel demand analysis of Fort McMurray, the Plan proposes several changes to transit services, policies, organization, and transit infrastructure in Wood Buffalo. The backbone of future Fort McMurray service, two high frequency Core Routes will provide faster and more direct service, connecting to major destinations. Neighbourhood transit routes have been built around the Core Routes, with connections provided at the Timberlea, Thickwood, and Downtown terminals, as well as along Franklin Avenue. These routes focus on local connectivity, providing convenient access to most parts of Fort McMurray. Supplementing Neighbourhood Routes are new On Demand services. These are a new type of service that is demand responsive, operating in a dynamic way with not fixed route, serving bus stops only when requested. These services can provide greater accessibility to more stops while operating more efficiently than traditional fixed-route services in areas, and at times, of lower demand. The changes proposed address several key items brought forward from the community as barriers to using transit, as a key part of this plan is to increase ridership, making transit user friendly is a first step. The creation of high frequency routes from Thickwood and Timberlea that run into Downtown and Gregiore was seen as a significant barrier and has been addressed, the limited frequency of neighbourhood routes throughout town was shown as a significant barrier and has been addressed through the introduction of the neighbourhood services and these being augmented with the on-

demand network to provide enhanced services over current service levels. All these changes are done to increase ease of use and bring passengers back to transit in a more effective and convenient manner.

School services are proposed to be streamlined to minimize duplication with Core and Neighbourhood routes, while still providing service to schools at school times. Rural services are proposed to be maintained, but adjusted to suit community needs, with the potential to provide services for special events in other parts of the Region. SMART Bus services are proposed to continue to be offered across Fort McMurray and to some rural communities, with improvements to service availability, booking, and a more dynamic dispatch system.

Supporting the new network and services are policy and infrastructure changes, including improvements to bus access at the terminals, passenger and stop improvements at the Downtown Terminal, fleet right-sizing, changes to fares and fare collection, as well as improvements to stop accessibility and access. Importantly, universal design, crime prevention through environmental design, all-season-access, and user-friendliness are all key elements driving the Plan's infrastructure and services. Underpinning all changes in the Plan is a need to grow staffing in some areas of RMWB Transit. Without appropriate staffing support, Plan implementation will not be possible, and ridership growth potential will not be met.

The Plan is comprehensive and recommends many changes to RMWB Transit. While these are explored in detail in this document, in summary, the Plan recommendations include:

- Transit Routes and Service
  - Implement new service guidelines
  - Undertake an On Demand Pilot in Taiga Nova and Thickwood
  - Evaluate On Demand Pilot and, if successful, expand services to Fort McMurray International Airport and other parts of the city
  - Implement new Core Routes
  - Implement new Neighbourhood Routes
  - Revise school trips as new routes are implemented
  - Engage rural communities and tailor service days and times to their needs
  - Trial the operation of pre-booked special event services to rural communities
  - System-Wide Performance Evaluation
  - System Implementation Support
- Transit Accessibility and Comfort
  - Define accessibility standards for new bus stops and retrofits of existing stops
  - Upgrade and maintain all bus stops
  - Improve sidewalk connections
  - Enhance transfer stops
  - Study and Design Downtown Terminal Improvements
  - Study and Design Thickwood Terminal Improvements

  - Study and Design Timberlea Terminal Improvements
  - Continue coordination with RMWB Active Transportation to improve walking access to transit
  - Measure progress by conducting a stop accessibility audit, including paths
  - Engage Transit in the planning process to improve connectivity
  - Continue annual review of snow clearing policy for priorities and timeliness
  - Continue to prioritize Terminals and high ridership stops for sidewalk clearing
  - Develop a policy for heated shelters
- SMART Bus
  - Introduce service hour parity
  - Integrate SMART Bus with On Demand
  - Review and revise eligibility criteria
  - Update application form
  - Identify a third-party contractor to conduct in-person assessments of a subset of SMART Bus applications
  - Update the appeals process to involve an internal RMWB or third-party panel not associated with RMWB Transit.
  - Revise attendant and companion policy
  - Introduce online booking software
  - Develop travel training curriculum to be used for conventional and specialized transit passengers, and pursue community partnerships to administer travel training
  - Modify reporting of cancelled trips and consider introducing longer temporary suspensions in the No Show and Late Cancellation Policy, if applicable
- Affordability
  - Introduce new ticketing system
  - Investigate a potential fare increase, maintaining fare parity between services
  - Introduce a fare pass program for low-income residents
- Trip Planning
  - Investigate or improve trip planning tools
  - Develop a travel training program that supports all potential passengers in using RMWB conventional services
- Policy and Staffing
  - Hire additional staffing resources required to support operator management & training
  - Hire additional internal staffing resources required to support the implementation of the Plan
- Assets
  - Replace ageing vehicles
  - Retire conventional vehicles as they reach end of life to reach 20-30% spare ratio
  - Expand demand responsive fleet

The Plan is designed to be implemented with minimal impacts RMWB Transit's operating and capital requirements. With a focus on using existing resources more effectively, overall service hours are proposed to stay very similar to 2019 levels. Increases to ridership as a result of the Plan's service improvements and proposed fare changes result in a forecast revenue growth, thus improved revenue to cost ratio. Further details on revenue and ridership forecast can be found in Summary Section 5.3.

Capital expenditure is spread across the Plan's five phases and is focused on passenger and bus access improvements to terminals. Capital spending is offset by cost savings from right sizing the bus fleet, reducing the need for additional and replacement vehicles. **Table 1** summarizes the estimated additional capital costs per phase, compared to a "business as usual" scenario. As such, these summarized costs do not include regular asset maintenance and replacement, but do include new initiatives, developments and any additional assets required by the Plan.

Table 1: Estimated Additional Capital Cost of the Plan by Phase

Phase One	Phase Two	Phase Three	Phase Four	Phase Five
$140k	$1.35M	$1.5M	$0	$1M

Based on community engagement, the Transit Master Plan is a practical tool to update and streamline Wood Buffalo's transit network, services, and operations. The recommendations in this report will result in an overhaul of RMWB Transit's system and service offerings. The intention of this Plan is to lead RMWB Transit in a direction that is passenger-focused, offers transit service on par with the expectations of modern mobility, and allows it to serve the community effectively and efficiently into the future.

The plan is designed to ensure collaboration with other regional plans in the near turn and the future, positioning transit to integrate with potential regional concepts, rapid transit, active transportation and seamlessly integrating with them, as they are brought forward for consideration. Key documents to base future strategic transit functions can be found in the goals and designs within the Municipal Development plan or other transportation plans both current and into the future, as well as active transportation and community service plans collaboration will ensure overall alignment in efforts throughout the municipality.

1.0 Introduction

1.1 Purpose

The Transit Master Plan (Plan) for the Regional Municipality of Wood Buffalo (RMWB or Wood Buffalo) has been developed to respond to issues and opportunities with the existing service, and address changing local travel behaviours and trends, including post-COVID-19 mobility, technology and equity. This is primarily an operationally focussed plan that seeks to set RMWB Transit on a solid foundation for future growth. As such, this Plan primarily works towards operational improvements, ridership growth, and cost efficiency. Future plans in conjunction with other municipal plans will build up on this operationally focused plan and can explore items such as Bus Rapid Transit, Park and Ride, and regional integration with private transportation networks. Policy direction concepts such as connections between transit and the trail networks (Active Transportation) or complete streets, will be in accordance with Municipal Development or other Sub-Area Development plans as they are adopted within the RM.

The Plan identifies the actions to be undertaken by RMWB Transit now and into the future to improve transit and expand mobility options for residents. The Plan will be transformative for Wood Buffalo, introducing several new service typologies (including core, neighbourhood, and On Demand transit services) and reducing operating costs for the municipality. A shift towards increased transit usage can help improve the quality of life for the community by reducing traffic congestion and vehicle-related emissions, while increasing affordable and available access to destinations across the RMWB.

1.2 Background

The RMWB is one of the larger municipalities in land area in North America, with over 68,454 km of within its borders. It is made up of the urban service area, and nine rural communities. Despite this large land area, the 2021 municipal census indicated that 72% (76,006 people) of the population in Wood Buffalo resides within the Urban Service Area of Fort McMurray and another 26% (27,313 people) considered to be a “shadow population” who live in temporary workers’ dwellings. RMWB Transit serves the majority of RMWB permanent residents by providing transit service within the Urban Service Area, connecting residents with the City Centre) commonly referred to as the Lower Townsite or Downtown). In addition, RMWB Transit provides limited services from some rural communities within the Region to Fort McMurray on select days each week, using contracted services provided by local business partners.

2.0 A New Transit Master Plan

2.1 Previous Transit Master Plan (2007)

In 2007, iTRANS Consulting Inc. and the RMWB completed a comprehensive service review of the conventional and specialized transit services. The Five-Year Transit Service Plan was developed to support ridership growth from 2008 through 2012. Many things have changed in the fifteen years following its approval, including population growth in Wood Buffalo and ongoing innovation in the transit industry, such as the proliferation of On Demand transit. It is important for the 2022 Plan to address the current needs and challenges of the community while looking ahead to build a stronger and more efficient transit system.

2.2 Existing Transit Service

2.2.1 Impact of COVID-19 Pandemic

Throughout the Plan, 2019 data has been used for baseline "current" service calculations, as it was the last full year prior to the COVID-19 pandemic. With evolving provincial and local responses to the pandemic, including periods of lockdowns and reduced movement, data from 2020 and 2021 was highly variable and therefore generally unsuitable for planning purposes.

2.2.2 Conventional Transit

RMWB Transit operates 16 routes using a fleet of 73 conventional transit buses. As of 2019, the annual ridership of Wood Buffalo's conventional transit service was 1,558,368. **Table 2** provides a summary of the operating characteristics for each conventional route. Many routes operate at low frequencies with headways ranging from every 30 minutes during peak hours to 120 minutes during off-peak periods. This means RMWB residents cannot fully rely on public transit as their primary means of transportation and may be discouraged from using the service if they have alternative options.

Table 2: Operating Route Characteristics

Route	Weekday Service	Weekday Headway		Weekend/ Holiday Service	Weekend/ Holiday Headway
		Peak	*Off-Peak*		
7 Abasand Heights	6:00-20:00	60	60	9:00-20:00	120
8 Beacon Hill Drive	6:00-20:00	60	60	9:00-20:00	120
9 Morgan and Harpe Heights	6:00-21:00	60	60	9:00-20:00	4 Trips
10 Gregoire and Prairie Creek	7:00-22:00	60	60	7:00-20:00	120
11 Fort McMurray Airport	5:00-23:30	30	75	6:00-23:30	75

Route	Weekday Service	Weekday Headway		Weekend/ Holiday Service	Weekend/ Holiday Headway
		Peak	*Off-Peak*		
12 Thickwood to Timberlea	6:30-23:30	30	30	6:30-23:30	30
15 Timberlea	5:30-23:30	30	30	6:00-23:30	30
16 Thickwood	5:30-23:30	30	30	6:00-23:30	30
17 Parsons Creek	7:00-19:30	30	60	9:00-19:30	60
18 TaigaNova Crescent	6:00-19:30	60	60	7:00-19:30	60
41 Brett Drive Eagle Ridge	7:00-20:30	30	60	9:00-19:30	60
42 Stone Creek Village	6:30-20:00	30	60	7:30-19:30	60
51 Wood Buffalo Estates	6:30-19:30	60	60	7:30-18:30	120
61 Thickwood Terminal	7:30-9:00 14:30-17:30	30	N/A	N/A	
91 Longboat Landing	7:00-20:00	60	60	9:00-19:00	60
92 Syncrude Sport and Wellness	6:30-19:30	60	60	9:30-18:30	60
99 MacDonald Island	7:00-22:30	30	30	7:30-22:30	30

All routes converge at three main locations within Fort McMurray: Timberlea Terminal; Thickwood Terminal; and the Downtown (Main Street) Terminal. Passenger boardings follow a similar pattern - the focal point of ridership within the Urban Service Area includes the Timberlea and Thickwood commercial areas and adjacent schools and the Lower Townsite, particularly along Franklin Avenue. The Downtown Terminal and Keyano College act as ridership anchors in Lower Townsite. **Figure 1** visually depicts ridership on a typical weekday in the Fall of 2019.

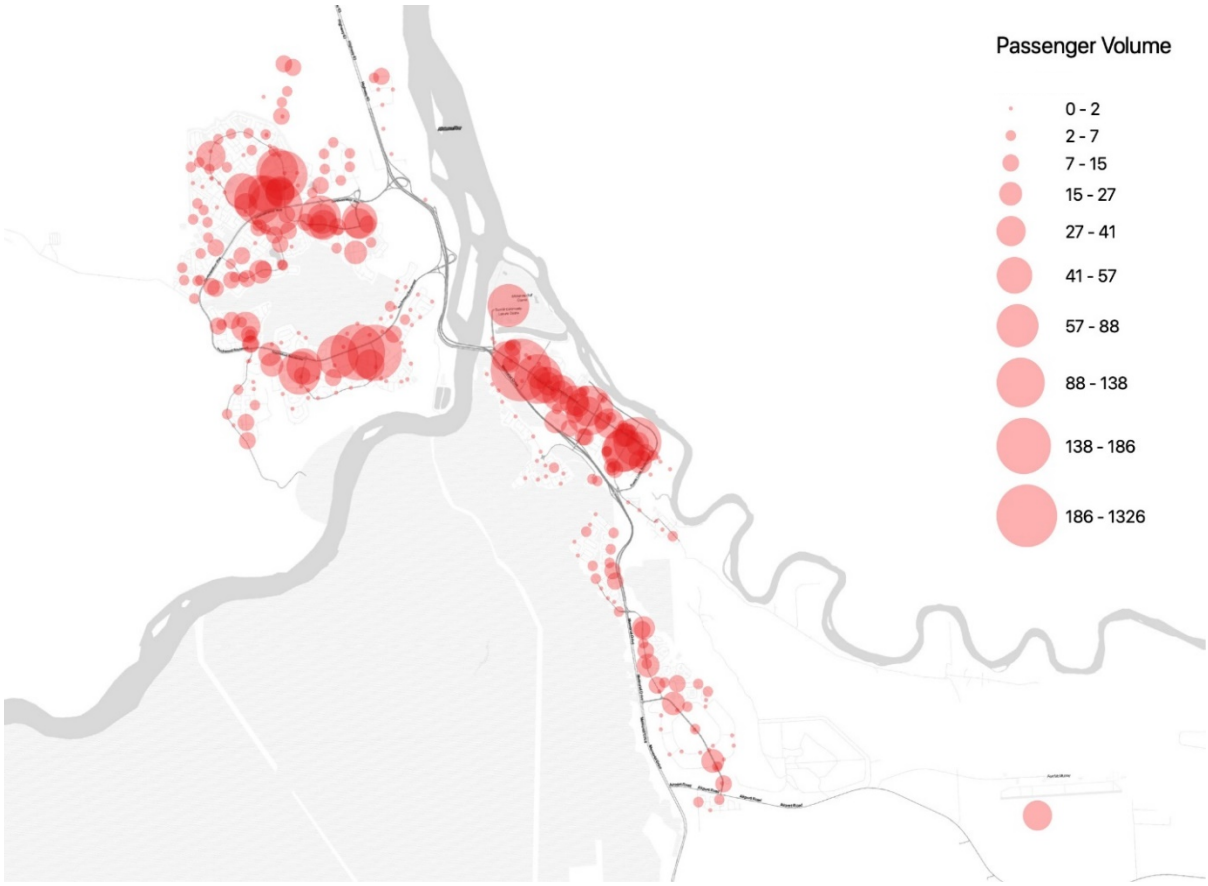


Figure 1: Typical Weekday Ridership (Fall 2019)

Route productivity is a way of measuring a transit network's performance and shows the average number of passenger boardings per revenue hour on the service. This can provide a sense of whether a route is being well-utilized or not.

Route productivity in 2019 in the RMWB varied, from 2 to 28 passenger boardings per revenue service hour. In 2019, there were no routes that experienced over-utilization, which would be characterized by consistent overcrowding. Routes 10, 15, 16 and 92, experienced an average utilization rate, operating along the main corridors and connecting passengers between Thickwood, Timberlea and the Lower Townsite. Most routes which were under-utilized in 2019 operated within Abasand Heights, Morgan and Harpe Heights, around the Thickwood Terminal, or during low demand periods. In some instances, low ridership/utilization is required to provide connections to the overall network. A key finding is RMWB Transit can refine these low utilization routes to increase the overall effectiveness of transit. A new service plan must be developed to better align the services with the needs of the community, rebalancing resources in a way that provides effective and attractive services.

2.2.3 Specialized Transit (SMART Bus)

RMWB Transit also operates a specialized transit service called Special Mobility Assistance Required Transportation (SMART Bus). This service is designed to provide door-to-door transportation for seniors over the age of 65 that do not have a driver's license; or individuals with mobility issues that prevent or severely restrict their use of conventional transit service. Unlike conventional transit, there are no fixed routes and trips are booked on an on-request basis. A fleet of 11 SMART buses operate this service which completes over 19,000 trips annually (2019 statistics).

2.3 Transit Performance Assessment

To better understand the current performance of RMWB Transit, and identify aspects that could be improved, a peer review of similar transit systems that serve populations of 50,000 to 150,000, and systems within other Alberta communities was undertaken. Each transit service operates in areas with their own unique geographic and cultural context, which will inform the transit service characteristics and performance. However, it is valuable to review standardized statistics of similar size transit agencies to get a sense of how RMWB Transit compares to its peers.

The review, included in full in **Appendix A**, examined the transit agencies serving Grand Prairie, Red Deer, Medicine Hat, Sault Ste. Marie, and Prince George. The purpose was not to identify identical transit systems that Wood Buffalo could mimic entirely. Instead, the purpose was to identify communities with similar characteristics, which are appropriate to compare with Wood Buffalo. Performance data and other relevant information from those communities were assessed to determine whether similar approaches to service may be relevant for RMWB.

2.3.1 Conventional Transit

RMWB's conventional transit service is generally on par with its peer systems. It has a predominantly radial network design, meaning most routes connect corners of the city with the centrally-located Downtown Terminal, at the Jubilee Centre. This is common in smaller transit systems and is consistent with most of its peers. RMWB Transit was also consistent with its peers when compared to passenger trips per capita and vehicle service hours per capita.

Figure 2: Wood Buffalo Peer Comparison Highlights

One of the key differences between Wood Buffalo and its peers relates to

revenue and expenses. Transit fares in Wood Buffalo were found to be the most affordable while it operates the largest transit system (i.e. routes, peak buses, and number of employees). This means there is a high cost to operate the service and very little of this cost is recovered at the fare box. As such, Wood Buffalo ranks the lowest among its peers in cost effectiveness and recovery.

Some of RMWB Transit's performance highlights compared to its peers are shown in **Figure 2**. Further analysis of the service in comparison to peers is available in **Appendix A**.

2.3.2 SMART Bus

Overall, RMWB SMART Bus service compares favourably to the peer systems offering a similar level of service, for a less expensive cash fare in all categories. The hours of service provided ends earlier than most other agencies but operates a higher number of vehicles during that service period. Administratively, Wood Buffalo's eligibility criteria and booking notice guidelines are comparable to other systems. The one exception is that SMART Bus allows seniors without a driver's license to use the service; whereas most other specialized transit services across Canada are only provided to persons with disabilities who cannot use conventional transit.

While RMWB Transit provides a similar level of service as its peers, SMART Bus falls below average in the number of registrants per 100,000 people, the number of rides per capita, and the number of trips per registrant. This may be due to the lower proportion of seniors in the community, since the propensity to develop a disability increases with age, which limits the number potential registrants to the service.

Further analysis of the service in comparison to peers is available in **Appendix A**.

2.4 Market Assessment

The Regional Municipality of Wood Buffalo Transit Master Plan aims to ensure that transit is meeting the needs of all individuals who live and work in the municipality, providing mobility options when and where they need to go.

2.4.1 Travel Demand Assessment

A travel demand analysis was undertaken to illustrate where and when trips are currently taking place across RMWB. Details of this analysis are included in **Appendix B.**

The analysis included trips by any mode, reflecting overall travel demand, rather than existing transit trips. The zones used for this analysis are presented in **Figure 3**.

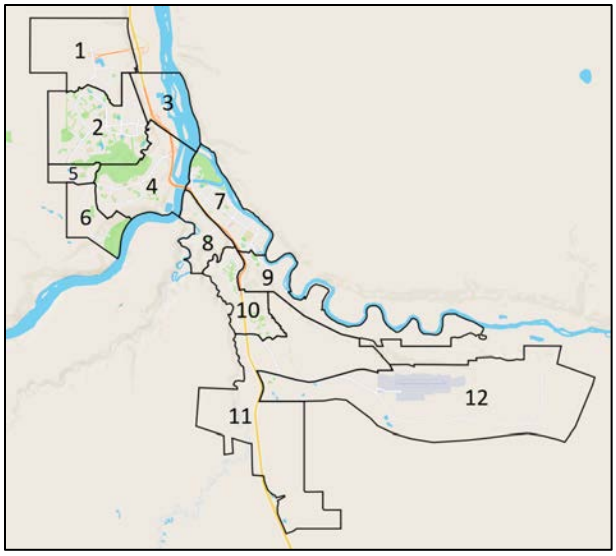


Figure 3: RMWB Travel Zones

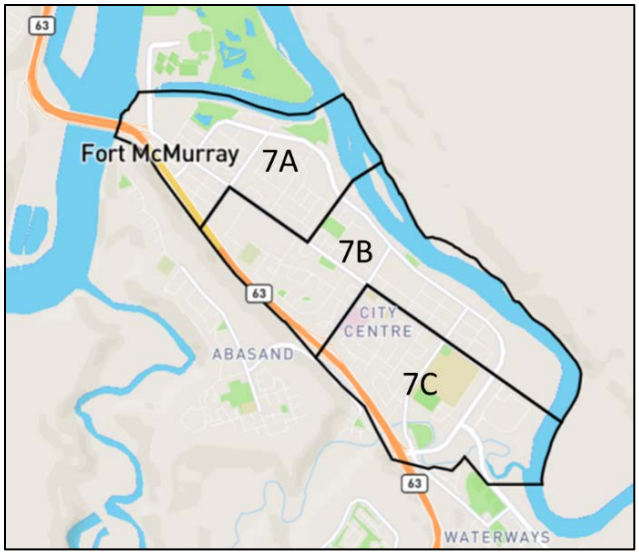


Figure 4: Subdivided Zone 7 (Downtown)

Downtown (Zone 7) is the most popular destination during weekday mornings, with 27.2% of trips ending in this zone. The area was further divided into three distinct subzones to better understand travel patterns within the Downtown. These subzones were based on the land uses in the Downtown, with 7A being predominantly residential with some office, 7B being predominantly commercial, and 7C containing health, education and some residential. These subzones are illustrated in **Figure 4**. It was found that subzone 7B had the highest number of trips as both an origin and a destination, with 11.6% of weekday morning trips destined for this area.

Morning trips originate from all areas of the urban service area, with the highest number of trips (41.5%) coming from Timberlea (Zone 2). Timberlea is the most popular origin and destination during weekday afternoons and has the highest number of trips taking place within a single zone, highlighting its importance in travel patterns. **Figure 5** illustrates how busy each zone is during weekday mornings, while **Figure 6** illustrates the same during weekday afternoons.

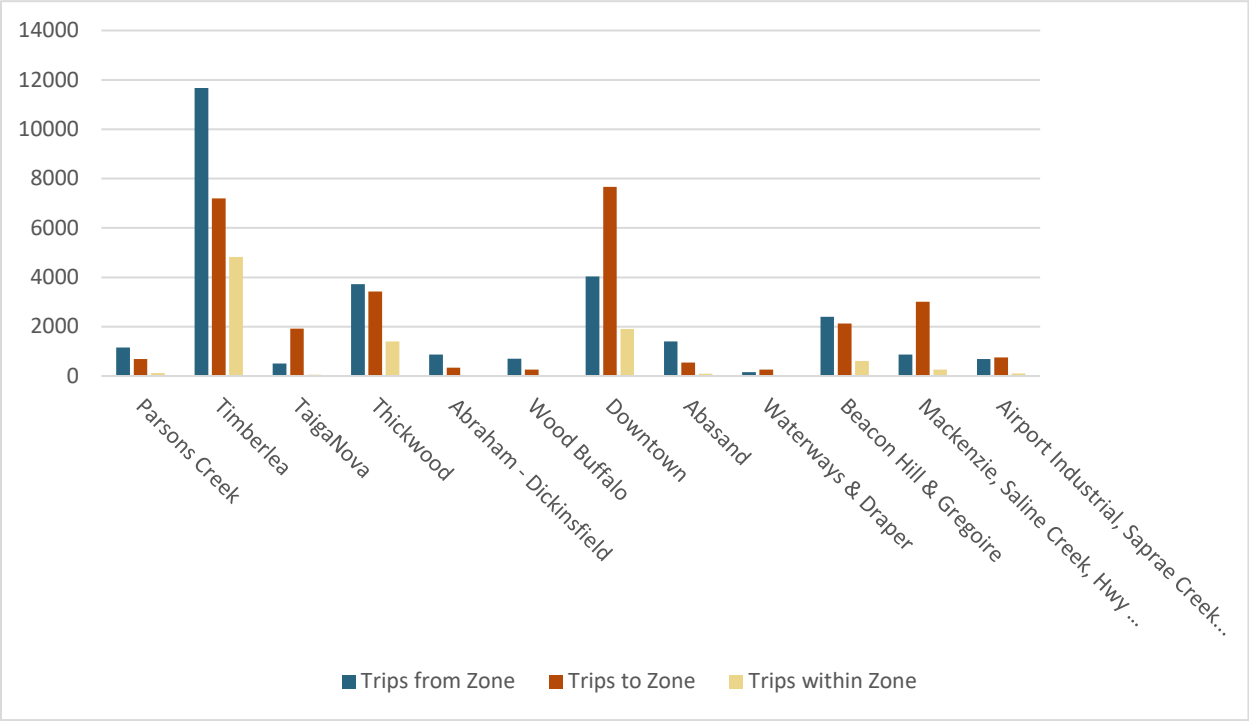


Figure 5: Weekday Morning Trips by Zone (All Modes)

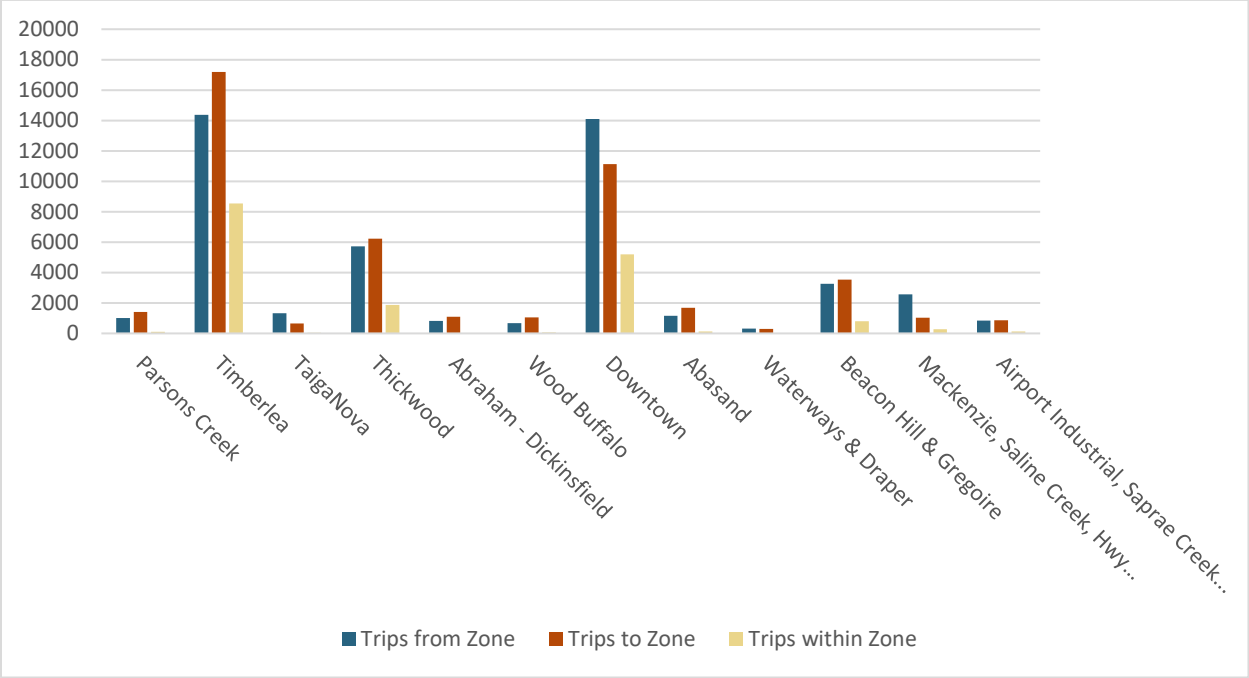


Figure 6: Weekday Afternoon Trips by Zone (All Modes)

Understanding common origin and destination pairs can help evaluate whether the transit system is offering sufficient origin/destination service. Travel demand analysis illustrates that travelers in Wood Buffalo are most often travelling both within and between Thickwood (Zone 4), Timberlea (Zone 2), and Downtown (Zone 7). These zones currently have the highest number of bus trips traveling within them each day. However, they have also been identified as zones which could benefit from added service for internal trips, as travellers are making more trips within this zone than the available bus trips support.

A number of underserved links between zones were identified, occurring where there are limited or inconvenient transit options between certain commonly-travelled parts of Fort McMurray. Limited or inconvenient transit options are defined as origin/destination pairs that passengers cannot easily travel between due to factors such as, the need for transfers or where transit schedules are limited. These are illustrated in **Figure 7** below. Most of these connections are between Timberlea and other areas of the municipality. While direct routes between all destinations in Fort McMurray are not feasible, high frequencies and efficient transfers can make it possible to effectively connect to a wide variety of locations.

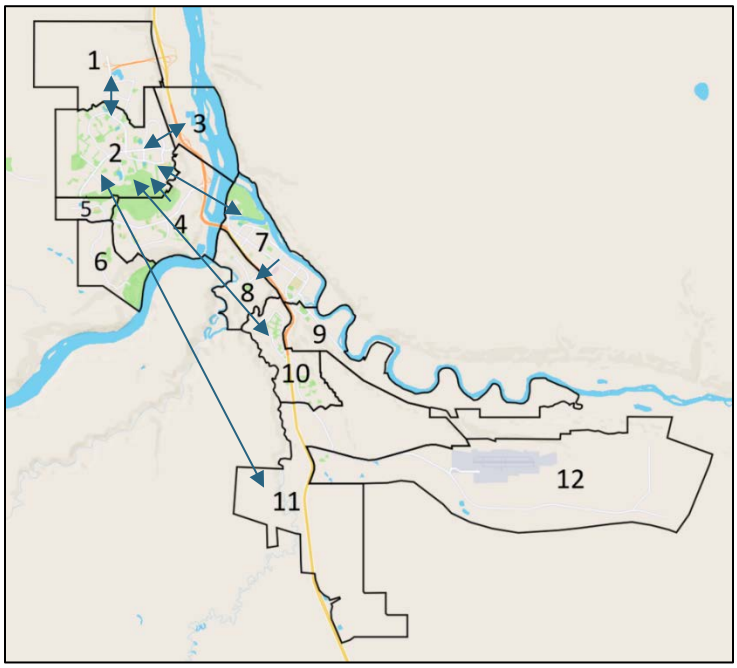


Figure 7: Current Underserved Transit Links

When considering travel demand in Downtown (Zone 7), which is a key destination in the Region, it was noted that ten routes service Zone 7. Six of these ten routes that service Zone 7, service all subzones of Zone 7, while the remaining four routes service only Zone 7A. However, Zone 7B has the majority of origin and destination trips in Zone 7 in both the AM and PM peaks. This highlights a potential to expand routes that travel to/from the Downtown to extend further southeast to meet demand and reduce the need for passengers to transfer. New core routes proposed in the Transit Master Plan enhance

connectivity through all Subzones (7A, 7B, and 7C) by providing a high frequency service along Franklin Avenue and eliminating the transfer at the Downtown Terminal. Core routes will be discussed in detail in **Section 4.2.1** of this report.

Figure 8 illustrates the number of trips taking place in RMWB by hour for both weekdays and weekends. It shows a weekday morning peak which has significantly lower ridership than the weekday afternoon peak period. This pattern is unique when compared to other transit agencies, which experience high ridership in both the weekday morning and afternoon peak periods. On weekends, ridership is highest in the afternoon, but is otherwise fairly consistent across the entire afternoon.

As part of developing the new route network, consideration was given to when individuals in RMWB want and need to travel and how this compares to the existing service standards (see **Section 3.2**).

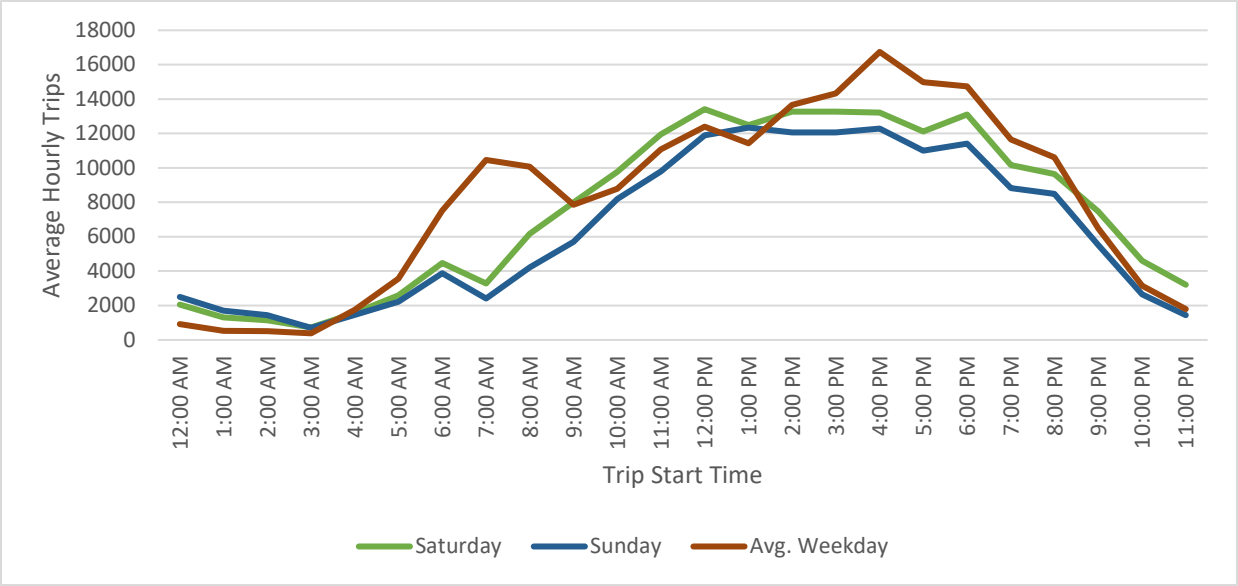


Figure 8: Travel Demand in RMWB by Hour (All Modes)

2.4.2 Community Perspective

Public transit is ultimately intended to serve the community by providing convenient and reliable mobility options. As such, feedback from residents about how the service currently functions and how well it meets their needs was reviewed. This review, detailed in **Appendix C**, highlights areas of improvement that can be addressed by a new Transit Master Plan.

Due to the ongoing COVID-19 pandemic, the first round of engagement activities was held virtually to minimize risks associated with in-person contact. These virtual engagement activities included a public survey, transit employee survey, three stakeholder workshops, and two rural community workshops.

The comments and feedback received from the community were organized into key themes as identified in **Table 3**.

Table 3: Round One Engagement Key Themes

Theme	Description
Routing/Frequency	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), reference to the built environment including sidewalks, signage and lighting.
Affordability	Comments related to the affordability of the transit system and fares.
Equity Equity Sub-theme: Accessibility	Comments related to the importance and ability of RMWB Transit to service all populations and communities in an equitable manner, including access to amenities, facilitating transit for newcomers, and language barriers.
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service, including interactions with staff and drivers, transit navigation and wayfinding, and other transit related information (lost and found).
Safety	Comments related to riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments related to the perceptions of transit, environmental benefits, bettering communities through transit - reducing traffic, reducing emissions, and growing future ridership (youth).
Staff Training/Transit Training	Comments related to the need for staff training and transit education training for transit riders (particularly newcomers, seniors, students).

The primary theme of the feedback received was a desire for better service: service to more areas of the municipality, higher frequencies, earlier and later service in the day. It was identified that a more efficient service may encourage residents to use the service.

Other consistent messages heard from the initial public engagement process included:

- **Frequency and routing** were identified as primary concerns from stakeholders and the public. A need for additional service hours, both in span and in frequency, was suggested for specific areas and specific user groups. It was noted that passengers like students, service sector shift workers, and those wishing to travel late in the evening could use more frequent service, earlier and later starts to service, and potentially new service types such as On Demand.
- **Transit infrastructure** was noted as an important element of the rider experience and an opportunity for improvement. Heated shelters in particular were identified as an important asset that should be maintained and improved to attract transit riders.
- Comments were provided regarding the **affordability** of the transit service and the available methods of fare payment. Some passengers suggested a reduction or removal of fares while

others indicated a preference for an increase in fares with the associated revenue leading to improvements in service. It was noted that there may be some passengers, such as students or low-income residents, which should have access to reduced fares.

- Wood Buffalo residents were concerned about **equity**, identifying a large immigrant population who may require transit orientation information and support; noting that written materials and any app technology should be designed in a way that meets the needs of passengers whose primary language is not English. For SMART Bus riders, a lack of flexibility when planning trips was noted as a concern.
- Various **assistance improvements** were suggested, consisting of physical improvements, including real-time bus information through new or existing apps and enhanced bus stop signage.
- Comments regarding perceptions of **safety** were heard from residents, suggesting improvements to safety should be considered. Concerns generally related to specific parts of the transit system at certain times of the day, when and where antisocial behaviour was more likely to occur.

3.0 Policy Direction

3.1 Policy Framework

The Transit Master Plan for the Regional Municipality of Wood Buffalo will help guide change and growth for the RMWB over the life of the plan. To do so effectively, a policy framework that clearly outlines where the organization wants to go and how to get there is required. To this end, a new Policy Framework (**Appendix D**) is suggested, made up of five key components:

- Role;
- Vision;
- Mission;
- Goals and Objectives; and
- Service Guidelines.

A Role identifies what service they are intended to provide in the municipality. "Vision" helps guide decision-making by setting broad direction through an aspirational statement of what the organization wants to achieve. The "Mission" statement is guided by specific values that the organization holds. Goals are more specific outcomes that the organization is striving to achieve, which can be measured by precise objectives. "Objectives" can be operationalized as service guidelines, which outline definitive metrics that evaluate how well the system is has aligned its service design and performance with its vision, mission, and goals.

3.1.1 Role

Transit systems in general are taking a more holistic approach to mobility across communities. They often work to integrate a variety of transportation approaches to accommodate complete, sustainable, and accessible origin-to-destination trips. As such, RMWB Transit will define its role in the Municipality as:

The primary purpose of RMWB Transit is to provide mobility services to the community.

To achieve this role, RMWB Transit will do the following:

- Provide transit services that are proximate within a reasonable distance to at least 90% of residents within the Fort McMurray Urban Service Area as outlined in **Section 3.2** and **Appendix D**;
- Provide transit services that are accessible to all people, regardless of their background, economic situation, and ability;

- Work in collaboration with other mobility providers and identify approaches that enhance connections and multi-modal travel options for residents; and
- Implement programs that encourage greater use of transit and active transportation options.

3.1.2 Vision

RMWB Transit's "Vision" is to improve connections across the network. As such the Vision Statement is as follows:

RMWB Transit – Making Better Connections

This vision statement is simple, memorable, and emphasizes that RMWB Transit is a mobility service that connects all of the region. The statement not only refers to the connectivity of the transit routes with one another, but also the connections made between neighbourhoods and community members and between multiple modes. It considers how people interact with one another and how the transit network can facilitate these connections.

3.1.3 Mission

Providing greater definition to what the Vision means, the Mission guides our transit agency at a more practical level. In our case, the Mission articulates what the "better connections" of the Vision should look like, and is as follows:

To provide **ACCESSIBLE**, **ATTRACTIVE**, and **EFFICIENT** mobility services that meet the **NEEDS OF THE REGION NOW**, and in the **FUTURE**.

The capitalized words in the Mission Statement convey specific values of RMWB Transit, which are described in more detail below.

- **Accessible** – The service should be accessible to people of all ability levels, age, gender, sexual orientation, social, ethnic, cultural, and economic backgrounds.
- **Attractive** – An attractive service is one which is competitive with other modes of transportation that are available to residents, requiring high levels of frequency, reliability, and coverage.
- **Efficient** – Transit should operate in a manner that is fiscally responsible, finding ways to improve efficiency by providing the highest quality service with the amount of resources available. Efficient transit systems also reduce their environmental impact, helping to improve the environment of Wood Buffalo.
- **Needs of the region** – The service addresses the specific needs of Wood Buffalo, with a network, infrastructure, and passenger amenities that fit its unique context.

- **Now** – This recognizes a need for change and action in the near term to provide service of the highest quality in the present moment.
- **Future** – Recognizing that change will inevitably occur in Wood Buffalo, transit service must be responsive to those changes/should work in collaboration with Council, residents, and stakeholders to guide and respond to that future.

3.1.4 Goals / Strategic Priorities / Objectives

The Role, Vision and Mission set a framework for the direction of RMWB Transit. To achieve the vision, the following four goals are guiding pillars for RMWB Transit to achieve the vision:

1. Convenient Travel
2. Customer Focus
3. Equity
4. Fiscal & Environmental Responsibility

An overview of each goal is provided below. Each goal is further broken down into measurable objectives, listed as bullet points. The goals and objectives are described in more detail in **Appendix D**.

3.1.4.1 Convenient Travel

- Reduce the need for passengers to transfer between routes
- Deliver transit services in innovative ways
- Increase transit's focus on strategic planning

3.1.4.2 Customer Focus

- Enhance rider amenities
- Remove fare and pass purchasing barriers
- Engage partners to support service growth
- Enhance access to transit services
- Operate a system built on connections across the Municipality
- Strive to improve public perceptions of transit

3.1.4.3 Equity

- Encourage transit use by newcomers
- Ensure all communication meets accessibility best practices
- Integrate conventional and specialized transit services to provide fair and equitable access to public transportation
- Ensure a competitive, consistent and equitable fare structure

- Be accessible

3.1.4.4 Fiscal & Environmental Responsibility

- Provide a service that makes the best use of resources to achieve the goals of the system
- Identify opportunities to improve the efficiencies, without sacrificing the goals above

3.2 Service Guidelines

The Plan proposes to update RMWB Transit service guidelines, as detailed in **Table 4** below. These service guidelines are based on the vision, mission and goals detailed in **Section 3.1**, and are designed to provide a solid operational foundation from which RMWB Transit can grow in future.

Table 4: Service Guidelines

Guideline Type	Guideline Category	Guideline
Planning	Service Area	RMWB Transit will provide service connecting destinations within the Fort McMurray Urban Service Area. Specialized transit service will be available to eligible passengers within the Urban Service Area of Fort McMurray. Transit service shall be provided between Fort McMurray and nearby rural communities based on minimum ridership targets being met. Specialized transit service should be made available to rural communities that have conventional or On Demand transit services. Transit service from rural communities should, at a minimum, provide return service to Fort McMurray on the same day. Schedules and routes for rural service should be developed in consultation with the rural communities they serve.
	Route Structure	There are three types of conventional transit services provided by RMWB Transit. Each one provides a different function based on the land use and population it services. • Core Routes – Provide direct and frequent trips along major corridors, connecting key destinations across the Municipality. • Neighbourhood Routes – Connect neighbourhoods to larger destinations, intersecting with Core Routes providing connectivity to the rest of the transit network. These routes will travel primarily along local and/or collector roads and are less frequent than Core Routes.

Guideline Type	Guideline Category	Guideline
		• On Demand - Provide demand-responsive services in specified zones, focusing on low-density and emerging areas, where low ridership and/or infrastructure barriers do not support a Core or Neighbourhood Route. On Demand will connect to Core and Neighbourhood Routes at the nearest terminal. All Core and Neighbourhood Routes shall be provided in both directions to the extent possible. One-way service loops beyond two kilometres are considered unacceptable. Routes shall be located along major arterial and collector roads and only be provided along residential local roads in order to meet walk distance requirements.
	Accessibility	All conventional vehicles shall be low floor wheelchair accessible, with rails, and hand holds, keeping universal accessibility in mind. Specialized transit clients shall be able to use conventional transit at no cost. Travel training should support and encourage the use of conventional transit wherever possible.
	Service Coverage	Routes will be located so that 90% of all urban residences, workplaces, places of worship, secondary and post-secondary schools, shopping centres, and public facilities in the service area are within a 300-metre walking distance of a Neighbourhood Route bus stop or 600 metres from a Core Route bus stop. Routes will be located so that 100% of all high-density residences are within a 450-metre walking distance of a Neighbourhood Route bus stop or 600 metres from a Core Route bus stop. The walking distance should be the actual pedestrian path taken and not 'as the crow flies'.
	New Service Warrant	New bus service shall be provided to new subdivisions with a minimum of 400 households or 1,000 residents, where the majority of the subdivision is more than 400 metres from existing transit service, and which is adjacent to areas served by transit. If the area is in a low-density and/or emerging development area, On Demand service is recommended to develop a ridership base. On Demand services can be introduced prior to reaching the population thresholds to encourage early adoption of transit services as the primary mode share for residents.

Guideline Type	Guideline Category	Guideline
		If a new subdivision is adjacent to an existing On Demand zone, the zone may be redefined to include these new streets. As ridership in the expanded zone increases a Neighbourhood Route may be added to higher-ridership areas of the zone. *Passenger Revenues and Costs* – when forecasting passenger ridership, revenues and operating costs, the demand and location of the development, socio-economic characteristics of the population, physical (geographic and road) constraints, accessibility, the pace and timing of development, and transit dependency should be considered. Forecasted ridership and revenues must be sufficient such that the service will achieve a revenue/cost ratio of 5% within 12 months and 10% within 18 months.
	Service Level Changes	Neighbourhood Routes, which fall below 8 passenger boardings per revenue hour should be discontinued or converted to On Demand services. Neighbourhood Routes between 8 and 10 passenger boardings per revenue hour should be modified or restructured. If Core Routes have fewer than 15 passenger boardings per revenue hour on weekdays, RMWB Transit should study ways to encourage more people to use the routes by providing better feeder services, marketing, etc. Core Routes should not be discontinued. On Demand service should be reviewed for potential replacement with a fixed-route service when demand exceeds 8 passenger boardings per revenue hour. Minimum fixed-route headways should be achievable with the fixed-route service, as noted in the Frequency of Service guidelines below. Use of leading analysis techniques (i.e. Traffic Pattern Analysis, or Gender Based Plus Analysis) to identify opportunities to improve service efficiencies and meet the overall and inclusive needs of the public.
Operation	Frequency of Service	The transit routes should have the following minimum service frequencies, subject to modification based on the context and use of each individual route: **Peak Period Weekdays** Core – 15 minutes Neighbourhood – 30 minutes School – as required

Guideline Type	Guideline Category	Guideline
		Off-Peak Period Weekdays Core – 30 minutes Neighbourhood – 60 minutes On Demand – 60-minute wait time **Early Mornings/Late Evenings** Core – 30 minutes Neighbourhood – 60 minutes On Demand – 60-minute wait time **Weekends and Holidays** Core – 30 minutes Neighbourhood – 60 minutes On Demand – 60-minute wait time
	Ridership Levels	**Core Routes:** Minimum: 15 passenger boardings per revenue hour Target: 25 passenger boardings per revenue hour **Neighbourhood Routes:** Minimum: 8 passenger boardings per revenue hour Target: 15 passenger boardings per revenue hour **Specialized Transit:** Minimum: 2 passenger boardings per revenue hour Target: 2 passenger boardings per revenue hour **On Demand:** Minimum: 4 passenger boardings per revenue hour Target: 8 passenger boardings per revenue hour
	Hours of Service	All residents should be able to access transit services within the following minimum hours of service: **Monday – Friday** 6:00 a.m. – 10:00 p.m. **Saturdays/Sundays/Holidays** 8:00 a.m. – 10:00 p.m. Specialized transit services should be available at any time that other transit services are operating.

Guideline Type	Guideline Category	Guideline
	Transfers	Buses at designated transfer points should wait no longer than three minutes past their scheduled departure time for arriving buses.
	Vehicle Occupancy	The maximum number of passengers per bus should not exceed 150% of the seating capacity, based on the average occupancy over the course of a week. During off-peak and weekend/holiday periods, passenger occupancy per bus should not exceed 100% of the seating capacity, based on the average occupancy over the course of a month.
	Schedule Adherence	No bus should leave early from any time point. In the case of On Demand services, no vehicles should depart prior to the provided pick up time if passengers have not boarded the vehicle. Buses should not leave more than three minutes late from the time point, 95% of the time.
	Transit Priority	Transit signal priority and bus by-pass/queue-jump lanes should be implemented, where warranted. Transit priority is preferable where more than one route travels along the same corridor and where buses are consistently or significantly delayed by traffic.
Bus Stops	Location of Bus Stops	Spacing between bus stops should be approximately 250 meters apart along any fixed-route, except along back-lotted arterial roads where pedestrian connections are limited. Bus stops should be placed to maximize the number of residences within walking distance of the stop as per the service coverage guidelines. On Demand bus stops should be sited such that the service coverage guidelines are met. Bus stops should be connected to safe, accessible pathway networks and road crossings that maximize access to surrounding areas, regardless of road network limitations. Preference given to bus stop locations which/where: • Are adjacent to major trip generators • Sidewalks exist, and connect to nearby intersections with accessible curb cuts • Are near walkways which improve service coverage • Do not block driveways • Are adequately illuminated • Road crossings are minimized for transferring customers • Consider bus turning movements

Guideline Type	Guideline Category	Guideline
		• There is space available for a shelter and where the addition of a shelter has minimum sightline impacts • Traffic signals, utility poles, planters and street trees, do not block bus doors or visibility • Are near signalized intersections or stop signs • Sightlines are maximized for operators, motorists and pedestrians, and which minimize the impact on sightlines and slip off lanes at intersections • Traffic volumes are such that the addition of a bus stop has minimal impact from or on motorists • Have space to accommodate benches and/or shelters in future
	Bus Stop Design	All new bus stops should include: • A bus stop landing pad, at minimum 3 meters deep by 2 meters wide. • A bus stop marker which should be mounted so the bottom is 2-3m from the ground. When mounted on a wide pole such a power pole, it should be mounted on the side of the pole (away from the street) with a bracket, so it is visible from both directions long the street. Where feasible, every bus stop will be placed such that there is a hard, unobstructed accessible surface at both the front and rear doors of the vehicle. Ideally, the bus stop should include: • A landing pad with a minimum area of 3 meters by 9 meters, that is free of any obstructions and has accessible connection to a 1.5-meter sidewalk Space requirements for different bus stops: • Nearside or midblock stops (minimum 36 meters along the curb) • Zones on the far side of intersections (minimum 26 meters along the curb) • Minimize the negative impacts on adjacent Public Utility Land parcels (i.e. minimal obstruction to utilities) All bus stops are No Parking zones
	Passenger Shelter Coverage	50% of bus stops should have shelters. Shelters should be accessible, meaning they have sufficient obstacle free space for a wheelchair to enter the shelter and make a complete revolution within the shelter. Shelters should be considered where ten or more passengers use the stop on average per day.

Guideline Type	Guideline Category	Guideline
		The installation of shelters is dependent on available right of way and should be prioritized at the following locations: • High ridership stops • Seniors centres • Major destinations • Near pick-up points that have significant SMART bus boardings • Transit terminals • Common destinations for vulnerable/marginalized populations
	Bus Bays	The use of bus bays should be discouraged except in certain circumstances where lengthy bus dwell times would significantly interfere with overall traffic movement or on high speed (>60 km/hr) roads.
	Premium Stops	Transit Terminals will have good access and be located close to major destinations, connect all service types, with dedicated spaces for Specialized transit vehicles and riders. They will include large, well-lit shelter(s) for passengers and passenger information.
SMART Bus	SMART Bus Eligibility	Eligibility is determined by specific mobility barriers that prevent the applicant from using conventional transit.
	Trip Booking Window	24 hours' notice is required for all bookings. Same day bookings are accommodated based on availability only. Advance bookings can be booked up to 14 days in advance.
	Trip Duration	90% of trips should not exceed 60 minutes in duration.
Transit Oriented Developme nt	Road Design	The network of local roads, collector roads, and pedestrian network in residential developments should be such that the furthest residential homes are within 450 metres walking distance to the nearest bus stop. In the event that development exceeds the 450-metre walking distance from existing routes, road layouts should be designed such that transit routes require a maximum of 1km of transit route per 1,000 residents served. Transit routes can be provided on arterial roads and major collectors which have reasonable through access; not on crescents or cul-de-sacs. Use of local roads should be minimized. Streets on transit routes must have a minimum of 9m wide pavement and should have sidewalks on at least one side of the street Arterial and major collector 'through' roads should be spaced no more than 800m apart to allow adequate transit route coverage for future developments.

Guideline Type	Guideline Category	Guideline
		Provision for temporary transit vehicle turning circles must be provided, where necessary, to allow transit route phasing to coincide with development phasing. A minimum of 15.2m radius is required for the turning circle.
	Walkways	Walkways should be provided such that walking distances from the residences of a subdivision to existing and/or future transit routes are minimized.
	Land Use	Land use design guidelines shall be designed to maximize accessibility to bus stops.

4.0 The Plan

4.1 Community Engagement

In developing the Plan, two rounds of community engagement were undertaken in June 2021, and February 2022, with an enhanced second round in April 2022. Details of each round are included in **Appendix C**.

The thoughts, needs, and desires of the community helped to shape the Plan. As such, the first round sought to understand what the community wants to see improved, what they consider to be working already, and the things they want to see in the future. This round of engagement is summarized in **Section 2.4.2.**

Based on the market assessment and the key themes identified by the community, a first draft of the Plan was developed in early 2022. This Plan identified specific actions to be undertaken to achieve desired improvements for RMWB. These actions were organized by the following topics:

- Transit Routes and Services
- Transit Accessibility and Comfort
- SMART Bus
- Affordability
- Trip Planning
- Staff
- Assets

4.1.1 Community Response to the Plan

The initial draft of the Plan was presented to the community as part of the second round of public engagement in February 2022. Due to the ongoing COVID-19 pandemic, this round of engagement activities was also held virtually using video conferencing software and the Engagement HQ platform, to minimize risks associated with in-person engagement. *Participate Wood Buffalo* featured a "Transit Master Plan" page for this project to support community engagement. Through the public survey and two public workshops, the public provided their views on their, transportation needs, and what people expect from RMWB Transit.

An enhanced extension to the second round of engagement was completed with Council members and staff to ensure their concerns and plans for the future were included. During this enhanced second round, three workshops were offered to RMWB Transit staff (operators, supervisors, and other staff members) to provide additional feedback on the updated draft Plan. A dedicated Council workshop was also held, introducing Council members to the draft Plan and the findings from the previous two rounds

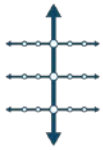
of engagement. Due to the improving situation related to the COVID-19 pandemic, these enhanced round two activities took place in-person in the region. The feedback from all rounds of engagement were organized into the themes listed in **Table 5**. These key themes were considered as the Plan was refined.

Table 5: Key Plan Themes

	Theme	Description
1	Frequency and Routing	Encompasses route designs and types, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.
2	Transit Infrastructure	Related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), and the built environment including sidewalks, signage, lighting, and transit signal priority.
3	Affordability	Includes the affordability of the transit system, smart card fare systems, and the overall cost of implementing the Plan.
4	Equity	Related to the importance and ability of RMWB Transit to service all populations and communities in an equitable manner, including accessible transit services, access to amenities, facilitating transit for newcomers, and language barriers.
5	Assistance Improvements/ Ease of Use	Encompasses the provision of accessible and equitable customer service including interactions with staff and drivers, transit navigation and wayfinding, and information available related to transit.
6	Safety	Related to riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
7	Transit for the Common Good	Includes perceptions of transit, environmental benefits, and bettering communities through transit - reducing traffic, reducing emissions, and growing future ridership (youth).
8	Staff Training/Transit Training	Comprises the need for staff training and transit education training for transit riders, particularly newcomers, seniors, and students.

4.2 Transit Routes and Services

A key component of the Transit Master Plan for the Regional Municipality of Wood Buffalo is the proposed route network for the Urban Service Area. This network was designed based on the following principles, an analysis of travel demand by all transportation modes within Fort McMurray (**Appendix B**), and feedback from the community:



High Frequency Service as the Anchor of the Network (Core Routes) – Frequency was identified as an important factor in the first round of engagement, as was effectiveness, which means; having high frequency services along the most well used corridors serving as the anchor for the overall network. These routes are the foundation on which the proposed network is built.

Serve Major Destinations – Transit service must connect residents to major destinations to facilitate more people using transit.

Connection to Schools – Students make up the majority of ridership, and therefore, connectivity to schools throughout the Urban Service Area was considered.

Improved Transit Route Directness – The community articulated a desire to travel to destinations efficiently, without large deviations in routing, incurring longer travel times.

Integration with "On Demand" – There was interest from the community to implement an "On Demand" transit service, particularly outside of the high demand service times.

Reduce Transfers – The community expressed a desire to travel to destinations quickly and directly, with journey times not significantly longer than other modes of travel.

Ridership – Both internal stakeholders and the community at large identified changes to the network should we seek to encourage ridership growth.

This principle-based approach, along with the market assessment outlined in **Section 2.4**, provided the foundation for planning a new network. Importantly, more frequent services underpin many other aspects of the Plan, and make transit a more flexible and attractive option for a variety of different trip types across the day. As RMWB Transit does not have ownership of the streets on which it operates, it is reliant on other RMWB departments to plan, approve, and construct a road network that is conducive to efficient and attractive transit services. Transit supports integrated and well-connected streets, and is a key mobility option for residents.

The new route network is made up of six different service types, each of which have different characteristics and serve different purposes to provide mobility in the community. Different service types are intended to meet different community needs in different areas, however all services are designed to work together as part of an integrated system. Some features that meet specific demands include higher frequencies during peak travel periods, and On Demand services to improve local community connectivity. The Plan's service types are outlined in **Table 6.**

Table 6: Service Types

Route Type		Description
	Core	• High frequency • Spine of network • Connect high ridership nodes and key destination • Operates on arterial and collector roads, with minimal deviation • Two-way service in both directions • Through service in Downtown
	Neighbourhood	• Fill gaps between Core routes • Connects local destinations within communities • Operates on local and collector roads
	On Demand	• Serves low-density and emerging areas • Connects to Core and Neighbourhood routes
	SMART Bus	• Door-to-door service • Available to eligible riders unable to use conventional transit
	Rural	• Regular service between Fort McMurray and nearby rural communities
	School	• Dedicated or modified services that operate directly to or from high schools

The following sections describe the different route types and proposed route locations. Information regarding the proposed implementation of these new routes and service types, over five implementation phases, can be found in the Implementation Plan, **Appendix H**.

4.2.1 Core

The **Core Routes** are the high frequency spine of the new network, providing direct routes on main corridors through the Urban Service Area. They will operate more hours than similar routes do today, providing higher frequencies and additional service hours in the morning, evening, and weekends. The **Core Routes** are expected to link the following key destinations:

- Timberlea to Downtown and Keyano Main Campus
- Thickwood to Downtown, Keyano Main Campus, and Keyano South

These Core Routes are illustrated in **Figure 9** below, and a summary of the proposed minimum frequencies is presented in **Table 7**.

Table 7: Proposed Core Route Frequencies

Weekday Peak	Weekday Midday & Evenings	Weekends & Holidays
15 minutes	25 minutes	25 minutes

Combined **Core Route** service frequencies along the Franklin Avenue corridor between Downtown and Keyano College in the Lower Townsite could be between every 7-8 minutes during weekday peak periods and every 12 minutes during the off peak. This new network connects the three transit terminals, Timberlea, Thickwood, and Main Street, reflecting the high demand travel patterns between the associated zones along with eliminating the existing transfer at the Downtown Terminal. These **Core Routes** also provide access to key destinations across Downtown Fort McMurray, such as the Northern Lights Regional Health Centre, Jubilee Plaza, and Keyano College. Note that, while important to the community overall, the airport is not a key destination that sees high levels of regular use and is thus not on the **Core Route** network. Transit to the airport is proposed to be operated by **On Demand** services (**Section 4.2.3**). The Downtown is maintained as the focal point of the network with these two frequent services both travelling through the downtown area supporting connections across the service area.

4.2.1.1 Regional Rapid Transit & Bus Priority

The **Core Route** network represents the first high-frequency transit backbone in Fort McMurray. Due to their design and frequency, these services are expected to be the most popular in the RMWB. This high ridership will help to justify the first elements of transit priority in the network, with any improvements benefiting the large number of riders on these routes. Future priority measures on these routes should be targeted in areas where buses experience consistent delays or inefficient operations. As priority measures expand, frequencies improve, and ridership grows over time, these routes will become Rapid Transit services. At this point Bus Rapid Transit (BRT) elements, such as improved stops, extended bus-only infrastructure, and distinct branding may be appropriate for the **Core Routes**.

#	Summary of Actions	Theme
1.1	Implement **Core Routes** as described	1,7

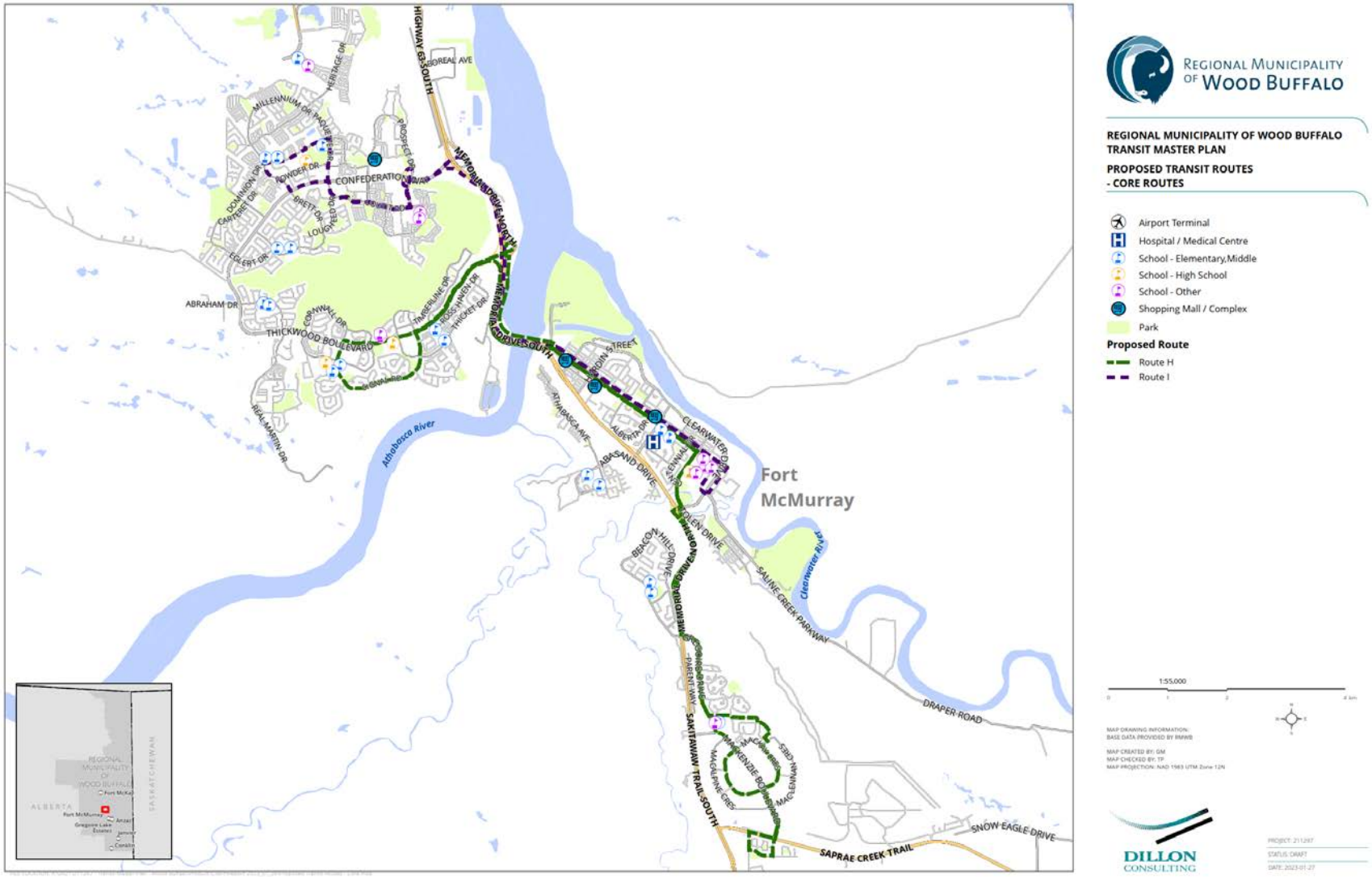


Figure 9: Proposed Core Routes Network

4.2.2 Neighbourhood

Neighbourhood Routes are intended to fill in the gaps within the **Core Route** network, providing services to communities outside of the main corridors. They connect local destinations with each other, and routes are anchored by transit terminals. These terminals provide comfortable and safe waiting environments suitable for passengers to wait while transferring between different routes and service types. **Neighbourhood Routes** will connect to **Core Routes**, which increase the number of destinations a passenger can access within a shorter amount of time.

The recommended **Neighbourhood Routes** will replace existing services and be phased in over time based on ridership, and with input from the public. They will operate at higher frequencies than similar routes do today. Proposed frequencies for **Neighbourhood Routes** are outlined in **Table 8** and proposed route alignments are in **Figure 10**.

Areas for future growth consideration through neighbourhood or On-Demand routes would be Parson's Creek and Saline Creek. These expansions would be done in accordance with the planning guidelines within this document or other RM guidelines that establish service levels for residents. Services will be expanded subject to available funding, and suitable road connectivity being in place.

Table 8: Proposed Neighbourhood Route Frequencies

Weekday Peak	Weekday Midday & Evenings	Weekends & Holidays
30 minutes	30-60 minutes* Many neighbourhood routes will transition to On Demand services in this time period	60 minutes* Many neighbourhood routes will transition to On Demand services in this time period

These Neighbourhood Routes are illustrated in **Figure 10**.

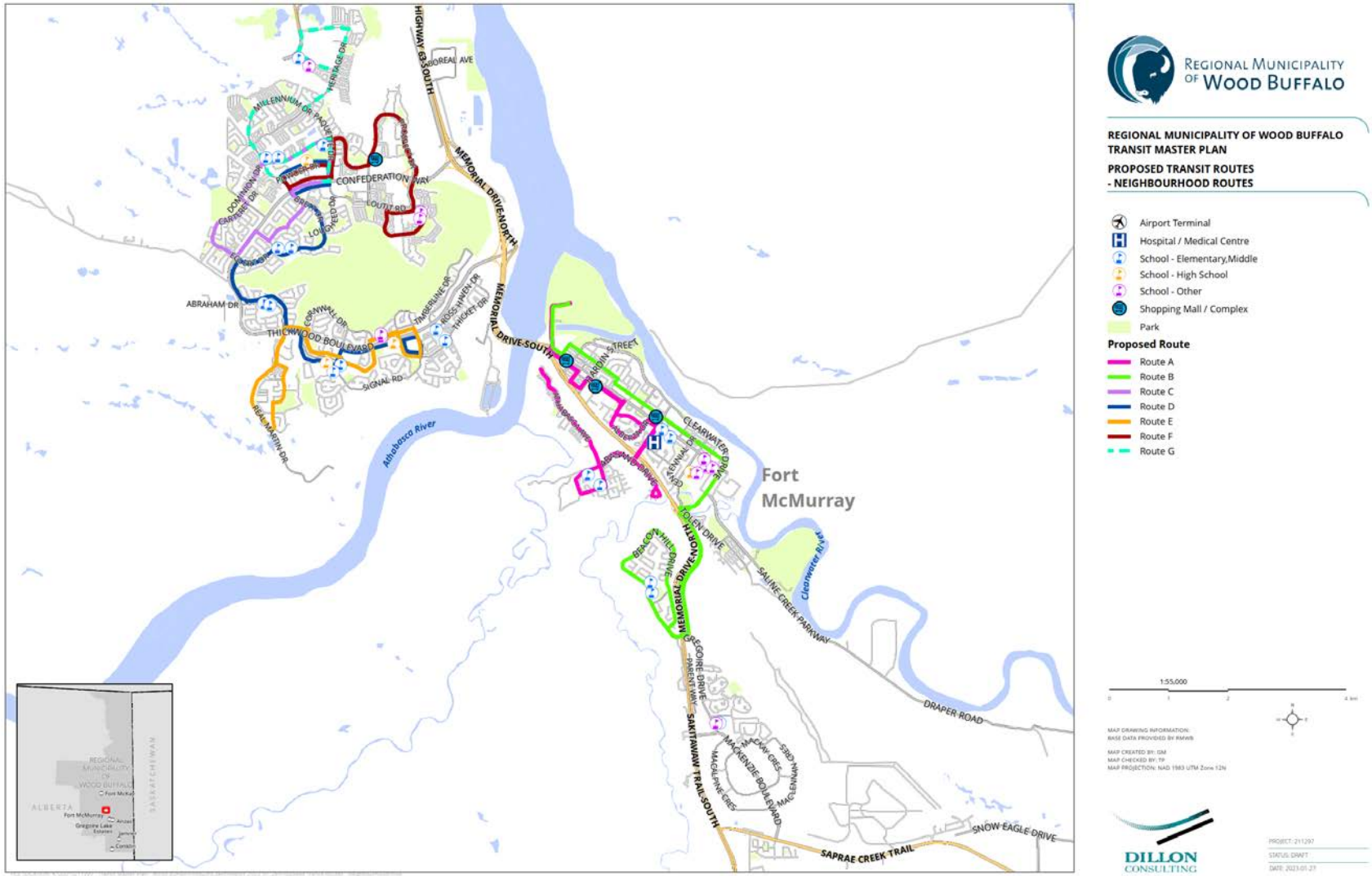


Figure 10: Proposed Neighbourhood Route Network

#	Summary of Actions	Theme
1.2	Implement **Neighbourhood Routes** as described	1,7

Figure 11 shows how the **Core** and **Neighbourhood** routes operate together to provide connections across the urban service area.

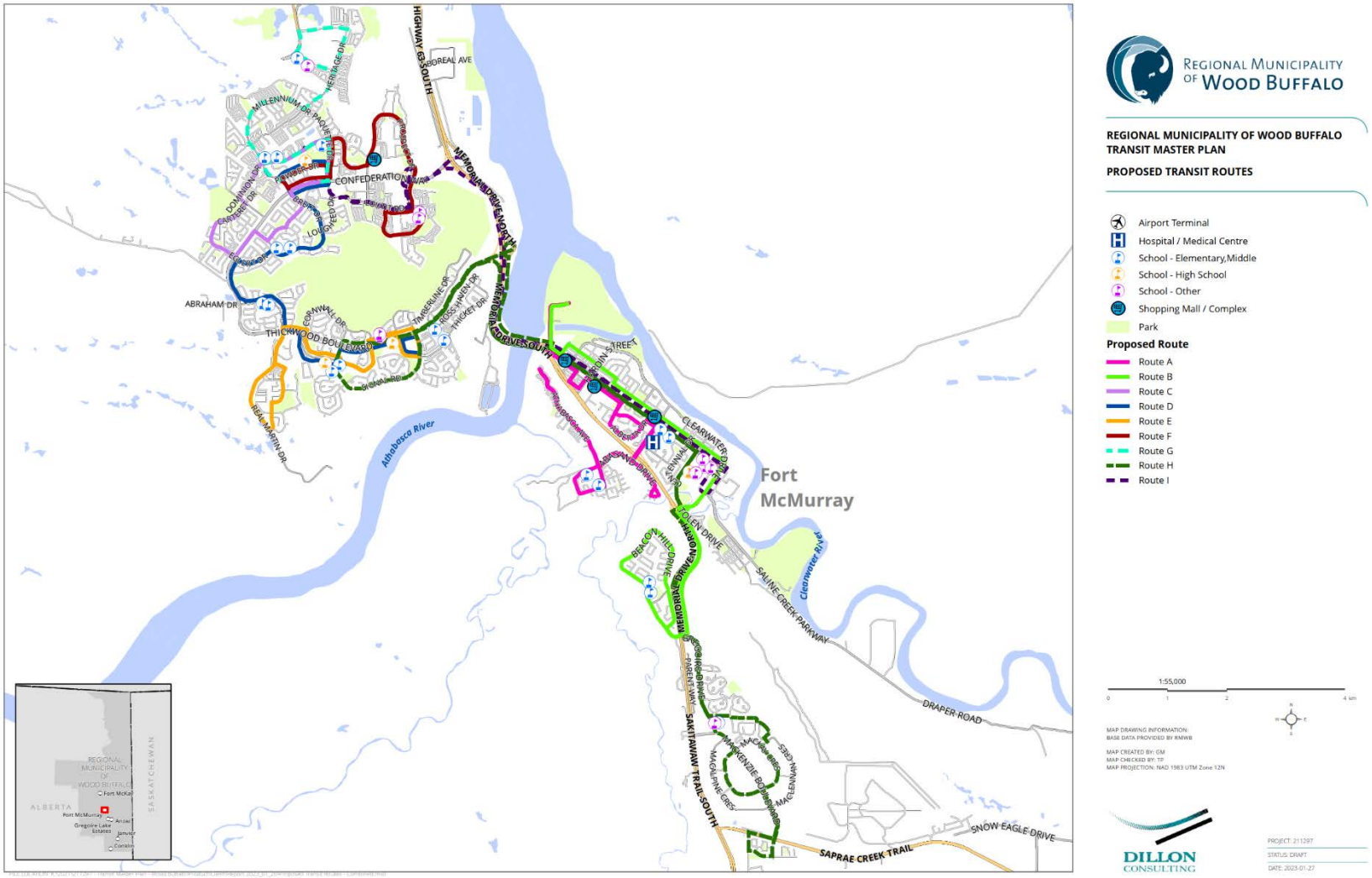


Figure 11: Combined Core/Neighbourhood Conventional Transit Network

4.2.3 On Demand

On Demand transit provides a shared-ride service on a non-scheduled basis in pre-defined zones, giving passengers the ability to request a trip in real time when they wish to travel, using either an app or by calling RMWB Transit. A vehicle is dispatched to pick up and drop off the requesting passenger, while also picking up and dropping off additional passengers along the way. Software is used to optimize trip scheduling in a way that results in the highest number of possible passengers per vehicle to provide cost efficient service, while minimizing travel time by routing the vehicle as directly as possible between each origin and destination.

This type of service will replace existing bus services in lower-density areas or periods of the day that experience low ridership, and in new emerging ridership areas which do not currently have appropriate road connectivity or ridership levels to support fixed-route transit at the minimum frequencies noted in the Service Guidelines.

The **On Demand** service areas will be phased in over time based on ridership levels on Neighbourhood Routes and trial On Demand services. The areas identified in green in
Figure 12 will be served by an **On Demand** service during the entire service day and will be implemented within the first year as a pilot. Those identified in orange will be served by **On Demand** service only during low ridership times of the day and will be implemented over the five-phase implementation lifespan of the Transit Master Plan. Core Route G and Core Route H along with Neighbourhood Route C will operate in all time periods, alongside **On Demand** transit services.

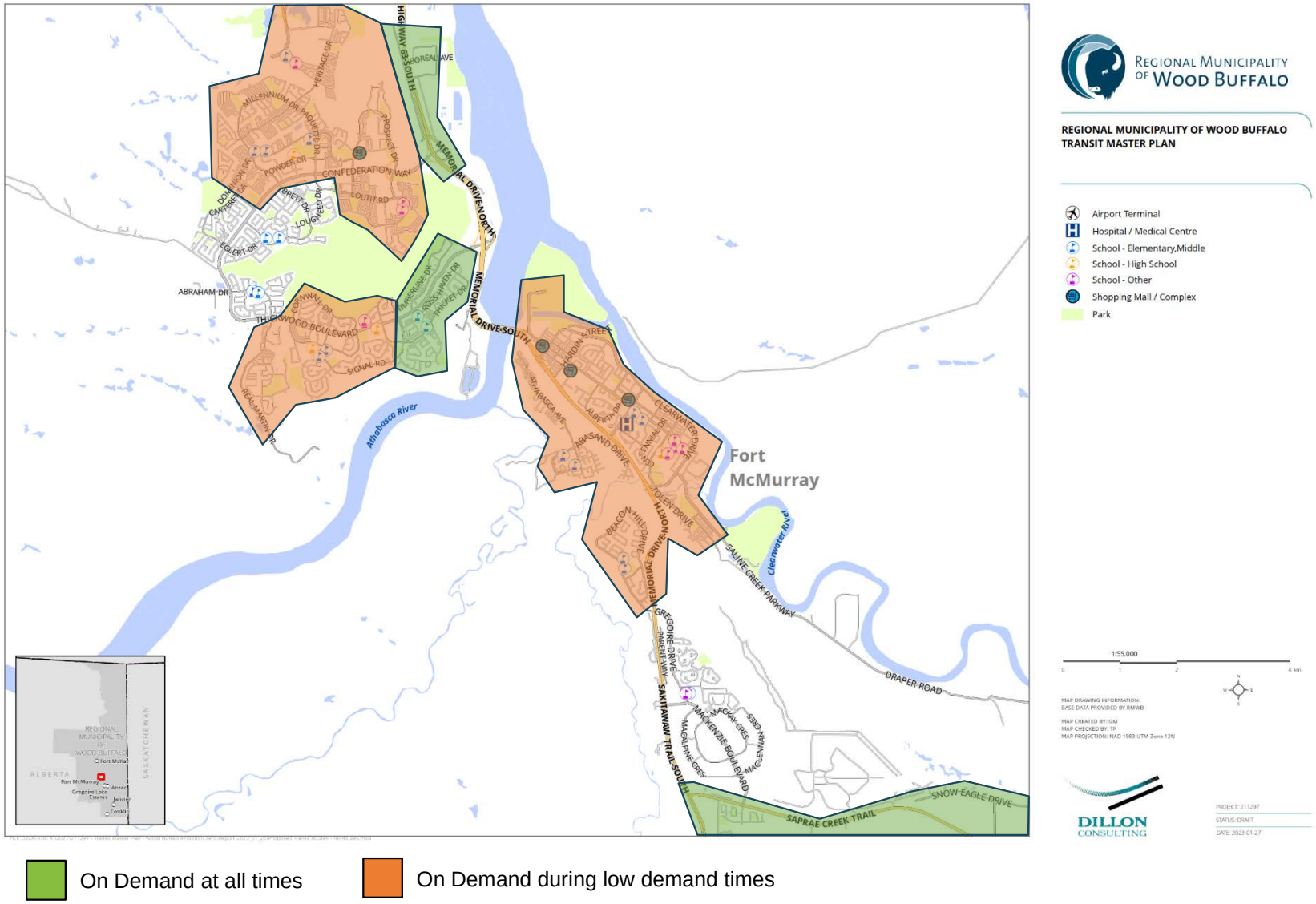


Figure 12: Proposed On Demand Network

Passengers will be able to access services from bus stops throughout each zone, with service provided to other stops within the zone or to nearby transit terminals. At the terminals, residents can connect to **Core Routes** and **Neighbourhood Routes**, continuing their journey on conventional services to their destination. Service in **On Demand** zones is proposed to operate at the same times as **Neighbourhood Route** services, with maximum waiting times not exceeding the **Neighbourhood Route** minimum frequency standards. Existing bus stops will be utilized as pick up and drop off points for the new **On Demand** transit service.

All **Neighbourhood Routes** will be replaced by all day On Demand services on weekends and holidays to provide a greater level of access across the service area by using the available resources more effectively. Ridership levels on the weekend are more conducive to this flexible service and having a consistent service type across the entire network during the whole service day simplifies the network.

Figure 13: On Demand Service Components

On Demand zones will be flexible, allowing RMWB Transit to transition **On Demand** zones to **Neighbourhood Route** services when ridership warrants it. Conversely, **Neighbourhood Routes** that attract insufficient ridership may be converted to **On Demand** service at certain times of the day or week, or on a full-time basis. Changing service types throughout the service day should be a practice used sparingly, as changing service types at different times can be confusing to passengers. The resulting uncertainty can discourage the riding of transit at all times, regardless of which service type may be operating. **Core Routes** should never be replaced by **On Demand**.

The first **On Demand** zones should be operated as pilot services in Taiga Nova and and Thickwood. These zones have been selected due to the low utilization of the existing transit services in these areas. It is anticipated that **On Demand** will more effectively and efficiently serve these areas, with lower demand allowing RMWB to undertake a thorough pilot of the new technology with a lower risk to riders. New **On Demand** zones can be added as development along the periphery of the service area occurs, helping to provide cost effective and appropriate levels of service for all residents.

See **Figure 13** for a visualization of how On Demand Transit could work in Wood Buffalo.

#	Summary of Actions	Theme

1.3	Pilot **On Demand** services in lower-demand parts of Fort McMurray	1,4,5,7
1.4	Subject to results of the pilot, implement **On Demand** services in all zones detailed in **Figure 12**.	1,4,5,7

4.2.4 SMART Bus

SMART Bus provides mobility services for eligible riders who are unable to use conventional transit services or for seniors that do not have a driver's licence. Registered customers call to book trips not less than 24 hours in advance of their desired trip time and up to fourteen days in advance. Accessible vehicles are scheduled and dispatched to complete these trips. Throughout the engagement process, we heard that the process to become a SMART Bus Program registrant could be simplified to be more accessible potential for passengers. A review of best practices also identified a need to provide more clarity in the application process and gear questions towards functional barriers to the use of conventional transit for some or all of a passenger's trips. To improve this, the eligibility forms will be updated, and the policies will be evaluated. It was also noted during engagement that booking a trip requires significant planning, particularly due to the need to book trips in advance.

The existing booking and scheduling process is conducted manually, which limits the ability for RMWB Transit to accommodate same day trips or fill vacancies left by same-day trip cancellations. To improve this, it is recommended that technology be introduced to make booking trips more convenient and flexible. Additionally, it is recommended that the On Demand software to be procured have the ability to also book specialized transit trips. This will provide more trip options for **SMART Bus** customers, particularly for same-day trips. Ultimately, these two areas, **SMART Bus** and **On Demand,** should be combined to create a single ***Demand Responsive*** service accommodating all riders both those who are eligible for **SMART Bus** service and those who aren't.

An increase in service hours is also recommended to achieve service hour parity with conventional transit and to meet the increased demand from a growing and aging population. Service will be extended earlier in the morning and later in the evening, seven days a week. The goal is to improve equity by allowing registered SMART Bus customers to travel at the same times as their conventional transit counterparts. Additional peak vehicles will also be added to the network over the life of the Plan to ensure that trips can be accommodated as demand grows.

Further information regarding SMART Bus service and associated recommendations are available in **Section 4.4** and **Appendix E**.

4.2.5 Rural

Rural Services connect Fort McMurray to communities outside of the Urban Service Area including Fort McKay, Conklin, Janvier, Anzac and Gregoire Lake Estates. This is a limited service which operates between each community on select days of the week only. Continuing to provide rural services is

important to ensure rural residents of Wood Buffalo have access to resources and opportunities in other communities.

This service should continue to be provided based on the needs of the communities served. As such, the specific days and times in which transit operates between each community is subject to change based on future community input. Further engagement processes should be undertaken with each rural community to develop appropriate service schedules, and to develop strong ongoing relationships through which to measure the success of the adjusted services.

An opportunity exists to provide additional pre-booked services for special events. Rural transit trips would be scheduled to align with events taking place in the Region and passengers would be able to book a seat in advance, providing a transportation option to and from the event location. This type of service would increase the cost effectiveness of rural services due to the higher number of passengers it may be able to attract per trip. RMWB Transit staff should investigate these opportunities further to identify regularly scheduled and *ad hoc* special events that may justify the introduction of a pre-booked service.

#	Summary of Actions	Theme
1.5	Engage rural communities and tailor service days and times to their needs	1,4
1.6	Trial the operation of pre-booked special event services to rural communities	1,4

4.2.6 School

School Services operate directly to or from schools at school start and end times only. This is a dedicated service offered in partnership with Fort McMurray school boards, meaning the route is used primarily for that purpose and is designed to be available for those travelling to and from designated schools. **School Services** are only offered where **Core Routes** and **Neighbourhood Routes** do not directly serve a school as students can utilize the **Core** and **Neighbourhood Routes**, where available. There are currently 26 scheduled school trips per weekday; with the full introduction of the new transit network, 14 weekday trips will be maintained unchanged, 12 shortened, and 2 cancelled and transitioned into the new transit network. Further information regarding the conversion of existing routes to new routes can be found in the Implementation Plan, **Appendix H**.

4.2.7 Implementation

The implementation of significant changes to a transit system requires significant resources. Staff time is required in order to prepare, communicate to and engage with the community, revise, implement, and measure the success of the changes. This is particularly important when new service types, which may require community and staff education to operate successfully, are being introduced and/or piloted (e.g. On Demand). With these considerations in mind, a five phase Implementation Plan has been developed (see **Appendix H** for full details). With all of RMWB Transit's staff resources dedicated to day-to-day

service operation, external support is required to successfully facilitate the Implementation Plan. This support will primarily be required in the earlier phases, when the initial organizational changes and new service types are being introduced.

#	Summary of Actions	Theme
1.7	Source external support to facilitate the Implementation Plan	1,5,8

4.3 Transit Accessibility and Comfort

To attract more passengers, RMWB Transit must continually improve the accessibility and comfort of riding transit. The recommendations are based on what we heard during engagement (**Appendix C**), including:

- The need for stops to better connect to safe pedestrian networks
- The desire for a more comfortable and safer environment to wait for buses which are well maintained
- Problems with snow and ice limiting safe access to stops in winter

4.3.1 Safety

Feedback from riders indicated that safety is a current concern at certain times and in certain areas of the transit system. All recommendations detailed in this section work to improve safety for riders, by enhancing the standard of infrastructure, encouraging passive surveillance, and working to better connect the transit system with development and activity. Broader societal issues relating to antisocial behaviour are whole of Region issue that must be tackled at a higher level. Transit services will play a key role in future engagements and collaborative solutions for public safety and inclusion initiatives.

4.3.2 Transit Infrastructure

On-street infrastructure (including stops and shelters), transit vehicles, and signage are the elements of a transit system that passengers interact with.

Bus stops should be accessible, compliant with universal design principles, and with direct connections to sidewalks to allow for a barrier free connection between the bus stop and destination. Providing sufficient space and concrete pads at bus stops helps parents with strollers, seniors with walkers and other passengers in wheelchairs navigate from the sidewalk to the bus easily. It also improves comfort for all passengers, particularly during wet weather conditions. Having the same level of accessibility across the network allows passengers to travel independently and confidently without the worry that they may be unable to safely navigate from the bus to their destination. A standard definition of an accessible, universal design, bus stop (including shelter) should be developed for new bus stops or retrofits of existing bus stops.

Bus stops should be designed in accordance with Crime Prevention Through Environmental Design (CPTED) principles, and located in areas which are well lit, or lighting should be added. Lighting can not only help passengers to see the bus stop and read available signage, but it can also make passengers feel safe. Lighting encourages natural surveillance meaning passing motorists and pedestrians will be able to see what is happening at the bus stops at night, which tends to discourage vandalism and other crimes. This improves how customers view the safety of bus stops both during the day and in the evening.

#	Summary of Actions	Theme
2.1	Define accessibility standard for new bus stops and retrofits of existing stops	2,4
2.2	Upgrade and maintain all bus stops to improve accessibility	2,4,7
2.3	Improve sidewalk connections	2,4,6

4.3.3 Transit Terminals

Transit Terminals are the major destinations of the transit system, and are intended to connect all service types, with dedicated space for **SMART Bus** and **On Demand** vehicles and riders. The Timberlea and Thickwood Terminals have recently been constructed. While they are located along well used corridors and near major destinations, buses are only able to access them by approaching in one direction. This restricts the routing options and makes trips longer and less efficient. A study of the benefits of making modifications to the Thickwood Terminal with the introduction of a transit priority activated westbound turn signal should be explored to simplify and optimize the routing of neighbourhood routes, reduce annual operating costs, and provide operational flexibility. If successful, similar measures should be applied to the Timberlea Terminal and Downtown Terminals in due course. Measures should be defined by future design studies, but could include bus-only queue jump, bus-only traffic lights, and/or bus-only turn movements.

Upon the full introduction of the new transit network, routes servicing the Downtown Transit Terminal will no longer terminate at this location, but rather travel straight through. This location will remain a focal point for ridership, where existing passenger and operator facilities will be maintained and new on street stops along Franklin Avenue will be required for the new **Core Routes**. As such, the Downtown Transit Terminal will require improvements to support continued high levels of ridership. Suggested improvements include stops on both sides of Main Street, improved shelter, passenger information, and curbside boarding for all services. As services will largely be passing through the terminal, rather than terminating and dwelling there, these improvements are expected to be largely accommodated within the existing footprint. Additional study on the downtown terminal design, layout and location(s) would be advised to ensure it meets the needs of the community and Transit in the future in accordance with the plan.

An enhanced stop will be required in the vicinity of Mackenzie Boulevard and Highway 69 to facilitate transfers between Core Route H to the Airport **On Demand** service.

#	Action	Theme
2.4	Explore and implement improvements to allow multi-directional bus access to the Timberlea and Thickwood terminals	1,2,3
2.5	Improve Downtown Transit Terminal to provide boarding on both sides of Main Street and improve passenger facilities	2,4,5
2.6	Add an enhanced stop in the vicinity of Mackenzie Boulevard and Highway 69 to facilitate transfers	1,2

4.3.4 Stop Connectivity and New Neighbourhoods

Almost all transit riders use the path and sidewalk network to access bus stops at both ends of their trip. The connectivity and quality of these networks is important to the success of any transit service, as passengers are more likely to walk or wheel to bus stops when it is safe and comfortable to do so. In both existing and new neighbourhoods, path connectivity and quality should be prioritized in all stages of planning and development.

4.3.4.1 Integrating Transit into the Development Process

To facilitate the planning of transit facilities throughout the community, RMWB Transit staff should be integrated into the development review circulation process by providing comments on development permits, area redevelopment plans, area structure plans, and outline plans. Comments solicited from Transit staff should focus on how the development proposal and/or plan will impact transit services and what transit facilities (e.g. concrete pads, shelters etc.) are required from the applicant. It is common practice in municipalities across Alberta for transit staff to review and comment on development applications that impact transit service. Development servicing plans/frameworks facilitate funding the installation of new sidewalk connections, transit bus stop pads, and shelters which are provided by the applicant at the time of construction. This significantly reduces capital costs for the municipality in the provision of transit facilities, particularly in new and redeveloping areas.

Building on this, RMWB Planning should work with RMWB Transit to outline future strategic priorities, including TOD. Working together, Transit can provide operational expertise and ridership information to inform the best locations and operation requirements for Transit Orientated Development (TOD). As the transit network grows and evolves based on ridership and rider engagement, Transit will be well-placed to provide up-to-date advice reflecting actual rider behaviour and preferences.

Below are the typical development review comments for the provision of transit facilities for Development Permits and Outline Plans, which are the most common development review circulations impacting transit service.

Development Permits

RMWB Transit staff should be circulated on the following Development Permits:

- Large commercial, institutional, industrial, and recreational developments
- High density residential, seniors, and affordable housing developments
- Developments impacting transit operations and facilities such as adjacent properties to the Timberlea, Thickwood, and Downtown Transit Terminals
- Developments at existing bus stops, where a bus stop is proposed and along transit routes, especially **Core Routes**

Comments on Development Permits could include the following:

- Identify the location of existing and planned bus stops.
- Does the location of the bus stop match those of an approved Outline Plan, Area Structure Plan, or Area Redevelopment Plan?
- How far does a RMWB Transit customer have to walk to the bus stop (based on the service coverage guidance in the Service Guidelines)?
- Does the existing bus stop require upgrading (e.g. new concrete pad, connecting sidewalk connections, shelter)?
- Is there a sidewalk proposed along the property frontage to facilitate access to transit service?
- Are there accessible curb cuts at the nearest intersection/crosswalks to the bus stop location?
- To encourage transit use, if the site is within 450 metres of transit service, parking should be kept to the minimum as stated the Land Use Bylaw.
- Does the development connect to the pedestrian and cycling network of the neighbourhood?

Outline Plans

Comments on Outline Plans could include the following:

- Does the area have an Area Redevelopment or Area Structure Plan? If yes, what does the policy document say about transit service?
- Is the density appropriate for transit service? In other municipalities, a minimum density of 7 units per acre is utilized to determine the warranted need for transit service.
- Are the proposed land uses appropriate for transit service? e.g. are employment areas and higher density residential located on a transit route?
- Are proposed transit routes operating on collector standard or better roads?
- Are bus stop locations identified? If yes, where? Are bus stops placed approximately every 250 metres? Are the bus zones located in appropriate locations (e.g. clear sightlines), located in close proximity to higher land uses such as schools, community recreation centres, commercial uses?
- Are bus zones appropriately sized; approximately 26 metres in length to accommodate standard 40-foot transit buses (space for the bus zone apron, tangent to curve, and clearance space for the transit bus to pull out the transit stop from adjacent on street parking)?
- Are turn around facilities required? If so, is there space for a 15.25 metre radius turn around facility or loop? This is important in multi-phase developments.

- What are the percentage of residents who must walk less than 450 metres to a Neighbourhood Route, or 600m to a Core Route bus stop?
- Are sidewalks proposed? If so, are sidewalks on both sides of the road along the proposed transit route? Are sidewalks and pathway connections (if applicable) being strategically placed to reduce the walking distance to a bus stop?
- It is common practice in other municipalities to require a restrictive covenant to be registered on the title of properties adjacent to a bus stop to prevent vehicle access across the bus zone location

#	Action	Theme
2.7	Continue coordination with RMWB Active Transportation to improve walking access to transit	2,4
2.8	Consider measuring progress by conducting a stop accessibility audit, including paths	2,4
2.9	Engage Transit in the subdivision planning process to improve connectivity	1,2,4,5,7

4.3.5 Winter Transit

Snow and icy conditions in winter can result in mobility issues for residents due to blocked or slippery sidewalks, slower travel on roads, and cold temperatures at bus stops, to name a few. Timely snow clearing is imperative to ensuring everyone has access to transit. While partially the domain of other parts of RMWB, snow clearing of paths to bus stops is a key requirement to support winter ridership. All transit riders are active transportation users when accessing bus stops, therefore providing a clear and safe path for that access is a key aspect of the overall transit experience.

Many of the bus stops in RMWB are equipped with a heated shelter. It was identified during consultation that these heated shelters are appreciated by the community for the comfort they provide during the cold winter months. Further, heated shelters, thanks to their electricity supply, can also feature automatic doors to make them accessible whilst also providing effective shelter in the winter. Ensuring shelters are located in predictable locations which are regularly maintained makes transit more appealing to riders. If shelters are out of service, communicating this to the passenger before they arrive at the shelter may allow them to travel to a different shelter which has the same level of service, improving their experience.

#	Action	Theme
2.10	Continue annual review of snow clearing policy for priorities and timeliness. Take steps to reduce time to remove snow from terminals and **Core Route** stops.	2, 4, 6
2.11	Terminals and high ridership stops should continue to be prioritized for sidewalk clearing, including paths leading to and from these stops.	2, 4, 6

2.12	Develop a policy for heated shelters which includes when and where are they appropriate to be installed, when they should be relocated, and standards for maintenance.	2

4.4 SMART Bus

Individuals requiring door-to-door service must apply and be approved for the SMART Bus service based on a set of criteria. In the RMWB, the service is available to passengers of all ages who have mobility issues that prevent or severely restrict their use of conventional bus service as well as seniors (65 years or older) who do not have a driver's license.

A more in-depth report on SMART Bus recommendations can be found in **Appendix E**.

4.4.1 Trip Integration and Service Hours

SMART Bus provides an essential service to individuals with disabilities in Wood Buffalo. Enhancing the quality of service is important to ensure equity in travel opportunities for SMART Bus passengers. The service will be expanded in two major ways. First, through integrating On Demand service with SMART Bus, and second by expanding SMART Bus service hours to be equivalent with conventional hours of operation.

It is recommended that the On Demand service be provided with accessible vehicles and the software configured in a way that allows registered SMART Bus passengers to be picked up or dropped off at their door rather than at a bus stop. This will open up the availability of transit for passengers whose main barrier to using conventional transit is long distances to their closest bus stop. In circumstances that they are able to, SMART Bus passengers could use the On Demand service to travel from their home to a transfer point and continue their journey on the accessible conventional fixed route service. While not all passengers will have the ability to use this service, it provides another option that is available depending on each passengers' abilities and needs.

To further expand mobility options, SMART Bus service hours will be expanded in the early mornings and evenings to be the same as conventional fixed route services. This will ensure that registered SMART Bus passengers have access to transit at the same time as conventional transit passengers. This is an important step to improve equity in the Region and improve quality of life for Wood Buffalo's residents with disabilities and mobility challenges.

4.4.2 Eligibility and Registration

Having an eligibility process in place is important to ensure the resources available for SMART Bus are used towards providing service for passengers who require it. Currently, residents who are interested in applying for the service must fill out an application form that is available on the RMWB website. Part A is filled out by the applicant themselves and details their personal information, ability to access

conventional transit, and any mobility devices they may require. All applicants must complete this section. Part B is filled out by a health care practitioner who describes the applicant's functional abilities, and is not required for passengers who are over 65 and do not have driver's license.

There are different eligibility types, including unconditional, conditional, and temporary. Unconditional eligibility refers to passengers who can use the service for any type of trips with no restrictions. Currently, unconditional eligibility makes up the vast majority of SMART Bus registrants (99%). Conditional eligibility involves identifying specific conditions that may prevent a passenger from using conventional transit. For example, a registrant may have the ability to use conventional transit in the summer, but they are unable to access a bus stop during winter conditions, and as such, would only be eligible for SMART Bus in the winter. Temporary eligibility is available for individuals who only need the service for a limited amount of time. Individuals are assigned eligibility for a specific amount of time, after which it lapses.

Using conditional eligibility is an impactful way of ensuring the passengers who need specialized service have the most access to it. By reducing demand for trips and encouraging conditional applicants to use conventional transit within their abilities, more trips are available for passengers who have limited mobility options apart from SMART Bus. It is recommended that RMWB Transit review and expand the conditional eligibility criteria and review applications based on an objective assessment of their functional abilities to use conventional transit some or all of the time, as presented in the application.

In order to minimize barriers for passengers to apply, the application form should be simplified to only require information that will be used in the evaluation or will be needed in order to provide the service. The application form itself should be updated to ensure it meets accessibility requirements. It is also recommended that an online application form be implemented to increase the convenience of the application process.

The existing policy of providing eligibility to residents who are over the age of 65 who do not have a driver's license is uncommon in Canada. Typically, specialized transit service eligibility is determined by mobility barriers to conventional transit. While this may provide a higher level of service to seniors in the community, opening up access to the service may limit the amount of resources available to passengers who truly require it. It is recommended that RMWB Transit continue to assess the ridership of passengers within this category and consider removing or changing the policy for new applicants.

4.4.3 Attendant/Companion Policy

SMART Bus passengers travel with other individuals for a variety of reasons. In some cases, they may require a support person (known as a Mandatory Attendant) who assists the passenger with communication, mobility, personal care/medical needs, or with access to goods, services or facilities. Mandatory Attendants do not pay a fare. Alternatively, a registered passenger may wish to travel with a family member or friend.

Currently, the SMART Bus Passenger Handbook accounts for Mandatory Attendants and Paying Attendants. While Mandatory Attendants meet the description provided above, Paying Attendants include all other guests the registrant may wish to travel with, and are limited to individuals over the age of 18 only. This limits the possibility of a registrant travelling with a child.

It is recommended that the Mandatory Attendant and Paying Attendant categories be refined in the SMART Bus Passenger Handbook to the following:

- **Attendant:** Passengers who are required to accompany a registered SMART Bus rider at all times or at pre-defined times as determined in the SMART Bus Application because the registered passenger is unable to travel without support. There would continue to be no fare charged for this category. Attendants are required to be over the age of 18 and are not registered SMART Bus passengers.
- **Companion**: All other non-registrants who travel with a registered SMART Bus passenger. While they may provide low levels of support for a registered passenger, they are not required to always accompany the registered passenger. Companions would be charged a regular fare for using the transit service.

These changes will allow for greater flexibility for SMART Bus registrants when travelling with other non-SMART Bus passengers. It recognizes that attendants may be mandatory all or some of the time, and provides registrants with the opportunity to travel with family members or friends between the ages of 5 and 18.

4.4.4 Technology

Innovations in technology can improve the quality of service for specialized transit passengers while improving efficiency in operations for staff. Currently, SMART Bus trips are booked manually by an individual staff member. Using this method requires advance booking of trips to provide staff with enough time to finalize schedules. This limits the ability to accommodate last-minute bookings, which reduces the mobility and ease of travel for SMART Bus registrants.

Newer specialized transit technology can automate trip booking, scheduling, and dispatch, which allows for the most efficient use of resources. More trips can be booked with the same number of vehicles and vehicle hours by using software to design the most efficient trip schedule. It also allows for more last-minute changes, including new bookings and cancellations, as the schedule can be adjusted throughout the day. These changes would allow for more flexibility and freedom for SMART Bus passengers, rather than requiring individuals to book in advance and find alternate arrangements if their plans change.

It is recommended that RMWB Transit investigate a specialized transit software that can integrate with On Demand service and allows for booking by desktop or app to increase the mobility options available to passengers.

#	Action	Theme
3.1	Update application form	4,5
3.2	Based on future demographic shifts and potential increases in demand for specialized transit service, consider: • re-evaluating policy of automatic approval for individuals over the age of 65 without a driver's license • applying more precise forms of conditional eligibility based on the specific circumstances under which an applicant has barriers to accessing conventional transit	4,5
3.3	Identify a third-party contractor to conduct evaluations of a subset of SMART Bus applications in cases where it is not clear whether the applicant meets the eligibility criteria.	4
3.4	Use existing RMWB appeals process or develop a third-party appeals process	4
3.5	Introduce Companion Policy that allows 1 additional non-attendant companion on all SMART Bus trips with allowances for additional companions subject to space availability	4,5
3.6	Ensure On Demand software has specialized transit integration functionality to provide integrated trips in future	4,5
3.7	Develop Travel Training curriculum to be used for conventional and specialized transit passengers	8
3.8	When curriculum is complete, pursue community partnerships to administer Travel Training	8
3.9	Maintain existing No Show and Late Cancellation policy. If rates of no shows and late cancellations increase, consider introducing longer temporary suspensions.	3,7
3.10	Track "Cancelled in Advance" and "Cancelled Late" trips separately.	7
3.11	Consider introducing additional evening service as demand increases post-COVID	1
3.12	Introduce online booking software to provide additional convenience and flexibility in the booking process	4,5
3.13	Maintain parity with conventional service in future fare changes	3

4.5 Affordability

4.5.1 Fare System

A modern fare system that provides a number of different fare options can improve the passenger experience and encourage new riders to take transit. Current options for buying transit fares are limited, requiring riders to purchase passes in advance at a kiosk, or provide exact change onboard the bus. By providing better options, transit will be easier to use and be more accessible. These options can include mobile and/or contactless ticketing and self-service ticket machines at transit hubs.

These methods improve the convenience of taking transit, particularly for those who are less familiar with the service. Using such a fare system also introduces the possibility of fare capping, where riders who use the same account (mobile or contactless) to ride frequently could have their fares automatically capped at a daily, weekly, or monthly price.

New fare technology should have the ability to provide different fares for different passenger types, including Adults, Seniors, Low-Income, Students, and/or Youth.

4.5.2 Fare Prices

At $1.50 per ride, Wood Buffalo has some of the lowest fare prices in Canada. The price for individual fares in Wood Buffalo's peers such as Grande Prairie, Medicine Hat, and Red Deer range from $2.50 to $3.35. The low cost of fares corresponds to lower revenue, which limits the ability of RMWB Transit to potentially improve and expand service, in addition to increasing cost recovery.

Revenue/cost (R/C) ratio is a commonly used metric in transit agencies that measures the amount of revenue received by a transit system divided by the cost to operate the system. This provides an understanding of the extent to which fare revenue is recovering operating costs. Transit is ultimately a public service, and as such, does not fully recuperate costs through fare revenue; however, higher revenue results in less financial pressure on the system. As detailed in **Appendix A**, RMWB Transit's 2019 revenue/cost ratio was 7%. This is significantly lower than a number of its peers. An increase in R/C ratio is a priority for the Region to ensure the transit system is operating in a fiscally responsible manner.
To support the Plan's recommended service improvements, and to attain a revenue/cost ratio that is appropriate for a system of Wood Buffalo's size, an increase in fares is recommended. A sustainable increase in revenue through a fare increase in alignment with peer transit agencies will help fund some of the higher levels of service proposed in this Plan without increasing reliance on taxpayer funds. It should be noted that increased ridership will also improve fare revenue, and that Wood Buffalo's low R/C ratio is exacerbated by its high staffing costs. Refer to **Appendix A** for a detailed exploration of how RMWB Transit compares to peer agencies.

While an increase in fares has the possibility of limiting access for some community members, it is important to recognize that Wood Buffalo household income is proportionately far higher than its peers. The Wood Buffalo median household income in 2018 was over $175,000, while the majority of peers had corresponding incomes under $100,000. The second highest household income was Grande Prairie at approximately $120,000. Thus, Wood Buffalo residents, on average, earn far more than residents of peer systems while paying far lower transit fares. As the RMWB has significantly higher income than most this skews the median range, this figure may not be reflective of all current and potential future transit users.

There are low-income members of the community who may be negatively impacted by fare increases. Their continued access to transit is a high priority, and as such, any fare increases should be accompanied by specifically-targeted fare relief programs and passes that ensure individuals who may have challenges paying higher fares are not faced with extra barriers to using transit.

The implementation of such a program will be undertaken in collaboration with the Wood Buffalo Community and Protective Services (CPS) department. Providing access to transit is already a priority for CPS, which issues on average 1,391 monthly passes and 27,431 single-use tickets on an annual basis through their Bus Pass program. Working in partnership with CPS will expanded any transit pass programs currently in place to be provide to identify community members in need of this support. Furthermore, there may be opportunities to improve access for all municipally provided transit service programs through integrating them into a single program. RMWB Transit will continue to work with CPS to ensure access to transit is maintained as fare prices change.

#	Action	Theme
4.1	Introduce new ticketing system, including some or all of the following features: • Mobile ticketing • Contactless payment • Self-serve ticket machines • Fare capping	3,5
4.2	Investigate a potential fare increase	7
4.3	Work with CPS to explore a fare pass program for low-income residents	3,4

4.6 Trip Planning

The transit system should be planned in a way that provides service in an equitable and accessible manner. There are several resources and programs that RMWB Transit can introduce to help residents more easily access the service.

Technology can help passengers at multiple points in their journey, from trip planning to checking the arrival time of the next bus at the stop. A trip planning app gives passengers the opportunity to easily find out how transit can take them to their destination. The app should also handle On Demand and SMART Bus booking, giving residents one app to use for all their transit needs.

It can also incorporate digital bus stop information, including timetables and live bus arrival times. However, improving wayfinding for those without digital literacy is also important, as not every passenger will have access to the same level of technology.

The introduction of travel training can help people learn how to use transit, improving their mobility options. These types of programs can take many shapes, including online instructional videos, in-person group sessions at schools or seniors' homes, or one-on-one training accompanying a passenger from their home to their destination. It can provide support to many different types of passengers such as

seniors, newcomers, students, and individuals with disabilities, and cover a variety of topics depending on the needs of the training recipient. This is an important service that can open up transit to a wider segment of the community.

#	Action	Theme
4.4	Investigate or improve the following trip planning tools: • Digital bus stop information: including timetables, live times, and route information at busier transit stops • Implementation of a trip planning app: On Demand and SMART Bus trip booking, as well as fare purchase • Newcomers/EAL: Written materials in commonly spoken languages apart from English, and using international symbols	2,5,8
4.5	Develop travel training program that supports all potential passengers in using RMWB conventional services.	8

4.7 Staff

Sufficient levels of staffing are required to support the various recommendations outlined in this Plan. As well, some changes in staffing are recommended to better align Wood Buffalo's operations with other peer systems.

Recommended changes to the organizational structure of RMWB Transit are summarized below:

- **Operator Supervision** – Consider the addition of a Supervisor of Employee Services role or hire additional 2-3 Transit Inspectors
- **Dispatch** – Addition of a Senior Scheduler/Dispatcher to provide supervision to existing team of Schedulers/Dispatchers
- **Social Media** – Include Operational notifications on social media into an existing job description
- **Transit Planning** – Addition of a dedicated Transit Planner role
- **Operators** - Review Ratio of Operators per Vehicle, and Service Hours per Transit Operator to better understand optimal Operator requirements and adjust number of Operators to reach an Operator/Vehicle ratio of 1.5
- **Training** – Consider the addition of a trainer to support both operator and travel training

Further analysis of the Organizational Review and its recommendations can be found in **Appendix G**.

#	Action	Theme
5.1	Hire additional staffing resources required to support the implementation of the Plan	8

4.8 Assets

RMWB Transit's assets include the vehicle fleet (including conventional, SMART Bus, and utility vehicles), terminals, bus barn, transit depot, and on-street infrastructure (bus stops and shelters).

4.8.1 Fleet

RMWB Transit vehicles should be replaced as they reach the end of their useful life. The current conventional transit fleet is made up of 73 conventional buses. The Transit Master Plan requires 34 buses during peak periods. Transit agencies typically maintain a "spare ratio" of 20-30%, which refers to the number of vehicles available but not in use during peak service in case of planned or unexpected mechanical issues or need for additional vehicles. Maintaining Wood Buffalo's 30% spare ratio would require a total conventional fleet size of 45 buses in order to operate the proposed routes and services. Due to the high number of current vehicles compared to the required peak vehicles, it is recommended that as these buses approach the end of life, they be retired and not replaced to approach a more manageable spare ratio of 20-30%.

While the shorter-term focus should be on retiring age-expired buses to right-size the fleet, RMWB Transit should stagger their bus retirements and replacements to result in an even distribution of vehicle ages across its fleet. Doing so will spread future capital pressures over several years, and is in line with industry best practice, whereby most transit fleets replace around 8% of their fleet each year.

Unlike the conventional fleet, the Demand Responsive (SMART Bus and On Demand) fleet will require some growth over the life of the Plan. This is due to the introduction of On Demand services, which will replace some existing conventional services. The initial On Demand pilot is anticipated to be operated by Conventional vehicles, as that fleet has spare capacity, and doing so will reduce the cost of the pilot.

Figure 14 provides an overview of the projected fleet size over the life of the Plan.

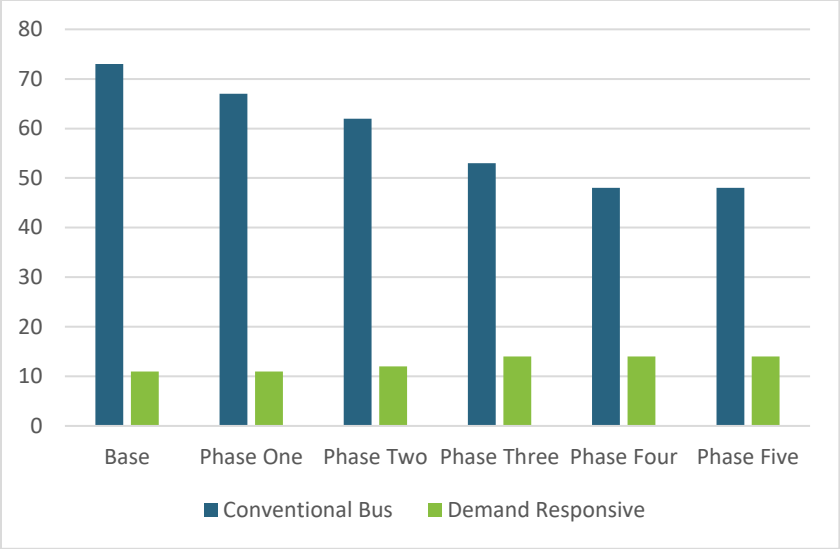


Figure 14: Projected Bus Fleet Size

4.8.2 Terminals and On-Street Infrastructure

Recommendations related to transit terminals and stops are provided in **Sections 4.3.1** and **4.3.3**.

4.8.3 Facilities

RMWB Transit manages two major facilities related to the operations and maintenance of Transit services which are located at 160 Airport Road in Fort McMurray. This includes the Bus Barn which was built in 2019/2020 has capacity for approximately 80 conventional buses while also providing space for parts storage. The Transit Depot provides office space for transit administration as well as bus cleaning facilities. It is located adjacent to the Bus Barn, was originally built in 2013/2014 and renovated in 2018.

The Transit Depot and Bus Barn have remaining expected useful lives of 40 and 52 years respectively and, as such, any future replacement is not within the five-phase timeframe of this Plan.

#	Action	Theme
6.1	Retire conventional transit vehicles as they reach end of life to attain a spare ratio of 30% for conventional transit and 20% for SMART Bus.	2
6.2	Procure replacement vehicles gradually with a view to replacing a relatively consistent number of vehicles each year	2,7

5.0 Implementing the Plan

5.1 Scheduling and Forecasts

An implementation schedule, system transformation forecasts, and a financial plan are all aspects of the Plan that are crucial to its success.

This section presents the schedule for each of the actions discussed in **Section 4**, a list of proposed changes to the system characteristics, the fleet plan, and a financial plan. These pieces must be read in conjunction with each other for the overall implementation plan. The phased implementation plan is detailed in **Appendix H**.

5.1.1 Phasing Plan

Each of the actions from **Section 4.0** is scheduled for implementation as shown in **Table 9**. In this table, blue shading indicates the action's timeframe. This table also reflects the phases of the Implementation Plan found in **Appendix H**.

Costs have been shown where considerable capital construction or external consultant fees are required as part of the action item. These costs are approximate. Squares without costs are actions that will be undertaken in-house (i.e. by RMWB Transit and/or other RMWB staff).

While **Table 9** provides an overview of the schedule, variations in timing may occur due to unforeseen circumstances. Therefore, the details in the table may change subject to available funding and additional unknowns at the time of writing and should be reviewed and adjusted annually by RMWB Transit staff.

Table 9: Plan Implementation Schedule (including capital amounts)

Plan Element	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Transit Routes and Service					
Implement new service guidelines					
On Demand Pilot - Taiga Nova and Thickwood (include software sourcing)	TBD				
Evaluate On Demand Pilot					
Core Route - H					
On Demand - Fort McMurray International Airport					
Neighbourhood Route - A					
Neighbourhood Route - B					
Neighbourhood Route - D					
Neighbourhood Route - E					

Plan Element	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Core Route - G					
Neighbourhood Route - C					
Neighbourhood Route - I					
Neighbourhood Route - F					
Revise school trips as new routes are implemented					
Engage rural communities and tailor service days and times to their needs					
Trial the operation of pre-booked special event services to rural communities					
System-wide Performance Evaluation					
System Implementation Support	$140k	$100k			
Transit Accessibility and Comfort					
Define accessibility standards for new bus stops and retrofits of existing stops					
Upgrade and maintain all bus stops					
Improve sidewalk connections					
Enhance transfer stops		$250k			
Downtown Terminal Improvements Study and Design		$750k			
Thickwood Terminal Improvements[1]			$1M		
Timberlea Terminal Improvements[1]					$1M
Continue coordination with RMWB Active Transportation to improve walking access to transit					
Consider measuring progress by conducting a stop accessibility audit, including paths					
Engage Transit in the planning process to improve connectivity					
Continue annual review of snow clearing policy for priorities and timeliness					
Continue to prioritize Terminals and high ridership stops for sidewalk clearing					
Develop a policy for heated shelters					
SMART Bus					
Introduce Service Hour Parity					
Integrate SMART Bus with On Demand					
Review and Revise Eligibility Criteria					
Update application form					

Plan Element	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Identify a third-party contractor to conduct in-person assessments of a subset of SMART Bus applications					
Update the appeals process to involve an Internal RMWB or third-party panel not associated with RMWB Transit.					
Revise Attendant and Companion Policy					
Introduce online booking software					
Develop Travel Training curriculum to be used for conventional and specialized transit passengers					
When curriculum is complete, pursue community partnerships to administer Travel Training					
Modify reporting of cancelled trips and consider introducing longer temporary suspensions in the No Show and Late Cancellation Policy, if applicable					
Affordability					
Introduce new ticketing system					
Investigate a potential fare increase, maintaining fare parity between services					
Introduce a fare pass program for low-income residents					
Trip Planning					
Investigate or improve trip planning tools					
Develop a Travel Training program that supports all potential passengers in using RMWB conventional services.					
Policy and Staffing (Cumulative Costs)					
Hire additional internal staffing resources required to support the implementation of the Plan, and operator management & training	$100k	$200k	$300k	$400k	$400k
Assets					
Replace ageing vehicles[2]					
Retire Conventional vehicles as they reach end of life to reach 20-30% spare ratio					
Expand Demand Responsive fleet		$250k	$500k		

[1] Terminal improvements are optional, subject to further study, and are not.

[2] Vehicle replacement is an ongoing need, not a result of the TMP, therefore those costs are not listed.

5.2 Plan Requirements

The purpose of the Plan is to improve Wood Buffalo's transit system. It is anticipated that general system performance (as well as performance indicators) and financial system performance will change over time as various parts of the Plan are implemented.

Table 10 presents the future forecasted system characteristics and performance based on the Plan. The values in the table show the estimated ridership growth as a result of the implementation of all recommended actions. However, it may take a few years immediately following an action or service change to see the full ridership growth realized. Note that ridership is expected to decrease between the pre-pandemic Base (2019) and Phase One, reflecting the impact of the COVID-19 on ridership. These impacts are expected to decrease over time and be overcome by Phase Two.

Table 10: Forecast System Performance (Conventional & On Demand Service)

	Base	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Population	75,000	75,000	75,000	75,000	75,000	75,000
Revenue Service Hours	97,500	99,000	101,500	99,500	104,000	104,000
Ridership	1,560,000	1,220,000	1,605,000	1,885,000	2,035,000	2,140,000
Rides/Capita	20.8	16.2	21.4	25.2	27.1	28.5
Rides/Revenue Service Hour	16.0	12.3	15.8	18.9	19.5	20.5

RMWB requires a right-sized fleet to provide transit in an efficient way. The system currently has a more conventional buses than are required to complete its scheduled service hours. As such, significant growth in the fleet is not anticipated until after The Plan is fully implemented. This fleet right-sizing will be a key driver of cost-efficiency improvements, reducing unnecessary resources while still supporting ridership and service frequency growth. **Table 11** forecasts the conventional fleet requirements and size over the life of the Plan.

Table 11: Forecast Conventional Fleet Plan

	Base	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Total Buses	73	67	62	53	48	48
Peak Buses[1]	41	34	34	34	34	34
Spare Buses	33	33	28	19	14	14
Spare Ratio	45%	49%	45%	35%	29%	29%
Replacement Buses	-	0	3	6	7	12
Expansion Buses	-	0	0	0	0	0

[1] Includes peak conventional service buses (23) and school service buses (11) does not factor in on-road spares needed for operational certainty.

With the addition of On Demand, the Demand Responsive fleet will need to grow to accommodate these services. However, the initial On Demand pilot is anticipated to be operated by a conventional vehicle, due to excess capacity in that fleet. **Table 12** outlines the forecast Demand Responsive fleet over the life of the Plan.

Table 12: Forecast Demand Responsive (On Demand and SMART Bus) Fleet Plan

	Base	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Total Vehicles	11	11	12	14	14	14
Peak SMART Bus Vehicles	7	7	8	9	9	9
Peak On Demand Vehicles	N/A	0	1	2	2	2
Spare Vehicles	4	4	3	3	3	3
Spare Ratio	36%	40%	25%	21%	21%	21%
Replacement Vehicles	N/A	2	4	0	2	10
Expansion Vehicles	N/A	0	1	2	0	0

Staffing is essential to keep transit moving in RMWB. While the number of operators is adequate to provide the service, the introduction of additional staff roles is necessary to support the recommendations of the Plan. **Table 13** outlines forecast staffing levels by the end of Phase 5 of the Plan.

Table 13: Staffing Requirements

	Base	Phase 5
Conventional Revenue Service Hours	97,500	104,000
Total Vehicles (Conventional & Demand Responsive)	84	62
Operators (Conventional & Demand Responsive)	93	93
Operators per Vehicle	1.1	1.5
Other Transportation Operations *(includes scheduling, dispatch, radio control, supervision)*	16	18-20
Vehicle Mechanics	N/A	N/A
Other Vehicle Maintenance and Servicing *(includes storage and supervision)*	19	19
General and Administration *(includes GM's office, planning, marketing, HR, finance, etc.)*	7	8
TOTAL	**135**	**138-140**

5.3 Paying For It

The Plan is not possible without funding and investment for transit. The new transit funding commitments of several millions of dollars over the next decade by the federal, provincial, and local governments are necessary to make the Plan happen.

Table 14 presents the financial forecasts, and shows the financial performance indicators for the Plan. Note that numbers in the table are rounded and, therefore, may not calculate directly to the indicators in **Table 15**.

The numbers in the table are based on the projected operating costs of each of the actions discussed in **Section 4** and the performance outlined in **Table 10**.

Table 14: Operating Financial Forecast

	Base	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Revenue	$1,545,000	$1,440,000	$1,785,000	$1,785,000	$2,025,000	$2,025,000
Operating Costs	$21,250,000	$21,960,000	$22,470,000	$22,080,000	$23,105,000	$23,105,000
Net Annual Operating Cost	$19,705,000	$20,520,000	$20,685,000	$20,295,000	$21,080,000	$21,080,000

Table 15: Financial Performance Indicators

	Base	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Revenue/Cost Ratio	7.3%	6.6%	7.9%	8.1%	8.8%	8.8%
Net Operating Cost/Passenger	$12.60	$16.84	$12.90	$10.76	$10.36	$9.85
Rides/Capita	20.8	16.2	21.4	25.2	27.1	28.5
Rides/Service Hour	16.0	12.3	15.8	18.9	19.5	20.5

5.3.1 Revenue / Cost Ratio and Fare Increases

While the Plan's improved network and services are expected to increase ridership, the R/C ratio is forecast to remain below average. In order to improve the cost recovery of the transit system, many of the Plan's recommendations work both to streamline operations and improve policy, thereby reducing costs. Additionally, it is recommended that RMWB increase fares for most passengers (see **Section 4.5.2**).

To better understand the impacts of fare increases on RMWB Transit's R/C ratio, two different scenarios were modeled. The first scenario sees fares increase to $2.00 for full fare paying riders by Phase Three, with fares transitioning to $1.75 in Phase Two. The second scenario continues these increases to $2.25 in Phase Four, and $2.50 in Phase Five. The results of these scenarios, and the baseline $1.50 fare scenario (detailed in **Table 14** and
Table 15) are presented in **Figure 15**.

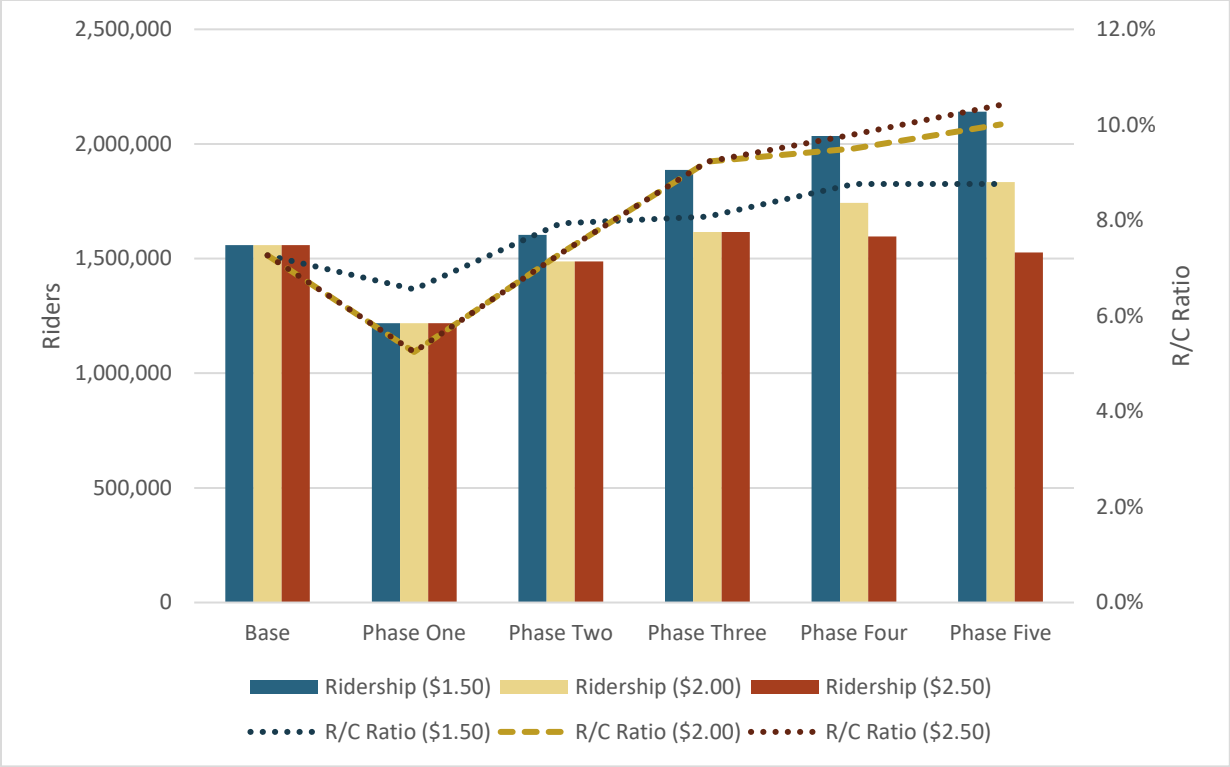


Figure 15: Fare Increase Scenarios

As a result of the increased fares, ridership in the two scenarios is lower than if fares were maintained at their current rate. However, the additional revenue generated by the higher fares does result in a higher R/C ratio of 10.0% and 10.4% for the $2.00 and $2.50 scenarios, respectively. While these increases do more than double the Base R/C ratio (4.9%), they highlight that significant improvements to the ratio also require a reduction to operating costs. As detailed in **Appendix A**, Wood Buffalo's labour costs are significantly higher than peer transit systems, and these are likely to keep the R/C ratio low for the foreseeable future.

6.0 Conclusion

RMWB Transit has long played an important role in getting people where they need to go. Through much evolution over the years, the system has reached a point where it needs an update in to keep the Region moving effectively and efficiently.

The Transit Master Plan is a practical tool to update and streamline Wood Buffalo's transit network, services, and operations to provide a solid foundation for future growth. The recommendations in this report will result in an overhaul of RMWB Transit's system and service offerings. The intention of this Plan is to lead RMWB Transit in a direction that is passenger-focused, offers transit service on par with the expectations of modern mobility, and allows it to serve the community effectively and efficiently into the future.

6.1 Next Steps

Following the approval of this report by the Regional Municipality of Wood Buffalo Council, RMWB Transit will proceed to implement this Plan's recommendations in accordance with the schedule shown in **Section 0**, and Implementation Plan detailed in **Appendix H**. Any new budget requirements would be considered in the RMWB's regular budget process. Service changes will be implemented as outlined in the Master Plan.

As RMWB Transit prepares to implement the various elements of the Plan, additional consultations will be required for individual route changes. It is recommended that this Plan be reviewed throughout its implementation to ensure that the recommendations still align with community sentiments, and updates to the Official Community Plan and the Transportation Master Plan.

As the plan is implemented and in conjunction with community feedback and other approved plans transit services and the RMWB should continue to explore the areas of park and ride, bus rapid transit, and regional integration through the use of transit nodes tied to area development plans which will provide more enhanced services to all the residents and business.

As future infrastructure is planned and developed, the need to enhance the facilities to have enclosed capacity to increase security for all should be part of the development plan. As this plan only references the needs for enhanced security without the specific recommendation of the elements of terminal designs it would be difficult to go beyond the mention of the location and needs to incorporate more security measures.

Appendix A

Peer Review

Appendix B

Travel Demand Analysis

Appendix C

Communications & Engagement

Appendix D

Policy Framework

Appendix E

Specialized Transit (SMART Bus)

Appendix F

Fleet & Infrastructure

Appendix G

Organizational Review

Appendix H

Implementation Plan

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REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

Appendix A – Peer Review

January 2023 – 21-1297

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Tables

1.0 Introduction

1.1 Purpose

The purpose of this document is to compare the Regional Municipality of Wood Buffalo's transit system and its current characteristics, service, and operations to similar transit systems across the country. The purpose is not to identify identical transit systems that Wood Buffalo could mimic entirely. Instead, the purpose is to identify communities with similar characteristics, which are appropriate to compare with Wood Buffalo. Performance data and other relevant information from each community are assessed to determine whether similar approaches to service may be relevant for RMWB. This document will also feed into the preparation of various elements of the Transit Master Plan and be included in the final Transit Master Plan.

1.2 Report Structure

This report is divided into the following sections:

1. **Introduction** – overview of report purpose and structure of document;
2. **Identification of Comparison Communities** – list of peer review group communities and rationale for their inclusion;
3. **System Comparisons** – comparison of general statistics and information, including fares, number of employees, size of fleet, and ridership;
4. **Performance Compari**son – comparison of systems' performance, with a focus on finances, service, and productivity;
5. **Summary of Conventional Service Findings** – discussion of comparison results and conclusions drawn;
6. **Paratransit Comparisons** – comparison of general statistics and information, including fares, ridership, booking, and cancellations;
7. **Paratransit Service Eligibility** – comparison of eligibility criteria for registration as a paratransit rider; and
8. **Summary of Paratransit Service Findings** – discussion of comparison results and conclusions drawn.

2.0 Identification of Comparison Communities

Every community is unique, with its own set of geography, topography, demographics, and culture. These differences affect how transit service is provided in a specific community. In the context of this peer review, these differences can limit the comparison as they can create uncertainty about whether or not a best practice or approach in one community will actually work in another. The purpose of this task was not to identify identical transit systems that Wood Buffalo could mimic entirely. Instead, it is to identify appropriate communities to compare with Wood Buffalo, obtain performance metrics and other information, and assess whether or not those approaches may be relevant for Wood Buffalo.

To identify an appropriate Peer Group for comparison, the 2019 Canadian Urban Transit Association (CUTA) Fact Book was reviewed for several transit systems. 2019 data was used as it was the last full year prior to the COVID-19 pandemic. With different early provincial and local responses to the pandemic, data from 2020 is generally unsuitable for comparison purposes.

The CUTA data groups Wood Buffalo with 28 other communities in the 50,000 to 150,000 population range. Each of these communities was considered and it was determined that not all of the systems listed in the CUTA grouping were appropriate for comparison. Through discussions with the Steering Committee, it was determined that it was important to have additional Alberta examples. Combined with the appropriate communities from the CUTA population group, the following five communities were identified for comparison with Wood Buffalo:

- **Grande Prairie, Alberta –** Grande Prairie is located in western Alberta and experiences a climate similar to Wood Buffalo. It has a service area population that is quite similar; however, its transit system has significantly less ridership than Wood Buffalo. Grande Prairie is currently re-developing its transit system to enhance connectivity and provide improved service.
- **Red Deer, Alberta –** Red Deer is located in central Alberta and serves a population that is 25% larger than Wood Buffalo. It experiences significantly higher ridership but operates a transit system that is similar in size. It has significant university student transit demand. Like Wood Buffalo, Red Deer is also served by rural inter-regional service, operated by a separate entity.
- **Medicine Hat, Alberta –** Medicine Hat is located in eastern Alberta and has a service area population similar in size to Wood Buffalo. However, both its ridership and system size are much smaller in comparison.
- **Sault Ste. Marie, Ontario –** Sault Ste. Marie is a city located in northern Ontario. Its service area population and ridership are very similar to that of Wood Buffalo. However, it operates with a smaller transit system.
- **Prince George, British Columbia –** Served by BC Transit, Prince George is located in the British Columbia interior. Prince George has a service area population much smaller than Wood Buffalo, but its economy is resources-based, and transit ridership numbers that are significantly higher. Like Wood Buffalo, BC Transit also offers rural inter-regional service to Prince George, although it is operated under a separate brand.

3.0 System Comparisons

The following section summarizes general characteristics for each of the transit systems from the chosen peer review group. As articulated in the previous section, all statistics are for 2019 as this represents the latest annualized data prior to the COVID-19 pandemic.

3.1 General Statistics

Table 1 presents the system highlights for RMWB Transit and its peer group systems.

Table 1: General System Information by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Municipal Population	75,615	91,391	101,002	62,935	73,300	58,874
Service Area Population	75,615	78,438	101,002	62,935	69,900	58,874
Service Area Size (km^2)	59.9	168.8	107.1	41.4	223.5	318.3
Service Provided by	Municipal Department	Municipal Department	Municipal Department	Municipal Department	Municipal Department	BC Transit
Ridership (revenue passengers)	1,558,368	435,977	2,644,412	752,322	1,894,611	2,276,867
Rides per Capita	20.6	5.6	26.2	12.0	27.1	38.7
Total Operating Revenue	$1,544,749	$975,179	$5,360,818	$907,725	$2,695,691	$2,409,150
Total Direct Operating Expenses	$21,628,267	$5,317,744	$16,562,630	$5,975,775	$8,862,415	$7,375,598
Peak Period Buses	46	15	43	11	18	21

As seen in **Table 1**, Red Deer has the largest service area population and experiences the largest ridership per capita in comparison with the other systems. Out of this peer group, Grande Prairie has the second largest population, but experiences the lowest ridership per capita. With the highest ridership it is unsurprising that Red Deer Transit has the largest operating revenue. Wood Buffalo has the largest operating expenses and one of the lowest operating revenue out of the peer group. Wood Buffalo experiences a ridership per capita that is average amongst its peers. The transit systems in Grande Prairie and Medicine Hat operate on a smaller scale with a rough correlation between service area population, ridership, operating revenue, and operating expenses.

3.2 Transit Network Structure

This section provides a general overview of the transit network structure of each of the peer group systems. A summary is provided in **Table 2**.

Table 2: Transit Network Structure

System	Number of Routes	Route Structure	Urban / Rural
Wood Buffalo	16	Fixed route – Multi-hub	Urban and Rural
Grand Prairie	6	Fixed route – Radial – 2 hubs	Urban
Red Deer	12	Fixed route – Multi-hub	Urban
Medicine Hat	8	Fixed route – Radial	Urban
Sault Ste. Marie	7	Fixed route – Radial	Urban
Prince George	14	Fixed route – Multi-hub	Urban

3.2.1 Wood Buffalo

RMWB Transit provides service through 16 fixed routes within Fort McMurray. The network is designed with a multi-hub structure. Rural inter-regional service is also offered to connect various communities within the Regional Municipality. In addition to fixed route services, RMWB Transit operates an addition 26 school special services within Fort McMurray during the school year.

3.2.2 Grande Prairie

Grande Prairie Transit utilizes a radial system network. Four of the six fixed routes offered by Grande Prairie terminate or travel through the downtown. The system does not offer any inter-regional transit services. The community is currently considering significant changes to its transit network to enhance connectivity and provide improved service. All routes in the new system will meet/transfer in downtown Grande Prairie. On-Demand service will also be implemented in select neighbourhoods.

3.2.3 Red Deer

Red Deer Transit offers service through 12 regular transit routes. Red Deer employs a radial transit system network, with three transit hubs located strategically throughout the City. Bus Rapid Transit runs north-south through Red Deer, connecting the three hubs. Inter-regional service is provided between Blackfalds and Red Deer. Rural services are operated independently by Blackfalds On-demand Local Transit (BOLT) and, as such, are not reported on by Red Deer Transit.

3.2.4 Medicine Hat

Like its peers, Medicine Hat also utilizes a radial transit system network. The majority of the 8 regular transit routes, terminate or pass through the downtown terminal. On-Demand service is provided in select neighbourhoods. The system does not offer inter-regional transit.

3.2.5 Sault Ste. Marie

Sault Ste. Marie Transit utilizes a radial system network, where all 7 fixed routes terminate or travel through the downtown. A Community Bus service is also available to everyone, but specifically designed to accommodate seniors and individuals with special needs. Inter-regional transit is not offered by the system.

3.2.6 Prince George

Prince George Transit offers service through 14 regular transit routes. Five transit exchanges are located strategically within the City where multiple routes pass through. Inter-regional service is provided between Burns Lake and Prince George.

3.3 Employee Statistics

Table 3 summarizes the employment statistics of each system in the peer group.

Table 3: Employee Statistics by Transit System

	Wood Buffalo		Grande Prairie		Red Deer		Medicine Hat		Sault Ste. Marie		Prince George	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Operators	93		22	16	75	24	30	7	52		50	
Other Transportation Operations	6		1		9		4		5		2	
Vehicle Mechanics			4						9			
Other Vehicle Maintenance and Servicing	8		2	2	6				1		1	
Plant and Other Maintenance	7				1		4		3			
General and Administration	7		4		7				4	1	3	
TOTAL	121	0	33	18	98	24	38	7	74	1	56	0

All systems did not report part time statistics for 2019 and 2018

As shown in **Table 3**, the municipalities with the largest operating expenses and system size (Wood Buffalo and Red Deer) tend to have significantly more staff in their transit systems than the smaller municipalities. In general, employee statistics are roughly proportional to system size.

Wood Buffalo and Prince George did not report employment of any part-time employees. For the other systems, most employees are full-time, with part-time employees mostly in operator roles. Grande Prairie has the highest percentage of part-time employees, making up just over 35% of its workforce.

Wood Buffalo employs a similar number of staff to Red Deer. This correlates with Wood Buffalo having the largest transit system in terms of number of routes and number of peak period buses.

3.4 Fare Structure

The fare structures of the peer group systems are compared in **Table 4**. Note that for consistency within this report, the fares reported below are those that have been reported for the 2019 CUTA Fact Book. Therefore, the fares below may not reflect the actual fares in effect at the time of reading.

Table 4: 2019 Fare Structures by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Adult						
Category Description	-	18-59 years old	18-64 years old	18-64 years old	-	-
Adult Cash Fare	$1.25[1]	$3.00	$2.50	$3.35	$2.90	$2.50
Adult Monthly Pass	$45.00[1]	$69.00	$72.50	$70.50	$67.00	$60.00
Child						
Category Description	Under 5 years old	Under 5 years old	Under 5 years old	Under 5 years old	Under 12 years old	Under 5 years old
Child Cash Fare	FREE	FREE	FREE	FREE	FREE	FREE
Child Monthly Pass	FREE	FREE	FREE	FREE	FREE	FREE
Student						
Category Description	Students (includes Keyano College)	6-17 years old and Grande Prairie Regional College Students	Valid Student ID	Post-Secondary with Valid College ID	13-18 years old	To GR. 12
Student Cash Fare	$1.25[1]	$2.50	$2.25	$3.35	$2.90	$2.50
Student Monthly Pass	$34.25[1]	$54.00	$62.00	$61.00	$30.00	$50.00
Senior						
Category Description	65+ years old	60+ years old	65+ years old	65+ years old	60+ years old	65+ years old
Senior Cash Fare	FREE	$2.50	$2.25	$3.35	$2.90	$2.50
Senior Monthly Pass	FREE	$39.00	$62.00	$43.75	$57.00	$50.00
U-Pass						
U-Pass System Implemented?	No	No	Yes	No	Yes	Yes

[1] Wood Buffalo fares have subsequently increased to $1.50 for cash and $41.00 for a pass for students

Generally, as seen in **Table 3**, the peer group systems differ in adult cash fares. Medicine Hat has the highest fare at $3.35. Wood Buffalo has the lowest fare at $1.25, which is half as expensive as the next-cheapest systems (Red Deer and Prince George), and only 37% of the cost of a fare in Medicine Hat.

Grande Prairie and Red Deer offer discounted cash fares for students. Red Deer and Medicine Hat have the most expensive monthly adult pass out of the six systems, with Wood Buffalo having the least expensive.

All of the transit systems have free fares for children under five. Sault Ste. Marie extends free fares for children up to 12 years in age. Wood Buffalo offers free transit service to seniors. All other systems offer discounted monthly passes for seniors. Red Deer, Sault Ste. Marie, and Prince George have a U-Pass system implemented to encourage post-secondary student transit use.

3.5 Fleet

Table 5 summarizes the peak and total numbers of buses for each transit system in the peer group. Note that these totals include conventional buses of varying size. Typical bus sizes included in these totals are 30 foot, 40 foot, 60 foot articulated and double deck.

Table 5: Total and Peak Buses by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Total Buses	84[1]	25	63	16	28	31
Peak Buses	46	15	43	11	18	21
Spare Ratio	0.45	0.40	0.32	0.31	0.36	0.32

[1] RMWB Transit's fleet has subsequently decreased to 76 buses

Typically, as seen in **Table 5**, the number of total and peak buses is directly correlated to the transit system size. As such, Wood Buffalo has the most buses on the road at any given time while Grande Prairie and Medicine Hat have the fewest number of buses. Wood Buffalo has the highest spare ratio (i.e. percentage of unused vehicle operated during peak service periods).

3.6 Operating Metrics

Table 6 compares the peer group systems by operating metrics: revenue vehicle kilometres, revenue vehicle hours, and paid employee hours.

Table 6: Operating Metrics by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Vehicle Kilometres						
Revenue Vehicle Kilometres	1,551,392	878,124	3,725,000	1,190,038	1,952,647	1,543,329
Total Vehicle Kilometres	1,772,388	878,124	3,725,000	1,190,038	1,991,915	1,543,329

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Vehicle Hours						
Revenue Vehicle Hours	88,840	42,187	140,413	53,000	81,799	67,995
Auxiliary Revenue Vehicle Hours	-	-	-	730	343	-
Total Vehicle Hours	97,237	42,187	157,027	53,000	83,282	67,995
Paid Hours						
Operator Paid Hours	195,520[1]	-	199,342	76,960	-	-
Total Employee Paid Hours	267,020	-	255,708	96,980	-	-

[1] The most recent paid hours reported to CUTA for Wood Buffalo and Medicine Hat are for 2018. All other systems are 2019 figures.

As with most parameters, total vehicle hours and total employee paid hours are roughly proportional to system size. Wood Buffalo and Red Deer incur the most vehicle hours and employee paid hours due to their large relative system size. Vehicle mechanic hours have not been separately-reported by any system.

3.7 Passenger Data

Table 7 compares the passenger service by transit system peer group systems and CUTA fare categories.

Table 7: Passenger Data by Transit System

	Wood Buffalo	Grande Prairie	Red Deer[1]	Medicine[2] Hat	Sault Ste.[3] Marie	Prince[4] George
Adult Passenger Trips	587,119	254,012	1,008,035	-	-	-
Discounted Fare Trips						
Child Passenger Trips	-	87,737	107,207	-	-	-
Student Passenger Trips	843,770	51,143	1,150,504	-	-	-
Senior Passenger Trips	-	43,085	99,300	-	-	-
Total Concession Fare Trips	971,249[5]	181,965	1,636,377	-	-	-
Regular vs. Auxiliary Service						
Regular Service Ridership	1,558,368	435,977	2,644,412	752,322	1,894,611	2,276,867
Auxiliary Service Passenger Trips[6]	-	19,787	3,129	660,000	3,547	-

[1] Red Deer auxiliary service passenger trip was last reported to CUTA in 2018; all other systems are 2019
[2] Medicine Hat does not report adult passenger trips and concession fare trips
[3] Sault Ste. Marie does not report adult passenger trips and concession fare trips
[4] Prince George does not provide a breakdown of passenger data to CUTA
[5] Total Concession figure includes Senior and Child trips, although these were not separately-reported
[6] Auxiliary Services are trips operated beyond regular scheduled services, such as charters.

As seen in **Table 7**, Wood Buffalo and Red Deer have more annual student passenger trips than regular adult fare trips. Grande Prairie experiences fewer concession fare than regular adult fare trips annually. Medicine Hat, Sault Ste. Marie, and Prince George do not report a breakdown of concession fare trips. All systems had auxiliary service passenger trips, aside from Wood Buffalo and Prince George.

3.8 Operating Expenses

Table 8 summarizes the annual operating expenses of each system in the peer group.

Table 8: Operating Expenses by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Transportation Operations Expenses	$16,325,492	$3,173,540	$9,408,949	$2,792,826	$4,682,638	$7,375,598
Fuel/Energy Expenses for Vehicles	$1,959,881	$556,554	$1,127,764	$510,346	$1,150,575	$1,077,000
Vehicle Maintenance Expenses	$2,757,398	$1,470,464	$3,475,151	$1,997,832	$1,705,671	$963,000
General, Administration & Plant Maintenance Expenses	$585,496	$117,186	$2,551,766	$671,870	$1,323,531	$11,000
Total Direct Operating Expenses[1]	**$21,628,267**	**$5,317,744**	**$16,563,630**	**$5,975,775**	**$8,862,415**	**$9,426,598**
Debt Service Payment	-	-	-	-	-	-
Total Operating Expenses[2]	**$21,628,267**	**$6,074,319**	**$20,321,103**	**$5,975,775**	**$8,862,415**	**$9,426,598**

[1] Sum of all direct operating expenses, including operation, fuel/energy, maintenances, and general/administration expenses

[2] Sum of direct and auxiliary operating expenses (the latter of which is not reported in this table but includes Inter-city Charters, Cross-boundary Service to Adjacent Municipalities, Rental / Lease Charges, Debt Service Payments, etc.)

In general, the total expenses are correlated to system size and annual ridership. The breakdown of expense type is roughly equally proportional to the total expenses for most of the systems.

Wood Buffalo has the largest total operating expense with Red Deer having the second largest. The size of Wood Buffalo's transit staff and transit fleet contribute to it having the highest transportation operations expenses. Additionally, the relatively high hourly cost of Wood Buffalo's staff (see **4.3 Productivity Performance**) is a key driver for its high overall operations expenses. All other peer systems have roughly similar operating expenses to each other. Wood Buffalo is on par with most peer systems in terms of the relative size of its General, Administration & Plaint Maintenance expenses (excluding the much larger system in Red Deer).

3.9 Operating Revenues and Other Funding Contributions

Table 9 compares the annual operating expenses and funding contributions among the peer systems.

Table 9: Operating Revenues and Other Funding Contributions by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Revenues						
Regular Service Passenger Revenues	$1,400,389	$796,522	$5,345,555	$907,725	$2,595,351	$2,409,150
Total Operating Revenues[1]	$1,544,749	$975,179	$5,840,380	$907,725	$2,695,691	$2,409,150
Total Revenues[2]	**$1,544,749**	**$1,265,691**	**$5,840,380**	**$907,725**	**$2,695,691**	**$2,409,150**
Costs						
Net Operating Cost[3]	$20,083,518	$4,808,628	$14,480,723	$5,068,050	$6,166,724	$4,966,448
Funding Contributions						
Provincial Contribution	$0	$0	$0	$0	$779,949	$3,443,667
Municipal Contribution	$20,083,518	$4,808,628	$14,480,723	$5,068,050	$5,386,775	$1,522,782
TOTAL Contributions	**$20,083,518**	**$4,808,628**	**$14,480,723**	**$5,068,050**	**$6,166,724**	**$4,966,449**
Contribution per Capita	**$265.60**	**$61.30**	**$143.37**	**$80.53**	**$88.22**	**$84.36**

[1] Sum of passenger and other operating revenues (the latter of which includes School Contracts, Local Charters, Advertising, Parking Lot Revenues, etc.)

[2] Sum of operating and non-operating revenues (the latter of which includes Passenger Revenues from Cross-boundary Services to Adjacent Municipalities, Other Revenues from Cross-boundary Services to Adjacent Municipalities, Inter-city Charters, Non-Transit Revenue, etc.)

[3] Difference between Total Operating Expenses and Total Revenues

Wood Buffalo has the highest net operating cost and one of the lowest annual revenues. Its relative low revenue can likely be attributed to its low fares and free fares for seniors. As expected, Red Deer has the largest annual revenue, due to having the highest ridership of the reviewed systems. The other systems have annual total revenues that are roughly proportional to their size and ridership.

Wood Buffalo receives the highest municipal operating contributions per capita. Sault Ste. Marie and Prince George both receive provincial operating contributions, although they are located outside of Alberta. None of the peer review systems receive federal funding.

4.0 Performance Comparison

The following section focuses on comparing the financial performance, service, and productivity of the systems in the peer group.

4.1 Financial Performance

Table 10 compares the financial performance of the transit systems in the peer group.

Table 10: Financial Performance Indicators by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Financial						
Cost Recovery – Total Operating Revenue/Total Direct Operating Expenses (R/C Ratio)	7%	18%	35%	15%	30%	33%
Municipal Operating Contribution/Capita[1]	$392.82	$61.30	$143.37	$80.53	$77.06	$25.87
Net Direct Operating Cost/Regular Service Passenger	$19.06	$9.96	$4.06	$6.74	$3.25	$2.18
Average Fare[2]						
Regular Service Passenger Revenue/Regular Service Passengers	$0.90	$1.83	$2.02	$1.21	$1.37	$1.06
Cost Effectiveness[3]						
Total Direct Operating Expenses/Regular Service Passengers	$20.05	$12.20	$6.26	$7.94	$4.68	$3.24
Cost Efficiency[4]						
Total Direct and Auxiliary Operating Expenses/Total Vehicle Hours	$243.45	$126.05	$105.48	$112.75	$106.41	$108.47

[1] Amount of transit operational funding provided by the municipality per person in the community.
[2] Average revenue collected every time a passenger boards a bus. This is less than the published fare for several reasons, such as passengers travelling with discount passes, and passengers transferring to another bus within 90 minutes can board without buying a second fare.
[3] Operating cost per passenger boarding
[4] Cost of providing one hour of transit service on a single route

The financial performance comparison of the peer group shows that Wood Buffalo has a significantly lower cost recovery and higher municipal operating contribution per capita than the peer group. This is almost 15x more than Prince George, which has the lowest municipal contribution per capita. Red Deer has the best cost recovery, while Prince George has the lowest net direct operating cost per passenger and is also the most cost-efficient system.

There are several factors that explain the low cost recovery for Wood Buffalo. The first is the low average fare, which results in low passenger revenue (See **Table 9**). Additionally, Alberta systems do not receive regular provincial funding whereas this is commonplace in other provinces, including Ontario and British Columbia.

The biggest factor is the high Total Operating Expenses. Net Direct Operating Costs per passenger are almost two times greater for RMWB Transit than the next highest system (Grande Prairie). Similarly, Operating Expenses per Vehicle Hour are also almost two times greater than the next highest system.

Table 11 breaks down costs per Revenue Vehicle Hour. Wood Buffalo's significantly higher operations expenses are likely do to the higher cost of labour compared to other systems (see 4.3 Productivity Performance).

Table 11: Performance Analysis per Revenue Vehicle Hour Provided by Each Transit System

	Wood Buffalo[1]	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Transportation Operations Expenses/Revenue Vehicle Hour	$183.76	$75.23	$59.92	$52.69	$57.25	$108.47
Fuel/Energy Expenses for Vehicles/Revenue Vehicle Hour	$22.06	$13.19	$7.18	$9.63	$14.07	$15.84
Vehicle Maintenance Expenses/Revenue Vehicle Hour	$31.04	$34.86	$22.13	$37.69	$20.85	$14.16
Plant Maintenance Expenses/Revenue Vehicle Hour	$6.59[2]	$1.67	$4.14	$3.28	$8.73	$0.16
General/Administration Expenses/Revenue Vehicle Hour	-[2]	$1.11	$12.22	$9.39	$7.45	-
Total Direct Operating Expenses/Revenue Vehicle Hour	**$243.45**	**$126.05**	**$105.48**	**$112.75**	**$108.34**	**$108.47**

[1] Wood Buffalo and Medicine Hat Vehicle Maintenance and Plant Maintenance expenses were last reported to CUTA in 2018; all other systems are 2019 figures.
[2] Wood Buffalo did not report separate General/Administration Expenses, but these costs are captured in the Plant Maintenance Expenses category.

4.2 Service Performance

Table 12 compares the service utilized by passengers and provided by the transit systems in the peer group.

Table 12: Service Performance Indicators by Transit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Service Utilization						

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Regular Service Passengers/Capita[1]	20.6	5.6	26.2	12.0	27.1	38.7
Regular Service Passengers/Revenue Vehicle Hour[2]	17.5	10.3	18.2	14.2	23.2	33.5
Amount of Service						
Regular Vehicle Hours/Capita[3]	1.2	0.5	1.4	0.8	1.2	1.2
Average Speed						
Revenue Vehicle Kilometres/ Revenue Vehicle Hours[4]	9.36	20.82	26.53	22.25	23.87	22.70

[1] Number of annual passenger boardings per person in the community served by the transit system.
[2] Number of passenger boardings per hour of transit service provided.
[3] Amount of transit service (measured in hours that a single bus is operating) per person per year.
[4] Average speed of transit service based on number of kilometres provided compared to number of hours operated.

Passengers per capita is a measure of the market penetration, and represents the average number of boardings made per person each year. Wood Buffalo is in the middle of the peer group, which is good considering the large proportion of the population that works in the Oil Sands and cannot use RMWB Transit for work. The systems with the highest ridership per capita (Sault Ste. Marie and Prince George) tend to have high student populations and encourage student ridership with a U-Pass.

Regular Service Passengers per Revenue Vehicle Hour is a key measure of the effectiveness of service. In this regard, Wood Buffalo is in the lower half of the peer group. Additionally, the amount of service provided is on par with the rest of the peer group (although lower than Red Deer). This is an indication that the current system does not deploy its service hours as effectively as some of its peers. However, it should be noted that the systems with higher utilization feature large post-secondary student populations that are generally good users of transit.

4.3 Productivity Performance

Table 13 compares the labour productivity of the transit systems in the peer group and the top wage rates paid to their employees.

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George[1]
Labour Productivity[2]						
All Revenue Vehicle Hours/ Operator Paid Hours	0.45[3]	-	0.70	0.74[4]	-	-
Top Wage Rates						
Operators	$46.62	$34.63	$30.60	$29.65[4]	$27.16	-
Mechanics	-	$47.53	$42.85	-	$30.26	-

Table 13: Service Productivity Indicators by Transit System

[1] Prince George does not report service indicators statistics

[2] A measure of how productive operator time is by comparing how many hours are paid to how many hours are operated in service. Higher numbers indicate more productive systems, with less non-service hours being paid to operators.

[3] Wood Buffalo labour productivity was last reported to CUTA in 2018

[4] Medicine Hat labour productivity and operator wage rates were last reported to CUTA in 2018

Red Deer and Medicine Hat experience the highest levels of labour productivity. Wood Buffalo experiences the lowest level of labour productivity in the peer group, indicating that they have a higher number of operator hours that are spent not providing transit services. This could be due to a combination of factors, such as requirements of the bargaining agreement, a high proportion of short peak-period-only trips (requires a driver to operate just a single trip, but still be paid a minimum shift time), or an inefficient garage location (requires buses to drive a long way empty to start and end their services).

Exacerbating other cost pressures, Wood Buffalo offers the highest top wage rates to operators, while Grande Prairie offers the highest top wage rates to mechanics (although no mechanic wage rate was provided for Wood Buffalo). Based on the top operator wage in Wood Buffalo being 34% higher than the closest peer system (Grande Prairie), it is reasonable to assume that Wood Buffalo's mechanics wages are also higher than average in the peer group. Driven by competition for similar jobs from the oil sands industry, RMWB Transit is likely to bear higher than average staff costs for the foreseeable future.

5.0 Summary of Conventional Service Findings

This section summarizes the conclusions of the previous sections as they apply to Wood Buffalo conventional service specifically.

Overall, compared to its peers, Wood Buffalo is generally on par with the peer systems. The key differences relate to revenues and expenses, which are lower and higher than most peers, respectively. As detailed in **4.1 Financial Performance**, Wood Buffalo ranks last among its peers in cost effectiveness and cost efficiency. This is largely a result of its very low fares (see **3.4 Fare Structure**) and high staffing costs (see **4.3 Productivity Performance**). Despite these challenges, it operates the largest transit system (routes, peak buses, number of employees, etc.). A summary of Wood Buffalo's performance against key peer attributes is below.

Below Peer Average:

- Total operating revenues;
- Passenger revenue per passenger;
- Highest operating expense per passenger (cost effectiveness);
- Highest operating expense per vehicle hour (cost efficiency);
- Lowest average speed of transit system; and
- Labour productivity.

Similar to Peer Average:

- Predominantly radial network design;
- Passengers per capita (service utilization); and
- Vehicle hours per capita (amount of service).

Above Peer Average:

- Number of fixed routes;
- Number of peak and total buses;
- Total number of employees per service hour;
- Less expensive cash fares for all riders;
- Less expensive *Adult* and *Student* monthly passes;
- Free ridership for Seniors; and
- Operator wage rates.

6.0 Paratransit Comparisons

The following section summarizes general characteristics for each of the transit systems from the chosen peer review group. With the exception of Grande Prairie, all statistics are for 2019, as this represents the latest CUTA Specialized Transit Fact Book annualized data prior to the COVID-19 pandemic. Statistics for Grande Prairie are from 2018.

6.1 General Statistics

Table 14 presents the system highlights for Wood Buffalo Paratransit and its peer group paratransit systems in terms of population served, operators, hours of service, booking notice, and vehicles.

Table 14: General System Information by Paratransit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George[1]
Population						
Population Served	81,948	69,008	101,002	63,260	69,900	69,084
Operators						
Dedicated Service	Transit System/ Municipality	Private Non-Profit Organization	Transit System/ Municipality	Transit System/ Municipality	Transit System/ Municipality	Private Contractor(s)
Non-Dedicated Service	-	-	Taxi	-	Taxi	-
Hours of Service						
Weekdays (M-W)	07:30 – 19:30	07:30 – 22:30	06:30 – 23:00	06:45 – 22:45	06:00 – 00:00	07:30 – 17:00
Thursdays	07:30 – 22:00	07:30 – 22:30	06:30 – 23:00	06:45 – 22:45	06:00 – 00:00	07:30 – 22:00
Fridays	07:30 – 19:30	07:30 – 22:30	06:30 – 23:00	07:30 – 19:30	06:00 – 00:00	07:30 – 17:00
Saturdays	08:30 – 17:30	07:30 – 22:30	06:30 – 23:00	06:45 – 22:45	06:15 – 00:00	09:30 – 17:30
Sundays	08:30 – 17:30	08:30 – 21:30	08:00 – 17:30	08:15 – 19:15	07:15 – 00:00	09:30 – 17:30
Holidays	10:00 – 17:30	08:30 – 21:30	08:00 – 17:30	10:15 – 18:15	06:15 – 00:00	N/A
Booking Notice						
Advance Booking	14 days	7 days	14 days	14 days	14 days	14 days
Minimum Notice	24 hours	48 hours	2 hours	12 hours	24 hours	-
Vehicles						
Vehicles	10 buses	9 buses	23 buses	13 buses	11 buses	-
Average wheelchair capacity	4	4	4	3	5	-
Average ambulatory capacity	12	12	7	6	5	-

[1] Prince George does not report vehicle statistics.

Wood Buffalo Paratransit Service is similar to the other peer group systems based on the metrics in **Table 14**. Hours of service are generally comparable across all systems. Wood Buffalo's maximum advance booking period of 14 days is in line with most of the peer systems, with the exception of Grande Prairie, which only allows bookings 7 days in advance.

6.2 Fare Structure

Table 15 compares the fare structures of the peer group paratransit systems. Not all fare categories apply to each system. Note that for consistency within this report, the fares reported below are those that have been reported for the CUTA 2019 Specialized Transit Fact Book. Therefore, the fares below may not reflect the actual fares in effect at the time of reading.

Table 15: 2019 Fare Structures by Paratransit System

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Adult						
Category Description	-	18-59 years old	18-64 year old	18-64 year old	-	-
Adult Cash Fare	$1.25[1]	$3.00	$3.00	$2.00	$3.00	$2.50
Adult Monthly Pass	N/A	$69.00	-	$70.50	$67.00	-
Child						
Category Description	Under 5 years old	Under 5 years old	Under 5 years old	Under 6 years old	12 years old or under (with an adult)	Under 5 years old
Child Cash Fare	N/A	FREE	$3.00	FREE	FREE	FREE
Child Monthly Pass	N/A	N/A	-	FREE	FREE	FREE
Student						
Category Description	-	-	-	-	-	-
Student Cash Fare	$1.25	$2.50	$3.00	$2.00	$3.00	$2.50
Student Monthly Pass	-	$54.00	-	$61.00	-	-
Senior						
Category Description	65+ years old	60+ years old	65+ years old	65+ years old	60+ years old	65+ years old
Senior Cash Fare	1.25	$2.50	$3.00	$2.00	$3.00	$2.50
Senior Monthly Pass	N/A	$39.00	-	$43.75	$57.00	-

[1] Wood Buffalo fares have subsequently increased to $1.50 for cash.

For Wood Buffalo, as for most paratransit systems, the fare structure is identical to the fare structure for conventional transit service. The primary difference in fares between SMART Bus and conventional service is that seniors over the age of 65 receive free transit on the conventional system but pay a regular fare on SMART Bus. Furthermore, monthly passes are not available for SMART Bus passengers; instead, 10- and 20-ride passes can be purchased.

6.3 Passenger Data

Table 16 compares the passenger service by paratransit system, broken down by active registrants (people who are registered and actively use the paratransit system), dedicated service (service provided by a dedicated paratransit vehicle) ridership, and non-dedicated service (service provided by a vehicle that may provide other services, like a taxi) ridership.

Table 16: Passenger Data by Paratransit System

	Wood[1] Buffalo	Grande[2] Prairie	Red Deer	Medicine[3] Hat	Sault Ste. Marie	Prince[4] George
Active Registrants						
Ambulatory	251	-	678	-	194	-
Non-Ambulatory	101	-	540	-	341	-
Total	352[5]	-	1,218	-	535	-
Registrants per 100,000 people	430	-	1,206	-	765	-
Dedicated Service Ridership						
Ambulatory	12,983	-	44,630	44,700	10,545	-
Non-Ambulatory	2,722	-	34,070	17,990	18,889	-
Total	15,705	-	78,700	62,290	29,434	67,555
Attendants & Companions	3,844	-	20,245	7,102	2,194	-
Non-Dedicated Service Ridership						
Ambulatory	-	-	866	-	12,088	-
Non-Ambulatory	-	-	369	-	2,106	-
Total	-	-	1,235	-	14,194	23,401
Attendants & Companions	-	-	169	-	-	-
Total Ridership						
Ambulatory	12,983	-	45,496	44,700	22,633	-
Non-Ambulatory	2,722	-	34,439	17,990	20,995	-
Support Persons	3,844	-	20,414	7,102	2,194	-
Total Trips	19,549	-	100,349	69,792	45,822	90,956

[1]Wood Buffalo does not provide non-dedicated service.
[2]Grande Prairie does not report passenger data.
[3]Medicine Hat does not provide non-dedicated service.
[4] Prince George does not report active registrants and does not separate ambulatory and non-ambulatory passengers.
[5]Registrations have increased to 430 in 2022.

Ridership is split between ambulatory passengers, non-ambulatory passengers, and attendants.

As seen in the **Table 16**, Red Deer has the highest number of registrants per 100,000 people. Conversely, Wood Buffalo has the lowest number of registrants per 100,000 people. This may be due to Wood Buffalo's unique demographics and role as an industry hub, with a lower proportion of seniors and qualified passengers in the municipality. Similarly, Red Deer has the highest ridership in the peer group and Wood Buffalo has the lowest.

6.4 Trip Booking and Cancellation

Table 17 presents details on the booking and cancellation of trips for Wood Buffalo Paratransit Service and its peer group paratransit systems.

Table 17: Trip Booking and Cancellation by Paratransit System

	Wood Buffalo	Grande Prairie[1]	Red Deer	Medicine Hat[2]	Sault Ste. Marie[3]	Prince George[4]
Passenger Trips by Booking Type						
Subscription/ Pre-Booked	-	-	26,636	24,249	-	-
Reservation	13,516	-	81,365	38,441	-	-
On-Demand/ Day-of	-	-	5,200	-	-	-
Total Trips Requested[5]	19,549	-	113,201	73,674	-	-
Trips Cancelled						
Cancelled in Advance	-	-	19,367	7,486	9,722	-
Cancelled Late	836	-	-	7,517	67	-
No-Shows	75	-	951	7,073	181	-
Cancelled at Door	91	-	1,235	52	-	-
Trips Cancelled by Percentage						
Cancelled in Advance	-	-	17.1%	10.2%	-	-
Cancelled Late	4.3%	-	-	10.2%	-	-
No-Shows	0.4%	-	0.8%	9.6%	-	-
Cancelled at Door	0.5%	-	1.1%	0.1%	-	-

[1] Grande Prairie does not report cancellation and booking details.
[2] Medicine Hat did not report trips cancelled at door for 2019, 2018 data shown instead.
[3] Sault Ste. Marie does not report eligible passenger trips by booking type, so the related indicators cannot be calculated.
[4] Prince George does not report cancellation and booking details.
[5] More trips are requested than are provided as not all trip requests can be catered for.

Red Deer and Medicine Hat reported similar numbers of subscription/pre-booked trips of the peer group system, with Red Deer having a significantly higher amount of individually reserved ("reservation") trips. Wood Buffalo reported the lowest percentage of trip cancellations, possibly because it has fewer trips booked per capita.

6.5 Indicators

Table 18 compares key system indicators between Wood Buffalo Paratransit and the peer systems.

Table 18: Key System Indicators by Paratransit System

	Wood Buffalo	Grande Prairie[1]	Red Deer	Medicine Hat[2]	Sault Ste. Marie	Prince George[3]
Amount of Service						
Revenue Vehicle Hours per Capita	0.16	0.33[4]	0.29	0.34	0.25	0.26
Revenue Vehicle Hours per Registrant	36.3	-	23.9	-	33.3	-
Revenue Vehicle Hours per Trip	0.65	-	0.29	0.30	0.39	0.20
Revenue Vehicle Hours / Total Vehicle Hours	-	-	90.5%	100%	100%	100%
Ridership Metrics (Dedicated Service)						
Rides per Revenue Vehicle Hour	1.53	-	3.36	3.29	2.57	5.07
% Ambulatory Rides	13.9%	-	45.1%	64.0%	33.3%	-
% Non-Ambulatory Rides	69.4%	-	34.4%	25.8%	59.7%	-
% Attendant and Companion Rides	19.7%	-	20.5%	10.2%	7.0%	-
Ridership Metrics (Non-Dedicated Service)						
% Ambulatory Rides	-	-	64.4%	-	85.2%	-
% Non-Ambulatory Rides	-	-	25.9%	-	14.8%	-
% Attendant and Companion Rides	-	-	9.7%	-	-	-
Ridership Metrics (Total Service)						
Rides per Capita	0.24	-	0.99	1.10	0.66	1.32
Rides per Revenue Vehicle Hour	1.53	-	3.41	3.29	-[5]	5.07
% Ambulatory Rides	13.9%	-	45.3%	64.0%	49.4%	-
% Non-Ambulatory Rides	69.4%	-	34.3%	25.8%	45.8%	-
% Attendant and Companion Rides	19.7%	-	20.4%	10.2%	4.8%	-
Financial Indicators						
Revenue / Cost Ratio	-	-	18.1%	5.6%	5.0%	12.4%

	Wood Buffalo	Grande Prairie[1]	Red Deer	Medicine Hat[2]	Sault Ste. Marie	Prince George[3]
Net Operating Cost / Capita	$14.22	-	$24.50	$24.27	$17.56	$23.72
Net Operating Cost / Hour	$107.56	-	$85.09	$72.34	$68.97	$91.37
Registration Indicators						
Trips / Registrant	45.4	-	82.3	-	85.7	-
Registrants / Capita	0.0062	-	0.0121	-	0.0077	-
Registrants / Hour (Dedicated Service)	0.03	-	0.04	-	0.03	-

[1] Grande Prairie does not report key system indicator data

[2] Medicine Hat does not report number of registrants, so the related indicators cannot be calculated

[3] Prince George does not report number of registrants, so the related indicators cannot be calculated

[4] Grande Prairie's paratransit revenue vehicle hours (22,830) was not officially reported, so this figure was extrapolated based on their listed hours of service

[5] Sault Ste. Marie does not report revenue vehicle hours for trips using non-dedicated vehicles (eg. taxis), thus this metric could not be calculated

As shown in **Table 18**, Medicine Hat provide the highest amount of service (revenue vehicle hours) per capita and consequently experiences the highest number of rides per capita. Wood Buffalo incurs the least rides per capita. All systems experience a higher percentage of ambulatory rides compared to non-ambulatory rides.

With respect to financial indicators, Red Deer performs well, with the highest revenue / cost ratio. Sault Ste. Marie has the lowest revenue / cost ratio but incurs the lowest net operating cost / hour. Red Deer and Sault Ste. Marie provide the most trips per registrant, almost twice as much as Wood Buffalo.

6.6 Paratransit Service Eligibility

Table 19 explores application and booking processes for the peer paratransit systems.

Table 19: Application and Booking of Paratransit System

Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
How to Apply					
Application by email or by mail • Signed by qualified health care worker	Application submitted through email, fax, or by mail • Signed by qualified health care worker	Application by mail • Signed by qualified health care worker	Application submitted through email, fax, or by mail • Signed by qualified health care worker	Application submitted through fax or by mail • Signed by qualified health care worker	Application submitted through fax or by mail • In-person assessment with Mobility Coordinator to discuss transportation options and assess eligibility
How to book					

Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Booking Platform					
Phone call, email	Phone call	Phone call	Casual booking, subscription booking, and charter booking	Phone call and booked with Trapeze Novus via phone, email or text	Phone call
Notice					
• Can be booked up to 14 days in advance. • Bookings must be made at least 24 hours in advance.	• Can be booked up to 7 days in advance. • Bookings must be made at least 48 hours in advance.	• Can be booked up to 14 days in advance. • Booking must be made at least 2 hours in advance.	• Can be booked up to 14 days in advance. • Bookings must be made at least 24 hours in advance.	• Can be booked up to 14 days in advance • Bookings must be made at least 24 hours in advance.	• Can be booked up to 14 days in advance
Information Required when booking					
• Name • Daytime telephone numbers • The date and time you require a trip • Pickup and destination locations • Travel with an attendant and/or a mobility aid		• Name • Any special equipment used • Address of the pick-up and drop off • Appointment time • Time and location for return trip			• Name • The day, date and time you need to travel • Identify if you have an attendant or companion or an assistance animal • Pick-up address • Drop-off address • Appointment time • Any special instructions • Type of mobility aid
Cancelation Policy					
• Trips must be cancelled at least 24 hours prior	• To cancel trips call dispatch	• Trips must be cancelled at least 2 hours prior		• Trips must be cancelled at least 1 hour prior	

Table 20 below summarizes the factors and criteria used to assess eligibility in the paratransit application forms. While each system may have their own eligibility and assessment, it is notable that Ontario systems are required to follow criteria outlined in the Accessibility for Ontarians with Disabilities Act.

Table 20: Assessment Factors in Paratransit Application Form

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Description of mobility aid • Cane • Leg brace • Wheelchair • Service Animal • Respirator • Ventilator • Crutches • Prosthesis • Walker • Scooter • Broda Chair	✓	✓	✓	✓	✓	✓
Communication Impairment	✓	✓	✓	✓		✓
Description of how rider is travelling at the moment • Taxi • Family/friends • Own car • Regular public transit bus • Volunteer or staff • Other?	✓		✓	✓		
Description of why rider is unable to use regular transit (disabilities)	✓	✓	✓	✓	✓	✓
Conditions permanent or temporary	✓	✓	✓	✓	✓	✓
Can the rider recognize landmarks	✓	✓		✓		✓
Can the rider go up or down steps without help	✓	✓	✓	✓		✓
Pick up location and accessibility (can the vehicle access pick up location)			✓			✓

	Wood Buffalo	Grande Prairie	Red Deer	Medicine Hat	Sault Ste. Marie	Prince George
Wait at stop while standing/sitting	✓	✓	✓	✓		✓
Walk/roll 3 city blocks	✓	✓	✓	✓	✓	✓
Can be left alone at home/destination	✓	✓		✓		✓
Vision impairment or legally blind	✓	✓	✓	✓		
Sit or rise without assistance		✓		✓		✓
Assistance of a personal attendant or aide	✓	✓	✓	✓	✓	✓
Dimensions of the wheelchair		✓	✓	✓		✓
Weight of the passenger and wheelchair		✓	✓			✓
Board a low floor bus	✓	✓	✓	✓		

Wood Buffalo's paratransit application form is like the applications used by the peer systems. The form includes the majority of the same assessment factors. Unlike some other systems, the application does not request information about the dimensions and weight of the mobility device used by a passengers (if requested). It is important for specialized transit agencies to be aware of the combined weight of the passenger and mobility device to ensure the safety of the passenger and operator, due to weight limits on vehicle's lift equipment. Recommendations related to changes to the application form can be found in Appendix E (Specialized Transit (SMART Bus)).

7.0 Summary of Paratransit Service Findings

This section summarizes the conclusions of the previous sections as they apply to the Wood Buffalo paratransit service (SMART Bus) specifically.

Overall, compared to its peers, Wood Buffalo's SMART Bus compares favourably to the peer systems. It features lower fares, and sees less trips cancelled, although the service is offered during less hours of the day, has fewer registrants, rides overall, and trips taken by each registrant. A summary of Wood Buffalo's performance against key peer attributes is below.

Below Peer Average:

- Earlier end of service;
- Overall length of service provided;
- Number of registrants per 100,000 people;
- Rides per capita; and
- Trips per registrant.

Similar to Peer Average:

- Start of service;
- Advance booking notice;
- Minimum booking notice;
- Number and type of vehicles in service;
- Breakdown of ambulatory, and attendant and companion ride categories; and
- Comprehensive eligibility criteria and nuanced registrant categories.

Above Peer Average:

- Less expensive cash fares in all categories;
- Percentage of trips cancelled.

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

Appendix B – Streetlight Travel Demand Analysis

January 2023 – 21-1297

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1.0 Introduction

Dillon Consulting Limited (Dillon) was retained by the Regional Municipality of Wood Buffalo (RMWB) to prepare the Transit Master Plan (TMP), setting out the foundation for transit service provision in the municipality for the next few years.

RMWB Transit has provided data regarding passenger boardings and station activity for each route; what is missing is information about the "non-transit" users. To identify a future transit market, we need to appreciate the travel demands for all users within Fort McMurray. Additionally, it is understood that travel patterns have been significantly impacted due to COVID-19, and any data collected at this time would not be reflective of peak demands that have been seen in recent years. While it may take time for travel demands to reach the levels that was seen pre-COVID, it is important that our analysis reflect the various possible outcomes.

The following document summarizes the analysis of travel patterns for the Regional Municipality of Wood Buffalo, Alberta, as observed in the outputs of the StreetLight Data transportation analytics tool (detailed below). The observed travel patterns noted in the analysis will help guide the strategic network planning as part of the Plan.

1.1 Streetlight Data Platform

Streetlight Data was used to obtain existing travel data for Fort McMurray to support the TMP.

Streetlight Data is a transportation data analytics platform that mines big data sources (GPS and cellphone tracking data). Streetlight Data collects millions of observations for a large portion of the travelling public from a data stream that is anonymized and aggregated sufficiently to remove any privacy concerns. This provides the analyst with a persistent and high quality set of data that can be queried for any time period for any size of area and with sufficient control to be useful in examining neighbourhood shortcutting and speeding studies, as well as large town- or city-wide issues related to mobility.

The Streetlight data analysis was undertaken using Fall 2019 (September, October, and November) travel demands as this was the most recent pre-COVID19 source of travel demand in and between areas within Fort McMurray. A 12-zone system was established for assessing trip origins and destinations. The zone system is illustrated in **Figure 1**.

The data does not predict potential transit ridership but, rather, provides an overview of personal travel patterns by any mode (not only transit). By demonstrating overall personal travel, schedules can be created and managed to meet peak transportation needs, increasing the potential for an increase in transit ridership.

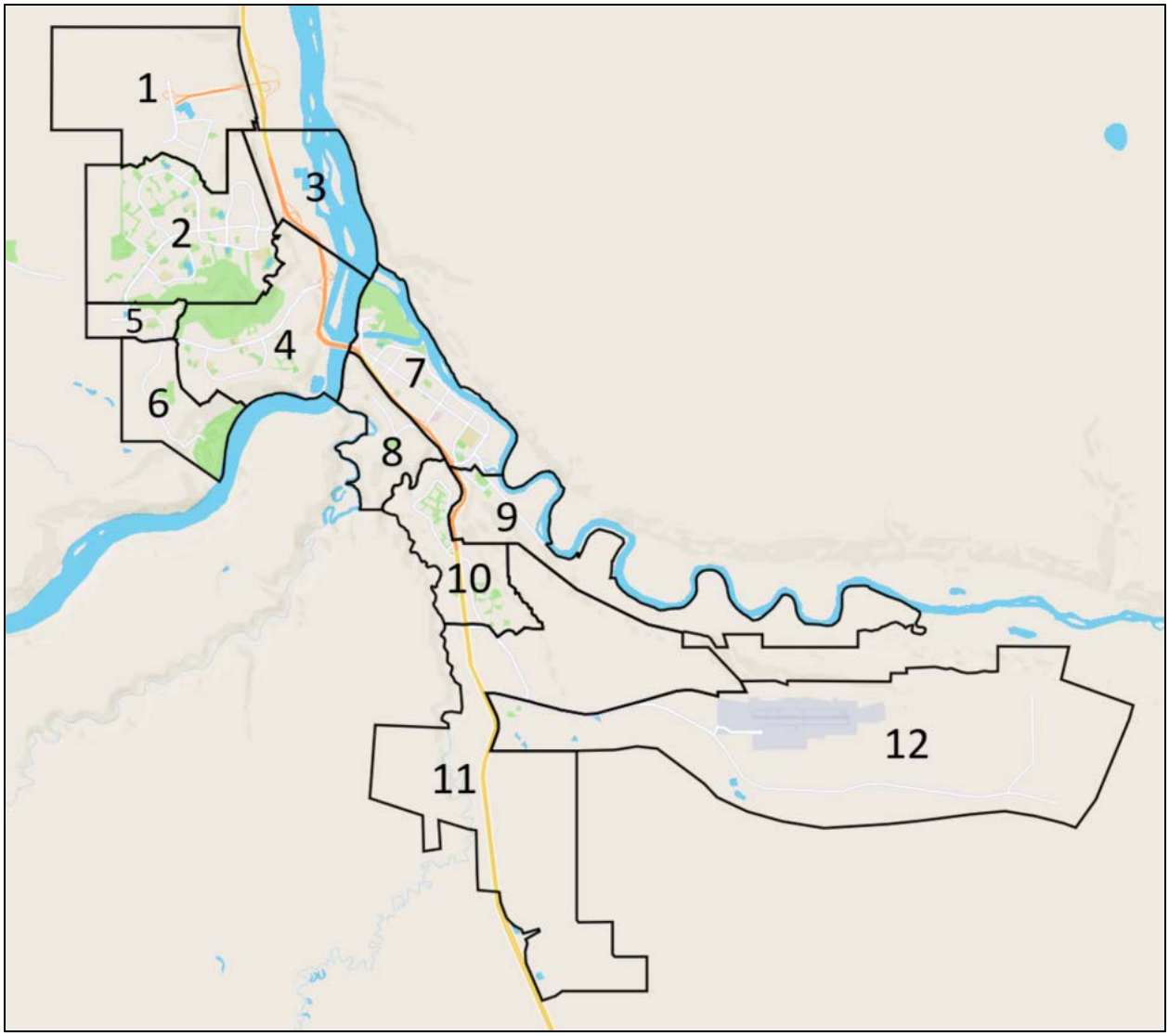

Figure 1: StreetLight Zone System

Table 1 provides a list of zones used for analyzing existing origin-destination travel patterns using the StreetLight Data Platform and their general land use characteristics.

Table 1: Wood Buffalo Traffic Zones Used for StreetLight Analysis

#	Zone	Primary Land Use(s)					Additional Notes
		Res.	Ind.	Com.	Inst.	N.A.	
1	Parsons Creek	✓		✓			
2	Timberlea	✓		✓	✓		
3	TaigaNova		✓	✓			
4	Thickwood	✓		✓	✓		
5	Dickinsfield	✓			✓		
6	Wood Buffalo	✓					

#	Zone	Primary Land Use(s)					Additional Notes
		Res.	Ind.	Com.	Inst.	N.A.	
7	Downtown	✓		✓	✓		
8	Abasand	✓			✓		
9	Waterways & Draper	✓					
10	Beacon Hill & Gregoire	✓		✓	✓		
11	Mackenzie, Saline Creek, Hwy 63 SE, & Hwy 63 SW		✓				
12	Airport Industrial, Saprae Creek, & Saprae Creek Trail Corridor	✓		✓			

A subsequent analysis was performed on Zone 7 (Downtown), which was subdivided into three subzones (see **Figure 2**):

- Zone 7A;
- Zone 7B; and
- Zone 7C.

These subzones were based on the land uses in the Downtown, with 7A being predominantly residential with some office, 7B being predominantly commercial, and 7C containing health, education and some residential. The three subzones are illustrated in **Figure 2**.

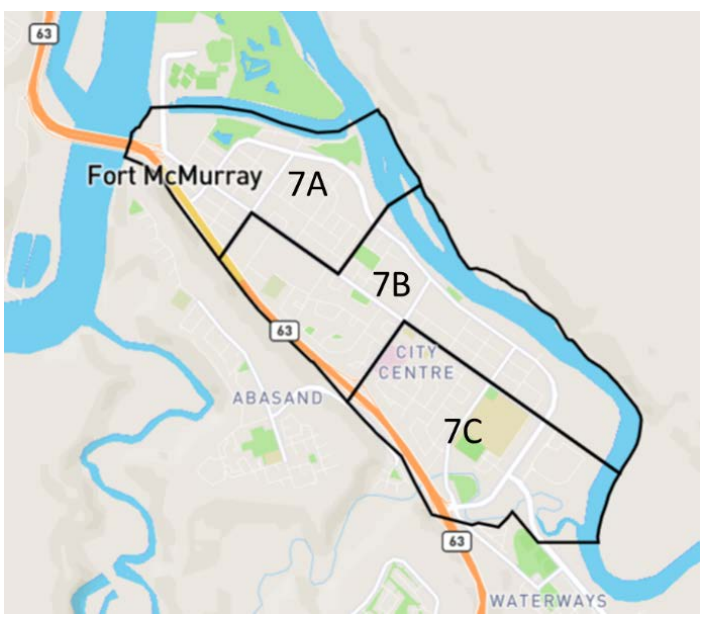

Figure 2: StreetLight Zone System of Subdivided Zone 7 (Downtown)

2.0 Demand Analysis

An analysis was undertaken using the Streetlight Data to obtain relevant travel demand data during Fall 2019.

2.1 When Does Wood Buffalo Travel?

Travel demands fluctuate throughout the day and can be significantly different on weekdays compared to weekends. To understand travel demands, it is important to look at travel profiles by time of day and day of the week.

The trip start time profile for daily trips anywhere in Wood Buffalo is illustrated in **Figure 3**. As with other municipalities, Wood Buffalo experiences sharp morning and afternoon peaks. These peaks represent the times when people are generally travelling to and from work and school. It is noted that on average, the weekday travel demand in the PM peak is significantly higher than in the AM peak, and the midday is similar to the AM peak demand. Weekend peaks are during the midday and early afternoon, and are at a similar scale to the Weekday AM peaks.

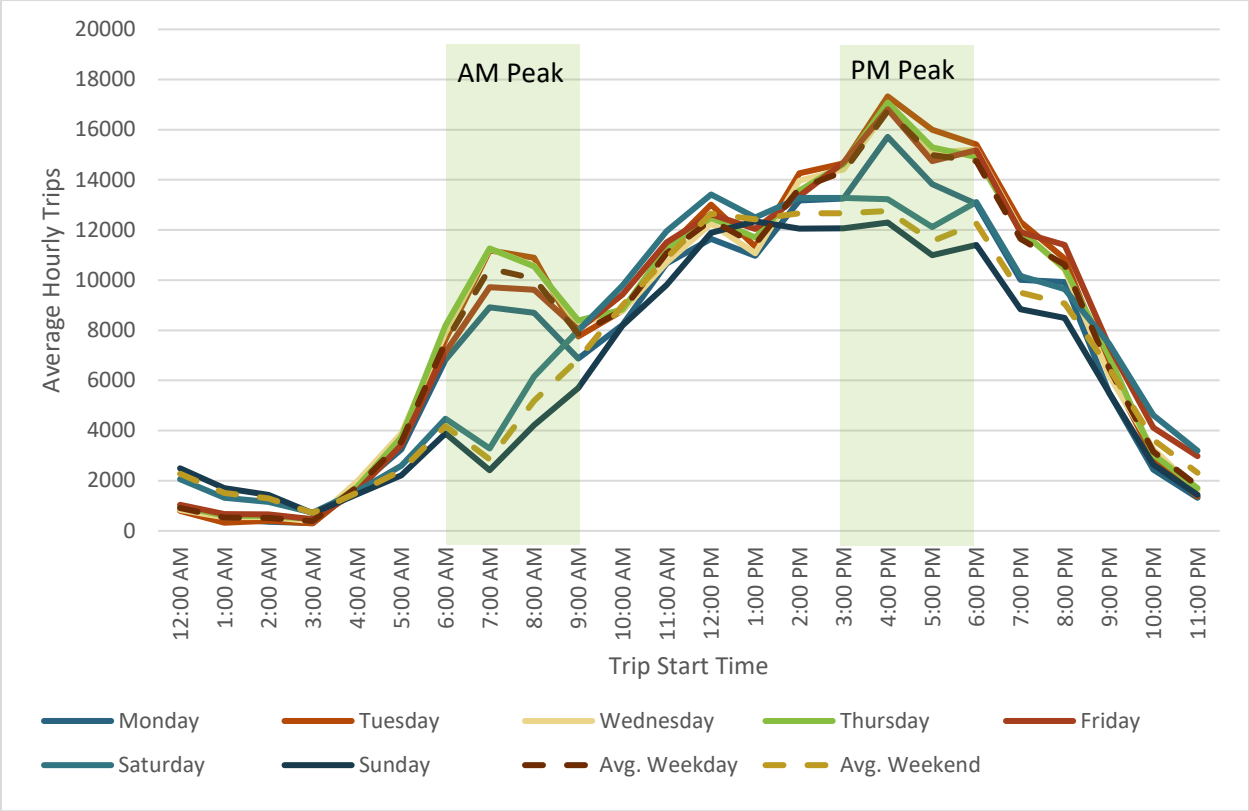

Figure 3: Travel Patterns in Wood Buffalo

Maximum traffic flow is on weekday from 7AM to 8AM (5.4% of daily demand) and from 4PM to 5PM (8.6% of daily demand). For an average weekend day, a single peak is observed from 12PM to 6PM.

2.2 Where Does Wood Buffalo Travel?

2.2.1 Weekday AM Peak

The weekday AM peak period demand for all zones is illustrated in **Figure 4**. Trips are characterized as follows:

- Trips from Zone: Trips that originate inside a zone and are destined outside of the zone;
- Trips to Zone: Trips that originate outside of a zone and are destined inside the zone; and
- Trips within Zone: Trips that originate and are destined within the same zone.

Further, **Figure 5** illustrates weekday AM peak period demand of the Downtown subzones.

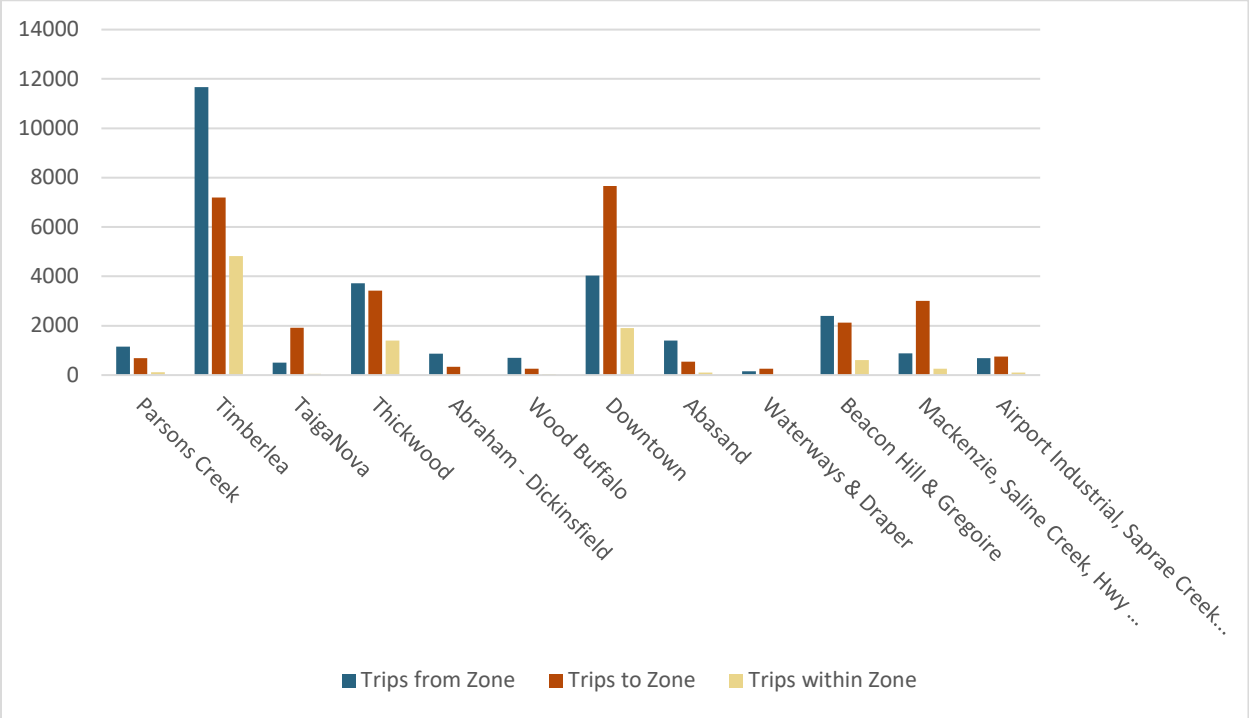

Figure 4: Weekday AM Peak Period Trip Origins and Destinations for all Zones

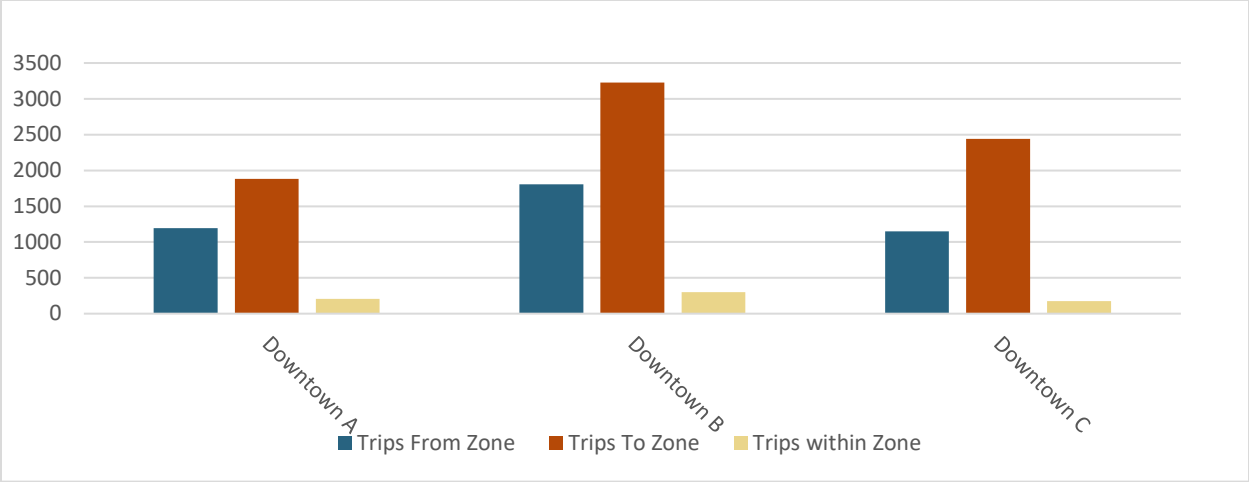

Figure 5: Weekday AM Peak Period Trip Origins and Destinations of Downtown Subzones

Table 2 shows that 69% of all trip origins are represented by three zones. It also highlights that the subzones within Downtown have a similar percentage of trips originating in each, with Downtown B producing the most trips of the three subzones.

Table 2: Weekday AM Peak - Top Origin Zones

Zone #	Zone Name	% of Total Origins
Zone 2	Timberlea	41.5%
Zone 7	Downtown	14.3%
Zone 7A	Downtown A	4.1%
Zone 7B	Downtown B	6.2%
Zone 7C	Downtown C	4.0%
Zone 4	Thickwood	13.2%

These same zones also make up 64.9% of all trip destinations as illustrated in **Table 3**. It also highlights that Downtown B attracts the most trips of the three Downtown subzones.

Table 3: Weekday AM Peak - Top Destination Zones

Zone #	Zone Name	% of Total Destinations
Zone 7	Downtown	27.2%
Zone 7A	Downtown A	6.7%
Zone 7B	Downtown B	11.6%
Zone 7C	Downtown C	8.8%
Zone 2	Timberlea	25.6%
Zone 4	Thickwood	12.1%

The Origin-Destination (OD) matrix for AM peak period trips is presented in **Table 4**. Trips shown along the diagonal of the table represent internal trips that begin and end within the same zone. In total there are approximately 33.5% of trips in the Weekday AM peak that are identified as “internal” trips.

Table 4: Weekday AM Peak Period Origin-Destination Matrix (% of AM peak period trips)

O / D	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	0.43%	1.94%	0.26%	0.33%	0.02%	0.07%	0.75%	0.00%	0.00%	0.07%	0.20%	0.01%	4.1%
2	1.57%	17.19%	4.21%	3.32%	0.61%	0.33%	9.06%	0.24%	0.19%	1.76%	2.54%	0.45%	41.5%
3	0.03%	0.86%	0.19%	0.20%	0.03%	0.03%	0.22%	0.07%	0.01%	0.04%	0.09%	0.03%	1.8%
4	0.16%	2.08%	0.68%	4.97%	0.23%	0.15%	3.13%	0.32%	0.09%	0.41%	0.76%	0.21%	13.2%
5	0.02%	0.53%	0.17%	0.63%	0.05%	0.11%	0.80%	0.06%	0.01%	0.38%	0.30%	0.00%	3.1%
6	0.01%	0.29%	0.19%	0.88%	0.06%	0.14%	0.69%	0.04%	0.02%	0.05%	0.09%	0.02%	2.5%
7	0.17%	1.60%	0.43%	1.04%	0.04%	0.07%	6.77%	0.49%	0.29%	1.23%	1.92%	0.25%	14.3%
8	0.00%	0.26%	0.37%	0.12%	0.00%	0.00%	2.09%	0.34%	0.00%	0.48%	0.99%	0.31%	5.0%
9	0.00%	0.01%	0.00%	0.00%	0.01%	0.00%	0.26%	0.03%	0.02%	0.07%	0.16%	0.01%	0.6%
10	0.03%	0.30%	0.18%	0.35%	0.14%	0.02%	2.06%	0.17%	0.26%	2.18%	2.13%	0.72%	8.5%
11	0.00%	0.28%	0.07%	0.19%	0.00%	0.02%	0.68%	0.07%	0.01%	0.61%	0.92%	0.27%	3.1%
12	0.01%	0.23%	0.07%	0.12%	0.00%	0.00%	0.68%	0.06%	0.00%	0.29%	0.56%	0.37%	2.4%
Total	2.4%	25.6%	6.8%	12.1%	1.2%	0.9%	27.2%	1.9%	0.9%	7.6%	10.7%	2.6%	100%

Table 5: Weekday AM Peak Period Origin-Destination Matrix of Trips Originating in Downtown

O / D	1	2	3	4	5	6	7	8	9	10	11	12	Total
7A	0.26%	2.50%	1.20%	1.35%	0.14%	0.17%	16.40%	0.65%	0.31%	1.49%	4.02%	0.26%	28.8%
7B	0.46%	5.73%	1.20%	3.32%	0.12%	0.34%	19.43%	1.78%	0.99%	2.89%	6.53%	0.75%	43.5%
7C	0.55%	2.75%	0.07%	2.43%	0.00%	0.00%	11.49%	1.20%	0.89%	4.74%	2.75%	0.82%	27.7%
Total	1.3%	11.0%	2.5%	7.1%	0.3%	0.5%	47.3%	3.6%	2.2%	9.1%	13.3%	1.8%	100%

Due to the significance of the Downtown as an origin and destination, and its importance in the current transit system, Downtown zone (7) was broken into sub-zones. This has allowed for a more detailed analysis of this important area of Fort McMurray, with a view to realising the greatest potential for transit ridership growth through the development of the Plan.

The OD matrix for AM peak period trips originating in and destined to Downtown (Zone 7) are presented in **Table 5** and **Table 6**, respectively. As noted previously, zone 7B has the most origin and destination trips of the three subzones; 43.5% of all trips originating in Zone 7 come from Zone 7B, and 10.52% of all trips destined for Zone 7 are travelling to Zone 7B. 47.3% of trips originating in Zone 7 stay within the zone. 32.9% of trips destined for Zone 7 originate in Zone 2 (Timberlea).

Table 6: Weekday AM Peak Period Origin-Destination Matrix of Trips Destined to Downtown

O / D	7A	7B	7C	Total
1	0.74%	1.03%	0.91%	2.7%
2	6.44%	13.01%	13.44%	32.9%
3	0.16%	0.42%	0.20%	0.8%
4	2.84%	5.51%	2.94%	11.3%
5	1.31%	0.77%	0.94%	3.0%
6	0.50%	0.90%	1.06%	2.5%
7	8.31%	10.52%	6.36%	25.2%
8	1.90%	3.71%	2.43%	8.0%
9	0.32%	0.28%	0.37%	1.0%
10	1.11%	4.28%	2.17%	7.6%
11	1.05%	1.19%	0.16%	2.4%
12	0.24%	1.11%	1.35%	2.7%
Total	24.9%	42.8%	32.3%	100%

The top 10 OD pairs during the weekday AM peak period are summarized in **Table 7**.

Table 7: Highest Origin-Destination Pairs during Weekday AM Peak Period

	Origin #	Origin	Destination #	Destination	Internal Trip	% of Weekday AM peak trips
1	2	Timberlea	2	Timberlea	Yes	17.2%
2	2	Timberlea	7	Downtown	No	9.1%
3	7	Downtown	7	Downtown	Yes	6.8%
4	4	Thickwood	4	Thickwood	Yes	5.0%
5	2	Timberlea	3	TaigaNova	No	4.2%
6	2	Timberlea	4	Thickwood	No	3.3%
7	4	Thickwood	7	Downtown	No	3.1%
8	2	Timberlea	11	Mackenzie, Saline Creek, Hwy 63 South	No	2.5%
9	10	Beacon Hill & Gregoire	10	Beacon Hill & Gregoire	No	2.2%
10	10	Beacon Hill & Gregoire	11	Mackenzie, Saline Creek, Hwy 63 South	No	2.1%

2.2.2 Weekday PM Peak

The weekday PM Peak Period Demand is illustrated in **Figure 6**, while **Figure 7** illustrates weekday PM Peak Period Demand of the Downtown subzones.

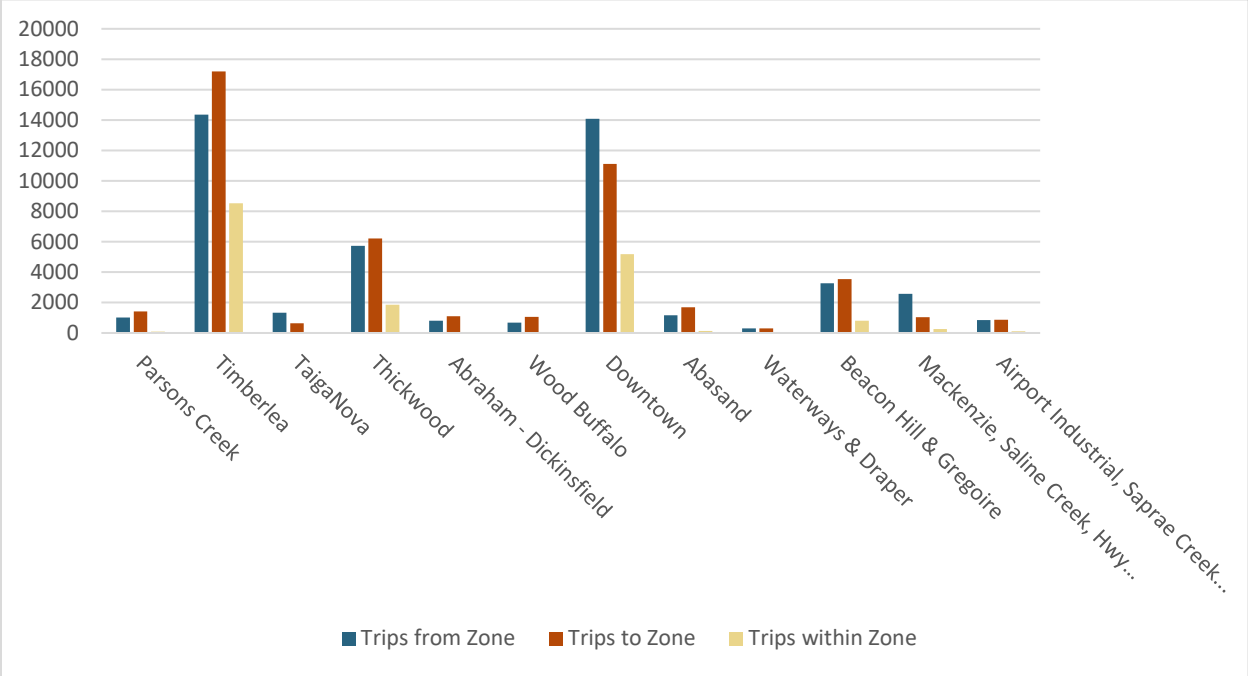

Figure 6: Weekday PM Peak Period Trip Origins and Destinations for all Zones

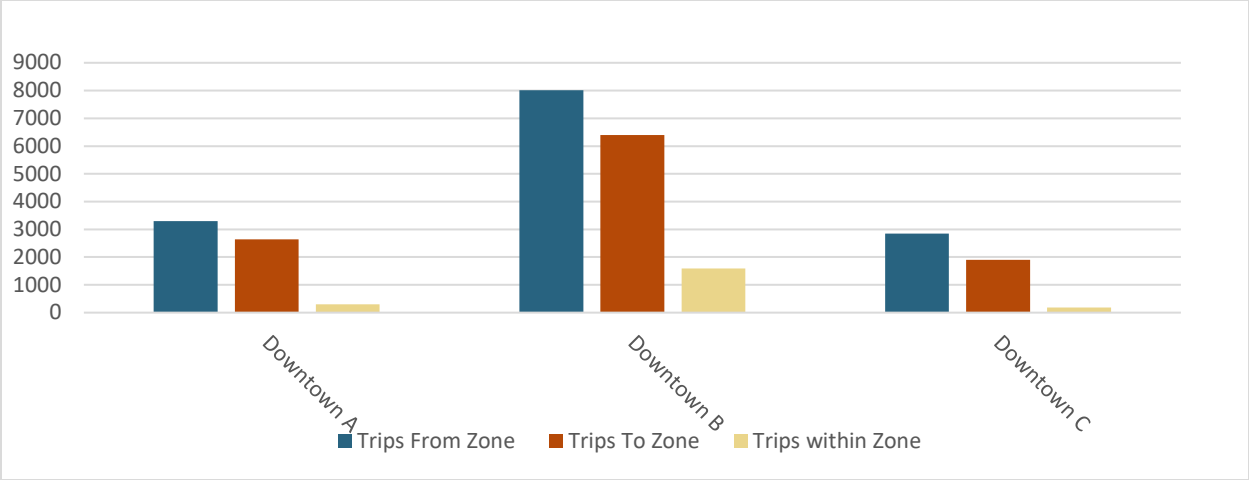

Figure 7: Weekday PM Peak Period Trip Origins and Destinations of Downtown Subzones

Table 8 shows that 74% of all trip origins are represented by three zones: Zone 2, Zone 7, and Zone 4. The table also highlights that Zone Downtown B produces the most origin trips of the three Downtown subzones, with 17.3% of transit trips originating from this subzone.

Table 8: Weekday PM Peak - Top Origin Zones

Zone #	Zone Name	% of Total Origins
Zone 2	Timberlea	31.1%
Zone 7	Downtown	30.5%
Zone 7A	Downtown A	7.1%
Zone 7B	Downtown B	17.3%
Zone 7C	Downtown C	6.1%
Zone 4	Thickwood	12.4%

These same zones also make up 74.8% of all trip destinations, as illustrated in **Table 9**. Similarly, Downtown B attracts the most destination trips of the three subzones, with 14.1% of Weekday PM Peak.

Table 9: Weekday PM Peak - Top Destination Zones

Zone #	Zone Name	% of Total Destinations
Zone 2	Timberlea	37.2%
Zone 7	Downtown	24.1%
Zone 7A	Downtown A	5.8%
Zone 7B	Downtown B	14.1%
Zone 7C	Downtown C	4.2%
Zone 4	Thickwood	13.5%

The Origin-Destination (OD) matrix for weekday PM peak period trips is presented in **Table 10**. Trips shown along the diagonal of the table represent internal trips that begin and end within the same zone. In total there are approximately 37.2% of trips in the PM peak that are identified as “internal” trips.

Table 10: Weekday PM Peak Period Origin-Destination Matrix (% of PM peak period trips)

O / D	1	2	3	4	5	6	7	8	9	10	11	12	Total
1	0.21%	1.36%	0.05%	0.17%	0.02%	0.03%	0.25%	0.02%	0.00%	0.03%	0.03%	0.01%	2.2%
2	1.68%	18.50%	0.67%	3.46%	0.76%	0.48%	4.21%	0.28%	0.04%	0.69%	0.21%	0.17%	31.1%
3	0.10%	1.62%	0.07%	0.21%	0.08%	0.13%	0.33%	0.13%	0.00%	0.09%	0.06%	0.05%	2.9%
4	0.21%	3.76%	0.10%	4.04%	0.48%	0.72%	2.12%	0.18%	0.04%	0.53%	0.10%	0.12%	12.4%
5	0.03%	0.58%	0.02%	0.45%	0.07%	0.08%	0.35%	0.00%	0.00%	0.15%	0.02%	0.01%	1.8%
6	0.04%	0.48%	0.02%	0.48%	0.04%	0.13%	0.21%	0.00%	0.00%	0.07%	0.01%	0.01%	1.5%
7	0.63%	8.00%	0.22%	3.42%	0.58%	0.51%	11.23%	1.92%	0.37%	2.52%	0.54%	0.54%	30.5%
8	0.05%	0.31%	0.06%	0.18%	0.05%	0.02%	1.17%	0.29%	0.03%	0.28%	0.06%	0.07%	2.5%
9	0.00%	0.09%	0.00%	0.05%	0.01%	0.01%	0.36%	0.01%	0.04%	0.07%	0.01%	0.00%	0.7%
10	0.05%	1.10%	0.10%	0.44%	0.12%	0.10%	2.24%	0.36%	0.05%	1.74%	0.49%	0.29%	7.1%
11	0.07%	1.00%	0.07%	0.42%	0.18%	0.07%	1.24%	0.40%	0.05%	1.13%	0.58%	0.33%	5.5%
12	0.00%	0.42%	0.01%	0.15%	0.01%	0.02%	0.35%	0.08%	0.00%	0.37%	0.14%	0.26%	1.8%
Total	3.1%	37.2%	1.4%	13.5%	2.4%	2.3%	24.1%	3.7%	0.6%	7.7%	2.2%	1.9%	100%

Table 11: Weekday PM Peak Period Origin-Destination Matrix of Trips Originating in Downtown

O / D	1	2	3	4	5	6	7	8	9	10	11	12	Total
7A	0.49%	5.62%	0.28%	3.06%	0.68%	0.35%	9.13%	1.27%	0.29%	1.34%	0.44%	0.34%	23.3%
7B	1.09%	15.04%	0.28%	6.16%	0.85%	0.70%	20.78%	3.82%	0.71%	5.17%	1.11%	0.90%	56.6%
7C	0.42%	5.02%	0.12%	1.88%	0.35%	0.59%	7.52%	1.38%	0.27%	1.76%	0.25%	0.57%	20.1%
Total	2.0%	25.7%	0.7%	11.1%	1.9%	1.6%	37.4%	6.5%	1.3%	8.3%	1.8%	1.8%	100%

Due to the significance of the Downtown as an origin and destination, and its importance in the current transit system, Downtown zone (7) was broken into sub-zones. This has allowed for a more detailed analysis of this important area of Fort McMurray, with a view to realising the greatest potential for transit ridership growth through the development of the Plan.

The OD matrix for weekday PM peak period trips originating in and destined to Downtown (Zone 7) are presented in **Table 11** and **Table 12**, respectively. As noted previously, Zone 7B has the most origin and destination trips of the three subzones with 20.78% of all trips originating in Zone 7 come from Zone 7B. Also, trips internal to Zone 7 make up 37.4% of trips originating in the zone. 26.94% of all trips originating from Zone 7 are travelling to Zone 7B. Also, trips destined for the Zone 7 account for 48.0% of all Weekday PM Peak Period Trips.

Table 12: Weekday PM Peak Period Origin-Destination Matrix of Trips Destined to Downtown

O / D	7A	7B	7C	Total
1	0.27%	0.62%	0.07%	1.0%
2	3.75%	9.97%	2.08%	15.8%
3	0.52%	0.68%	0.13%	1.3%
4	2.37%	5.15%	1.19%	8.7%
5	0.24%	0.90%	0.24%	1.4%
6	0.21%	0.54%	0.13%	0.9%
7	12.27%	26.94%	8.80%	48.0%
8	0.80%	3.16%	1.02%	5.0%
9	0.29%	0.75%	0.50%	1.5%
10	1.86%	5.65%	2.07%	9.6%
11	1.18%	3.23%	0.99%	5.4%
12	0.38%	0.93%	0.13%	1.4%
Total	24.1%	58.5%	17.4%	100%

The top 10 OD pairs during the weekday PM peak period are summarized in **Table 13**.

Table 13: Highest Origin-Destination Pairs during Weekday PM Peak Period

	Origin	Origin	Destination	Destination	Internal Trip	% of PM peak trips
1	2	Timberlea	2	Timberlea	Yes	18.5%
2	7	Downtown	7	Downtown	Yes	11.2%
3	7	Downtown	2	Timberlea	No	8.0%
4	2	Timberlea	7	Downtown	No	4.2%
5	4	Thickwood	4	Thickwood	Yes	4.0%
6	4	Thickwood	2	Timberlea	No	3.8%
7	2	Timberlea	4	Thickwood	No	3.5%
8	7	Downtown	4	Thickwood	No	3.4%
9	7	Downtown	10	Beacon Hill & Gregoire	No	2.5%
10	10	Beacon Hill & Gregoire	7	Downtown	No	2.2%

2.3 Summary

Travel demand in Fort McMurray follows common patterns for urban areas, with a shorter weekday AM peak, and a longer weekday PM peak. Demand on weekends is generally lower, with less pronounced peaks. Also common with many urban areas, the central downtown area is one of the busiest zones throughout the day.

However, Fort McMurray has its own idiosyncrasies that demonstrate its unique geography and development patterns. In particular, the Timberlea area is a key area of activity, with significant internal travel demand, as well as to many neighbouring areas. Thickwood also represents a significant proportion of travel demand.

With existing transit terminals in all three significant demand areas (Downtown, Timberlea, and Thickwood), RMWB Transit is well-positioned to take advantage of the ridership opportunities with, to, and from these areas. The demand data detailed in this section will be used in the development of a new transit system that seeks to make the most of these opportunities.

3.0 Supply Analysis

3.1 Amount of Service

Wood Buffalo is currently served by 16 transit routes. The amount of service is presented in **Table 14**.

Table 14: Existing Weekday Transit Service Supply (Trips per Period)

Route Number	Route Name	6:00-9:00 (AM Peak)	9:00-15:00	15:00-18:00 (PM Peak)	18:00-22:00	22:00-6:00	Daily
Route 7	Abasand Heights	3	6	3	2	0	14
Route 8	Beacon Hill Drive	3	6	3	2	0	14
Route 9	Morgan and Harpe Heights	3	6	3	2	0	14
Route 10	Gregoire and Prairie Creek	2	6	3	3	0	14
Route 11	Fort McMurray Airport	6	5	5	5	1	22
Route 12	Thickwood to Timberlea	5	12	6	8	2	33
Route 15	Timberlea	6	12	7	8	3	36
Route 16	Thickwood	6	12	7	8	3	36
Route 17	Parsons Creek Stone Creek	2	6	3	2	0	13
Route 18	TaigaNova Crescent	3	6	3	2	0	14
Route 41	Brett Drive Eagle Ridge	4	6	6	5	0	21
Route 51	Wood Buffalo Estates	2	6	3	2	0	13
Route 61	Thickwood Terminal	3	1	4	0	0	8
Route 91	Longboat Landing	2	6	3	2	0	13
Route 92	Syncrude Sport and Wellness	3	6	3	1	0	13
Route 99	MacDonald Island	4	12	6	8	1	31
All Routes		57	114	68	60	10	309
Avg. Trips / Hr		19	19	23	15	1	

It is noted the highest amount of transit service is provided during weekday PM peak periods, with an average of 23 trips per hour. Route 15 and Route 16 provide the largest number of daily weekday trips with a total of 36 trips on each route respectively. The AM and PM peak periods represent 40% of total weekday transit trips, transit service provided with midday representing 37% of total weekday service. The weekday profile of vehicles in services is illustrated in **Figure 8**.

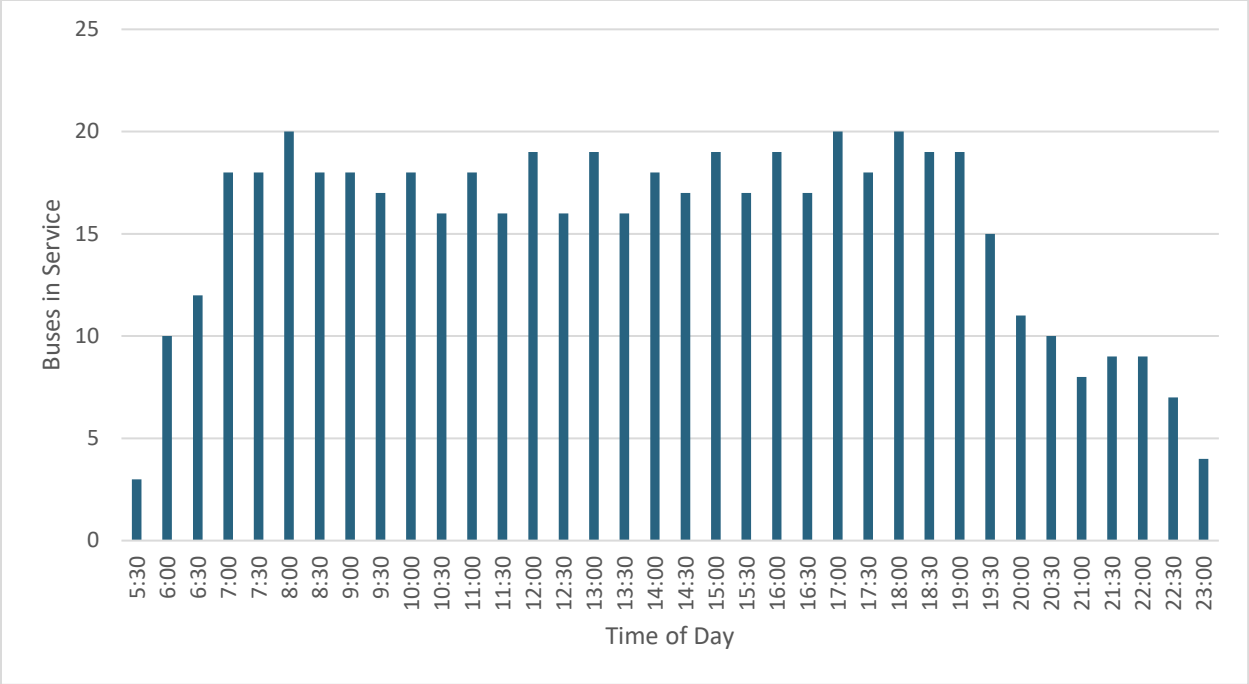

Figure 8: Weekday Buses in Service

3.2 Routes serving each zone

Each route serves several of the identified zones, and a breakdown of this is presented in **Table 15**.

Table 15: Transit Routes Serving Each Zone

Route	Zones Served			
Route 7	7A, 7B, 7C	8		
Route 8	7A, 7B, 7C	10		
Route 9	2			
Route 10	7A, 7B, 7C	10	11	12
Route 11	7A, 7B, 7C	10	11	12
Route 12	2	4	5	
Route 15	2	7A		
Route 16	4	7A		
Route 17	1	2		
Route 18	3	7A		
Route 41	2			
Route 51	4	6		
Route 61	4			
Route 91	7A, 7B, 7C	9		
Route 92	7A, 7B, 7C			
Route 99	7A			

Out of the ten routes that service Zone 7 (Downtown), six routes service all Subzones (7A, 7B, and 7C) and the four routes service only Subzone 7A. 7B has the majority of origin and destination trips in Zone 7 in both the weekday AM and PM peaks. The data in **Table 15** has been organized into an origin-destination style matrix to show which routes can be used to travel between zones. This is illustrated in **Table 16**.

Table 16: Transit Routes Connecting Zones

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	17	17										
Zone 2	17	9, 12, 15, 17, 41		12	12		15					
Zone 3			18				18					
Zone 4		12		12, 16, 51, 61	12	51	16					
Zone 5		12		12	12							
Zone 6				51		51						
Zone 7		15	18	16			7, 8, 10, 11, 18, 91, 92, 99	7	91	8, 10, 11	10, 11	11
Zone 8							7	7				
Zone 9							91		91			
Zone 10							8, 10, 11			8, 10, 11	10, 11	11
Zone 11							10, 11			10, 11	10, 11	11
Zone 12							11			11	11	11

The weekday service frequencies shown in **Table 14** were applied to determine the number of trips that connect corresponding zones. The number of bus trips per day between each zone is summarized in **Table 17**. Of the 309 weekday bus trips in Wood Buffalo, 135 serve Downtown.

Table 17: Weekday Transit Service Between Zones (Bus Trips per Day)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	13	13										
Zone 2	13	117		33	33		36					
Zone 3			14				14					
Zone 4		33		90	33	13	36					
Zone 5		33		33	33							
Zone 6				13		13						
Zone 7		36	14	36			135	14	13	50	36	36
Zone 8							14	14				
Zone 9							13		13			
Zone 10							50			50	36	22
Zone 11							36			36	36	22
Zone 12							22			22	22	22

3.3 Weekday AM Peak

Table 18: Weekday AM Peak Transit Service Between Zones

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	2	2										
Zone 2	2	20		5	5		6					
Zone 3			3				3					
Zone 4		5		16	5	2	6					
Zone 5		5		5	5							
Zone 6				2		2						
Zone 7		6	3	6			26	3	2	11	8	8
Zone 8							3	3				
Zone 9							2		2			
Zone 10							11			11	8	6
Zone 11							8			8	8	6
Zone 12							6			6	6	6

3.4 Weekday PM Peak

Table 19: Weekday PM Peak Transit Service between Zones

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	3	3										
Zone 2	3	25		6	6		7					
Zone 3			3				3					
Zone 4		6		20	6	3	7					
Zone 5		6		6	6							
Zone 6				3		3						
Zone 7		7	3	7			29	3	3	11	8	8
Zone 8							3	3				
Zone 9							3		3			
Zone 10							11			11	8	5
Zone 11							8			8	8	5
Zone 12							5			5	5	5

4.0 Comparison of Supply and Demand Data

Areas with higher travel demand by any mode of transportation can offer greater potential for transit ridership. The demand data that was obtained through StreetLight was compared to the scheduled transit services that were provided in the Fall of 2019 to see how the transit network aligns with how people travel by all modes.

The following methodology was used:

- Analysis of weekday Daily (all day), AM and PM peak travel periods;
- Determine whether direct (no transfers required) service is available for each of the major demand pairs; and
- Identify areas without service that have little demand

4.1 Weekday Daily Travel

Table 20 below presents the daily (all day) trips by any mode compared to the number of bus trips that are provided to serve each OD pair. Zone pairs with high numbers (coloured red) indicate where the amount of transit service currently provided is low compared to demand for travel by any mode. It is noted that land use, site connectivity, and trip purpose influence the ability to attract transit riders. As such, the travel demand for all modes may not directly represent transit ridership potential.

Table 20: Total Travel Demand per Bus Trip Provided (daily)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	41	217										
Zone 2	232	309		210	41		306					
Zone 3			13				36					
Zone 4		210		99	28	86	132					
Zone 5		38		30	3							
Zone 6				89		20						
Zone 7		338	39	153			161	215	53	97	43	25

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 8							193	45				
Zone 9							45		6			
Zone 10							87			70	48	34
Zone 11							47			46	34	21
Zone 12							39			29	23	34

The travel pairs between zones that have the highest demand per bus trip are presented in **Table 21**.

Table 21: Travel Pairs with High Weekday Travel Demand per Bus Provided

Priority	Origin	Destination	Demand	Demand per bus trip
1	Zone 2	Zone 7	11,017	306
	Zone 7	Zone 2	12,158	338
2	Zone 2	Zone 4	6,936	210
	Zone 4	Zone 2	6,934	210
3	Zone 1	Zone 2	2,819	217
	Zone 2	Zone 1	3,019	232
4	Zone 7	Zone 8	3,015	215
	Zone 8	Zone 7	2,703	193

The following internal zones also experience high demand per bus trip provided.

- Zone 2 309 trips per bus provided
- Zone 7 161 trips per bus provided
- Zone 4 99 trips per bus provided

There are also travel patterns that are not served with a single bus route and would require riders to transfer buses in order to complete an equivalent journey using the current transit system. For example, a significant number of trips by any mode travel between Zone 2 and Zone 3, without a direct transit service connection. When combined, a total of 17% of daily trips by any mode are not served by direct transit services in the current system. The most underserved travel pairs are listed in **Table 22**.

Table 22: Daily Travel Pairs Without Direct Transit Connections

	Origin	Destination	Travel Demand	% of Total Daily Demand
1	Zone 2	Zone 3	2,697	1.38%
2	Zone 3	Zone 2	2,189	1.12%
3	Zone 2	Zone 10	1,799	0.92%
4	Zone 10	Zone 2	1,611	0.82%
5	Zone 2	Zone 11	1,184	0.61%
6	Zone 11	Zone 2	1,092	0.56%
7	Zone 2	Zone 5	1,036	0.53%
8	Zone 7	Zone 1	983	0.50%

4.2 Weekday AM Peak

The Weekday AM Peak Period travel demand per number of bus trips that are provided is presented in **Table 23**.

Table 23: Total Travel Demand per Bus Trip Provided (Weekday AM Peak Period)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	60	273										
Zone 2	221	242		187	35		425					
Zone 3			18				21					
Zone 4		117		87	13	22	147					
Zone 5		30		35	3							
Zone 6				124		20						
Zone 7		75	40	49			73	46	42	32	68	9
Zone 8							196	32				
Zone 9							37		3			
Zone 10							53			56	75	34

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 11							24			21	32	13
Zone 12							32			14	26	17

The travel pairs between zones that indicate the highest demand per bus trip provided are presented in **Table 24**.

Table 24: Travel Pairs with High Weekday AM Peak Demand per Bus Provided

Priority	Origin	Destination	Demand	Demand per bus trip
1	Zone 2	Zone 7	2,551	425
2	Zone 1	Zone 2	546	273
3	Zone 2	Zone 1	441	271
4	Zone 8	Zone 7	588	196
5	Zone 2	Zone 4	934	187

The following internal zones also experience high demand per bus trip provided.

- Zone 2 242 trips per bus provided
- Zone 4 87 trips per bus provided
- Zone 7 73 trips per bus provided

There are also travel patterns that are not served with a single bus route and would require riders to transfer buses in order to complete an equivalent journey using the current transit system. For example, a significant number of trips made by any mode travel between Zone 2 and Zone 3 without a direct transit service connection. A total of 24.5% of weekday AM peak period trips are not served by direct transit services in the current system. The most underserved travel pairs are listed in **Table 25**.

Table 25: Weekday AM Peak Travel Pairs Without Direct Transit Connections

	Origin	Destination	Travel Demand	% of Total Daily Demand
1	Zone 2	Zone 3	1,184	4.21%
2	Zone 2	Zone 11	716	2.54%
3	Zone 2	Zone 10	496	1.76%
4	Zone 8	Zone 11	279	0.99%
5	Zone 3	Zone 2	243	0.86%

4.3 Weekday PM Peak

The PM Peak Period travel demand per number of bus trips that are provided is presented in **Table 26**.

Table 26: Total Travel Demand per Bus Trip Provided (PM Peak Period)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12
Zone 1	33	209										
Zone 2	257	341		266	58		277					
Zone 3			11				51					
Zone 4		289		93	37	110	140					
Zone 5		45		35	5							
Zone 6				74		20						
Zone 7		526	34	225			178	295	57	106	31	31
Zone 8							179	44				
Zone 9							55		7			
Zone 10							94			73	28	26
Zone 11							72			65	34	31
Zone 12							32			34	13	24

The travel pairs between zones that indicate the highest demand per bus trip provided are presented in **Table 27**.

Table 27: Travel Pairs with High Weekday PM Peak Demand per Bus Provided

Priority	Origin	Destination	Demand	Demand per bus trip
1	Zone 7	Zone 2	3,685	526
2	Zone 7	Zone 8	886	295
3	Zone 4	Zone 2	1,733	289
4	Zone 2	Zone 7	1,937	277
5	Zone 2	Zone 4	1,593	266

The following internal zones also experience high demand per bus trip provided.

- Zone 2 341 trips per bus provided
- Zone 7 178 trips per bus provided
- Zone 4 93 trips per bus provided

There are also travel patterns that are not served with a single bus route and would require riders to transfer buses in order to complete an equivalent journey using the current transit system. For example, a significant number of trips made by any mode travel between Zone 2 and Zone 3 without a direct transit service connection. A total of 17% of weekday PM peak period are not served by direct transit services in the current system. The most underserved travel pairs are listed in **Table 28**.

Table 28: Weekday PM Peak Travel Pairs Without Direct Transit Connections

	Origin	Destination	Travel Demand	% of Total Daily Demand
1	Zone 3	Zone 2	748	1.62%
2	Zone 10	Zone 2	507	1.10%
3	Zone 11	Zone 2	460	1.00%
4	Zone 2	Zone 10	320	0.69%
5	Zone 7	Zone 1	290	0.63%

4.4 Summary

The weekday daily, AM peak, and PM peak comparisons of supply and demand data are summarized in the tables below.

Table 29: Zones that May Benefit from Additional Internal Transit Service

	AM	PM	Daily
Priority 1	Zone 2 242 trips / bus (17% of AM demand)	Zone 2 341 trips / bus (18.5% of PM demand)	Zone 2 309 trips / bus (18.5% of daily demand)
Priority 2	Zone 4 87 trips / bus (5% of AM demand)	Zone 7 178 trips / bus (11% of PM demand)	Zone 7 161 trips / bus (11% of daily demand)
Priority 3	Zone 7 73 trips / bus (6.5% of AM demand)	Zone 4 93 trips / bus (4% of PM demand)	Zone 4 99 trips / bus (4.5% of daily demand)

Table 29 highlights that Zone 2 (Timberlea), along with Zone 4 (Thickwood) and Zone 7 (Downtown), see significant demand per bus for internal zone trips and could benefit from additional transit service within the zone.

Table 30: Key Travel Patterns Without Direct Transit Service

	AM	PM	Daily
Priority 1	Zone 2 → Zone 3 (4.2% of AM demand)	Zone 3 → Zone 2 (1.6% of PM demand)	Zone 2 & Zone 3 (2.5% of daily demand)
Priority 2	Zone 2 → Zone 11 (2.5% of AM demand)	Zone 10 → Zone 2 (1.1% of PM demand)	Zone 2 & Zone 10 (1.7% of daily demand)
Priority 3	Zone 2 → Zone 10 (1.8% of AM demand)	Zone 11 → Zone 2 (1.0% of PM demand)	Zone 2 & Zone 11 (1.2% of daily demand)

Table 30 indicates that Timberlea is not presently well connected to several other zones, specifically Zone 3 (TaigaNova), Zone 10 (Beacon Hill & Gregoire), and Zone 11 (Mackenzie, Saline Creek, Hwy 63 SE, & Hwy 63 SW).

Table 31: Key travel Patterns that May Benefit from Additional Transit Service

	AM	PM	Daily
Priority 1	Zone 2 → Zone 7 425 trips / bus	Zone 7 → Zone 2 526 trips / bus	Zone 2 & Zone 7 322 trips / bus
Priority 2	Zone 1 → Zone 2 273 trips / bus	Zone 7 → Zone 8 295 trips / bus	Zone 2 & Zone 4 210 trips / bus
Priority 3	Zone 2 → Zone 1 271 trips / bus	Zone 4 → Zone 2 289 trips / bus	Zone 1 & Zone 2 225 trips / bus

Table 31 highlights that travel between Timberlea and the Downtown has a high demand per bus and could benefit from enhanced service. Additional zone pairs that could benefit from enhanced service include Zone 1 (Parsons Creek)/Timberlea, Downtown/Zone 8 (Abasand), and Timberlea/Thickwood.

5.0 Conclusion

The preceding analysis highlights several priority zones and zone pairs for consideration when developing the TMP's transit network and services.

From the perspective of internal zone trips, Timberlea, Thickwood and the Downtown see significant trip demand per bus; introducing more frequent service in these areas to accommodate such trips could be of benefit to the transit system. Further, Downtown is one of the most frequented zones, with the centre of the Downtown (Zone 7B) being the busiest area. Providing service that spans the length of the Downtown would allow transit users to travel to the centre of the zone from either end (Zone 7A or 7C) with relative ease.

While Timberlea is well connected to some zones, it is poorly connected to TaigaNova, Beacon Hill & Gregoire, and Mackenzie, Saline Creek, Hwy 63 SE & Hwy 63 SW. Introducing direct service to provider greater coverage, particularly between Timberlea and the aforementioned zones, could benefit the transit system.

Finally, several zones have a high trip demand per bus and could benefit from increased service. In particular, there is a high demand for trips between Timberlea and Downtown – providing additional service could be of benefit.

The travel demands and priorities noted in this document, in conjunction with community and stakeholder feedback, and existing ridership data, will be used to inform the new network and services outlined in the TMP. By understanding overall travel demand across Fort McMurray, the Plan will be able to prioritize areas and connections with the greatest potential, noting that it is not feasible for RMWB Transit to provide direct connections for all journeys.

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

Appendix C – Engagement Summary

Internal Regional Municipality of Wood Buffalo use only

January 2023 – 21-1297

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1.0 Engagement Summary

1.1 Project Background

The Regional Municipality of Wood Buffalo (RMWB) Transit Master Plan (TMP) is being prepared to address important issues with the form and function of transit in the region. The TMP will establish a vision for RMWB Transit, and steps will be identified that achieve this vision with a methodology built upon existing strengths and best practices.

To develop the TMP, input from the public and stakeholders was needed. The Communications and Engagement Plan (Plan) was submitted to the RMWB at the onset of the project and written to outline the project engagement objectives, principles, style, and tactics and techniques used through the course of this project. This Summary of Engagement speaks to the initiatives and outcomes from each round of engagement undertaken by the project team including:

- Round 1
- Interim Communications Round
- Round 2
- Round 2 Enhanced

Stakeholder discussions from all engagements are summarized in this document and will help inform the recommendations of the RMWB TMP. This summary will be utilized by the technical team to directly inform the service review.

1.2 Overview of Project Engagement

Public engagement for the project was designed in two rounds. Round 1 was held in June/July 2021. Round 2 was held in February/March 2022. An internal round – Round 2 Enhanced – was added as the project progressed, and was held during April 2022. Rounds 1 & 2 were supported by an interim communications round launched in October/November 2021, which ran between Round 1 and Round 2 to maintain project momentum with the decision to delay Round 2 into early 2022.

1.2.1 Engagement Outcomes

The Communications and Engagement Plan identified engagement outcomes. It was through this lens that all engagement activities were designed. Outcomes include short and long-term actions and recommendations to create and improve the transit system. The engagement outcomes for all rounds were to:

1. Identify the varied needs of the public and stakeholders for the transit system;
2. Capture rider experiences;
3. Identify gaps in service;

4. Understand the expectations of residents in the RMWB when it comes to transit;
5. Inform the development and finalization of the RMWB Transit Master Plan; and
6. Identify a clear vision of the future of RMWB Transit.

To achieve these outcomes the Project Team undertook a multi-faceted approach to engaging with the public, RMWB staff, and stakeholders in order to understand how RMWB Transit can better serve the community. The findings from all rounds of engagement were used to develop and refine the TMP – the outcomes of the engagement process are reflected in the recommendations in the main Plan document.

1.2.2 Communications Principles

The Plan outlined a set of Communications Principles to guide key messaging and communications throughout Rounds 1 and Round 2. They are as follows:

- Coordinated Communications and Engagement
- Multiple Communications Methods
- Consistent Visuals
- Accessible Language
- Uniform Tone
- Working with Local Champions

1.3 Stakeholder Identification

To capture feedback from a wide spectrum of individuals and organizations, the Project Team worked closely with the RMWB early on in the project to identify a list of stakeholders and organizations. Stakeholders were categorized and the list was assessed for completeness and the ability to equitably engage a population sample that would accurately reflect ridership on RMWB Transit, and include non-riders to understand their perception of transit. Categories include:

- Municipal Stakeholders
- Transit (general)
- Other Wood Buffalo Departments
- Wood Buffalo Committees
- Industry
- Employers
- Healthcare Facilities
- Group Homes/Affordable Housing Agencies/Housing Support Agencies
- Employment Agencies
- Entrepreneurship
- Event Facilities
- Persons with Disabilities
- Seniors
- Students/Youth

- Indigenous
- Neighbourhood Associations/Community Centres
- New Canadians/English as an Additional Language (EAL)
- Other
- Rural - Contacted through Indigenous and Rural Relations Department (IRR)

The stakeholder list is included in Sub-Appendix A. The list includes groups, organizations, and individuals, and their corresponding high-level issues or interest areas. The stakeholder list was circulated to the Municipality for review and finalization.

In addition to the targeted stakeholders above, the general public was invited to attend all public workshops, engage through the Participate webpage, and fill out the two project surveys.

2.0 Round 1 Engagement Summary

2.1.1 Engagement Goal

Round 1 was conducted with the following goal in mind:

To understand what elements of transit people want to see improved, what is working, and what they want to see in the future. Through Round 1 we will identify opportunities to share with stakeholders what goes into transit planning so they can more effectively participate in creating a vision for the future.

2.1.2 How We Engaged in Round 1

Due to the ongoing COVID-19 pandemic, Round 1 engagement activities were held virtually to minimize risks associated with in-person engagement. Through the public survey, transit employee survey, three stakeholder workshops, and two rural community workshops, the public shared information about issues, transportation needs, and what people expect from RMWB Transit. Using EngagementHQ, Participate Wood Buffalo also featured a page for this project. A high level breakdown of the results is below.

2.1.3 Survey

1. An online public survey was available to the public from June 14 to July 9, 2021, through the City's engagement platform Participate Wood Buffalo. The survey was promoted through social media outlets including Facebook and Twitter. The survey was advertised at bus stops, and on and in City buses.
2. The public survey was distributed in hard copy in the rural communities of Anzac, Fort McKay and Conklin through coordination with the IRR.
3. There were 190 survey responses from 189 contributors, with over 300 comments regarding service provision and rider experience for consideration by the project team.
4. A Transit Operator Survey was available on a public page on Participate Wood Buffalo from June 14 to July 9, 2021, with one response. The RMWB conducted an additional 15 interviews with transit staff to identify issues, concerns, and areas for improvement regarding transit operations.

2.1.4 Workshops

1. Three stakeholder workshops were held between June 15 and 16, 2021, with 30 attendees.
2. Two rural community workshops were held. One for Anzac on June 22, 2021, and one for Fort McKay on July 14, 2021. The rural workshops were attended by a total of 4 participants.

2.1.5 Participate Wood Buffalo

1. At the closure of Round 1, the Participate Wood Buffalo Ideas Tab generated 13 ideas for how to improve transit. One question was received on the Q&A tab from the public, with a personalized response from City staff.

3.0 Round 1 Engagement Techniques & Results

3.1 Methods of Information Sharing

The Project Team utilized a multi-pronged approach to information sharing engagement. The Project Team used the following methods to share information in Round 1.

3.1.1 Participate Wood Buffalo

- The project team leveraged the City's engagement website, Participate Wood Buffalo, to convey information through a dedicated project webpage. The page included the Municipality's standardized branding for project recognition. The Participate webpage for the TMP was launched in Round 1 and included information about the project and opportunities to engage with the project team. Information included:
  - A link to the project survey
  - Additional opportunities to engage such as a Q&A tab, Locations tab, and Ideas tab
  - Quick polls
  - Project Frequently Asked Questions (FAQ)
  - Project timeline
  - Registration for project updates
  - Contact to the project team

3.1.2 Branding & Project Advertising

- The RMWB Communications Department developed colourful and eye-catching graphics to generate excitement for the project. The graphics were incorporated in all project communications, including:
  - Social media posts and information releases.
  - Email correspondence from the Dillon team including workshop invitations and the Feedback Form.
  - The project survey
  - Signage posted at bus stops, in, and on buses.
- The RMWB posted advertisements for the project through Spotify with a pre-recorded advertisement based on a script created by the team.

3.1.3 Social Media & Media Promotion

- The RMWB project team posted a media release in Round 1, which was distributed to the RMWB media contact list.
- The RMWB leveraged a number of social media and media tools to release information on the project and project updates. The project updates included links to the survey and directed

individual feedback to the Participate Wood Buffalo project page. The City monitored the likes and comments on the posts.

- Social Media:
  - Twitter & Instagram – Shared to the City's corporate account (@RMWoodBuffalo) with the hashtags #RMWBTransitPlan and #RMWB.
  - Facebook – Shared to the RMWB Government page.
- Traditional Media - Radio:
  - The RMWB project team held a 20-minute interview with Mix 103.7, the project was given light coverage on Rogers and Harvard radio and BINGO spots on CFWE.

3.2 Engagement Activities

3.2.1 Public Workshops

The Dillon team sent 33 public workshop invitations to individuals and organizations identified on the stakeholder list where contact information was available. Where direct contact information was not available some stakeholder organizations were contacted directly through contact website portals. The RMWB was responsible for sending invitations to community associations and City staff. Dillon developed text for the email invite, including links to register for the virtual Zoom workshop.

Three stakeholder workshops were held between June 15th and 16th, 2021, with 30 attendees. The project team developed two templates for each break-out room team - a facilitator copy and a note-taker copy.

Subject matter experts gave a presentation at the start of each workshop. The presentation included a piece on "Transit 101" that outlined, at a high level, the methodology of transit planning to allow stakeholders to understand how the use of transit data influences decision making.

3.2.2 Workshop Feedback

All stakeholder workshops had a dedicated note-taker assigned by Dillon to catalogue all comments and information provided by the stakeholders. Based on these, preliminary themes were developed and later revised based on additional feedback received through the public survey. What we heard is categorized with survey comments by preliminary themes and compiled in detailed summaries in **Section 4.0**.

3.2.3 Workshop Evaluation

An evaluation form was developed in GoogleForms and circulated to all workshop attendees to gather input on the Workshops and any recommendations for the project team to improve upon. The GoogleForm also provided stakeholders with additional opportunities to submit any feedback they did not share during the workshop. The Project Team received seven responses to the feedback survey. All

respondents agreed or strongly agreed that the presentation was informative, they understood the objectives of the meeting, felt the agenda was appropriate and well facilitated, and that they had opportunities to share their opinion. All seven evaluation respondents identified that they were interested in participating in Round 2 engagement activities.

Key takeaways from the feedback form include:

- Concern that feedback gets lost for small segments of the population. The respondent gave senior-specific feedback - even if it can't be implemented it's important to know why so it can be explained to the seniors.
- The session was well facilitated.
- There should be a partner sharing pocket or box on board buses. This would allow community partner organization to share their resources with people travelling in the bus, and riders to learn of support services present within the community.
- One respondent wished to communicate that they recognize the transit team's willingness to remove barriers when partnering with agencies, as it is noticed and appreciated and has very positive impacts.

3.2.4 Public Survey

The project team received 190 surveys during 25 day survey period from June 14 to July 9, 2021. Over 300 comments regarding service provision and rider experience were submitted for consideration by the project team. Specific public survey responses are detailed in **Section 3.2.4.1** below, while overall themes and findings from an analysis of the public survey comments are incorporated in **Section 4.1**.

3.2.4.1 Specific Survey Findings

The public survey asked questions that targeted specific elements of transit within the region of Wood Buffalo. The responses to these questions are detailed below, in order to illustrate public sentiment regarding these specific factors.

1. Transit Routes and Services

The survey asked participants specific questions related to what kind of routes and services they would like to see implemented in their community, as well as their priorities when balancing frequency and coverage. Note that both riders and non-riders may experience challenges that limit their ability to use transit. **Figure 1** illustrates that poor transfers presented the most significant barrier to current transit riders. In contrast, the most common factors that prevent non-riders from using transit are the need for a car for work/school and the fact that transit service doesn't meet their needs.

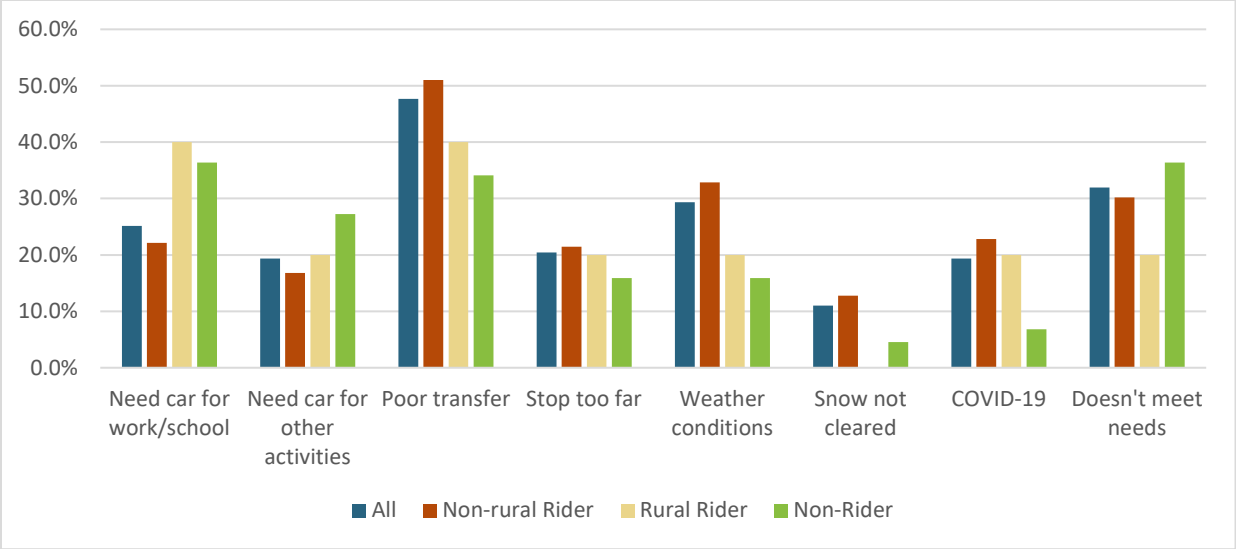

Figure 1: Barriers to Riding Transit

Regarding what days of the week and times more service should be added, there was moderate support for additional trips across the week. The highest level of support was for additional service during "weekday mornings", "weekday peaks", and evenings (weekday and weekend). Demand for weekday mornings was particularly high among rural passengers. The full results are presented in **Figure 2**.

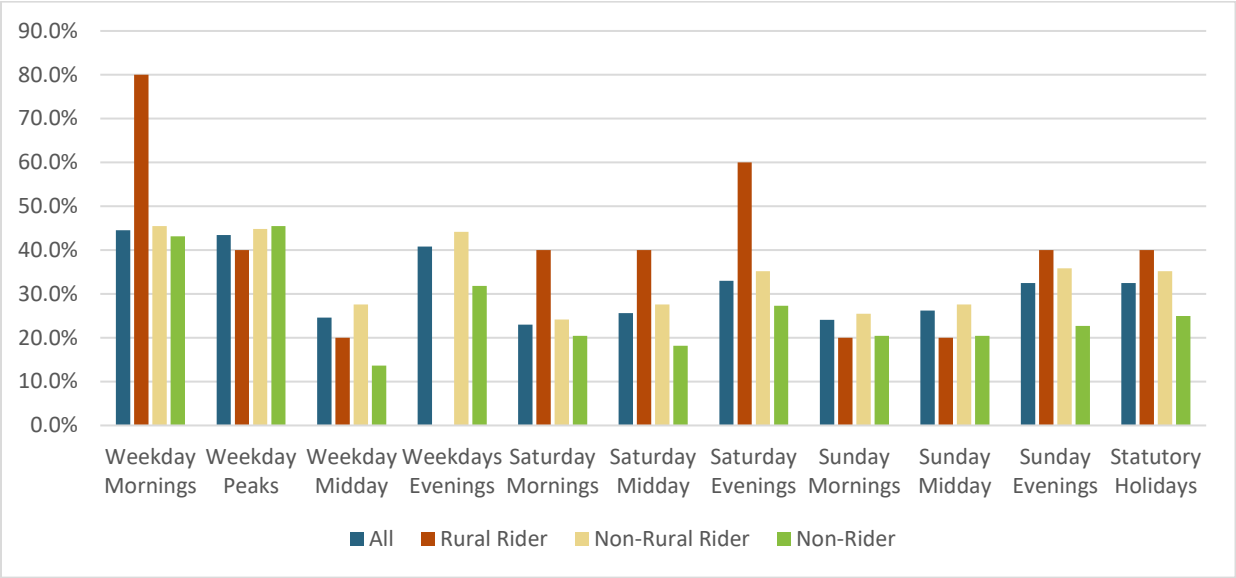

Figure 2: When More Trips Should Be Added

Recognizing limited resources require a trade-off between frequency and coverage, participants were asked to select their priority between these two principles (illustrated in **Figure 3**). The majority of respondents (74.6%), regardless of passenger type, preferred higher frequency of transit service over wider coverage of service. While non-riders also responded in favour of frequency, they presented the

highest level of interest in increased coverage, suggesting that lack of available transit service nearby may be related to their non-use of transit.

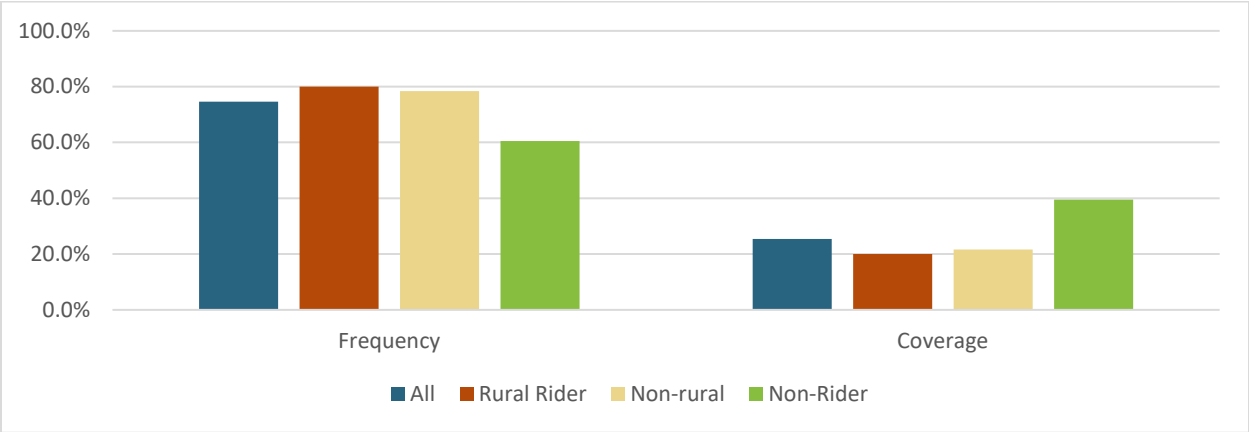

Figure 3: Preference for Frequency of Coverage

When asked what aspects of transit service are important to them, participants noted frequency, coverage, and reliability as very important. Over 90% of respondents identified these three factors as somewhat or very important. Customer service and environmental impacts were the lowest priority, with these issues being somewhat or very important for less than 50% of respondents. Other factors such as bus stop infrastructure, fares, and trip planning were rated as moderately important. The full results are presented in **Figure 4**.

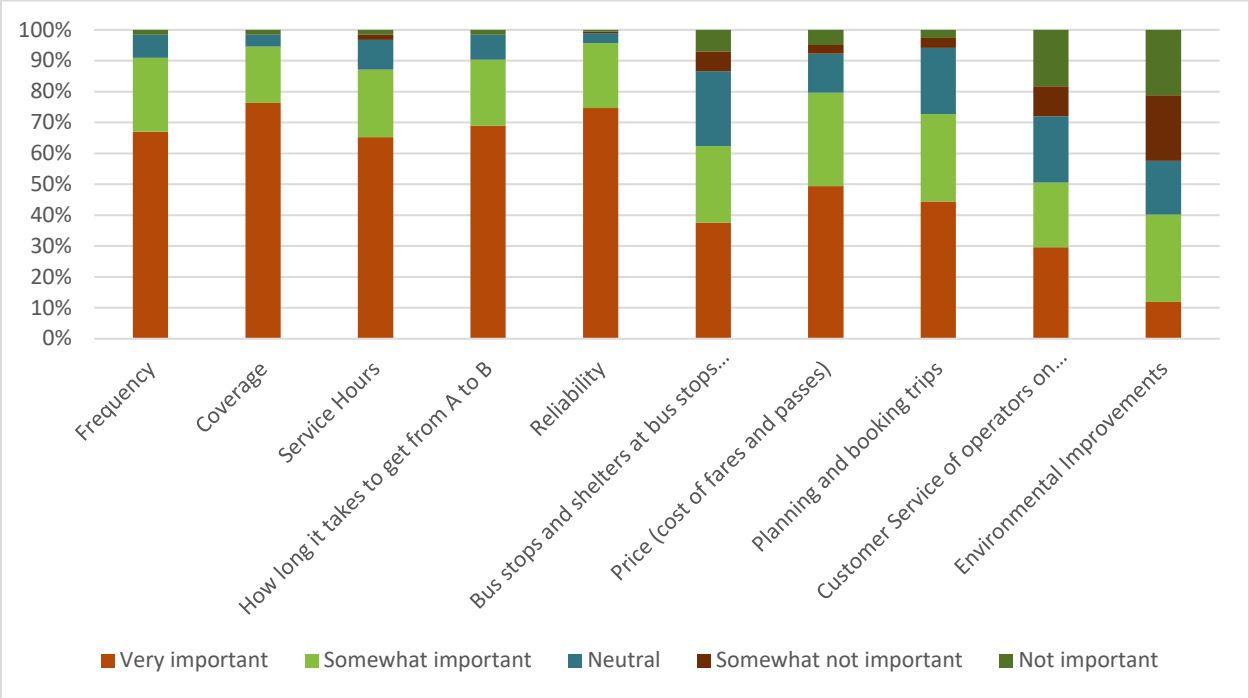

Figure 4: Which Aspects of Transit Service are Important

2. Transit Accessibility and Comfort

The accessibility and comfort of transit vehicles can impact the attractiveness of the service. To understand participants' perceptions of transit facilities, they were asked their level of agreement with a variety of statements related to the quality of buses and stops as well as safety while on transit vehicles or waiting at stops. These findings are presented in **Figure 5**. The highest level of agreement was related to the comfort level of riding the bus as well as space on the vehicle. In contrast, concerns were raised about the condition and cleanliness of bus stops. In regard to safety, 52% to 63% of respondents agreed that they felt safe while riding or waiting for the bus

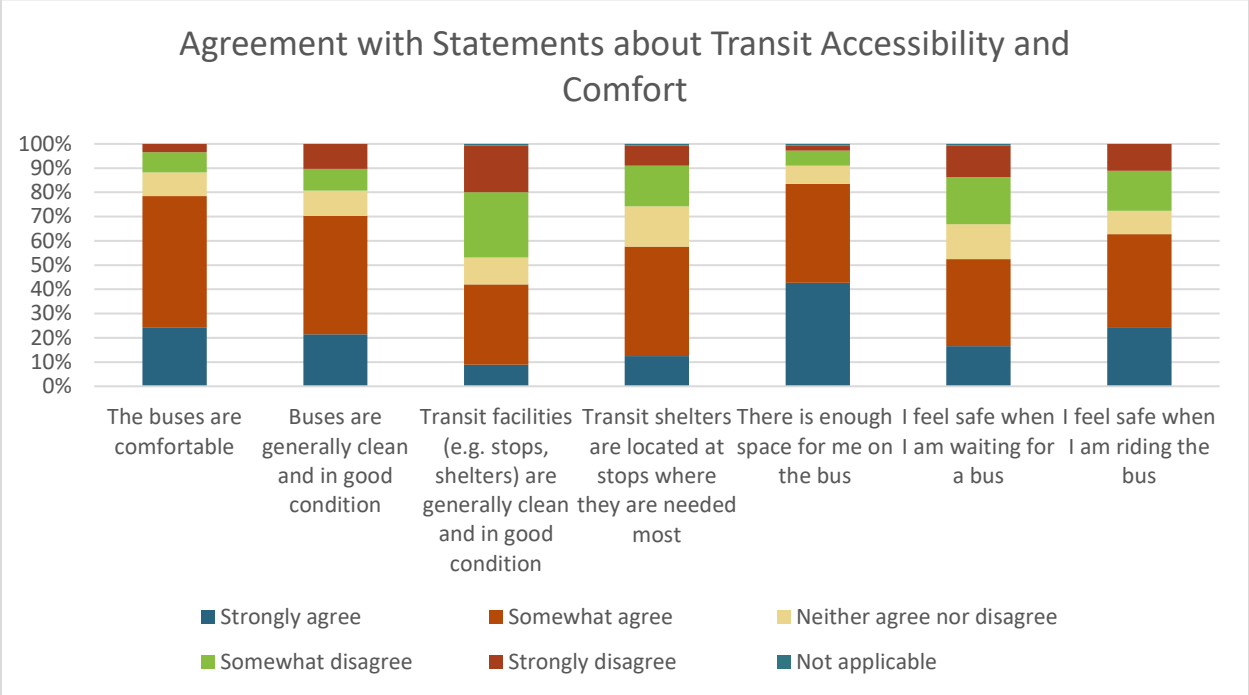

Figure 5: Agreement with Statements about Transit Accessibility and Comfort

3. Fares

Participants were asked their perception of the existing fare structure for transit service in Wood Buffalo. These questions were divided based on urban and rural service as the fare structure differs between them. Fares for service within Fort McMurray was considered inexpensive or reasonable by most respondents, with almost 90% identifying them as such. Perception of Fort McMurray transit fares are illustrated in **Figure 6**.

Figure 6: Fare Price Perception of Fort McMurray Service

In contrast, rural service was considered expensive by a higher number of respondents compared to urban service, illustrated in **Figure 7**. This was particularly the case for rural passengers, of which 50% agreed that rural fares are "expensive". While fewer passengers considered the fare "Inexpensive", approximately half of respondents considered rural fares to be reasonable.

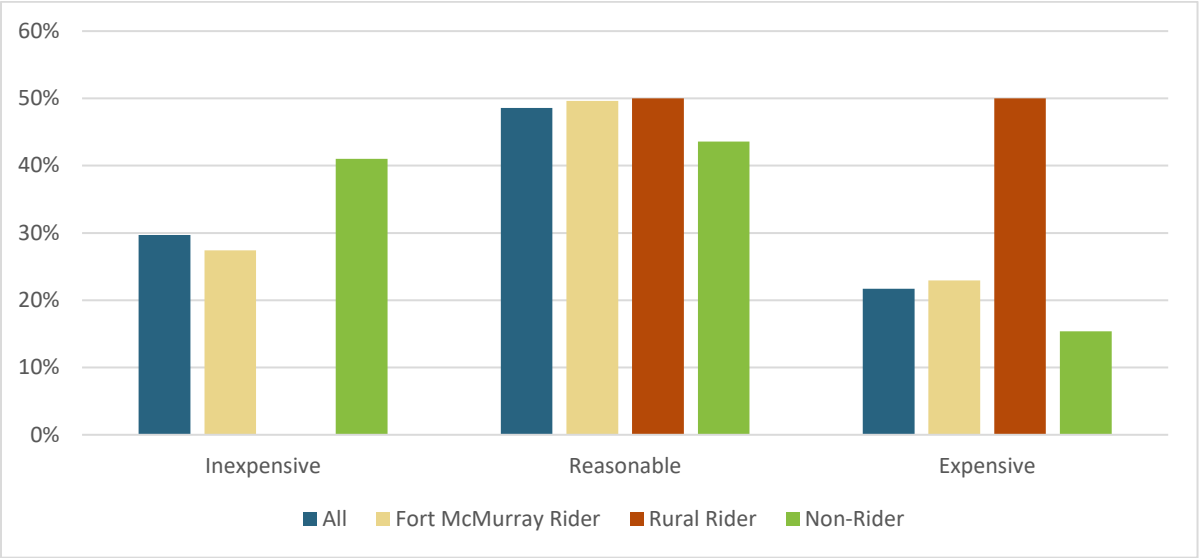

Figure 7: Fare Price Perception of Rural Service

3.2.5 Participate Wood Buffalo

The project was assigned a dedicated project page on Participate Wood Buffalo, designed to include branded graphics, opportunities to receive information and a link to the public survey. The project page on Participate Wood Buffalo also included three additional tabs to prompt the submission of public feedback. To post ideas and Q&As, residents were required to register with Participate Wood Buffalo. A direct link to sign up was posted on the project website. The following features of the webpage that were used in Round 1 Engagement include:

- Locations Tab - Participants were able to pinpoint areas on a map to identify where RMWB Transit is doing well and areas that could be improved.
- The Ideas Tab - Generated 13 ideas in response to the prompt "Share your ideas or vision for Transit in Wood Buffalo". Written responses could be submitted with supporting image uploads. The tab allowed multiple contributors from one individual and also featured a "like" and "comment" feature for people to display support for the ideas of others.
- The Questions Tab - Generated one question from the public, and each question received a personalized response from RMWB staff.

All comments received through Participate Wood Buffalo were included in the comment summaries and data analysis with the pre-engagement interviews, workshops, and general survey data. This allowed the project team to review all information received through a holistic, standardized approach.

3.2.6 Transit Operator Survey

The Transit Operator Survey was available on a public page on Participate Wood Buffalo from June 14 to July 9, 2021, with one response. The RMWB conducted an additional 15 interviews with transit staff to identify issues, concerns, and areas for improvement regarding transit operations.

Overall themes and findings regarding the staff survey are incorporated in **Section 4.2** below.

3.2.7 Rural Engagement

Rural communities that currently receive rural transit service were targeted for participation in Round 1 engagement. The engagement tools and activities used were the same as for those in Fort McMurray – rural participants completed the same survey and were invited to participate in virtual workshops with the project team. In collaboration with IRR, the following efforts were made to engage the RMWB rural communities:

Fort McKay

- The engagement poster was posted in community spaces in both Fort McKay Metis Nation and Fort McKay First Nation.
- Social media posts for both Fort McKay Metis Nation and Fort McKay First Nation.
- Invitations sent to key members of the Fort McKay Metis Nation.

- Invitations sent to Fort McKay Recreation and Cultural Society.
- Three attendees participated in the Fort McKay workshop held on July 14, 2021.

Anzac

- The engagement poster was shared on Anzac community pages; the RMWB requested to be posted locally and shared with other contacts.
- The engagement poster was posted at the Anzac Grocery, Esso, Recreation Centre, Willow Lake Community Association (WLCA) Office, Anzac Petro Canada and GLE's bulletin board.
- A phone call was placed to WLCA, and the Anzac Family Community Support Society (AFCSS) to invite members to the workshop.
- Email correspondence was sent to the Community Group contacts:
  - WLCA
  - Recreation Centre
  - Anzac Recreation Board
  - Metis Nation
  - AFCSS
  - Willow Lake Tiny Tots
- Invitations to the rural community workshops were sent to the following businesses and organizations:
  - Bill Woodward School
  - Anzac Gas Station
  - Northlands School
- One attendee participated in the Anzac TMP Workshop that was held on June 22, 2021.

Janvier

- The engagement poster was posted at the health centre, Band Office, the 218 Trading Post and Gregg's store.

468 First Nation:

- Invitations were sent to key members of the Fort McMurray 468 First Nation.

Willow Lake Metis

- Invitations sent to key members of the Willow Lake Metis.

Conklin

- 13 copies of the engagement poster and survey were printed for the Conklin Community School, and 12 copies were printed and left at the Petro Canada Store for customers to take. The engagement poster was also posted at the Petro Canada.

4.0 Round 1 Public and Stakeholder Feedback

4.1 Key Themes - Stakeholder Workshops and Survey

Based on a qualitative review of comments received in the three stakeholder workshops, submissions to Participate Wood Buffalo, and the survey comments received, recurring Key Themes were identified, which are outlined in **Table 1**. The Key Findings that support each Key Theme are found in **Section 4.1.1** for urban transit and **Section 4.1.2** for rural transit.

Table 1: Round 1 Public Engagement Key Themes

Theme	Description
Routing/Frequency (includes On-Demand Service)	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), reference to the built environment including sidewalks, signage, and lighting.
Affordability	Comments related to the affordability of the transit system and fares.
Equity Equity Sub-theme: Accessibility	Comments regarding the importance and ability of RMWB Transit to service all populations and communities in an equitable manner, including access to amenities, facilitating transit for newcomers, and language barriers.
SMART Bus	All comments related to SMART Bus Service
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service including interactions with staff and drivers, transit navigation and wayfinding, information available related to transit.
Safety	Comments regarding riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments regarding the perceptions of transit, environmental benefits, bettering communities through transit - reducing traffic, reducing emissions, growing future ridership (youth).
Staff Training/Transit Training	Comments regarding the need for staff training, and transit education training for transit riders (particularly newcomers, seniors, students).

4.1.1 Key Findings

In support of each identified theme, the Project Team highlighted some Key Findings:

4.1.1.1 Affordability

- The cost of transit is generally seen as affordable.
- Passes and single-trip tickets sent to clients at Keyano College for newcomers by the Municipality are appreciated.
- Some suggest that buses should stay free after the pandemic, both as a public service and a means of expanding ridership.

- Others suggest fares be increased, for a few common reasons:
  - To make transit more profitable and less reliant on tax dollars.
  - To fund expansion and streamlining of services.
  - To fund expansion particularly to rural areas.
  - To deter usage of buses as hang-out spots for the population experiencing homelessness.
- Others suggest fares are reduced to make bus service more accessible, especially in rural areas.
- Fare exceptions or reductions for certain individuals, such as students, those travelling from rural areas for health care, and families.
- Bus passes could be delivered as smartphone applications or as reloadable, or more durable cards. Cards should be reloadable online and at high-usage areas like schools.

4.1.1.2 Transit Infrastructure

- Specific areas with transit infrastructure issues were identified:
  - Carteret Drive. Riders report having to wait on a grassy hill, which is slippery when wet and unsafe in winter.
  - At Thickwood terminal. Would benefit from having buses park closer to the entrance.
  - Request for better amenities at Franklin/Main station.
  - In Gregoire and Beacon Hill the bus stops with no sidewalks leading to them, making the stops inaccessible.
  - Snow clearing of sidewalks around stops is a big issue across the system. Particularly noted was the stop by Service Canada/Fatburger/Save-On Foods.
  - More benches and better lighting at Thickwood Plaza stop.
- Requests for new infrastructure:
  - Shelter at Brett Drive in front of Telus building.
  - Transit hub at Jubilee with indoor waiting area.
  - Hubs in new areas of Fort McMurray.
  - Hubs at older locations “south of the bridge” such as Beacon Hill, Prairie Creek.
  - A sidewalk is needed at Rodeo Drive bus stop.
  - There should be a crosswalk at the Eagle Ridge stop.
- Riders enjoy that most shelters are enclosed and heated, though have noticed that the doors of some shelters have been removed.
- Many riders report that broken heaters can take a long time to get fixed and that this is a common and recurring problem.
- Requests that each bus stop has heated shelters and benches.
- Better ventilation requested in bus stop shelters.
- Air conditioning on buses during the summer.
- Shelters and stops should be better maintained. Sometimes hazardous debris such as syringes can be found at sites.
- There should be separated/devoted bus lanes for Bus Rapid Transit.

- Realistic budgets should be allocated to transit to ensure the maintenance and good operation of transit operations and infrastructure.
- The stop location at Keyano could be in a better location to be safer and to encourage more ridership.
- There should be a place to lock bikes at all stops and at the transit hub.
- There should be places to park personal vehicles at bus stops, or at least at the hubs, for riders to be able to "park and ride."
- Buses should not impact on-street parking spaces downtown.
- Remove signs for bus stops that are no longer in use.
- Reserve front seats for those with disabilities, the elderly, and those with children.
- Aesthetics and branding deserve more consideration, with degraded and inconsistent posters on buses. As well, one rider described bus stops marked by signs on tire rims as "sad."

4.1.1.3 Routing/Frequency

- Participants identified several areas where transit services could be improved/expanded, including:
  - Vista Ridge is highly utilized by foreign workers but there is no weekend and very limited weekday transportation which is challenging for shift workers.
  - There should be direct service between Thickwood and Timberlea that bypasses the downtown altogether.
  - More service to Gregoire Park.
  - Higher frequency on Route 91 (Longboat Landing).
  - Higher frequency of Route 10 (Gregoire and Prairie Creek) on weekends.
  - MacDonald Island Park (Mac Island), which has had transit service reduced since 2016 the fire, from 15 mins to 30.
- Many cited a need for both earlier and later service, later service to extend past 10:30pm. This would support:
  - Workers
  - Students at Keyano
  - Those attending Oil Baron hockey games
  - Those out on Friday and Saturday nights
  - And on important routes, including Airport, Thickwood and Timberlea
- Participants identified that the RMWB previously provided a special bus service for seniors on weekends to go to key spots and should consider reinstating this service.
- There is a perception that newer areas in Fort McMurray are better serviced than older ones.
- Hour-long waits for buses are unacceptable, particularly downtown. 15-30 minutes would be a reasonable wait time.
- Rather than adding new services, transit should schedule buses strategically - existing buses can run more during peak times and less during others.

- More people would use the service if travel times were quicker and more straightforward, such as express routes. Many complaints about commutes taking 1-1.5 hours, including transfers, compared to 10-20 minutes by personal vehicle.
- The schedule in which buses make stops at the top of the hour is not functional for those who start work at the top of the hour and also conflicts with programs at Mac Island that start at the top of the hour. There is a request to stagger scheduled times just before or after the top of the hour.
- Transit should consider implementing on-demand service, particularly for people who do shift work outside of conventional transit hours and for students.
- There is a request for more bus service to areas hosting local businesses, shopping areas and medical facilities.
- More routes, more frequently, using smaller buses for efficiency. Save larger buses for high-traffic areas/times such as the start and end of school days.
- Summer buses to provincial parks and recreation areas in the summer.
- There should be more service between the airport and areas of the municipality.
- Sunday bus service was requested.
- Riders reported trips that felt serpentine, in which their bus seemed to backtrack before reaching its destination, or in which they had to transfer to a bus that would then go back and cover ground their previous bus already serviced before reaching their destination.
- A few suggested scrapping transit buses entirely and switching to on-demand or dial-a-ride services.

Route Suggestions

- Direct downtown route to Timberlea.
- King Street to Airport.
- Express, cross-town, local/community routes.
- Hourly routes from each uptown street to downtown.
- Express to MacDonald Island and other high-commercial areas, especially from areas like Timberlea and Thickwood.
- Direct from Timberlea and Thickwood to Abasand, Gregoire and other parts of the city.
- Express during rush times.
- Regular runs to Vista Ridge.
- More buses travelling along Franklin Avenue.
- More stops in Gregoire trailer park.
- Thickwood to Eagle Ridge.
- Return to the pre-pandemic frequency of Route 11 Airport (every 30 minutes starting at 5:15 a.m. at the main terminal).
- Pre-2016 bus routes.
- Routes 15 (Timberlea), 25 (removed), and 16 (Thickwood) “the way they used to be”.

- Fewer transfers, especially on routes like Timberlea to downtown. The amount of time it takes to travel makes the service impractical.

4.1.1.4 Ease of Use/Assistance Improvements

- Bus stop locations should be numbered or labelled so people can orient themselves better while using the system.
- Wayfinding should use colours and symbols for accessibility, particularly helpful for those with ESL.
- Transit should integrate transit stops and routes in real-time on Google Maps.
- Multiple riders expressed dissatisfaction with currently available online trip planning tools, with some adding that prior knowledge of the routes is necessary for the tools to make sense.
- If a transit app is developed, it should come with a tutorial and be available in many languages. It should provide real-time tracking of buses and notifications of delays and cancellations. It should show routes.
- Buses should identify the final destination of the route.
- There should be clear and available information available about where each bus stops
- Physical maps/routes should be available or posted at all stops. Digital literacy is not standard across all populations.
- Service should be clearly advertised, especially in rural areas, so that potential riders know it's an option. Not everyone is online, so it is recommended to look into local communication options in rural areas.
- Multiple riders suggested a system, as is in place in municipalities such as Edmonton and Toronto, in which bus stop numbers can be texted to a system that will respond with estimated times of arrival of the next buses.
- Transit should consider adding screens at stops that are updated regularly showing this information.
- Clear notice should be given when buses go out of service.

4.1.1.5 Equity

- Transit service is critical for the independence of seniors, youth, and newcomers.
- Transit stops should not be altered to deter homeless people from seeking shelter in the winter.
- A dispute process should be developed that is inclusive to those who cannot read or write.
- Some expressed a desire to be accompanied on the bus by pets.
- Available services to assist in trip planning may be unusable to those whose first language is not English.
- While many expressed safety concerns about the usage of the bus by people experiencing homelessness, it was also suggested that bus service is vital to vulnerable populations with low incomes.

- Shift mandate from primarily providing a service to those with no options, to being a better way to travel for as many people as possible.
- Others said the primary concern should be for those with no other means of travel.

A sub-theme identified beneath Equity is **Accessibility:**

  - There is a need to reach out to disabled individuals and seniors to determine their needs and barriers.
  - Poor maintenance of sidewalks and travel routes to bus stops can be a barrier to those with mobility aids, especially in the winter.
  - Buses should wait and look carefully at the stops, as some with limited mobility take longer to exit shelters.

4.1.1.6 Safety

- Many riders cited safety concerns around the common presence of intoxicated persons on buses and at shelters. This was often linked by riders to the population experiencing homelessness.
  - Concerns included aggressive behaviour, urination/defecation/vomiting, use of alcohol and/or drugs on the buses and at shelters.
- There are safety concerns about bus stop infrastructure that influences perceptions of safety, including:
  - Lighting
  - Broken heating in the wintertime as well as long timeframes to get heating fixed
  - Lack of security
- Security presence, trained in cultural sensitivity, should be available to buses and at stops.
- Bus drivers should be allowed and directed to pick up/drop off riders anywhere along their routes during extreme cold snaps, as is reportedly the case elsewhere in Alberta.
- Lengths of waits were cited as a safety concern, especially at night.
- An emergency button should be available at bus stops to call the police or other emergency services.

4.1.1.7 SMART Bus

- The Paratransit application form is repetitive, and people sometimes require assistance to fill them out.
- There is confusion around the need for a physician to sign the form/purchase a doctor's note. The form also cannot be submitted by anyone except the person applying, which can be challenging for certain disabilities.
- Client service experiences are positive among riders.
- More storage space is needed on the bus for riders' personal items.
- A lot of pre-planning is required. It's not feasible to make last-minute plans using this service. As well, the cost of cancellation is high, making it a risk to plan too far ahead.

- Multiple riders cited issues with children not being allowed on SMART Buses, which is a problem for many disabled persons with families.
- Criteria for SMART Bus should be expanded. There are many invisible disabilities.

4.1.1.8 Staff Training/Transit Education Training

- Public transit travel training for newcomers and students is important as the bus can be intimidating and confusing.
- Staff and driver sensitivity training should be mandatory.
- Cultural sensitivity training for public-facing staff such as drivers.
- Transit rider education should be provided to reduce anxieties. Training should include bus etiquette.
- Driver training should include how to assist people with mobility issues and devices.

4.1.1.9 Transit for the Common Good

- Encouraging ridership to decrease reliance on vehicles, especially single-occupant vehicles, both for emissions reduction and traffic reduction.
- The long-term vision for electric buses but desire to keep diesel buses in the short term.
- Consider partnerships with Indigenous communities and artists for art on livery, passes and other campaigns.

4.1.2 Key Findings - Rural Transit

The following key themes were identified for rural transit:

Routing/Frequency: Comments directly related to routes, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.

- Transit service hours leaving and returning to Anzac + Fort McKay only allows around three hours in the city which prevents people from using the service for day-to-day uses and prevents people from being able to use transit for work.
- Service hours in Anzac should be expanded particularly in the evenings.
- Allow for an on-demand service to rural areas, similar to SMART Bus. Particularly for travelling to events.
- Transit services in Fort McKay are in the evening (3 pm to 9 pm), which does not serve a great number of people. These hours should be revised based on the needs of the community with service departing in the morning.
- Transit should coordinate with rural health centres and the hospital to identify when typical discharge times are, so people can use transit to get home from procedures.

4.1.2.1 Transit Infrastructure

- There should be a designated transit stop (currently no signage, no bench, no place to wait protected from the elements).
- Bus shelters that do exist in rural communities are not heated.
- A stop at Anzac day-use area for residents to use.

4.1.2.2 Affordability

- Rural transit fares are high particularly for low-income individuals.
- RMWB should consider providing rural bus passes rather than the standard fee.

4.1.2.3 Equity

- There are some transit rules that make it difficult to use for rural riders. For example, eating and drinking on the bus are often not allowed. Riders are not allowed to bring their pets on board.
- Parents assume children will one day be able to drive but if they are disabled or unable to drive, they will have a hard time achieving independence and would likely need to move out of rural areas.
- Funding for additional services to events and activities should be provided to rural communities so rural residents can also partake.
- Regarding rural areas, communication of what services are available is important. There are concerns that rural citizens feel like a second priority to urban areas.

4.1.2.4 Transit Education Training

- Education and travel training for youth in rural communities should be included as part of the CALM curriculum.

4.2 Internal Stakeholder Feedback

4.2.1 Key Themes - Stakeholder Workshops and Survey

RMWB staff met with transit staff to discuss the RMWB Transit Master Plan. Based on a qualitative review of the feedback heard, recurring Key Themes were identified, which are outlined in **Table 2**. The Key Findings that support each Key Theme are found in **Section 4.2.2**.

Table 2: Round 1 Internal Engagement Key Themes

Theme	Description
Transit Operations	General comments regarding the form and function of RMWB Transit, efficiencies, impacts of changes to transit operations, implementation of new technologies, and day to day to concerns.
Routing/Frequency	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), reference to the built environment including sidewalks, signage, and lighting.
Employee Morale	Comments regarding the working environment and workplace morale among transit workers.
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service including interactions with staff and drivers, transit navigation and wayfinding, and information available related to transit.
Safety	Comments regarding riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments regarding the perceptions of transit, environmental benefits, and bettering communities through transit - reducing traffic, reducing emissions, growing future ridership (youth).

4.2.2 Key Findings

In support of each identified theme, the Project Team highlighted some Key Findings:

4.2.2.1 Assistance Improvements/Ease of Use

- An app is needed that can track buses in real-time and report delays to riders. This becomes more necessary in winter when temperatures can reach -40 C.
- When routes change, these changes must be communicated to both riders and drivers clearly and well ahead of time, and changes should be posted at stops.
- Printed copies of routes must be posted at stops as not everyone uses a smartphone.

4.2.2.2 Employee Morale

- Low employee morale was repeatedly brought up as a major issue.

- The perception among many is that management will not listen to feedback and that those who bring suggestions or complaints to management might then face repercussions.
- The perception that all points brought up in these interviews have already been brought up to and ignored by management. This was countered a few times by employees who stated they believed management is working on solutions to these issues.
- Perceptions that favouritism and nepotism guide decisions such as which employees get overtime or promotions.
- Worries that lessening ridership and empty buses may mean bus service is destined to be contracted out again.
- The perception is that confidentiality is an issue and that managers talk openly about employees in the presence of other employees.
- Employees want more transparency from management. Some feel their questions go unanswered.
- There is good morale and community within the hostlers, which should be encouraged.
- Multiple suggestions that a group bonding activity, such as a barbeque, should be held. This should include all transit staff and might also include a meeting where staff can talk openly about their concerns.
- Comments from the public on platforms such as Facebook, complaining about the service, are being seen by the staff and affecting morale.
- One person said things are not as bad as people are making them out to be.

4.2.2.3 Frequency/Routing

- Some routes, such as in Timberlea, are “driving in circles.”
- Current routes are bad for both riders and drivers.
- Trips take too long with too many transfers. Trips that should take less than 20 minutes can take up to an hour. Transit staff find routes and schedules prohibitive for their own personal use.
- Routes are not timed to connect well with other routes, leading to long waits for connections. Buses should arrive on some routes every 15 minutes.
- Frequent empty buses are proof that routes are not working.
- The airport bus does not correspond to flight schedules or staff schedules, and because of this, it is unusable to much of what should be its target demographic.
- Routes that service schools work well for students but are seen to be successful at the expense of routes for the rest of the public.
- Routes change too often. Riders and drivers would be better served by consistent routes.

Specific Route Suggestions

- The route that services Your Independent Grocer in Timberlea needs to be redirected to the stop near the grocery store rather than its current stop, which is 200 metres away from the grocery store.
- Franklin Avenue should have a dedicated bus route running consistently in each direction.

- Multiple suggestions that former Route 15 (Timberlea) and Route 16 (Thickwood) need to come back. Route 10 (Gregoire and Prairie Creek) and Route 11 (Fort McMurray Airport) were also mentioned. One person said to return entirely to old routes.
- Streamlined route from Wood Buffalo to Gregoire.
- Route 17 (Parsons Creek) is too long.
- Secondary routes (Route 41 (Brett Drive), Route 51 (Wood Buffalo Estates), Route 61 (Thickwood Terminal), Route 17 (Parsons Creek), Route 9 (Morgan and Harpe Heights), Route 7 (Abasand Heights), and Route 8 (Beacon Hill Drive)) need to be extended as people currently cannot match connections.
- Referencing current Route 15 (Timberlea) and Route 16 (Thickwood), it should meet with all routes on the hour and on the half-hour.
- On route 92 (Syncrude Sport and Wellness), at Alberta and Franklin, a stop should be added by the church.

4.2.2.4 Safety

- When homeless passengers linger on buses, drivers generally take the approach, “If I don’t bother them, they don’t bother me.” Asking unruly passengers to leave, however, usually results in more conflict, and considerable discomfort for riders, and drivers don’t have an easy route to resolution.
- There needs to be processes and procedures, coming from the top, for when there are problems with the homeless population.
- RMWB should develop day programs for the homeless, with safe places for them to go.
- The suggestion is that there need to be transit police available for when passengers become unruly.
- Buses should have the right of way and bear yield signs, as is the case in many other municipalities.
- Drivers do not feel safe at the main terminal. Cameras should be installed and a full-time inspector and police should be present.
- Inspectors should be more visible (wearing safety vests at all times).
- Trees and fences obstruct views of intersections in residential routes.
- Timing points are set up in dangerous places. No accidents yet but no one counts near misses.
- Management must take safety complaints seriously. The perception that they are ignored.

4.2.2.5 Transit for the Public Good

- An employee said they were approached in public, while they were wearing their uniform, by a resident who told them transit helped them survive when they had no money and no car.
- Enthusiasm for electric buses that would be able to run air conditioning or heating without interruption.
- The RMWB could hold more transit-related events.

4.2.2.6 Transit Infrastructure

- More bathrooms are needed for drivers at terminals.
- Some buses do not have air conditioning and need this during the summer.
- Buses are generally clean.
- Buses need detailing/livery to be maintained.
- Many shelters exist but do not have bus services.
- Bus stop numbers should be posted on all signs.

4.2.2.7 Transit Operations

- Bus-flagging should be allowed when it is safe to do so.
- Ridership must be improved, mainly through routes and schedule but there was also a suggestion of a contest for riders, with a prize given.
- Have some drivers or buses on standby, with other tasks, for when there are breakdowns or other issues.
- Some drivers do not like being forced to do split shifts.
- Drivers have to switch and memorize too many routes each day.
- Suggestion for on-demand service.
- The perception is that there is enough money, staff, and buses to run an efficient, well-routed service, but that resources are being used inefficiently and without proper planning.
- The pass system should change as it is currently too easy to cheat.
- Staff need 60-minute lunch breaks so they can run errands that must be done within business hours.
- Buses should be tracked, and drivers better trained on routes, as some drivers are skipping runs or stopping short.
- Communications procedures between management and staff need an overhaul.
- Drivers could use a refresher course in customer service.
- When issues arise, they need well thought out and permanent solutions, not band-aid solutions.
- Wheelchairs should be allowed on the bus again or SMART Bus should function better as an on-demand service.
- Company vehicles should only be parked in RMWB's parking structure and shouldn't take up public spaces.

4.3 Observations for Round 1

The Project Team benefited from the engagement and participation of RMWB residents through the public survey, transit operator interviews, and workshop attendance. Throughout the process, the Project Team identified both things that worked, and areas for improvement, and internalized all feedback received from survey participants and attendees to consider in Round 2.

4.3.1 Stakeholder Identification

The following observations were made by the Project Team regarding Round 1 stakeholder participants:

- The participation rate of employers was low.

4.3.2 Stakeholder Workshops

The following observations were made by the Project Team after the Round 1 Engagement debrief:

- The Project Team identified the need to work with IRR earlier in the process to enable invitations to be sent out to rural communities with more advanced notice.
- Include a request in the invitation emails to pass along invitations to someone in the organization who rides the bus or has an alternate attend who does ride the bus.
- There was a higher response rate for workshops held during business hours.

4.3.3 Survey

The following observations were made by the Project Team regarding the public survey after reviewing the comments:

- Participants identified the hope that the feedback and concerns communicated through the survey would lead to positive change.

5.0 Interim-Communications Round Summary

Due to timing of municipal election and the 2021 December holiday season falling shortly after, the project team delayed Round 2 engagement to February 2022. This decision acknowledged that engagement participation had the potential to be reduced due to these factors. To maintain ongoing communication with the public regarding project progress, the project team undertook an interim communications round between Round 1 and Round 2. The intent of the interim communications round was to maintain momentum and communicate project progress in advance of Round 2 activities.

5.1 Methods of Information Sharing

Project updates with predetermined key messages were shared with the public through:

- Participate Wood Buffalo
- Email list
- Rural Newsletters

The project webpage Participate Wood Buffalo was active during the Interim Communications round and updated with a summary of what we heard in Round 1. The public could also access the Locations, Ideas, and Questions tabs to leave their feedback.

A tailored email was sent by the Project Team to stakeholders and Participate registrants, to notify them of the delayed Round 2 engagement and opportunities to engage during the Interim Communications round.

6.0 Round 2 Engagement Summary

Stakeholder discussions from Round 2 summarized in this document will help inform the final Transit Master Plan. Round 2 Engagement began on February 16, 2022, with a planned closing date of February 28, 2022. Upon reaching the closing date, engagement response was low and the RMWB extended the engagement timelines to generate additional opportunities and time for feedback to be received on the draft TMP. Round 2 ended on March 16, 2022.

6.1 Overview of Project Engagement

Round 2 was conducted with the following goal in mind:

To confirm the vision, mission, and goals developed in Round 1 with the public and stakeholders, and present the draft plan recommendations. The team will be transparent about how feedback from engagement in Round 1 has been incorporated into the final Transit Master Plan.

6.1.1 How We Engaged in Round 2

Due to the ongoing COVID-19 pandemic Round 2 engagement activities were held virtually to minimize risks associated with in-person engagement. Through the public survey and two public workshops, the public shared information about issues, transportation needs and what people expect from RMWB Transit. Using EngagementHQ, Participate Wood Buffalo also featured a page for this project. Here's a breakdown of the results:

1. An online public survey was available to the public for 28 days from February 16 to March 16, 2022, through the City's engagement platform Participate Wood Buffalo. The survey was promoted through social media outlets including Facebook and Twitter. The survey was advertised at bus stops, and on and in City buses. Radio ads and billboards were also used to promote the engagement opportunities for the draft TMP.
2. The public survey was also distributed in hard copy in the rural communities of Anzac, Fort McKay, and Conklin through coordination with the IRR.
3. There were 200 survey responses with over 260 comments regarding service provision and rider experience for consideration by the project team.
4. Two stakeholder workshops were held on February 23rd and 24th, 2022, with nine attendees to discuss urban and rural transit.
5. At the time this report was written the Participate Wood Buffalo page included:
   a) Five new ideas on the Ideas Tab;
   b) Two new questions received on the Q&A tab. For those who submitted a question a personalized response was sent by City staff;
   c) Four new comments on the Places tab; and
   d) 161 visitors participated in the Quick Polls.

All of the feedback received from the survey, workshops, and Participate Wood Buffalo helped inform the final Transit Master Plan, with the purpose of enabling RMWB Transit to better meet the opportunities and challenges it will face in the future.

7.0 Round 2 Engagement Techniques & Results

7.1 Methods of Information Sharing

Round 2 employed the same multi-pronged approach for information sharing and communication based on the Communications Principles outlined in the Regional Municipality of Wood Buffalo TMP Engagement and Communications Plan.

Round 1 graphics were updated for Round 2 to create a consistent communications approach that the public would relate to and recognize from Round 1. The Project Team used the following methods in Round 2 to communicate and engage with the public and stakeholders.

7.1.1 Participate Wood Buffalo

- The project team leveraged the City's online community page Participate Wood Buffalo to convey information regarding the project. The page maintained the standardized branding for project recognition. The dedicated webpage was updated regularly during key points of project progress. The features of the webpage that were used in Round 2 Engagement included:
  - Information and registration options for upcoming public engagement sessions;
  - A link to view the Transit Master Plan recommendations and transit maps;
  - A link to the second project survey;
  - Additional opportunities to engage such as a Q&A tab, Locations tab and Ideas tab;
  - Quick polls;
  - Project Frequently Asked Questions (FAQ);
  - Project timeline;
  - Public engagement session presentation slides;
  - Registration for project updates; and
  - Contact details to reach out to the project team.

7.1.2 Branding & Project Advertising

- Round 2 continued the use of eye-catching graphics from Round 1.
- Graphics were incorporated in social media posts, information releases, and the survey.
- Graphics were circulated with all email correspondence from the Dillon team including workshop invitations.
- Signage with project graphics were posted at bus stops, and in and on buses.
- LED outdoor advertising was utilized at Northstar Ford, Earls Restaurant, and Centerfire Place.
- IRR advertised the project to their community contacts and a project poster was put in the rural newsletters prior to the survey launch date.

7.1.3 Social Media & Media Promotion

- The RMWB released a series of project updates on the following social media platforms:
  - Twitter & Instagram – Shared to the City's corporate account (@RMWoodBuffalo) with the hashtags #RMWBTransitPlan and #RMWB.
  - Facebook – Shared to the RMWB Government page.
- Project updates through social media and media channels including links to the survey and directed individual feedback to the Participate Wood Buffalo project page. The City monitored the likes and comments on the posts.
- The RMWB project team posted a media release in Round 2 which was distributed to the RMWB media contact list.
- The RMWB posted advertisements for the project through Spotify with a pre-recorded advertisement based on a script created by the team.
- The RMWB conducted an interview with McMurray Matters.

7.2 Methods of Information Sharing Engagement - Additional Promotion

To further promote the Round 2 engagement, additional communication efforts were conducted to inform the public about the TMP engagement extension to March 16, 2022.

7.2.1 Branding & Project Advertising

- LED outdoor advertising at Northstar Ford, Earls Restaurant, and Centerfire Place. Advertisements were updated to add "fill out the survey" and "extended" to support extended engagement timelines.
- The RMWB placed an ad in Centerfire Place for Oil Barons Playoff Games – a 1920x1080 jpg with 15 sec script to be read live by the Oil Barons announcer encouraging residents to take the survey and visit the RMWB Participate Page.

7.2.2 Social Media & Media Promotion

- Messaging was updated to include messaging about engagement timelines being "extended".
- Facebook & Instagram - Released five "stories" that last 24 hours with project graphics and messaging that identified the extended engagement timeline.
- The RMWB placed YouTube ads with a voiceover advertising the survey and Participate page to include updated engagement timelines.
- The RMWB updated Spotify ads with messaging on timeline extension.
- Instagram - 2 additional Instagram posts/pictures for transit.
- The RMWB placed one additional paid Facebook Ad.
- The RMWB advertised the TMP on the Buffalo Bulletin Board radio ad on Harvard radio stations Mix 103.7 and Cruz 100.5 fm.

7.3 Engagement Activities

7.3.1 Workshops

Dillon sent 48 public workshop invitations to individuals and organizations identified on the stakeholder list. Where direct contact information was not available, some stakeholder organizations were contacted directly through contact website portals. The RMWB was responsible for sending invitations to council appointed committees, council, mayor and the residents registered for updates. Dillon developed text for the email invite, including links to register for the virtual Zoom workshop.

Two workshops were held on February 23rd from 2:00-4:00 pm and February 24th from 4:00-6:00 pm to share the draft TMP urban and rural recommendations and to request feedback from the public and stakeholders. The two workshops had a total number of nine (9) attendees. The number of participants did not necessitate breakout rooms during workshop sessions. Facilitator notes and questions were developed, one copy for the facilitator and a second document for note taking. Subject matter experts gave a presentation at the start of each workshop. The presentation included a review of proposed recommendations and key policy considerations from the draft RMWB Transit Master Plan.

7.3.2 Workshop Feedback

All workshops had a dedicated note-taker assigned by Dillon to catalog all comments and information provided by the stakeholders. The topics aligned with the preliminary themes identified in Round 1 and were revised where required. The feedback heard confirmed and supplemented what we heard in previous engagements. What we heard is categorized thematically through summaries of Key Themes in **Section 8.0**.

7.3.3 Public Survey

The project team received 200 surveys prior to the closing on March 16, 2022, and over 265 comments regarding specific feedback on the draft routes and TMP. Specific public survey responses are detailed in **Section 7.3.3.1** below, while overall themes and findings from an analysis of the public survey comments are incorporated in **Section 8.0**.

7.3.3.1 Specific Survey Findings

1. Transit Routes and Services

Overall, the survey showed broad support for the new conventional route network, with over half of respondents (56%) indicating that the suggested Core routes would meet their needs, as shown in **Figure 8**. In regard to frequency, the 81% of respondents agreed that the suggested frequency during peak hours is “Frequent Enough”. Agreement that frequency was sufficient slightly was lower for off-peak and weekends/holiday Core Route service at 56% and 61% respectively.

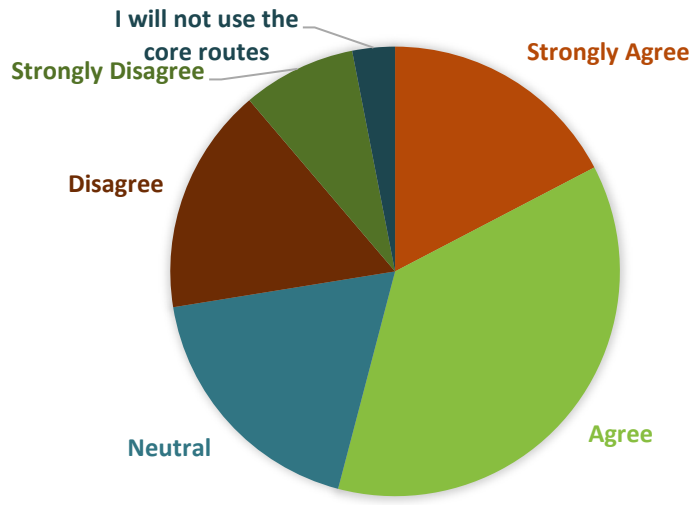

Figure 8: The suggested core routes will meet my needs

The survey indicated moderate support for Neighbourhood Route frequency during peak hours, with 55% agreeing that the proposed 30-minute frequencies are "Frequent Enough". However, only 40% of respondents agreed that off-peak Neighbourhood frequency was sufficient. Similarly, the proposal to replace some Neighbourhood service with On Demand during off-peak was met with uncertainty. When asked whether this proposal would meet their needs, the most common response was "Unsure", which 44% of participants selected. This indicates a need for public education regarding how On Demand service works far in advance of any implementation of this service.

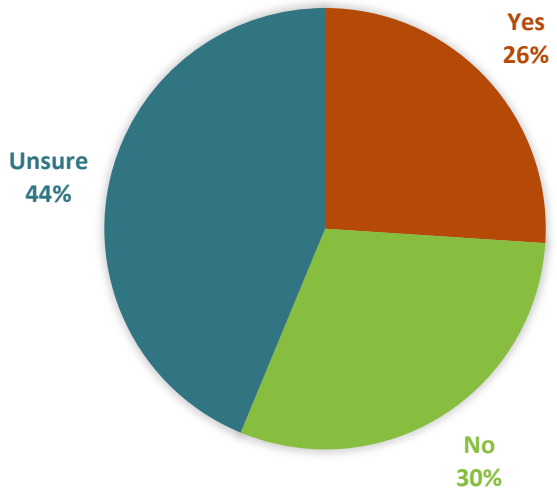

Figure 9: Would the on-demand service (instead of neighbourhood routes) at select times serve your transit needs?

2. SMART Bus

The survey asked specific questions about the impact of changing the eligibility process for specialized transit and other recommendations related to changing the companion policy and introducing a new, more flexible booking process. Just over half of respondents (53%) agreed that the updated eligibility process would improve the experience for SMART Bus riders, while 21% were unsure and 26% disagreed. Similarly, the majority of respondents supported the SMART Bus recommendations (58%) while 21% were unsure and 21% were not in support, as shown in **Figure 10**.

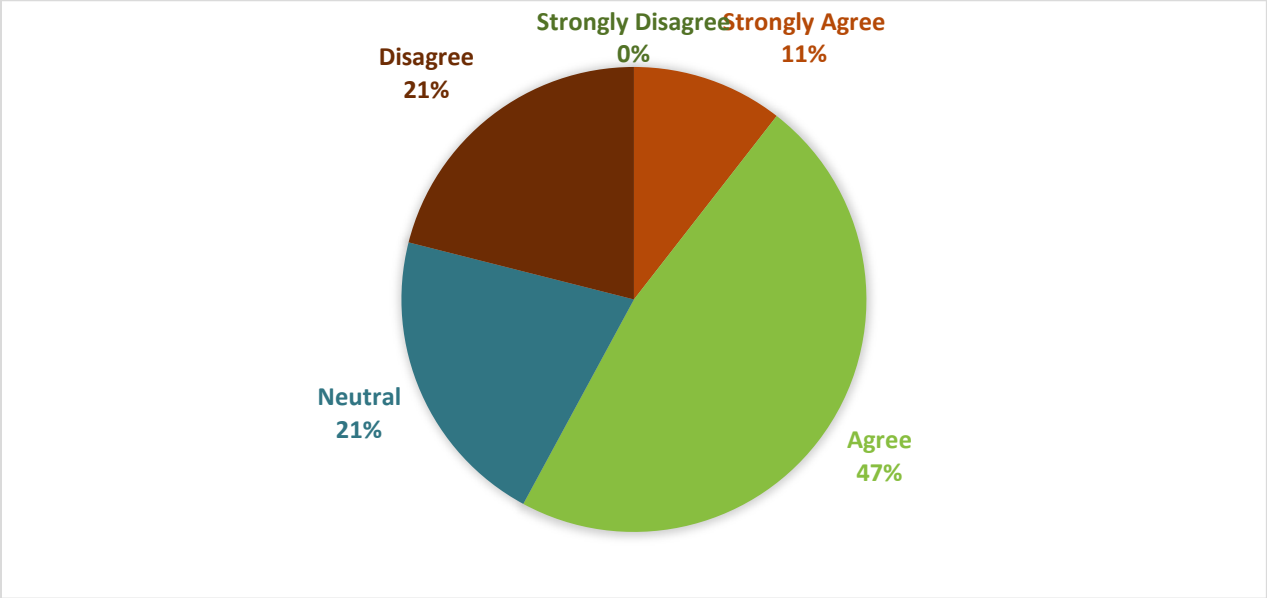

Figure 10: The changes proposed for riding SMART Bus will make the service easier to use

3. Transit Accessibility and Comfort

This section specifically asked whether recommended changes to transit infrastructure (shelters, terminals, and pedestrian connectivity) would improve their experience using transit. Overall, there were high levels of support for the proposed infrastructure improvements. The vast majority of participants (90%) agreed that the proposed recommendations to improve transit priority near terminals would lead to a higher quality transit experience. Similarly, support for general infrastructure improvements such as improve sidewalk connectivity to bus stop and enhancing accessibility of bus stops was very high at 85%, with 13% responding neutrally and 2% opposed.

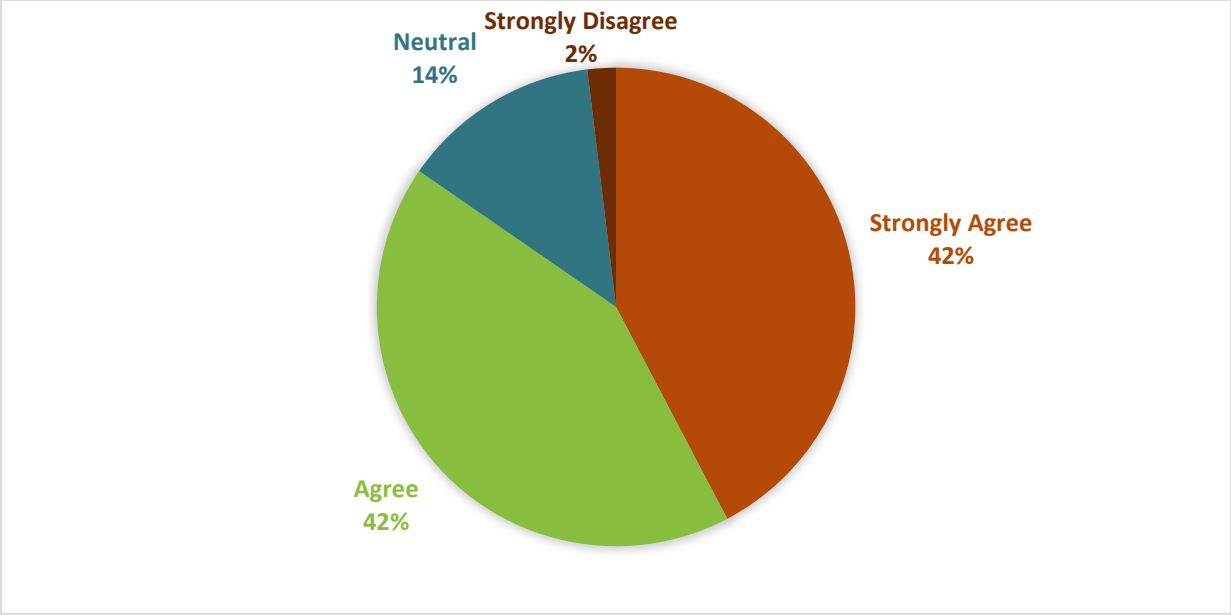

Figure 11: The proposed recommendations related to transit infrastructure improvements will improve access to transit in the RMWB

Recommendations related to improving maintenance of bus shelters in winter received high levels of support, 80% of respondents agreeing that the proposed changes would improve their experience using transit in the winter. Of the remaining respondents, 16% were neutral and 4% disagreed.

4. Fares and Trip Planning

The Transit Master Plan recommends updating the agency's fare structure to align more closely with other transit systems in Canada. The survey asked participants specific questions related to increasing fares. As well, participants were asked about whether the Plan's recommendations related to trip planning would improve their experience using transit.

The majority of respondents (54%) supported a proposed fare increase to support higher levels of service in more areas. In contrast, 32% disagreed and 15% indicated that they preferred not to answer.

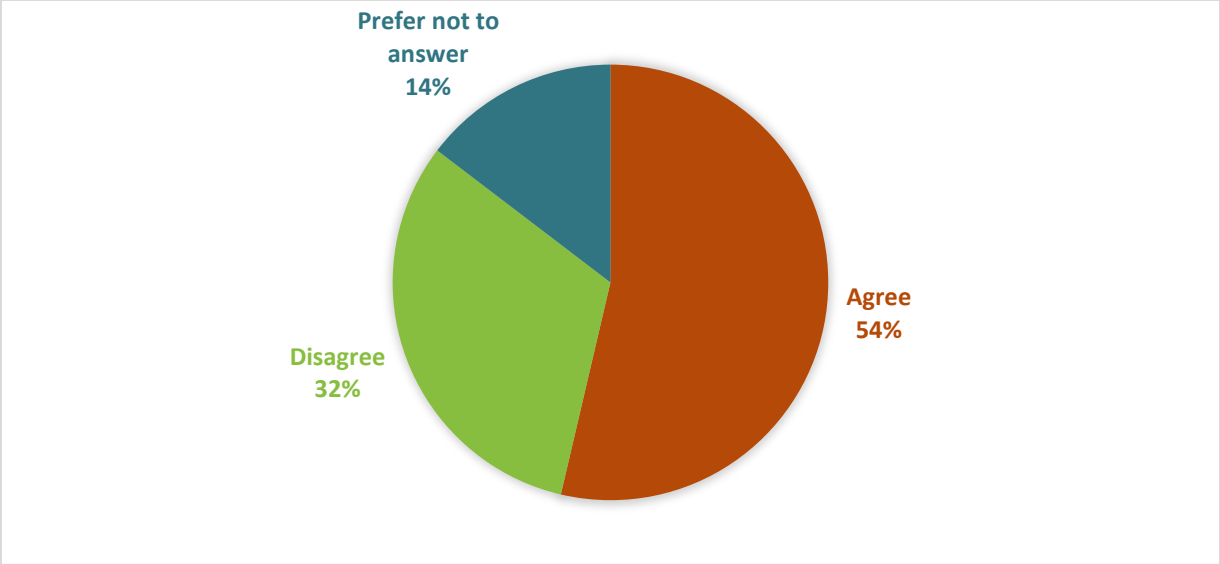

Figure 12: I support increasing adult transit fares over time to support more frequent transit service areas in more areas

The Plan also recommends that the Municipality maintain reduced fares for low-income individuals, which was met with broad support: 81% were in favour of this recommendation, while 17% were not and 2% preferred not to answer.

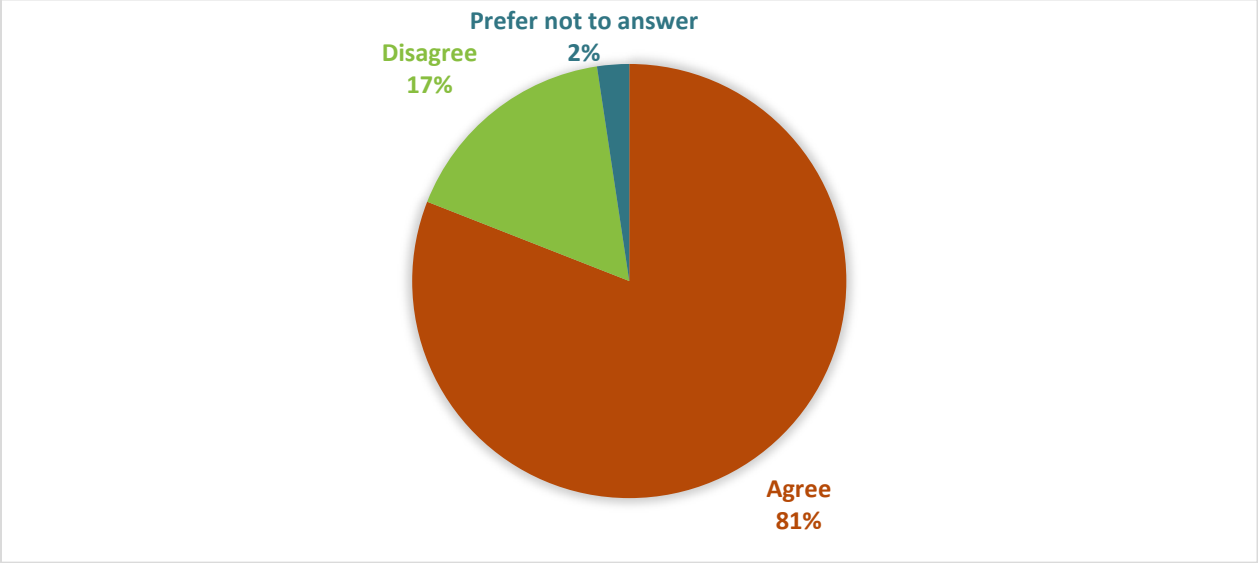

Figure 13: I support keeping fares lower for low-income individuals

Recommendations related to trip planning include developing informational materials in other languages, investigating a trip planning app, and introducing a Travel Training program. 75% of respondents agreed that these recommendations would improve their transit experience, while 14% were neutral and 12% disagreed.

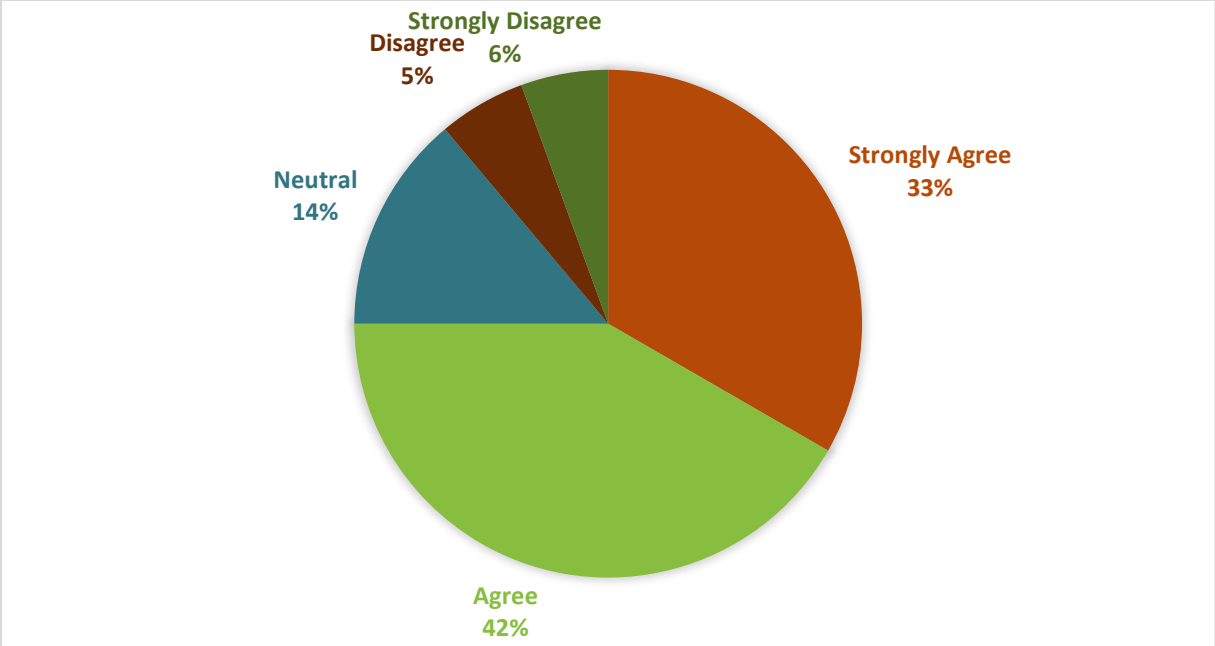

Figure 14: The recommendations related to trip planning and travel training will improve my transit experience

7.3.4 Participate Wood Buffalo

The project page on Participate Wood Buffalo encouraged the public to post Ideas and Questions using the webpage tabs. The public was required to register with Participate Wood Buffalo in order to post on the page. Results include:

- Five new ideas on the Ideas Tab in Round 2, with a cumulative total of 18 Ideas for Round 1 and 2 combined.
- Two new questions were received on the Q&A tab from the public for a cumulative total of three questions from Round 1 and Round 2. Each question received a personalized response from City staff.
- Four comments on the Places tab.
- 161 visitors participated in the Quick Polls.

7.3.5 Group Staff Interviews

Group Staff Interviews were coordinated by the RMWB to share proposed network changes with staff and listen to feedback. A summary of the feedback received is provided below.

Route A - Abasand Heights

Comment: Route no longer travels to Grayling Terrace.

Action: Route has been updated to operate to Grayling Terrace, service has been removed to Keyano College to conserve on service hours.

Route B - Beacon Hill
Comment: Route no longer serves extended care homes on Fraser Avenue.
Action: Route network has been updated with the route now updated to operate along Fraser Avenue.

Route C - Parsons Creek - Cartier - Thickwood
Comment: Route is too long and doesn't serve Holy Trinity and McTavish High Schools.
Action: Route was deleted and merged into a revised Route F (Parsons Creek-Stone Creek-Eagle Creek) to better serve local high schools.

Routes G/H
Comment: Quite like the high frequency routes, the route alignments serve high ridership areas.

7.3.6 Rural Engagement

Rural community members were asked to complete the survey or attend the public workshop. Specific rural survey questions were developed to allow for specific responses regarding rural transit services. When registering for the public workshop, participants were asked to let the team know what topics they would like to discuss, with a plan to create a rural breakout room if there was enough interest. Rural transit participants ended up joining the main room, with rural specific questions asked by the facilitator to solicit feedback.

7.4 Workshop Evaluation

7.4.1 Stakeholder Identification

Stakeholders in the February 24, 2022, workshop noted that more effort should have been directed to talking directly with clients of newcomer organizations rather than the representatives, in order to have more lived experience reflected in the feedback. The Islamist School was specifically noted in the session.

7.4.2 Stakeholder Workshops

Session participants shared that as sessions and project materials were only advertised in English, in the future the RWMB should consider adding resources to share information in additional languages.

8.0 Round 2 Public and Stakeholder Feedback

8.1 Key Themes - Stakeholder Workshops and Survey

Based on a qualitative review of comments received in two stakeholder workshops, submissions to Participate Wood Buffalo, and the survey comments received, recurring Key Themes were identified, which are outlined in **Table 3**. The Key Findings that support each Key Theme are found in **Section 8.1.1** for urban transit and **Section 8.1.2** for rural transit.

Table 3: Round 2 Engagement Key Themes

Theme	Description
Transit Operations	General comments regarding the form and function of RMWB Transit, efficiencies, impacts of changes to transit operations, implementation of new technologies, and day to day to concerns
School Service	Comments related to school services provision.
Routing/Frequency, includes Core Route, Neighbourhood and On-Demand Service	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), and reference to the built environment including sidewalks, signage, and lighting.
Affordability/Fare	Comments related to the affordability of the transit system and fares.
Equity Equity Sub-theme: Accessibility	Comments regarding the importance and ability of RMWB Transit to service all populations and communities in an equitable manner, including access to amenities, facilitating transit for newcomers, and language barriers.
SMART Bus	All comments related to SMART Bus Service
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service including interactions with staff and drivers, transit navigation and wayfinding, and information available related to transit.
Safety	Comments regarding riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments regarding the perceptions of transit, environmental benefits, and bettering communities through transit - reducing traffic, reducing emissions, growing future ridership (youth).
Staff Training/Transit Training	Comments regarding the need for staff training and transit education training for transit riders (particularly newcomers, seniors, and students).

8.1.1 Key Findings - Urban Transit

In support of each identified theme, the Project Team highlighted some of the Key Findings and responses:

8.1.1.1 Transit Operations (General Comments)

- Under the proposed transit network there are several large areas of town and neighbourhoods left out of the TMP. Residents will be required to walk further and wait longer.
- Focus of the TMP should be on how to encourage residents to use the service rather than service expansion.
- RMWB should have buses on standby to support other buses when they run into issues.
- Ridership numbers are low because the previous neighbourhood routes were reduced drastically.
- Bus drivers do not always stop at bus stops and leave riders behind.
- Ridership will increase if transit runs on time and stops are within 1-2 blocks.
- Transit should provide access to parks. This is a gap in the proposed plan.
- Fear that proposed changes are based on upgrading service from reduced amounts during the pandemic, not based on routes running during normal times prior to. As a result, the plan as proposed cuts services that were present before.
- Buses often stop directly on crosswalks which is dangerous for pedestrians.

8.1.1.2 School Service

- Significant concern that buses are severely overcrowded, an issue being ignored by the RMWB. Children do not feel safe riding the bus.
- Routes should equally serve low and high density areas.
- Bus fares are too expensive, lower income students should have an affordable pass option.
- Concern that taxpayers are paying for school services where parents and school boards should be responsible for funding.
- School buses should be provided instead of requiring the youth to ride conventional transit.
- School buses should be cleaned more often.
- Routes should be numbered for the schools they are going to (reference to two Number 51s).

Route Specific School Service Comments:

- The bus leaves McTavish 2 minutes after school ends so children often miss the bus.
- Several requests for an additional bus to support Bus 41 (Brett Drive and Eagle Ridge) and Route 17 (Parsons Creek) due to overcrowding.
- The bus leaves Father Merc 15 minutes after the hour. As after school activities run until 5pm and students cannot catch transit home unless they leave 20-25 minutes early or stay much later after the activity has ended.
- Request for an express bus from McTavish and Holy Trinity to/from downtown
- Bus 51 (Wood Buffalo Estates) to McTavish at stop 5020 is consistently late.
- Routes linking Downtown to Timberlea schools are needed.
- A route from Westwood School to Thickwood and Walter G School to Landmark Mall is needed.

8.1.1.3 Routing/Frequency, including On-Demand Service

- Service should be extended on either end of the working day.
- Request an express route from MacIsland to the Airport.
- Transit should run 24 hours a day.
- The Airport bus to the main terminal arrives 5 minutes after all connecting buses have left, and riders must wait for the next bus.
- Transit service to Gregoire and Abrams Landing is lacking, with 20 minute walks between stops.
- Transfer from downtown bus at Casman Terminal in Thickwood only allows for 3 minutes to transfer buses. Request a direct bus from Dickinsfield to downtown.
- Route 16 (Thickwood) does not stop at any other terminal on the way downtown.
- Route 12 (Thickwood to Timberlea) should serve other areas of Thickwood on the way down Thickwood Drive.
- There are no stops along Confederation and Thickwood despite the number of businesses.

On-Demand Route Specific Comments:

- Appreciate that the RMWB is using On-demand to grow service rather than replace existing service.
- Concern that On-demand riders may require multiple transfers.
- Concern about On-demand service as a new service, residents will require more education and information before deciding to use it.
- On-demand might be the solution to reduced neighbourhood routes if it is easy to use and does not require days of planning.
- On-demand seems to be complicating a process that should be easy. Fear that it will not be reliable and available when needed. The more complicated the transit system, the less ridership will be.
- Should not have to choose between neighbourhood service and On-demand.
- Request that proposed fares for On-demand be released.
- Concern that On-demand is too similar to taxi service, and people will opt for taxis instead. Particularly if the fare is similar.
- On-demand should provide 24 hours service.
- On-demand service will need to be heavily advertised with plenty of information on how to use it.
- Request that the reservation system occur through Google Maps.
- On-demand buses should come within 15 minutes.
- Concentrate on-demand in low ridership areas and maintain neighbourhood routes everywhere else.
- Only serves those with phones to call or go online to book.
- Support that on-demand may be a “greener” option with less large empty buses running.
- Concern there will not be enough on-demand buses available during peak times.

- On-demand service gaps include Gregoire Trailer park, Dickisnfield, Abram's Landing, Innisfil, Eglert Drive and Morgan/Harpe Heights.
- Removal of fixed-route airport service is a poor decision.

8.1.1.4 Core Routes

- Several comments identified that the routes proposed are very good
- Frequency should be 10 minutes. Buses must run consistently for the 15 minute frequency to be effective. If the bus is off, the frequency grows to 20 minutes.
- Concern that increased service will increase cost of service but will still have empty buses (mentioned Route 8 (Beacon Hill Drive), Route 10 (Gregoire and Prairie Creek), Route 11 (Fort McMurray Airport), and Route 92 (Syncrude Sport and Wellness)).
- Route G core routes should include Syncrude Athletic Park and Howard Pew Park (waterways). Return via Clearwater Drive or Snye Park.
- Route G should serve Stone Creek Shopping Area.
- Core routes lead to too many transfers from north side of the bridge to downtown.
- Consider using express buses between high traffic areas
- A core route that runs every 15 minutes, rather than 3-5 simultaneous routes running every 30 mins with a common "core path" (i.e. Franklin Ave) is reasonable.
- The focus on business hours, school hours and other peak times is where the RMWB's plan succeeds.
- Off-peak times should be 20 minutes off peak time in place of 25, with 25 minutes on weekends.
- Some proposed routes have no service in the evenings and between 11am and 2pm.
- The core bus routes do not adequately serve employees with weekend shifts.
- Extend peak times in the afternoon - from 5:45 am in the morning (to 9:15 am), from 3:00 pm to 6:30 pm (or 7:00 pm) in the evening.

Core Route Specific Comments:

- Additional service requested for service of Route 8 (Beacon Hill Drive), Route 10 (Gregoire and Prairie Creek), and Route 11 (Fort McMurray Airport).
- Support that Route 15 (Timberlea) travel to Stone Creek on its way to downtown. The revised route will require residents to take the bus from Loutit. This does not serve the high density and affordable housing/apartments in Stone Creek.
- Support the direct route from Timberlea to Keyano.
- MacIsland should be on a core route.
- MacIsland should be served with a direct route from uptown.
- Routes do not effectively connect with other buses - Now the 15 and 16 come into the main terminal for 10:30 pm and the 11 leaves at 10:15 pm.
- The Timberlea bus should serve Gregoire.
- A core route is required from Parsons Creek to Downtown and Keyano.

- Route 42 (Stone Creek Village) leaves Timberlea Terminal at 7:30 pm. This is not late enough for commuters and service workers with Route F circling schools and through Heritage prior to Stone Creek stops.
- Route 15 (Timberlea) should stop at City Hall.
- There is no direct bus route into the Eagle Ridge Commercial District, MacIsland, Walmart and commercial districts along Manning Avenue.
- The Airport Route should be served from Thickwood or Eagle Ridge
- The Airport Route should be advertised.
- The core route from Timberlea stopped at the local shopping plaza.
- Route 12 (Thickwood to Timberlea) should be maintained on weekend evenings
- Abasand does not have adequate service. Shift workers require service past 7pm.
- There is no service to Waterways.
- There is a loss of a dedicated route to TaigaNova Industrial Park.

8.1.1.5 Neighbourhood Routes

- Neighbourhood Routes and Core Route timings should be switched, with less wait time for Neighbourhood Routes.
- Neighbourhood Routes as proposed will be good, as long as on-demand service is easily accessible.
- Core route frequencies should be 25 minutes with off-peak time at 30-40 minutes.
- On-demand routes should not replace weekend frequencies. Weekend frequencies should be 30-40 minutes.
- Support that Route F links Stone Creek and Eagle Ridge to facilitate downtown access.
- Frequencies should be shortened during cold winter months.
- The intent of neighbourhood routes should be to serve major community facilities such as recreation centres and churches.

Neighbourhood Route Project Specific Comments:

- The Beacon Hill bus should service the Syne, downtown and east, with the Abasand bus serving downtown and west.
- Route F should serve high density housing in Parsons Creek Drive in Timberlea.
- Concern there are no improvements made for Timberlea/Thickwood/Eagle Ridge areas.
- Route 8 (Beacon Hill Drive) does not run frequently enough.
- Concern that Gregoire Industrial is not served past Northstar.

8.1.1.6 Transit Infrastructure

- Physical access to stops is very important. Poorly maintained stops and pathways increase travel time and inconvenience for transit riders.
- The lack of consistently heated bus shelters is an ongoing issue and should be reviewed.

- The RMWB should identify and legitimize pedestrian shortcuts for snow removal and pathway improvements.
- Not all bus stops are visible or have adequate signage.
- Several requests that buses be cleaned more often.
- Ramps on buses are sometimes not functional.
- All stops should have shelters.
- Buses should be accessible from both the front and back doors.
- Clear transit stops and sidewalks should be a priority.

8.1.1.7 Affordability/Fares

- Feedback identified the need to gather baseline data for ridership to identify who is actually riding transit. This data should be used to contemplate changes to fares. A cost saving matrix could be developed for rider categories - youth, seniors, disabled, low income etc.
- Additional fare flexibility should be considered such as prorating monthly passes bought mid-month.
- Local organizations should have the ability to buy bulk passes at a reduced rate for distribution to clients to increase access to passes for vulnerable groups.
- The RMWB should identify sponsors to subsidize transit fares for employees (large corporations and employers).
- The RMWB should be sensitive to low income residents purchasing a reduced fare, for example after showing eligibility for a lower fare when the fare is purchased they should not be required to show this again (for example a different bus pass that is shown to drivers).
- Several suggestions that fares should be increased to support the provision of additional services.
- Current fare seems obsolete with the number of riders who do not pay.
- Discounted fares should be available for low-income residents and seniors.
- Updated fare payment options using smart technology, such as rechargeable card/chip/fob/QR code with tap payment options.
- Fares should reflect income levels.
- Seniors over 65 should have a free fare.

8.1.1.8 Equity

- The RMWB should consider simple and easily applied modifications to improving transit infrastructure (e.g., lowering handles on buses).
- Continued engagement should be undertaken with specific newcomer groups. There is a large Hindu and Filipino community that fill key roles in the hospitality and small business sector that may not have been heard through this process and would be greatly impacted by transit. Recommend working with the Foreign Worker group in Fort MacMurray to make this connection.

- The RMWB should consider the location of affordable and subsidized housing. Neighbourhoods that lack transit are automatically removed from the list of appropriate locations to house people, as they would have no way to move around.
- The RMWB should consider servicing large worship centers that cater to high numbers of residents.
- Many ethnic groups experience discrimination while taking transit. If this is experienced by youth, they will not ride transit in the future.

8.1.1.9 SMART Bus

- The service is valuable to the community.
- Support that the application form is being simplified (language) and reduced (length). The current form is too invasive.
- Concern that SMART Bus riders may have more than one child or a child under the age of 5 that the companion voucher would not support. Consider adding permanent car seats to SMART Buses to support companions less than 5 years old.
- Booking features for SMART Bus should have option to book recurring trips more than two weeks in a row (eg. every Sunday at 9am for Church).
- SMART Bus booking requires 15 days in advance and still does not provide adequate time options for riders, should be available 24 hours.
- SMART Bus service is not available after 7:00 pm Monday to Friday and after 5:00 pm on weekdays. These services should be expanded so riders can enjoy a nightlife.
- Seniors with drivers licenses are automatically disqualified from using SMART Bus.
- Call-in option for SMART Bus bookings should remain for seniors to use the service.

8.1.1.10 Assistance Improvements/Ease of Use

- Transit information for riders and residents about transit operations, frequencies or changes to transit service should be shared using multiple approaches:
  - Apps and technology are useful for the youth, including newcomer youth.
  - Hard copy and traditional information sharing methods should be maintained for seniors and organizations for low income or vulnerable populations who may not have access to technology.
  - Information should be translated into multiple languages.
  - The RMWB can leverage youth to translate and communicate information to ESL parents and grandparents.
- Colour coding and use of symbolism should be considered for transit materials including identification of stops and bus routes. Consider adding Brail to stop design.
- Integrate trip planning with Google Maps.
- Ensure all stops have schedules posted at the terminal.

- Add frequent destinations to transit info - “This bus services Service Canada, Keyano, Churches etc”.

8.1.1.11 Safety

- The Main transit terminal downtown is not safe. Riders have experienced verbal abuse from intoxicated people.
- Downtown transit requires additional policing or security.
- During the winter transit riders are fearful of using the downtown transfer station due to prevalence of homelessness.

8.1.1.12 Transit for the Common Good

- Participants noted that those who use the bus are those that need its services the most. The goal should not be to remove people from their personal vehicles but to make the service the best it can be for riders who rely on it completely.
- Participants noted that partnerships with industry leaders should be explored. Industry can support the RMWB with possible subsidies for transit to support transit services for the RMWB and employees.
- Employers have difficulty finding hospitality and retail workers during weekend and evening shifts due to limited access to transit.

8.1.1.13 Staff Training/Transit Education Training

- Driver training was identified for RMWB drivers, as ethnic groups have experienced descrimination riding RMWB transit.

8.1.2 Key Findings - Rural Transit

The following key themes were identified for rural transit:

8.1.2.1 Routing/Frequency

- Additional and more frequent service is required to/from rural communities - should have service twice a day, including a morning and afternoon route.
- Additional services provided to rural communities take time to gain traction with residents. It takes several months to grow comfortable and familiar with new services, and often by the time this happens they have been taken away due to low use.
- Bus shelters are few and far between in rural areas and they should be heated. Shelters also appear outdated with no updated information in several years.
- Buses that connect surrounding Hamlets and First Nations should be able to have transit access to Fort McMurray on weekends.
- Request for service to Fitzgerald.

- Wait and commute times are long, which is very difficult in the winter.

8.1.2.2 Equity

- Participants requested additional funding for the use of fleets and bus drivers for service to and from rural communities for special events (RRC, winter events, concerts, etc.).
- Participants noted that the RMWB should reach out to Chiefs of First Nations and rural boards for future engagement (e.g., attend seniors bingo), and be creative to circumvent the relationship between the RMWB and rural communities.
- Participants recommended that the RMWB should identify disabled riders in rural communities to understand what is needed to provide adequate service.
- Participants feel that current stops for transit in rural communities do not reflect their residents, as the spaces should feel relevant and more connected.

8.1.2.3 Transit for the Common Good

- Services required by residents are not available to many rural communities, RMWB should be helping rural residents get to the services they need.
- Community programs should be developed to increase access to rural transit, with low fee costs.
- Residents in rural communities that are low income or have other social barriers do not have adequate access to Fort McMurray. Discounted bus passes should be available.

8.1.2.4 Affordability/Fares

- From a rural transit perspective, participants noted that it is difficult to justify fare increases to fund more robust transit services in the urban service areas when there is no perceived benefit to rural riders.

8.1.3 Round 2 Survey Comment Quotes

Core Routes

- *"These routes are great! However I would like to see them being 20 minutes off peak instead of 25. And have them be every 25 minutes on weekends".*
- *"Need a proper transit terminal downtown with transit police to secure and make transit safe and cleaned up".*
- *"I like that Timberlea will be connected to the entire downtown without having to make transfers".*

Neighbourhood Routes

- *"The routes are good! However I would prefer if we did have regular weekend service".*

- *"Neighbourhood routes are very important to people who cannot drive and do not have the money to take taxi services, and many may not have the money to call for On Demand services".*
- *"These routes are also great! I would like to see them being every 25 minutes during peak. And off peak 30-40 minutes".*
- *"Like the idea of Route F linking Stone Creek/Eagle Ridge. Makes for easier connection to downtown route from Stone* Creek area".

On-Demand

- "I think on *demand should be for the neighborhoods that need it the most. And the neighborhood routes should be running on weekends".*
- *"I think it's worth trying. It's been popular in Innisville, Ontario. Also, for persons unable to walk to the bus stop, it could be more convenient and maybe safer to wait at a more populated area".*
- *"As I see so many empty buses driving by my house, I think that on demand would better serve my neighborhood".*

Trip Accommodation

- "All *of this is great! Looking forward to seeing how transit here will evolve. And I hope to see more ridership and I believe more ridership will happen! Fort McMurray is expanding and developing as well as population increasing".*
- *"Add frequent destinations to the transit info—- ie what bus to get to service Canada, or dr offices or Keyano or each mall, or restaurants or where to buy tickets or churches".*
- *"I think the google map project the RMWB appears to be piloting may be successful when the kinks get worked out".*

Rural Service

- "Just *make it more common. If vital services won't become more common in rural areas (food, health care, retail, pharmaceutical needs, dental care, better schools, certain programs at Keyano, even certain jobs) then help rural residents get to where those things are".*
- *"I would like to see rural bus service which is more accessible. I would like to see more community programs that help and support people needing to travel into Fort McMurray by rural bus, at a low to free cost for* people".

9.0 Round 2 Enhanced Engagement Summary

While The Engagement Plan originally included two rounds of Engagement, an additional Round of internal stakeholder workshops with RMWB Transit staff and RMWB Council were held to provide additional opportunities for key stakeholder to provide feedback on the draft TMP, including updates based on prior rounds of Engagement.

Stakeholder discussions from Round 2 Enhanced helped to inform the final Transit Master Plan. Round 2 Enhanced engagement took place April 25-26, 2022.

9.1 Round 2 Enhanced Engagement Overview

Round 2 Enhanced was conducted with the goal of ensuring that RMWB staff and Councillors were active participants in the development of the plan's recommendations. Additionally, further engagement with these internal stakeholders allowed the plan to address their concerns and goals for the future.

9.1.1 How We Engaged in Round 2 Enhanced

Due to the ongoing COVID-19 pandemic Round 2 engagement activities were held virtually to minimize risks associated with in-person engagement. However, due to the improving situation related to the COVID-19 pandemic, Round 2 Enhanced activities took place in-person in Wood Buffalo.

Three workshops were offered to RMWB Transit staff (operators, supervisors, and other staff members) to provide additional feedback on the updated draft TMP. A dedicated Council workshop was also held, introducing Council members to the draft TMP and the findings from the previous two rounds of engagement.

Through this phase, the following groups were engaged:

- 27 RMWB Transit staff members including operators, dispatchers, inspectors, supervisors
    - Staff for these sessions were selected and invited by the RMWB.
- 5 RMWB Council members
    - All councillors were invited to attend this session.

9.2 Engagement Findings

9.2.1 Staff Workshops

9.2.1.1 Overall Feedback

Across the three sessions, staff provided positive feedback about the general intention and direction of the draft TMP.

9.2.1.2 Fixed Route Network

Staff raised the issue of requests for stops that are not required based on the stated service standards. It was noted that these requests can be communicated to Transit management and evaluated. Operators raised concerns about sufficient washroom facilities on longer routes.

9.2.1.3 On Demand

Staff raised questions related to the operation of On Demand service which were clarified by TMP Project staff. There was general interest and positive feedback towards piloting On Demand services as a solution for providing service to low-demand areas. Staff noted that any integration of On Demand and SMART Bus service should not take away from SMART Bus service availability for registered passengers. It was also noted that informational materials should be made available to passengers, particularly at the airport, to explain how the On Demand service works.

9.2.1.4 School Service

Staff were supportive of the TMP's proposed shift away from RMWB Transit providing specific school routes and transitioning these services to regular fixed routes where possible. Additional policies related to school service were requested to be included in the proposed Service Standards.

9.2.1.5 Transit Accessibility and Comfort

Staff indicated interest in exploring transit signal priority to improve reliability of services. Concerns were raised regarding security issues and feelings of safety for passengers on transit. Additional details were provided by RMWB Transit leadership regarding specific safety upgrades that are currently being introduced on the system.

9.2.1.6 Fares

There was interest from staff in introducing a smart card fare system. Concerns were raised related to fare evasion. Removing fares was proposed as a potential strategy.

9.2.1.7 Trip Planning

There was support for improving access to real-time bus location information. It was noted that passengers who do not have access to phones/data should be considered to ensure they are able to access information as well.

9.2.2 Council Workshop

The RMWB Mayor and Councillors who attended the Council Workshop provided feedback on the draft TMP, summarized below:

- General support for the direction of the TMP including the route structure and introduction of On Demand services
- Concern about costs
  - Project staff indicated that cost estimates will be provided in the final draft.
  - It was noted that staffing metrics such as number of operators per revenue service hour and operators per bus will remain similar
- Concern about fare evasion
- The concept of removing fares was raised
- Ensuring sufficient SMART Bus service is provided is a high priority

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Transit Master Plan

Appendix D – Policy Framework

January 2023 – 21-1297

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1.0 Introduction

1.1 Purpose

The purpose of this document is to assess the challenges and opportunities facing public transportation in Wood Buffalo, review the existing transit policy framework pertaining to Wood Buffalo, determine the role of the transit system, and recommend a policy framework for the Transit Master Plan.

1.2 Document Organization

To ensure the success of a transit master plan, it must be built on a sound policy framework that outlines the purpose of the transit system and provides guidance on how to plan, design, operate and maintain all of the components of the system. This document seeks to accomplish this.

The document is organized into the following sections, each representing a key component of the policy framework:

- **Needs Assessment** – This section will summarize information collected about the current and future ridership, understanding of the planning context, performance analysis of the transit system, analysis of the Wood Buffalo transit market, and the outcomes of stakeholder and community engagement. The information will be brought together to identify the overall needs that the new Transit Master Plan should address. This needs statement will summarize the transit challenges and opportunities facing the community and identify the strengths and weaknesses of the public transit system in Wood Buffalo.
- **Role of Transit in Wood Buffalo** – This section will take the expectations that the community wishes the transit system to fulfill (as identified in the needs statement), bring in the requirements outlined in other RMWB planning documents, and distil everything into a set of distinct roles that are appropriate for Wood Buffalo's transit and paratransit services currently as well as in the future.
- **Vision, Mission, and Goals** – This section will review the vision statement, mission statement and set of goals as outlined in previous transit plans, and the recent Transportation Master Plan. This will help to establish a strategic foundation for the vision, mission, and goals of the new Transit Master Plan.
- **Service Standards** – This section will review the set of service standards and guidelines established in previous transit plans, and identify any elements that are no longer relevant along with areas where revisions to current guidelines may be necessary. These recommended changes will form a fully integrated set of service guidelines for both conventional and paratransit services.

2.0 Needs Assessment

Since the RMWB last developed a robust Transit Master Plan in 2007, the region has changed, and the transit operational model has evolved several times. Despite this, other RMWB plans and policies do provide context for the new Transit Master Plan, including:

- Municipal Development Plan (2011);
- Transportation Master Plan (2018);
- Commercial and Industrial Land Use Study (2018);
- Strategic Plan 2018-2021;
- Winter Maintenance Program – Urban Snow and Ice Control Policy; and
- City Centre Area Redevelopment Plan (2012)

To address the changed context of the region, align with other municipal plans, and meet the area's unique and evolving needs, RMWB Transit needs a Transit Master Plan that will guide its development into the future.

This chapter of the document establishes the context for the Needs Assessment for RMWB Transit. First, any existing policies related to transit in Wood Buffalo are discussed. Next, the findings of the service review are summarized. This document concludes with a summary of the main themes from the existing policy review and service review as well as a list of recommended goals for RMWB Transit.

2.1 Existing Policy Context

This section speaks to the policies in several overarching planning documents that are related to transit in Wood Buffalo.

2.1.1 Municipal Development Plan

The Municipal Development Plan (MDP) is a long-term strategic plan for managing growth through 2030. It was approved and adopted by Council in October 2011. The MDP will be used to guide both short- and long-term decision making in the Regional Municipality of Wood Buffalo. A new MDP is currently being developed, and it is expected that this plan will further support mobility and transit improvements within Fort McMurray and the broader region.

The plan gives direction to regional, urban, and rural growth, with several directions relating to transit and mobility:

Direction R.2: Integrated Multi-modal Mobility Systems

- ***R.2.1 Develop Rapid Transit*** *– Rapid transit is an integral part of the solution to encourage permanent residency in the region by reducing commuting time from communities to oil sand operations through the region. The Municipality will commit to the pursuit of rapid transit solutions focusing, as a first priority, on connection between Fort McMurray's City Centre and places of employment and the consolidated work camp area to the north. This commitment may be approached incrementally, transitioning over time from dedicated bus lanes to Bud Rapid Transit (BRT), and potentially to the Light Rail Transit (LRT). New transportation corridors will be designed and developed with consideration for rapid transit.*

Direction U.1: Strategic Urban Development

- ***U.1.2 Protect and enhance Established Neighbourhoods*** *– In established neighbourhoods, the existing neighbourhood structure will largely remain unchanged, with targeted increases in density taking place in selective areas. Intensification will be directed primarily along transit corridors, at transit nodes, and on vacant or underutilized land.*

Direction U.2: Supportive Urban Mobility Systems

- ***U.2.1 Focus on Transit*** *– Within the urban area, the Municipality will emphasize the provision of regular transit to connect Emerging and New Neighbourhoods to the City Centre as a destination, and as a connector, through rapid transit to employment in the north. In addition, the Municipality will investigate rapid transit connections between the airport and the City Centre. The Municipality will develop transit systems that are reliable, safe, and convenient, as well as accessible throughout the year.*
- ***U.2.2 Promote integration of urban transportation systems*** *– As the population grows, it is desirable to have more and more people select alternative modes of transportation. The Municipality will promote alternative modes of transportation by emphasizing convenience, comfort, and efficiency. An integrated approach to transportation planning will ensure smooth interchanges between systems. Bicycle stands and lock-ups, bicycle accommodation on transit, sheltered transit nodes, and park-and-rides, among many other possibilities, will be considered. The Municipality will promote complete streets that provide equal opportunity for all modes of mobility.*

Direction 4.1: Complete Livable Communities

- ***4.1.3 Plan for a variety of mobility choices*** *– An integrated and well-connected street, sidewalk, and trail network can help promote walking and cycling as well as enhance the viability of transit. This, in turn, can serve to reduce congestion and greenhouse gas emissions while providing residents with options for how they move. The*

Municipality will prioritize pedestrian movement and transit to reduce dependence on single occupant vehicles. Streets will be designed as complete streets with considerations for the comfort, safety, convenience and visual interest of all users, including cyclists, transit riders, and pedestrians of all ages and abilities. Subdivisions and communities will be planned in a manner that places emphasis on active transportation and walkability.

2.1.2 Commercial and Industrial Land Use Study

The Commercial and Industrial Land Use Study (CILUS) examines commercial and industrial land requirements in the region until 2030. It was approved and adopted by Council in June 2018.

A series of recommendations were made to support a strategic and efficient approach to commercial and industrial development. Development trends, implications for planners, and recommended actions were identified for retail, industrial, and office space development. Recommended actions that implicate transit development include the following:

Trend – Power Centres and Large Format Retailers

- ***Implication:*** *Need to balance urban form, walkability, and community integration with consumer desires and large format benefits.*
- ***Recommended Action:*** *Because power centres fail in many ways to achieve the goals of sustainable development, where power centres are necessary, planners should attempt to encourage greater transit use, walkability, and integration with the adjacent communities.*

Trend – Transit Oriented Development (TOD)

- ***Implication:*** *Recognize there is a finite demand for high density development. Transit itself does not create demand for retail but retail can be focused around stops.*
- ***Recommended Action:*** *Plan for an appropriate amount and mix of retail, office, and residential to meet demand and site context. Do not expect transit to increase retail demand.*

2.1.3 Strategic Plan 2018-2021

The RMWB Strategic Plan is a map to the future of the region. It provides focus and clarity on the direction that will be followed to achieve the vision of Wood Buffalo's future. The Plan aims to help citizens understand strategic priorities and track progress over the four years of the plan. It was approved and adopted by Council in January 2018.

The Plan sets out a number of strategies that align with the strategic priorities, contributing to a robust plan created to foster the continued development of the region. One such strategy is the Transportation Strategy, which identifies the construction of a downtown transit terminal hub.

2.1.4 Winter Maintenance Program – Urban Snow and Ice Control Policy

The Urban Snow and Ice Policy for Wood Buffalo was developed to establish priorities and standards of the Snow and Ice Control Program based on winter conditions and available resources. Council adopted the policy in January 2016. As snow and ice can significantly impact access to transit stops and facilities, it is an important consideration for transit planning and operations for systems in winter climates. Because the majority of snow and ice control is undertaken by the Municipality, rather than RMWB Transit, the Transit Master Plan needs to consider the impact of this policy and proposed changes to the transit system may in turn promote future changes to this policy.

The purpose of the Policy is to:

1. *Set winter and ice control standards for urban area roads and sidewalks.*
2. *Ensure municipal roads and sidewalks are maintained in order to reduce hazards and economic loss.*
3. *Prioritize safe access to emergency vehicles and transit.*
4. *Provide guidelines for management and operating personnel in the handling of winter maintenance operations.*

The policy classifies primary, secondary and tertiary routes for snow clearing priority. Secondary routes include urban service area transit routes and are the second highest priority. The guidelines specify that snow in transit lane areas is to be hauled to allow safe access by buses and pedestrians. De-icing / sanding materials are to be applied on such areas as required.

2.1.5 City Centre Area Redevelopment Plan

It is the Municipality's objective to attract development, commerce and residents to Fort McMurray's City Centre in order to create a quality urban environment that is a vital and dynamic place to work, play and live. The City Centre Area Redevelopment Plan was developed to guide and facilitate the realization of that objective.

The Plan identifies eight objectives and associated strategies that form the basis of the action plans:

Objectives:

1. *A Sustainable City*
2. *A People City*
3. *A Beautiful City*
4. *An Accessible City*
5. *A Secure City*
6. *An Inspirational City*
7. *A Competitive City*
8. *A Connected City*

Strategies:

- *Focus new job opportunities within a compact concentration of high density office buildings, with excellent access to public transit.*
- *Neighbourhoods will be walkable with convenient and universal access to transit and with improved access and comfort during all seasons.*
- *Improve public transit to and within the City Centre*
- *Ensure that plans for expansion of housing and employment are accompanied with correspond expansion of the health education and social services systems in locations that are accessible by a variety of transportation modes including public transit, biking, and walking.*

The Plan outlines a number of transportation policies and actions. One such action is to substantially improve public transit service through the following:

- *Connect various transit routes through the City Centre so that passengers do not have to transfer, thus reducing the chance of missed connections.*
- *Create new transit routes to neighbourhoods with high-density development.*
- *Locate transit stops at activity nodes of retail, civic and employment centres.*
- *Introduce technology to provide real time information on the progress of buses.*
- *Encourage high frequency bus services along Franklin Avenue on reserved bus lanes.*
- *Work with the province to designate priority bus lanes on Highway 63 to connect transit from the City Centre and other Fort McMurray areas to the mine sites.*
- *Create main public transit routes on Franklin Avenue and other arterial roads, such as Saline Creek Parkway.*

2.2 Performance of Existing Transit System

A Peer Review was completed to compare RMWB Transit's current characteristics, service, and operations to similar transit systems across the country. The comparable system information provided input into RMWB Transit's roles, vision, mission and goals that follow in this document. This information will feed into the preparation of various elements of the Transit Master Plan in future work and be included in the final Transit Master Plan document. The Peer Review was completed with the transit systems in the following municipalities: Grande Prairie, Red Deer, Medicine Hat, Sault Ste. Marie, and Prince George.

Compared to its peers, Wood Buffalo's Conventional Transit Service has the following attributes:

- Operates a radial transit network similar to the other systems its size;
- Has a similar service utilization to its peers;
- Has higher operating expense per passenger and per vehicle hour;
- Has a higher number of service hours per operator;

- Has less expensive cash fares for all riders;
- Has less expensive Adult and Student monthly passes; and
- Offers free ridership for seniors, unlike the peer systems.

2.3 Stakeholder and Community Engagement

An initial round of public, stakeholder and staff engagement has been undertaken to guide the Transit Master Plan process. This round focused on understanding perceptions of the current system, and what was desired from RMWB Transit in the future.

Due to the ongoing COVID-19 pandemic, these engagement activities were held virtually to minimize risks associated with in-person engagement. Through the public survey, transit employee survey, three stakeholder workshops, and two rural community workshops, the public shared information about issues, transportation needs, and what people expect from RMWB Transit. Using Engagement HQ, Participate Wood Buffalo also featured a page for this project.

Subsequent to the initial round of engagement that informs this document, a further round of public engagement, and an additional round of internal engagement will occur. These rounds will seek feedback on the proposed Transit Master Plan, and be documented in Appendix C.

2.4 Summary of Findings and Needs Statement

The results of this first round of engagement have been divided into what we heard from the public and stakeholders, as well as what we heard from internal RMWB staff. The key themes are summarized below. For detailed engagement findings, refer to Appendix C.

2.4.1 Public and Stakeholders

The Public and Stakeholder feedback focused on the services currently provided by RMWB Transit, with a strong desire for improved services and better infrastructure for transit riders. The key themes are listed in **Table 1** below.

Table 1: Public and Stakeholder Engagement Key Themes

Theme	Description
Routing/Frequency (includes On-Demand Service)	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), reference to the built environment including sidewalks, signage, and lighting.
Affordability	Comments related to the affordability of the transit system and fares.
Equity Equity Sub-theme: Accessibility	Comments regarding the importance and ability of RMWB Transit to service all populations and communities in an equitable manner, including access to amenities, facilitating transit for newcomers, and language barriers.

Theme	Description
SMART Bus	Comments specifically-related to SMART Bus services, beyond the other general themes.
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service including interactions with staff and drivers, transit navigation and wayfinding, information available related to transit.
Safety	Comments regarding riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments regarding the perceptions of transit, environmental benefits, bettering communities through transit - reducing traffic, reducing emissions, growing future ridership (youth).
Staff Training/Transit Training	Comments regarding the need for staff training and regarding transit education training for transit riders (particularly newcomers, seniors, students)

2.4.2 Internal

The Internal feedback focused on the way services are operated by RMWB Transit, with a strong desire for improved routings, and changes to safety, and operating policy to increase morale within the workforce. The key themes are listed in **Table 2** below.

Table 2: Internal Engagement Key Themes

Theme	Description
Transit Operations	General comments regarding the form and function of RMWB Transit, efficiencies, impacts of changes to transit operations, implementation of new technologies, and day to day to concerns.
Routing/Frequency	Comments directly related to routes, the number and placement of stops, the need for extended or additional service, and route efficiencies/inefficiencies.
Transit Infrastructure	Comments related to infrastructure at stops and shelters, types of transit vehicles (i.e. electric buses), reference to the built environment including sidewalks, signage, and lighting.
Employee Morale	Comments regarding the working environment and workplace morale among transit workers.
Assistance Improvements/ Ease of Use	Comments related to the provision of customer service including interactions with staff and drivers, transit navigation and wayfinding, information available related to transit.
Safety	Comments regarding riders' perceptions of safety and comfort riding RMWB Transit and safety improvements.
Transit for the Common Good	Comments regarding the perceptions of transit, environmental benefits, bettering communities through transit - reducing traffic, reducing emissions, growing future ridership (youth).

2.4.3 Summary of Engagement Findings

Overall, the initial round of engagement showed that the community and staff desire an improved transit system that better serves the RMWB. Key themes for improvements include:

- Service frequency;

- Route alignments;
- Transit infrastructure; and
- Customer service.

These are all core elements of a successful transit system, indicating that RMWB Transit's focus should be on improving these base aspects of the system in the shorter term. Doing so would address the majority of perceived issues, while creating a solid foundation from which to grow and address the other key themes from engagement.

3.0 The Role of Transit in Wood Buffalo

The organization's role should look beyond the past planning framework and recognize that the roles of transit systems throughout the world are changing. Many transit systems today are becoming broad mobility coordinators for their community through leadership in building partnerships with new mobility providers and approaches.

Acknowledging all of this as well as the summary of needs and findings in the previous section, the following role and action statements are proposed for RMWB Transit:

The primary purpose of RMWB Transit is to provide mobility services to the community.

To achieve this role, residents need to be able to access the service regardless of their background, economic situation, or ability level. As such, RWMB transit will continue to upgrade the transit system to offer fully accessible transportation to passengers. This includes using low floor buses, providing schedule information in accessible formats, and upgrading on street infrastructure to allow for barrier free trips to be completed by transit.

RMWB Transit will design routes such that 90% of residents within the Fort McMurray Urban Service Area are within a 300 metre walking distance from a bus stop. For those unable to traverse the 300 metres and who are unable to use conventional transit service RMWB offers a paratransit service, SMART bus. The Municipality is committed to working in collaboration with other mobility providers to identify approaches and provide services that will continue to enhance mobility for all residents.

RWMB recognizes that transit is one component of a larger system of mobility and therefore will implement programs that not only encourage greater use of transit, but also active transportation options which can be combined with transit to develop integrated mobility patterns.

4.0 Vision, Mission, and Goals

4.1 Vision Statement

The vision statement for an organization should be a clear and concise statement describing *the desired future for the organization in serving its community*. The vision statement speaks about broad themes relevant to the organization. Every action taken by the organization should reflect the vision and the goals and objectives should be well aligned with the vision statement.

The existing vision statement from the 2007 Transit Master Plan is as follows:

> *RMWB Transit will increase transit ridership and provide a local public transportation system that is supported by residents, academic institutions and the business community.*

This vision statement highlights important goals for transit in Wood Buffalo – increased ridership and a system that utilized by all. However, the statement focuses on the *local* transportation system and fails to mention that providing service to its rural communities is also a priority. The vision statement is also quite wordy, and has the potential to be something that is easy to forget.
There are two possible approaches for a vision statement for RMWB Transit: the aspirational and the specific. **Table 3** compares the two approaches.

Table 3: Comparison of Vision Statement Approaches

	ASPIRATIONAL	SPECIFIC
DEFINITION	An aspirational short slogan-like vision statement	A descriptive short and clear vision statement
PROS	• Simple and catchy • Concise • Emotionally inspiring	• Detailed • Precise • Easy to understand
CONS	• Length limits context • Potential for misinterpretation • Non-traditional, can come off as a marketing slogan	• Can be overly specific • Not always emotionally inspiring
EXAMPLE	"Brampton Transit: Connecting you to everyday"	"Strathcona County Transit will provide opportunities for all residents and businesses in the community through the provision of sustainable mobility services."

Three suggested vision statements for RMWB Transit are shown in **Table 4**. The rationale for each vision statement suggestion is also presented.

Table 4: Suggested Vision Statement Options for RMWB Transit

	ASPIRATIONAL		SPECIFIC
POSSIBLE VISION	**RMWB Transit – For all life's journeys**	**RMWB Transit – Convenient connectivity for all**	**RMWB Transit will be an attractive, integrated and sustainable mobility option for all residents of the Regional Municipality of Wood Buffalo.**
RATIONALE	This statement is simple, memorable, and focuses on RMWB Transit as a mobility option for all types of trips. The phrase "for all life's journeys" suggest a mobility service that is readily available to all and connects you to your destination.	The statement is simple, memorable, and emphasizes that RMWB Transit is a mobility service that connects all of Wood Buffalo. The phrase "convenient connectivity for all" speaks to themes of connectedness and inclusiveness and points to the vision that RMWB Transit is a convenient travel option for everyone, including rural residents	This statement is more precise and focuses on RMWB Transit as being an inclusive and accessible mobility service option for everyone. The terms "attractive", "integrated" and "sustainable" suggests that the future vision for RMWB Transit is to be a comparable travel option for all residents that is well integrated with other modes of travel and remains sustainable as it continues to grow and evolve.

Starting with the suggested visions in Table 4, discussions with RMWB Transit staff throughout the development of the plan have evolved the vision to the recommendation below. This recommended vision statement focuses on the system's desire for improvement and ridership growth, while being short and aspirational, and reflecting the desires of the community articulated during engagement:

RMWB Transit – making better connections

4.2 Mission Statement

The mission statement of an organization builds on the broad vision statement by succinctly describing how the organization achieves the vision.

The existing mission statement from the 2007 Transit Master Plan is as follows:

To provide safe, efficient and environmentally friendly public transportation services that support the economic vitality, growth, environmental sustainability, and health of the regional community.

This mission statement does a good job of highlighting how the organization aims to achieve the vision identified in the 2007 Transit Master Plan. However, an updated mission statement is necessary to connect with the new vision statement.

The following is the suggested mission statement for RMWB Transit, based on the existing policy context, feedback from community, and the updated vision statement.

To provide **accessible, attractive** and **efficient** mobility services that meet the **needs of the region now**, and in the **future**.

The bolded words in the suggested mission statement convey specific values of RMWB Transit, which are described in more detail below.

- **Accessible** – The service should be accessible to people of all ability levels, age, gender, sexual orientation, social, ethnic, cultural and economic backgrounds.
- **Attractive** – An attractive service is one which is competitive with other modes of transportation that are available to residents, requiring high levels of frequency, reliability, and coverage.
- **Efficient** – Transit should operate in a manner that is fiscally responsible, finding ways to improve efficiency by providing the highest quality service with the amount of resources available. Efficient transit systems also reduce their environmental impact, helping to improve the environment of Wood Buffalo.
- **Needs of the region** – The service addresses the specific needs of Wood Buffalo, with a network, infrastructure, and passenger amenities that fit its unique context.
- **Now** – This recognizes a need for change and action in the near term to provide service of the highest quality in the present moment.
- **Future** – Recognizing that change will inevitably occur in Wood Buffalo, transit service must be responsive to those changes/should work in collaboration with Council, residents, and stakeholders to guide and respond to that future.

4.3 Goals / Strategic Priorities

Having recommended the roles, vision, and mission for RMWB Transit, the next step is to establish a set of goals and corresponding objectives that will guide the individual activities of the organization. While the goals are specific paths taken to achieve the vision and mission, they are still relatively broad. On the other hand, objectives are more detailed measurable targets whose achievement will progress the goals.

Goals and objectives are more manageable and better aligned when they belong to a clearly defined set of strategic priorities – or themes – that the organization will focus on and prioritize.

Based on the existing policy framework, comments from community engagement, results of analysis, existing contexts, recommended roles, and the updated vision and mission statements, the following four strategic priorities are recommended for RMWB Transit:

Table 5: Strategic Priorities

Priority	Mission Values
1. Convenient Travel	Attractive, Efficient, Needs of the region, Now, Future
2. Customer Focus	Accessible, Attractive, Needs of the region, Now, Future
3. Equity	Accessible, Now, Future
4. Fiscal & Environmental Responsibility	Efficient, Needs of the region, Now, Future

Table 6 presents the suggested goals and objectives for these four priorities. Note that the suggested objectives must be measurable to ensure that progress can be adequately monitored. In the table below, the objectives will need to be refined as they are not yet appropriately detailed or measurable.

Table 6: Goals and Objectives

Strategic Priority	Goals	Objectives
Convenient Travel	Reduce the need for passengers to transfer between routes	Introduce a route network that spans multiple key destinations/areas of the city by reducing transfers
	Deliver transit service in innovative ways	Incorporate on-demand service or flex routing where feasible (eg. in areas of low ridership)
Customer Focus	Enhance rider amenities	Maintain existing and add new heated bus shelters, that can reasonably be maintained in a fiscally sustainable way
	Remove fare and pass purchasing barriers	Implement modern fare payment system in formats desired by customers
	Engage partners to support service growth	Work with developers that are supportive of transit service
	Define minimum access to transit service	Update minimum access standards to ensure 90% of the community is within walking distance of bus stops
	Operate a system built on connections across the City	Ensure bus stops are accessible (path access/curb cut) and connected to the sidewalk network
	Increase transit's focus on strategic planning and develop minimum design standards and new development phasing thresholds to provide integration and encourage use	Focus on implementing transit in new developments as early as possible Incorporate comments from transit in the development circulation process
	Strive to improve public perceptions of transit	Improve perception of transit by highlighting benefits (cost, convenience, decreased congestion, decreased GHG emissions)

Strategic Priority	Goals	Objectives
Equity	Encourage transit use by newcomers	Eliminate language barriers and implement Travel Training program
	Ensure all communication meets accessibility best practices	Eliminate communication barriers and ensure all communications and documents meet accessibility standards
	Integrate conventional and specialized transit services to provide fair and equitable access to public transportation	Strive for conventional and specialized services to be equitable by providing same hours of services, fares, wait times, flexibility of travel etc.
	Ensure a competitive, consistent and equitable fare structure	Develop fare structure that incentivizes public transit, is affordable and maintains low fares for those who need them
	Be accessible	Adopt design principles for vehicles, bus stops and other transit amenities that facilitate usage by the greatest number of people including persons with disabilities, older adults, newcomers, and parents with children. Implement Travel Training program
Fiscal & Environmental Responsibility	Provide a service that is environmentally aware, and uses financial resources efficiently	Reduce the environmental impacts, and improve Revenue/Cost ratio closer to Canadian average, or at least 20%

5.0 Service Standards

The primary service planning policy for a transit system is its service standards. This policy document is typically owned and administered directly by the transit system, and compliments broader municipal policies and goals. These help to ensure alignment and progress in the right direction, by providing a robust set of planning, design, and operations service guidelines that link to their goals and objectives. The 2007 Transit Master Plan identified a set of service standards that assist in determining levels of bus service on a route and when to introduce bus service to new neighbourhoods. **Table 7** summarizes the existing RMWB Transit service standards for conventional transit and paratransit and contains some proposed changes and recommendations to the guidelines.

Table 7: Existing Service Standards and Recommended Changes

Theme	Indicator	Existing Conventional Service Guideline	Existing Paratransit Service Guideline	Comments & Recommendations
Planning	**Service Coverage**	• 90% of low-density housing units within the urbanized area of Wood Buffalo shall be within a 450 metre walk (less than 5 minutes) of a bus route. • In new developments, 70% of units should be within a 300m walk of a bus stop. • 100% of medium to high density residential units within the urbanized area of Wood Buffalo shall be within a 300 metre walk (less than 3 minutes) of a bus route.	• SMART Bus is available within the urban area of Fort McMurray. • Limited service is also provided to the rural communities of Anzac and Janvier on Wednesday and Thursday respectively with flexible scheduling depending on the needs of passengers. • Service to Conklin and Fort McKay is available on request.	• Formally define the "urbanized area" of Fort McMurray. • Formally define the boundaries of the service area outside of Fort McMurray for the Paratransit service.
	Service Warrants	Conventional bus service shall be provided to new subdivisions with 400 households or 1000 residents; alternative forms of service delivery shall be considered for new subdivisions that do not meet the criteria.	N/A	• The new service area should be greater than 400m from existing routes and must be adjacent to areas served by transit. • *Passenger Revenues and Costs* – when forecasting passenger ridership, revenues and operating costs, the demand and location of the development, socio-economic characteristics of the population, physical (geographic and road) constraints, accessibility, the pace and timing of the development and transit dependency shall be taken in to account. • Forecast ridership and revenues must be sufficient such that the service will achieve a cost revenue of 5% within 12 months and 10% within 18 months. • Define the parameters under which On Demand services and conventional services would be introduced.
Operation	**Eligibility**	N/A	• The following persons are eligible for specialized transit services: o Seniors (65 years or older), if required and recommended by a medical practitioner. o Those with mobility issues that prevent or severely restrict their use of conventional bus service as confirmed by a licensed health care professionals. • There are six types of registrations: o Non-ambulatory passengers - A registered passenger with a temporary or permanent disability who regularly requires the use of a wheel chair or scooter, but who may on occasions use only a walker, cane, crutches, etc. o Ambulatory Passengers - An ambulatory passenger is a registered passenger with a temporary or permanent disability who is able to walk but cannot use public transit. An ambulatory passenger may use a walker, cane, crutches, etc., but does not require the use of a wheel chair or scooter. o Temporary Passengers - A temporary passenger is a registered passenger with a disability who requires the use of specialized transit for at least six (6) weeks. All temporary passenger files are reviewed after 3 months.	**See SMART Bus recommendations in Appendix E.**

Theme	Indicator	Existing Conventional Service Guideline		Existing Paratransit Service Guideline	Comments & Recommendations
				o Visitors - A registered passenger, who does not live permanently in Fort McMurray and fits within the mandate. o Personal Care Attendants - A personal care attendant is an individual, who travels with a passenger because they require assistance. This attendant is required to travel with the passenger on every trip and must have an approved personal care attendant identification card available from the Specialized Transit Office. o Paying Attendant - A paying attendant is an individual who travels with a passenger only for some trips because the passenger can't travel without assistance.	
	Service Hours	**Weekdays**	6:00 am – 12:00 am	7:30am – 7:30pm Monday, Tuesday, Wednesday, Friday 7:30am – 10:00pm Thursdays	• Extend specialized transit service to be available during the same hours as conventional service, including customer service call centre hours. • Review service annually to adjust based on City and ridership growth. • All transit services, including Paratransit, should have the following minimum hours of service: **Monday – Friday** 6:00 a.m. – 10:00 p.m. **Saturdays/Sundays/Holidays** 8:00 a.m. – 10:00 p.m.
		Saturday	7:00 am – 12:00 am	8:30am – 5:30pm	
		Sunday	8:00 am – 10:00 pm	8:30am – 5:30pm	
	Headway (Frequency of Service)	**Weekday Peak Periods**	30 minutes	N/A	Transit services should have the following minimum service frequencies: **Peak Period Weekdays** Core – 15 minutes Neighbourhood – 30 minutes School – as required **Off-Peak Period Weekdays** Core – 25 minutes Neighbourhood – 30 minutes **Early Mornings/Late Evenings** Core – 25 minutes Neighbourhood – 60 minutes **Weekends and Holidays** Core – 25 minutes Neighbourhood – 60 minutes The service plan should be reviewed annually to adjust based on City and ridership growth.
		Weekday Off-Peak and Evening Periods	60 minutes	N/A	
		Saturdays and Sundays	60 minutes	N/A	
	Trip Booking Window	N/A		• 24 hours' notice is required for all bookings. • Advance bookings can be booked up to 2 weeks in advance. • Same day bookings are accommodated on availability only.	**See SMART Bus recommendations in Appendix E.**

Theme	Indicator	Existing Conventional Service Guideline	Existing Paratransit Service Guideline	Comments & Recommendations
	Accessibility	• All conventional vehicles shall be low floor wheelchair accessible, with rails and hand holds, keeping universal accessibility in mind. • Land use design guidelines shall be designed to maximize accessibility to bus stops.	• Paratransit clients shall be able to use conventional transit at no cost. • Travel training should support and encourage the use of conventional transit wherever possible.	No comments or recommendations beyond the existing guidelines.
Design	**Route Design**	• All routes shall be provided in both directions to the extent possible. One-way service loops beyond two kilometres are considered unacceptable. • Routes shall be located along major arterial and collector roads and only be provided along residential local roads in order to meet walk distance requirements. • Routes shall be designed so that the need to travel to any destination within the urbanized area of Wood Buffalo does not require more than one transfer.	N/A	No comments or recommendations beyond the existing guidelines.
	Bus Stop Locations	• The location of bus stops must be co-coordinated with the design of walkways, intersections and development in order to minimize walk distances and provide for reasonable bus stop spacing. • Stops should be spaced: o Every 200m in downtown areas o Every 250m in urban areas o Back-lotted arterial roads may dictate the need for longer spacing between bus stops. • Preference given to bus stop locations which/where: o Are adjacent to major trip generators o Sidewalks exist o Are near walkways which improve service coverage o Do not block driveways o Are adequately illuminated o Road crossings are minimized for transferring customers o Consider bus turning movements. o There is space available for a shelter and where the addition of a shelter has minimum sightline impacts. o Traffic signals, utility poles, planters and street trees, do not block bus doors or visibility. o Are near signalized intersections or stop signs. o Sightlines are maximized for operators, motorists and pedestrians, and which minimize the impact on sightlines and slip off lanes at intersections. o Are not on upgrades or downgrades when possible. o Traffic volumes are such that the addition of a bus stop has minimal impact from or on motorists.	N/A (door to door service)	• Minimum bus stop spacing along any route should be 150m.
	Walkway Locations	Walkways should be provided such that walking distances from the residences of a subdivision to existing or future transit routes are minimized.		No comments or recommendations beyond the existing guidelines.
	Transit Priority	Transit signal priority and bus by-pass/queue-jumping lanes should be implemented, where feasible.		No comments or recommendations beyond the existing guidelines.

Theme	Indicator	Existing Conventional Service Guideline	Existing Paratransit Service Guideline	Comments & Recommendations
	Rural Transit Service	• Transit service from the more rural communities should, at a minimum, provide service to Fort McMurray on Fridays, Saturdays and Sundays to enable rural residents to return on the same day. • The level of service in the rural areas should reflect a comparable investment in transit service that all Wood Buffalo residents contribute on a per capita basis. • Schedules should be developed in consultation with rural communities. • Transit service shall be provided to nearby rural communities to reduce the demand for on-street residential parking during the peak periods.		No comments or recommendations beyond the existing guidelines.
	New Development	• Transit routes can be provided on arterial roads and major collectors which have reasonable through access; not on crescents or cul-de-sacs. Streets on transit routes must have a minimum of 9m wide pavement. • Arterial and major collector 'through' roads should be spaced no more than 900m apart to allow adequate transit route coverage of future residential developments. • Provision should be made to minimize one-way transit loops. One directional loops longer than 2km are unacceptable. • Provision for temporary transit vehicle turning circles must be provided, where necessary, to allow transit route phasing to coincide with development phasing. A minimum of 15.2m radius is required for the turning circle. • Road layouts in residential developments should be designed such that transit routes require a maximum of 1km of transit route per 1,000 residents served.		• New developments should consider providing pedestrian infrastructure throughout the development that reduces the walking distance to existing and/or future transit routes.
	Bus Stop Design	• Every bus stop requires: o An entry ramp (min. 7.8 for farside stops, 17.8m for midblock and nearside stops) o A parking space (min. 12.2m) o An exit ramp (min. 5m) o A bus stop landing pad o A bus stop marker which should be mounted so the bottom is 2-3m from the ground. When mounted on a wide pole such a hydro pole is should be mounted on the side of the pole (away from the street) with a bracket so it is visible from both directions long the street. • Space requirements for different bus stops: o Nearside or midblock stops (min. 36m) o Farside zones (min. 26m) • All bus stops are No Parking zones (30 m)		• The use of bus bays should be discouraged except in certain circumstances where lengthy bus dwell times would significantly interfere with overall traffic movement or on high speed (>60 km/hr) roads. The engineering service standard should be reviewed and potentially to reflect this change. • Include bus bay dimensions in a standard detail and reference. • Define the characteristics of premium stops including transit terminals. Outline the infrastructure expectations at these locations. • Identify the characteristics of stops which would qualify for shelter installation.

In addition to the recommendations outlined in **Table 7**, in order to provide a comprehensive guide for RMWB Transit that assists in delivery high quality services in line with industry best practice, the service standards should also consider the following:

1. Minimum and target ridership levels for each route type, as well as the actions that can be expected when a route falls below the minimum ridership levels;
2. Expected behaviour of buses at designated transfer points and timepoints; and,
3. Maximum vehicle occupancy and actions that should be taken if vehicles are regularly exceeding maximum occupancy levels.

Table 8 outlines recommended additions to the service standards to align with these three categories. Elements like these can be found in the service standards of other transit agencies across Canada, including those of a comparable size and geography to RMWB Transit.

Table 8: New Service Standard Recommendations

Indicator	Recommendations
Ridership Levels	**Core Routes:** Minimum: 15 passenger boardings per revenue hour Target: 25 passenger boardings per revenue hour **Neighbourhood Routes:** Minimum: 8 passenger boardings per revenue hour Target: 15 passenger boardings per revenue hour **Paratransit:** Minimum: 2 passenger boardings per revenue hour Target: 3 passenger boardings per revenue hour **On Demand:** Minimum: 5 passenger boardings per revenue hour Target: 10 passenger boardings per revenue hour
Service Level Changes	Neighbourhood Routes, which fall below 8 passengers per hour should be discontinued or converted to On Demand services. Neighbourhood Routes between 8 and 10 passengers per hour should be modified or restructured. If Core Routes have fewer than 15 passengers per hour on weekdays, RMWB Transit should study ways to encourage more people to use the routes by providing better feeder services, marketing, etc. Core Routes should not be discontinued. On Demand service should be replaced with a fixed route service if it exceeds 12 passengers per hour.

Indicator	Recommendations
Transfers	Buses at designated transfer points should wait no longer than three minutes for arriving buses. The designation of timed transfers should be limited to non-standard operations, such as school services.
Vehicle Occupancy	The maximum number of passengers per bus should not exceed 150% of the seating capacity, based on the average occupancy over the course of a week. During off-peak and weekend periods, passenger occupancy per bus should not exceed 100% of the seating capacity, based on the average occupancy over the course of a month.
Schedule Adherence	No bus should leave early from any time point. Buses should not leave more than four minutes late from the time point, 95% of the time.

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Specialized Transit (SMART Bus)

Appendix E

January 2023 – 21-1297

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List of Tables

1.0 Introduction

1.1 Purpose

The purpose of this document is to outline the recommendations for the Regional Municipality of Wood Buffalo (RMWB) SMART Bus as part of the RMWB's Transit Master Plan.

1.2 Report Structure

This report is divided into the following sections:

1. **Introduction** – overview of report purpose and structure.
2. **Current Situation** – description of the existing state of specialized transit in Wood Buffalo including opportunities and challenges facing the service.
3. **Recommendations** – recommended improvements to specialized transit with associated rationale, grouped into key themes.
4. **Financial Plan** – description of the financial impact of implementing the proposed changes.
5. **Summary** – conclusion and summary of all recommendations.

2.0 Current Situation

The Special Mobility Assistance Required Transportation (SMART) Bus currently provides transportation services for:

- Individuals over the age of 65 that do not have a driver's license; or
- Individuals with mobility issues that prevent or severely restrict their use of conventional transit service.

Residents that fit the above criteria must apply for the service and be approved by the municipality.

Operations

Like conventional transit, SMART Bus is provided by the Regional Municipality of Wood Buffalo and is fully managed and operated by the municipality. The SMART Bus fleet is made up of 11 small lift-equipped buses. Of these, 9 were used in peak operations pre-COVID. All vehicles are owned by the RMWB. All trips are provided using this dedicated fleet and there is no non-dedicated service provided.

Service Area and Period

SMART Bus is provided on a pre-booked basis with trips available daily within the urban area of Fort McMurray. **Table 1** illustrates the hours of service that SMART Bus is available. This is compared to the service hours for conventional transit.

Table 1: SMART Bus Service Hours

Day	SMART Bus	Conventional Transit
Monday, Tuesday, Wednesday, Friday	7:30am – 7:30pm	5:30am – 11:23pm
Thursday	7:30am – 10:00pm	5:30am – 11:23pm
Saturday, Sunday, and Statutory Holidays	8:30am – 5:30pm	6:00am – 11:23pm

SMART Bus service hours of service in the urban area of Fort McMurray are shorter than conventional service. On weekdays, SMART Bus service starts 2 hours later and ends between 1.5 and 4 hours earlier than conventional transit, depending on the day of the week. On weekends and statutory holidays, SMART Bus starts 2.5 hours later and ends 6 hours earlier than conventional transit. It should also be noted that a summer pilot will occur between August 1st and August 31st, 2022, which will see SMART Bus hours extended until 10:30pm.

Limited SMART Bus service is also provided to the rural communities of Anzac, Janvier, Conklin, and McKay. When a person from one of these communities registers for SMART Bus service, staff from Transit will work out a dedicated day of the week for the service to operate to their community. Currently, SMART Bus service is offered to Anzac on Wednesdays and to Janvier on Thursdays at pre-

arranged times (when pre-booked). There is currently no service to Conklin and Fort McKay as there are no passengers registered for SMART Bus that live in these communities.

Conventional transit also operates scheduled, fixed-route, service to these rural communities with two trips per day of service. Service to Anzac and Janvier is scheduled on Tuesday and Thursday, Conklin and Anzac on Wednesday and Friday, and Fort McKay on Thursday.

Application Process

To access specialized transit services in Wood Buffalo, passengers are required to submit an application that describes their barriers to accessing conventional transit service. The form is filled in by the passenger as well as a health care practitioner and can be submitted by mail or by email to the Regional Municipality of Wood Buffalo. Applications are reviewed for completion and content, and a decision is made by RMWB transit staff (from the Public Works Department).

Eligibility Criteria

Eligibility for the service is based on having one or more of the following limitations to mobility (as identified by the SMART Bus Passenger Handbook):

- Physical;
- Cognitive;
- Sensory;
- Visual; and
- Age.

RMWB Transit also offers unconditional, conditional, and temporary registration. These passenger categories are defined as follows:

- **Unconditional** - A person with a disability that prevents them from using conventional transit all of the time.
- **Conditional** - A person with a disability where environmental or physical barriers limit their ability to consistently use conventional transit some of the time. Conditional registrants may be able to use conventional transit for all or part of their trip, but may also qualify for SMART Bus under specific circumstances for some or all of their trip.
- **Temporary** - A person with a disability who requires the use of the SMART Bus for at least six (6) weeks. All temporary passenger files are reviewed after 3 months.

The vast majority of registrants are unconditional (99%) while a small number are conditional (0.5%) and temporary (0.5%). It should be noted that only the definition of Temporary Registrant is included in the SMART Bus Passenger Handbook and there is no defined “conditional” category, which is why it is currently rarely used.

Trip Booking

Bookings are processed by phone or email between the hours of 8:00am and 4:00pm from Monday to Friday. Trips can be requested a maximum of 14 days in advance and up to 24 hours before the desired trip time, when dispatch staff available. Same-day trip requests are accommodated on weekdays where possible. Outside the call centre working hours (e.g. evenings and weekends), dispatch staff coordinate trip cancellations but do not accept new bookings.

Attendants

There are two types of attendants that can travel with a registered passenger.

1. Mandatory Attendants are attendants that are required to travel with the registrant and the registrant cannot travel without them. Mandatory Attendants are not required to pay a fare.
2. Non-Mandatory Attendants provide an additional level of support for the passenger, but are not required to travel with the registrant. Non-Mandatory Attendants are required to pay a passenger fare.

Both types of attendants are required to be over the age of 18 and not another SMART Bus registrant.

Fares

The fare for trips is equivalent to conventional transit service at $1.50 per trip, which can be purchased as a single fare or in groups of 10 or 20. Rural SMART Bus tickets costs $10, equivalent to conventional rural fare.

All seniors over the age of 65 ride conventional transit service for free. Seniors that are registered for SMART Bus pay the standard fare for a SMART Bus trip (e.g. $1.50 per trip). The same fare policies for attendants noted for SMART Bus apply while on conventional transit.

Registrants and Ridership

In 2019, SMART Bus had 352 registrants and provided 19,549 trips, including passengers and attendants. Ridership remained fairly stable between 2018 and 2019, and reduced significantly in 2020 due to the COVID-19 pandemic. Registrant and ridership information between 2018 and 2020 is summarized in

Table 2**.** A further breakdown of registrants by type is available in **Table 3.**

Table 2: Annual Registrant and Trip Summary (2018-2020)

Category	2018	2019	2020[1]	2021
Registrants	327	352	423	435
Passenger Trips	16,016	15,967	6,677	7,209

[1] Ridership and revenue vehicle hours were significantly reduced in 2020 due to the impacts of the COVID-19 pandemic.

Attendant Trips	3,666	3,582	764	444
Total Trips	**19,682**	**19,549**	**7,441**	**7,653**
Revenue Vehicle Hours	14,379	12,767	11,822	11,112
Total Trips per Revenue Vehicle Hour	**1.36**	**1.53**	**0.63**	**.69**
Total Trips per Registrant	**44.0**	**55.5**	**17.6**	**17.6**

Table 3: SMART Bus Registrants and Trips by Category

	Trips (2019)	% of Trips	Registrants (2021)	% of Registrants	Trips per Registrant
Senior	2,470	15.7%	98	22.5%	25.2
Wheelchair Senior	596	3.8%	75	17.2%	7.9
Disabled Senior	3,236	20.6%	81	18.6%	40.0
Wheelchair Adult	2,079	13.2%	42	9.7%	49.5
Disabled Adult	6,992	44.5%	98	22.5%	71.3
Wheelchair Child	47	0.3%	8	1.8%	5.9
Disabled Child	285	1.8%	33	7.6%	8.6
Total	**15,705**	**100%**	**435**	**100%**	**36.1**

As illustrated above, seniors without a disability and adults with a disability make up the highest composition of registrants (22.5% each), however, seniors without a disability make far fewer trips. The "Disabled" category noted above includes a person that has a physical, cognitive, visual or sensory disability that prevents them from using conventional transit, excluding a person that uses a wheelchair or scooter as a mobility aid.

The average number of trips made by registrant is 36.1. Children make up the fewest trips per registrant (8.1), followed by seniors without a driver's license (25.2). Peer Review

A peer review of SMART Bus was conducted and is presented in **Appendix A** (Peer Review). The peer systems reviewed include:

- Grande Prairie, Alberta (pop. 69,008);
- Red Deer, Alberta (pop. 101,002);
- Medicine Hat, Alberta (pop. 63,260);
- Sault Ste. Marie, Ontario (pop. 69,900); and
- Prince George, British Columbia (pop. 69,084).

The performance of Wood Buffalo's SMART Bus service compared to its peers can be found in **Table 4**. For more details, please refer to **Appendix A**

Table 4: Peer Comparison of SMART Bus Service

Performance	Aspects of Service
Above Peer Average	• Less expensive cash fares in all categories; • Registrants that are seniors can use conventional service at no charge; and • Low percentage of trips cancelled.
Consistent with Peer Average	• Start of service; • Advance booking notice; • Minimum booking notice; • Number and type of vehicles in service; and • Comprehensive eligibility criteria and nuanced registrant categories.
Below Peer Average	• Earlier end of service; • Daily service span; • Number of registrants per 100,000 people; • Rides per capita; and • Trips per registrant.

It should be noted that the lower level of registrants per 100,000 population and number of rides per capita is likely due to the demographics for the municipality, as Wood Buffalo has a much younger population than many of the peer comparators (the likelihood of developing a disability increases as we age).

3.0 Recommendations

The recommended improvements to SMART Bus service were organized into a number of key areas. The areas reflect various stages of a specialized transit service, from eligibility to operations. For each recommendation, the existing situation was reviewed and compared to industry best practices. The recommendations for SMART Bus noted below are organized by the following themes:

- Integration with On Demand Service;
- Service Hours;
- Eligibility;
- Evaluation of Applications;
- Attendant/Companion Policy;
- Appeals;
- No Shows and Late Cancellations;
- Travel Training;
- Technology
- Fares; and
- Rural Service.

3.1 Integration with On Demand Service

3.1.1 Discussion

Conventional On Demand systems can often closely resemble specialized transit service. Like specialized service, On Demand is on-request and does not operate fixed routes. Depending on the operating model selected, On Demand services can pick passengers up at their curb or at a designated bus stop. Provided the vehicles used are accessible and the scheduling software can accommodate curbside pick-up, there is an opportunity to integrate On Demand transit with specialized service where On Demand vehicles pick-up specialized transit passengers and take them to a fixed-route where they can complete a trip.

Existing Situation

There is currently no On Demand service in Wood Buffalo. However, the introduction of On Demand zones are a significant component of the Transit Master Plan recommended network.

A stop-to-stop model has been recommended, where passengers request a trip, which would pick them up and drop them off at the nearest bus stop within the On Demand zone.

Peer/Best Practice

For some passengers, a major barrier to conventional transit may be accessing the conventional bus stop itself, and leveraging On Demand services to pick-up and drop-off passengers at the door within the

On Demand zone way removes this barrier. By opening up the option to take conventional trips within their abilities, some passengers will have increased availability of trip options, while opening up additional dedicated specialized service for those passengers who require it.

Best practice also includes additional staff support for passengers taking integrated trips, such as Travel Training to ensure the passenger can safely complete the trip independently, and accessible on-street supervisor vehicles that are available to provide assistance in the case of pass-ups, inclement weather, or other disruptions.

Opportunities and Challenges

In Wood Buffalo, there may be an opportunity to utilize the On Demand service to provide integrated trips. Due to the manual nature of current scheduling for SMART Bus trips, planning trips with transfers to the conventional service may be logistically challenging. However, On Demand software is more dynamic in scheduling, allowing for spontaneous trip booking that may be better suited for connecting to fixed-route services. Depending on the type of vehicles utilized in an On Demand service, many registered SMART Bus passengers may be able to access the On Demand service as opposed to the SMART Bus.

However, there are opportunities for potential trip integration for registered SMART Bus users using future On Demand services. Registered SMART Bus passengers who live or travel within an On Demand zone could have the ability to provide verification within the On Demand app and access door-to-door service to the nearest fixed route. This would increase mobility options for some registered passengers, allowing for more spontaneous and flexible travel when pre-booking SMART Bus is not possible or convenient. Opening up the On Demand service in this way provides an extra level of service, while freeing up existing resources in SMART Bus for other passengers who require the service, offering greater trip availability.

3.1.2 Recommendation

It is recommended that the On Demand transit model include an option to allow door-to-door pick-up and drop-off in the On-Demand zone for registered SMART Bus registrants. The software would provide a space for a registered SMART Bus passenger to enter their registration number.

SMART Bus registrants would have the ability to book the ON Demand service to get a pick-up or drop-off at their door. Travel outside the On Demand zone would require the passenger to transfer on to a fixed-route service at the hub. This would not replace SMART Bus service within the On Demand zone but would provide an additional option for registered passengers who are able to use it.

This recommendation would require the Regional Municipality to add this functionality to the procurement of an On Demand software package.

It is also recommended that the RMWB gradually use accessible vehicles for the On Demand service to increase opportunities for co-mingling of passengers.

3.2 Service Hours

3.2.1 Discussion

Existing Conditions

The service hours for both SMART Bus and conventional service are displayed in **Table 5**.

Table 5: Existing Transit Service Hours

Day	SMART Bus Service Hours	Conventional Service Hours
Monday, Tuesday, Wednesday, Friday	7:30am – 7:30pm	5:30am – 11:23am
Thursday	7:30am – 10:00pm	5:30am – 11:23am
Saturday and Sunday	8:30am – 5:30pm	6:00am – 11:23pm
Statutory Holidays	8:30am – 5:30pm	6:00am – 11:23pm

This comparison highlights a disparity in service hours between specialized and conventional service. The high per-hour operation cost for specialized service makes the expansion of hours challenging to implement. In the past, an additional day of late evening service was introduced for SMART Bus passengers; however, that time period experienced low demand. The low levels of ridership did not justify the increase in operating costs and as such the service hours were removed.

Peer/Best Practice

The industry standard is to maintain parity in service hours between specialized and conventional transit. There are a number of reasons for this:

- From an equity and quality of life lens, service hour parity provides the opportunity to participate in the community to the same extent as individuals that are able to use conventional transit;
- From a human rights perspective, service hour parity is a proactive measure that may help to avoid future human rights complaints were certain segments of the population are not offered the same opportunities as others; and
- From a legislative perspective, while Alberta does not currently have provincial accessibility legislation, a number of provinces that do mandates parity in transportation services. Ontario, Manitoba and Nova Scotia currently have provincial accessibility legislation and British Columbia is currently writing the policy. Alberta is likely to follow suit.

Opportunities and Challenges

Increasing service hours to have parity with conventional would provide higher levels of mobility for SMART Bus passengers. However, the associated increase in service hours would result in higher operating expenses. Ridership for SMART Bus registrants during early morning and late evening periods

has traditionally been very low, resulting in a few trips per week when service was previously expanded to these periods.

Based on one (1) vehicle scheduled during all extended periods, this would result in an additional 2,700 revenue vehicle hours annually. The current collective bargaining agreement would require an increase this service hour requirement based on minimum daily and weekly shift times and need for spare operators. This could bring the service hour requirement up to between 3,300 and 4,200 annual hours; or a 26% to 33% increase from 2019 service hours. At an hourly rate of $107.35, this would result in an approximately an additional $355,000 to $451,800 in annual operating expenses, plus any additional hours associated with a customer call centre or supervision.

Given the low ridership expected during these periods, two alternative solutions could be considered include:

1. **Contract the Service to a Third Party**. There are some third party operators or taxi companies with accessible vehicles in the market that could be available to provide the service based on a cost per trip. This would mean that the RMWB would only get charged if a trip was requested and confirmed. Typical costs could range between $100 and $300 per trip. Assuming a conservative estimate of 7 early morning or late evening SMART Bus trips delivered per week, the annual cost in this option would range between $36,400 and $109,200.

2. **Provide and Integrated On Demand Service.** Utilize the On Demand service to support expanding availability of specialized transit service. In the mornings and evenings when SMART Bus does not operate but conventional service does, the On Demand service could be expanded to pick up registered SMART Bus passengers and complete those trips. The software would be required to be able to recognize registered SMART Bus passengers and offer a different type of trip to those specific passengers. This would require RMWB staff to use the On Demand software to book SMART Bus trips that are requested during these late/early morning periods. This option would not see any significant increase in operating costs if ridership remains low.

3.2.2 Recommendation

RMWB should move towards expanding service hours to have parity with conventional service. In the short-term, RMWB staff should monitor ridership on the service hour extension pilot that is planned to occur for the month of August 2022. If ridership during the extended period is low (e.g. less than 10 boardings per week), then RMWB staff should look to enter into a contract with a third-party operator based on a 'cost per trip' type contract (only pay an operator when a trip is booked). This will provide significant cost savings over providing dedicated hourly service. If ridership increases to a point were dedicated service is viable (e.g. greater than 1.0 to 2.0 boardings per revenue vehicle hour), the service model should be switched to in-house operations.

In the medium-term, it is recommended that the extended service be integrated with the On Demand service (see **Section 3.1**). This should occur after the On Demand service is in place for at least a year to assess the ability of the On Demand service to provide door-to-door trips for SMART Bus passengers during these periods. This would also require the use of accessible vehicles, which may not be in place initially during the On Demand pilot. This model would reduce operating costs if demand for extended hour SMART Bus service is low, as the vehicles would already be on the road.

Should the On Demand vehicles not be able to provide the evening and early morning service for SMART Bus registrants, then non-dedicated contract or dedicated SMART Bus vehicles should be considered.

3.3 Eligibility

3.3.1 Discussion

Existing Conditions

In order to access specialized transit services in Wood Buffalo, passengers are required to submit an application that describes their barriers to accessing conventional transit service. The form is filled in by the passenger as well as a health practitioner and can be submitted by mail or by email to the Regional Municipality of Wood Buffalo. Applications are reviewed for completion and content, and a decision is made by RMWB staff. Eligibility is determined by specific mobility barriers that prevent the applicant from using conventional transit. As well, adults who are over the age of 65 and do not have access to a private vehicle are automatically eligible for the service.

The SMART Bus Passenger Handbook lists a broad range of limitations that it considers when assessing eligibility for SMART Bus. This includes physical, cognitive, sensory, visual, and age. The consideration of these limitations are fairly common among other specialized transit services, with the exception of age, as many residents over the age of 65 would continue to have the ability to use conventional transit.

The vast majority of applicants who apply for SMART Bus service are approved. Denials typically only occur when the application is completed incorrectly or is incomplete. These applications are typically approved once the applicant resubmits with the issues addressed.

Upon approval, registrants are placed into one of the following passenger categories:

- Non-Ambulatory Passengers;
- Ambulatory Passengers; or
- Temporary Passengers.

There are no conditions applied to eligibility based on a passengers ability to use conventional transit some of the time. For example, many specialized transit agencies also have a ‘conditional passenger’

category, where passengers are eligible to use specialized transit only when their condition prevents them from using conventional transit.

Peer Practice/Best Practice

Industry best practices highlight the importance of matching the correct type of service to each passenger. Most transit agencies are investing in the accessibility of their conventional transit service (e.g. low-floor vehicles, accessible stops). This opens up this service for certain persons with disability, for some, all or part of their trip. Matching the correct type of service to each passenger maximized the use of this investment in accessible conventional transit, which increasing the availability of specialized transit services to those individuals that truly require it.

Many application forms focus on functional ability to use conventional transit, including the situations where a person is not able to use the service based on their ability. For example, a registrants ability to access conventional transit at night versus the day, or during summer versus winter weather conditions. This helps identify whether an applicant requires the use of specialized transit some or all of the time. This would create a new passenger category of "Conditional Eligibility", with the condition identified that would allow the registrant to use specialized transit.

Having a 'conditional eligibility' category can reduce the number of trips taken. By encouraging registered passengers to take conventional transit within their abilities, additional specialized transit service hours would be available for other registrants who require the service and are not able to use conventional transit. This creates a more equitable service for all residents. Typical conditions of eligibility include:

- Winter;
- Darkness;
- Rush Hour AM/PM;
- Non-accessible Route;
- Unfamiliar Destination;
- Medical Condition; and
- Alone.

The SMART Bus eligibility category of individuals over the age of 65 without access to a private vehicle is also not commonly found within the industry. This is because many seniors over 65 are active and still capable of using conventional transit for some or all of their trips. This also goes against the principle of providing specialized transit to individuals based on their abilities, rather than a generic category such as age and access to a driver's licence.

Opportunities and Challenges

The current application form captures some information about the applicant's ability to use conventional transit; however, the framing of certain questions does not clearly require applicant's to describe their barriers to conventional transit.

To illustrate, a comparison between certain questions in the SMART Bus Application Form and the York Region Transit (YRT) Mobility On-Request Paratransit application form is provided below:

RMWB SMART Bus	YRT Mobility On-Request Paratransit
Have you ever traveled independently on Fort McMurray Transit? □ Yes □ No Explain: Are there any specific destinations that you are able to travel independently on a regular transit bus? Please list the address(es) below	Use of conventional buses: **1. Which of the following best describes your ability to get to or from a conventional public transit bus stop?** **(Check only one)** • I am able to walk or roll a city block (175 metres) to a bus stop. • I am only able to walk or roll a city block (175 metres) to a bus stop with a mandatory support person. • I can never get to or from a conventional transit bus stop because: (written explanation) **2. Which of the following best describes your ability to get on and off a conventional transit bus?** *(Answers: Yes, No (if no, explain why))* • I can safely wait for a conventional low-floor bus if there is seating. • I can safely get on and off a conventional low-floor bus with no steps. • I can handle a fare, take a transfer or show a pass.

The SMART Bus application form places more responsibility on the applicant to explain how they *can* utilize conventional transit rather than how they *cannot*. In contrast, the YRT Mobility On-Request Paratransit application form requests higher level of detail that specifically evaluates a potential registrant's ability to access both stop and conventional transit vehicles and pay for their fare. If the applicant indicates an inability to access a stop or vehicle, they are required to provide further detail as to how and why. This can result in a higher level of detail in the applicant's responses that can indicate their level of need for specialized transit service more accurately.

Moving to an application form which identified more conditions of eligibility can better align passenger ability with the need for the service. However, the benefits of moving to conditional eligibility rely on staffing availability to conduct in-depth evaluations and expertise to accurately evaluate what type of

eligibility an applicant should be assigned. As such, there may be additional costs associated with having conditional eligibility, due to the additional time required per application.

The existing "65+ without a driver's license or private vehicle" eligibility category provides access to specialized transit service to a larger group of residents than other transit agencies typically offer. While improving access to the service can have benefits, it also limits the use of conventional transit, allowing registered passengers who do not truly have barriers to conventional transit, to use the SMART Bus service. This can increase the number of potential trip denials for persons with disability if the service is also being used by seniors that do not have a disability. Furthermore, an inflated number of registrants can result in higher costs for the service over all, as each registrant and their associated trips incurs additional costs to the agency.

Despite the challenges noted above, the first round of Transit Master Plan engagement had a number of SMART Bus riders identify that the existing application form is too long and complex, and is not seen as customer-oriented. Adding additional questions to the form to determine conditional eligibility may increase the length of the form.

3.3.2 Recommendation

Eligibility should be identified based on the conditions under which passengers require the service, rather than providing unconditional eligibility to use specialized transit for any trips. To achieve this principle, the following changes to eligibility are recommended.

1. **Remove the Eligibility Category of "Age".** The SMART Bus Hand Book states that senior citizen's over the age of 65 automatically qualify of the service if required and recommended by a medical practitioner. A person's age should not be seen as a limitation to use conventional transit, even if the person does not have access to a private automobile or a licence to drive. Instead, the approval for the service should be based on functional limitations to use transit, including physical, cognitive, sensory and visual. All of these are covered in the existing eligibility criteria and should be the focus of the assessment.
2. It is not anticipated that this will significantly change the number of applications approved for seniors that lose their licence, but it may change the condition of eligibility.
3. **Strengthen the Use and Evaluation of Conditions of Eligibility.** The application form should be updated with questions framed to specifically ask applicants to explain the ways (or conditions) that prevent them from using conventional transit. (e.g. if the route or physical environment is not acceptable, darkness and winter conditions). This should include the following:
    - Winter;
    - Darkness;
    - Non-accessible route;
    - Unfamiliar Destination;
    - Medical Treatment; and
    - Travel Alone.

In order to do this, the scheduling software will need to create conditions of eligibility which note when a passenger can ride.

4. **Increase Ease of Filling out the Application.** Questions that are repetitive or that request information that is not directly used in the evaluation or registration process should be removed to reduce the level of effort required to submit the application. The application should be available online as a fillable PDF that applicants can print or email.

3.4 Evaluation of Applications

3.4.1 Discussion

Existing Conditions

Completed applications are submitted directly to RMWB Transit by mail or email and evaluated by the Supervisor, Transit Planning. The application requires a health care practitioner to complete a section of the form regarding the applicant's functional abilities and their ability to access conventional transit. There are no follow-up evaluations before a decision is made, unless there appears to be an error or missing information in the application.

Peer Practice/Best Practice

According to the Canadian Urban Transit Association (CUTA) Canadian Code of Practice for Determining Eligibility for Specialized Transit ("Code of Practice"), the industry standard for applications is a comprehensive review of each applicant and their specific barriers to accessing conventional transit. This can best be accomplished by modifying the medical form to be framed in a manner that asks questions around a person's functional ability. While framing these questions in this manner will help identify conditions upon which a registrant can use specialized transit, it is partially dependent on the medical practitioner's knowledge of the client and their ability to perform certain functions without witnessing them first hand. In certain circumstances, clients applying for specialized transit may believe they are unable to use the service based on a lack of understanding of the service.

To address this, many specialized transit agencies have started to conduct in-person evaluations of applicants. This would require applicants to attend a 1 hour in-person assessment with an independent medical practitioner funding by the municipality to assess their ability to use conventional transit under different circumstances. In this instance, the decision made by the in-person evaluation would rule on the eligibility of the applicant.

For the purpose of treating all applicants equitably, CUTA notes that requiring in-person assessments for all applicants is common. However, this can result in significant additional costs for the transit agency. If in-person evaluations are selectively required, there must be clear policy indicating under what circumstances they will be requested to provide transparency for the community.

In-person evaluations can be completed by externally contracted health care practitioners or by internal staff in the employment of the transit agency. A dedicated in-house staff member can be valuable in this role; however, the size of the transit agency must be large enough to justify a full-time employee. Many smaller agencies utilize contracted services for this purpose through an organization or by identifying a qualified individual to conduct assessments on an as-needed basis. Regardless of the organizational structure, individuals responsible for assessments should have experience in the rehabilitation field (such as physical, occupational or recreational therapists), or have a background as a nurse, social worker, and emergency medical technician.

Where barriers to use conventional transit are tied to specific factors that are not always present, the best practice is to provide conditional eligibility, which allows passengers to use the service under the specific conditions that apply to them. These can include winter only or darkness only. A thorough, personalized assessment is required to make decisions on conditional eligibility.

Opportunities and Challenges

The current application form has a Part B form called Professional Verification to be completed and signed by an applicant's doctor, nurse or other health care worker that is familiar with the applicant.

There are some challenges with the current application form that do not allow the medical practitioner to adequately identify the functional ability of the applicant to use conventional transit. A high level assessment of the form follows below:

1. Question 3 asks the medical practitioner to check a list of conditions that may affect the applicant's ability permanently, temporarily, during the winter or summer and during the day or night. The question is general and provides no background on how the person's condition will impact the use of conventional transit. This question should be revised or removed and replaced with more detailed questions that allow comments regarding each category. Details regarding time duration and conditions of the applicant's barriers to mobility should be collected in their own specific questions.

2. Question 4 also asks whether the applicant's disability or health condition prevents them from using conventional transit. Similar to the applicant section, this question does not get into the barrier to using conventional transit. For example, is the barrier getting to the bus stop, and does that change during summer and winter conditions. Is the barrier learning a new bus route, and could that change with an effective travel training program that would increase the independence of a passenger to make trips to frequent destinations? Adding more specificity to this question would be beneficial.

3. Question 9 provides the right level of specificity when assessing the applicant's ability to travel. It asks specific questions about the service and does not require the medical practitioner to make a determination on whether they are able to use conventional transit some or all of the time. Two

questions that are missing from this section involve a passenger's ability to pay a fare and their ability to be on a bus that is crowded.

4. Question 11 asks the medical practitioner whether the applicant requires a Mandatory Attendant when they are in the SMART Bus. This question should be more general and focus the trip (e.g. help boarding a vehicle, care while riding in a vehicle, assistance to take the passenger to and from their destination). Based on the answers to these questions, the need for a Mandatory Attendant should be determined by the RMWB staff member assessing the application. Question 12 is a good example of this type of question, where it asks whether the applicant can be left alone at their destination.

Reframing the Professional Verification section will help bring more clarity to the evaluation. It is important that it is clear that the medical practitioner is not the person making a determination of the applicant's eligibility on SMART Bus, but rather providing information on the applicant's functional ability to use conventional transit. It is the responsibility of the assessor to determine eligibility, which may include follow-up questions to the medical practitioner.

Implementing in-person assessment can improve the accuracy of the eligibility decision made by the assessor. When using a third-party contracted service, there is an increased impartiality of the assessment from both the medical practitioner who filled out the Professional Verification form and the assessor working for the RMWB. Instead, the third-party assessor is one-step removed from both the RMWB and the applicant and bases their review on an in-person assessment that is directly tied to mobility barriers that prevent the use of conventional transit, and not on the general medical condition.

This may increase the number of denials and cases of conditional eligibility due to more individualized assessments. Reducing the number of registrants and trips taken can in turn lead to lower operating costs, or a reduction in cost increases with a growing and/or aging population. By reducing the number of conditionally eligible registrants, there may also be higher levels of trip availability for those who require it.

It should be noted that increasing the number of applicants that are not approved for the service may lead to a greater demand for appeals (described further in **Section 3.5**), which have historically been minimal at RMWB Transit.

Introducing in-person assessments is associated with a higher cost per application, due to the higher level of staffing required. These staffing costs may vary based on whether dedicated internal resources are required or if a third-party health care service provider is contracted to conduct evaluations on a case-by-case basis. The additional costs associated with a third-party assessor may be mitigated by clearly identifying which types of applications can be approved with full eligibility by internal staff members and only sending a subset of applications for further assessment.

In-person assessments may present a challenge for customers as they require an additional level of time and effort to get to the location where the assessment is being conducted. This may be seen as

increasing barriers to the application. As such, a universal requirement that all applicants undergo in-person assessment may not be appropriate.

Typically, in-person assessments cost can cost a municipality between $200 and $250 to engage a health-care provider to conduct each in-person assessment[2]. SMART Bus receives approximately 85 new applications per year. Assuming about 50% of these new applications would have the potential to be conditionally eligible, the annual cost of in-person assessments would be between $8,600 and $10,750.

The cost per trip on SMART Bus (based on 2019 data) is approximately $87.00. Assuming that:

- the new eligibility process results in 35% of new applicants being approved for conditional eligibility (or 30 new conditional passengers per year based on 85 applications); and
- conditional registrants make 30% fewer trips than unconditional registrants (33 annual trips versus 44 annual trips respectively).

This would result in 335 trips being made on conventional transit instead of SMART Bus in the first year for individuals that have the ability to use the conventional transit service. Assuming that the reduction in SMART Bus trips would result in fewer service hours, the cost savings in year one could exceed the cost to conduct the in-person assessment.

3.4.2 Recommendation

It is recommended that RMWB revise the Professional Verification form to increase the clarity of the questions to be more in line with the applicant's functional ability to use conventional transit as noted above. The assessor would have the ability to ask clarifying questions to the medical practitioner upon reviewing the application to confirm their understanding of transit and how the person's disability may be a barrier to using conventional transit.

This process, along with the change to eligibility noted in **Section 3.3** and new travel training program noted in **Section 3.8**, should see an increase in conditional registrants. This will help to provide more travel choices for a number of registered SMART Bus customers and increase the availability of trips for customers that are only able to use SMART Bus. Based on other specialized transit agencies in Canada, it can be expected that 25 to 35% of new applications would be approved as conditional or temporary registrants.

There may still be challenges with this process as the assessment of eligible passenger is done over paper and may result in eligibility determination of some residents that is not based on their functional ability. If this continues to be the case and the new process results in little change in the eligibility outcomes of new registrants or a high rate of appeals, it is recommended that the RMWB adopt a third-party in-person assessment process. RMWB staff would continue to receive applications and assess for completeness and apply a screening criteria for applications require to move forward with an in-person

[2] Note: Based on research from other municipalities and not specific to rate in Wood Buffalo.

assessment. The in-person assessment would assess the applicant's functional ability to use conventional transit under various conditions and make a final determination. This process would provide more impartiality to the determination of eligibility.

3.5 Attendant/Companion Policy

3.5.1 Discussion

Specialized transit service is intended to serve individuals who are not able to utilize conventional transit service. In some cases, passengers may require a mandatory personal care attendant to assist them in successfully completing trips on the specialized service and cannot travel alone. Some registrants require this for all of their trips, while others require assistance only for certain trips (e.g. when carrying large parcels or when their medical condition requires assistance some of the time).

Many specialized transit services also allow registered passengers to travel with one or more companions who do not provide a support service but wish to travel together.

Existing Conditions

SMART Bus allows for two types of attendants:

- **Mandatory Personal Care Attendants:** An individual who travels with a registered passenger because they require assistance on all trips. Personal Care Attendants do not pay a fare.
- **Paying Attendant:** An individual who travels with a registered passenger who does not require full-time assistance. Paying Attendants are required to pay a fare.

The role of the Paying Attendant is not clear and should be clarified. The SMART Bus Passenger Handbook does not provide any restrictions on the role of the Paying Attendant, which suggest they can travel with a passenger that does not require assistance. In reality, the role of attendants are to support registered passengers when they require assistance with their trip. The requirement for any attendant is also that they are over the age of 18 and are not registered SMART Bus passengers. This suggests that companions are not permitted on SMART Bus.

There is no policy in place which allows for companions, or additional passengers that wish to accompany registered passengers on a discretionary basis. There are inconsistent understandings in Wood Buffalo of the service's purpose among some passengers: for registrants only, or for registrant's family members.

Peer/Best Practice

A review of existing policies related to companions on specialized transit is provided in **Table 6**.

Table 6: Peer System Companion Policies

Transit System	Max # of Companions	When Companion Trips are Confirmed	Age Requirements
TTC	1[3]	At time of booking	None specified
York Region Transit	2	At time of booking	None specified
Regina Paratransit	As many as space permits	At time of booking	None specified
Winnipeg Transit	1	After schedule confirmed	None specified
Halifax Transit	1	At time of booking	Must be over age 5
Strathcona County Transit	1	At time of booking	Must be over age 6 and ambulatory
Airdrie Transit	As many as space permits	At time of booking	None specified
Sault Ste. Marie	As many as space permits	At the time of booking	None specified
TransLink	1	At the time of booking if space is available	Children under 9 are permitted, but registered client must provide appropriate CSA approved child securement (car seat or booster seat).
Peel TransHelp	2	At the time of booking	None specified

The majority of specialized transit systems allow for a maximum of one companion and confirm the availability of space for the companion on the vehicle at the time of booking. YRT Mobility On-Request Paratransit allows for two companions per registered passenger. Regina, Sault Ste Marie and Airdrie allow for as many companions as can be accommodated in the vehicle. Handi-Trans (Toronto Transit Commission) allows passengers to request additional companions on the day of the trip, subject to space availability.

Allowing for a minimum of one companion is standard practice within the industry, as it allows family members and friends to travel together. This improves the experience for specialized transit passengers, providing opportunities for them to complete everyday trips with other people as non-specialized transit passengers have the ability to. Most systems require that the registered passenger and their attendant/companion be picked up and dropped off at the same location.

The majority of systems allow travel by children should an appropriate vehicle be in place to have the child travel safely. Strathcona County and Halifax have a minimum age in place, which mandates that companions must be over the age of 6 and 5 respectively. The other systems do not specify a minimum age requirement to travel as a companion, and the TTC's policy provides an example of a companion as a dependent child of the registered passenger. Peel TransHelp does not require and does not provide

[3] Additional companions can be requested on the day of the trip

car seats or booster seats in vehicles, however, children who weigh less than 9 kg (20 lbs) or cannot hold themselves upright must be securely held on a parent, guardian or companion's lap. Parents, guardians or companions who cannot hold the child on their lap or care for the child while travelling must bring a support person to hold and care for the child.

In all systems, companions are required to pay a regular fare and travel with a registered passenger to access the service.

Opportunities and Challenges

The existing policy creates confusion regarding the ability for non-attendants to travel with passengers. The Passenger Handbook defines a "Paying Attendant" as "an individual who travels with you only for some trips because you can travel without assistance". However, the usage of the term "attendant" implies the role of providing assistance or supervision. Furthermore, the minimum age requirement of 18 prevents SMART Bus registrants from travelling with family members under this age, limiting the ability for SMART Bus registrants to travel freely with companions as would be possible on conventional transit. As such, there is an opportunity to allow for non-attendant passengers (i.e. "companions") to travel with registered SMART Bus passengers.

SMART Buses use cutaway vehicles that require passengers to wear seatbelts while in use. By law in Alberta, children under the age of 6 who weigh 18 kg or less must be in a child seat. Since the cutaway vehicles are not equipped with child seats and are not equipped to secure them, transporting children that meet this requirement would be unsafe.

3.5.2 Recommendation

Based on a review of industry practices, it is recommended that RMWB Transit modify and clarify their Companion policy. The policy should be as follows:

- One companion allowed per trip, to be confirmed at time of booking;
- An additional companion can be requested on the day of the trip subject to vehicle space availability;
- Registered customers must have the ability to have care and control over anything they bring on a SMART Bus vehicle without assistance from the driver. This includes ability to care for a companion, if required, while boarding or riding the vehicle.
- All companions pay the appropriate SMART Bus fare; and
- Companions must not require the use of a child seat as stated in provincial legislation (under the age of 6 who weigh 18 kg or less), future changes maybe considered as internal policy, equipment or provincial legislation is changed.

To reflect the above, the Mandatory and Paying Attendant categories should be refined in the SMART Bus Passenger Handbook to the following:

- **Attendants:** Passengers who are required to accompany a registered SMART Bus rider at all times or at pre-defined times determined in the SMART Bus application because the registered passenger is unable to travel without support. There would continue to be no fare charged for this category. Mandatory Attendants are required to be over the age of 18 and are not registered SMART Bus passengers.
- **Companion:** All other non-registrants who travel with a registered SMART Bus passenger. While they may provide low levels of support for a passenger, they are not required to accompany the passenger at all times. Companions would be charged a regular fare for using the service. Companions are required to be able to travel in a SMART Bus vehicle without the need for a child seat (as determined by provincial legislation).

For both Attendants and Companions, the registered passenger and their attendant/companion must be picked-up and dropped-off at the same location. This would prohibit registered passengers from using the service to drop off or pick-up Companions or Attendants, unless they are getting on/off at the same origin or destination.

Regarding the transportation of children, it is not recommended that the Regional Municipality of Wood Buffalo extend their companion policy to allow children to travel that require a use of a child seat (based on provincial legislation) at this time. However, as a next step, the Regional Municipality should explore the potential to replace or retrofit where feasible existing cutaway vehicles with either purpose-built transit vehicles or cutaway vehicles that have built-in child seats or have the appropriate securements to include a client-provided child seat.

If these vehicles are purchased or modified, consideration should be made to change the Companion policy to allow children under 6 who weigh 18 kg or less to travel with a registered customer as a companion. The registered customer must have the ability to care for the companion while boarding/alighting the vehicle and while the vehicle is in motion. This is to ensure the driver has the ability to operate the vehicle without distraction. This should be determined during the application process (**Section 3.2**), with input from a medical practitioner.

Where a child-seat is required, the registered customer would be responsible for securing the child seat to the vehicle (if applicable) and securing the child onto the seat. The driver would be responsible for determining that the securement system is safe before starting the trip.

3.6 Appeals

3.6.1 Discussion

Existing Conditions

An Appeals process is typically in place in the case that an applicant wishes to appeal the eligibility decision made. There have historically been minimal appeals related to SMART Bus application decisions

and as such there is no formal process documented by RMWB Transit. However, should an appeal be received, the current process at RMWB Transit is that appeals would be sent to the Manager, Transit and Senior Manager, Transportation and Facilities. The application is then reviewed and a decision made by these individuals.

Since the majority of applications are approved under an 'unconditional' category, the number of appeals is minimal. In 2021, four new applications were denied, but none were appealed.

One of the challenges with the existing appeals process is that the final judgement is made by municipal staff, including the Manger, Transit (who is responsible for reviewing applications). This creates a potential conflict of interest should an appeal ever be denied by the RMWB.

Peer/Best Practice

Appeals are typically heard and adjudicated by a panel made up of health care practitioners and specialized transit users, or by a roster of professionals specializing in different disabilities that are called upon on a case-by-case basis. The latter structure is recommended in CUTA's Code of Practice based on its ability to utilize expertise related to each individual case. However, it is acknowledged that in smaller municipalities, the availability of a wide range of medical professionals may be limited and as such a traditional panel may be more appropriate.

As per the Code of Practice, "whichever model is adopted, it is important that the individual(s) conducting the appeal be well versed in the:

- skills required to ride transit;
- level of accessibility and scope of services of the conventional transit system;
- ability of people with different disabilities to perform different tasks; and
- service policies of the specialized transit system."

Another best practice identified by CUTA is that the individual who conducts the appeal had no role in the original determination. Developing a third-party appeals process provides stronger objectivity and removes the adjudication of the appeal from the original eligibility assessment process.

Opportunities and Challenges

If the application process is changed to include Conditional registrants, there will be a stronger need for a more formal appeals process that removes any potential real or perceived bias from the RMWB staff member reviewing applications. Creating a formal appeals process will add cost and time to the appeals process.

The challenge in Wood Buffalo is the availability of potential medical practitioners to conduct a third-party appeals process. This may make implementing this best practice a challenge.

3.6.2 Recommendation

It is recommended that RMWB Transit consider the development of an updated appeals process that involves a third-party panel not associated with RMWB Transit. This could include individuals from a local Accessibility committee, social services agency, SMART Bus registrants, or health care providers, who would be remunerated for each appeal that they review. Given the low number of appeals that currently take place, the use of this process is anticipated to be minimal.

Individuals on the panel should have a strong understanding of the SMART Bus and conventional transit service and its purpose, and have the expertise to evaluate applications accurately based on their functional ability. The process should allow the panel to request additional information from the applicant that would help make the determination. Ideally, three individuals should be available to conduct a review of each appeal. The role of the RMWB Transit would be to administer the process and to present any supporting rationale for the initial application denial or approved condition of eligibility.

Once confirmed, the appeals process should be documented and made publicly available to provide transparency to the community.

3.7 No Shows and Late Cancellations

3.7.1 Discussion

No Shows refer to trips wherein the passenger is not at the pick-up location at their scheduled pick-up time and the trip is unable to be completed. Late Cancellations refer to trips wherein a passenger contacts the transit agency to cancel their scheduled trip after the deadline to cancel.

Both of these situations reduce the efficiency of the service by causing a vehicle to travel unnecessarily in the case of No Shows and Cancelled at Doors, or by removing a trip after the schedule has already in made in the case of Late Cancellations. High rates of these occurrences can negatively impact the effectiveness of the service and result limit the number of available trips for registered passengers. As such, minimizing Late Cancellations and No Shows is a priority for specialized transit agencies.

Existing Conditions

The table below provides information about trip cancellation rates in Wood Buffalo as well as a number of peer systems.

Table 7: Trips Booking and Cancellation by Paratransit System (2019)

	Wood Buffalo	Red Deer	Medicine Hat	Sault Ste. Marie
# of Trips				
Total Trips Requested	19,549	113,201	73,674	-
Cancelled in Advance	836	19,367	7,486	9,722
Cancelled Late	-	-	7,517	67
No-Shows	75	951	7,073	181
Cancelled at Door	91	1,235	52[2]	-
% of Total Trips				
Cancelled in Advance	4.3%	17.1%	10.2%	-
Cancelled Late	-	-	10.2%	-
No-Shows	0.4%	0.8%	9.6%	-
Cancelled at Door	0.5%	1.1%	0.1%	-

Wood Buffalo has the lowest rates of cancellations and No Shows across the peer systems. All Cancellations are marked as "Cancelled in Advance" with no instances of "Cancelled Late"[4]. Based on this information it is not possible to determine the proportion of cancellations that are late compared to those that are cancelled in advance.

Best Practice

Based on the CUTA Specialized Transit Industry Best Practices ("Best Practices") report, the average rate of cancellations in small systems is 18.95% and the median is 20.24%. The industry best practice, however, is noted as 5-10%. With a 2019 Cancellation rate of 5.2%, SMART Bus is within the best practice range.

Opportunities and Challenges

Current rates are low and existing policy is effective in deterring No Shows and Late Cancellations. However, there may be opportunity to provide recommended updates to policy as appropriate.

The existing policy for Late Cancellations and No Shows is as follows:

> *"Passengers whose trips are marked "Same Day Cancel", "Cancelled at the Door" or "No Show" on a regular basis will have their service reviewed after three incidents by the Program Supervisor. Service will be suspended until such time as it has been reviewed."*

While this policy is not documented in the Passenger Handbook, newly registered SMART Bus passengers have been required to sign a "Cancelation Policy" that outlines their responsibilities, which

[4] Cancelled Late in Wood Buffalo are classified as "Same Day Cancellations" that are not provided at least 24 hours' notice. These are tracked, but no instances were reported.

include providing sufficient notice for cancellations. This approach led to a reduction in Late Cancellations and No Shows, resulting in the current rates which are in place. While recurring Late Cancellations is less common, the policy described above is enforced when needed. There is no long-term consequence for continued violations of the policy apart from the standard temporary suspension.

3.7.2 Recommendation

As per the existing policy described above, passengers who accumulate more than three (3) Late Cancellations or No Shows should have their access to service temporarily suspended. Depending on the number of continued occurrences, RMWB Transit staff may wish to implement a stricter enforcement policy resulting in longer periods of suspension of the service.

A process for exceptions should be put in place, supported by documentation where required (e.g. from a medical practitioner). Passengers should be able to provide information regarding legitimate justification for cancelling late or missing their pickup window, in which case the occurrence would not count towards their maximum number of allowed Late Cancellations/No Shows.

3.8 Travel Training

3.8.1 Discussion

Travel Training provides education and support to assist individuals in using conventional public transit services for some or all of their trips. These programs can be catered towards a variety of groups, including existing SMART Bus registrants, SMART Bus applicants, seniors, students, newcomers, or the general public. Travel Training can take a wide variety of forms depending on the desired target audience, ranging from classroom-setting presentations (virtual or in-person), to off-street bus familiarization activities, to one-on-one trip planning and on-street guidance.

Travel Training can be provided by a number of different parties, including in-house staff or by contract to a community agency. If contracted out, payment may be provided per session or per passenger trained, or with a lump sum (e.g. on an annual basis). A ‘train-the-trainer’ approach is also a common practice, where staff at facilities that have residents or attendees that require transportation are trained, and in turn train their members.

Existing Conditions

There is no Travel Training program currently in place in Wood Buffalo.

Best/Peer Practice

Transit agencies across the country use Travel Training to support existing and potential customers, both specialized and conventional. Each agency’s offerings may differ based on the system’s desired outcomes and the needs of the community at large. Below is a summary of peer systems’ Travel Training programs.

Table 8: Travel Training Comparison

System	Format of Training	Key Demographics	Training Provider
York Region Transit	• One-on-one on-street training • Group sessions with spare bus available for demo • Online material	• Specialized transit passengers • Seniors • Youth/Students • Newcomers	In-house staff: Dedicated Travel Trainer
Regina Transit	• One-on-one on-street training	• Registered Paratransit passengers	Existing Paratransit passengers (coordinated by community agency)
Grand River Transit	• Hands-on activities to practice boarding, riding the bus • Group sessions	• Senior communities • High school students (life skills classes) • Newcomers • Specialized transit customers	In-house staff (approximately .25 FTE) Train the trainer used occasionally in schools
Sault Ste. Marie	• One-one-one on-street training preferred • Group sessions catered to needs of requester	• Open to all • Offered to all specialized transit applicants	In-house staff: Training Supervisor

As illustrated in **Table 8**, a wide variety of Travel Training models are available. The strength of a model such as YRT and Sault Ste. Marie's is the ability for the dedicated Travel Trainer to conduct Travel Training with new specialized transit passengers to evaluate their ability to use conventional service for some trips. The dedicated in-house role ensures registered specialized transit passengers have the support needed to learn how to use the conventional system. Alternatively, a service such as Regina Paratransit is effective by relying on strong community connections and leveraging individuals within local community agencies to conduct the training and champion the use of conventional transit service for other specialized transit passengers.

Opportunities and Challenges

Travel Training may be able to increase travel options for SMART Bus registrants by increasing their comfort level in taking conventional transit. This may also lead to reduced costs for the Regional Municipality.

If Travel Training resources are in place, there may also be opportunities to expand this opportunity to non-SMART Bus passengers as a way of encouraging ridership on RMWB Transit more broadly. This training may be targeted to seniors, students, newcomers, and any other residents who would benefit from some level of assistance using the conventional network before being able to do so independently. While this type of programming is not directly related to SMART Bus operations, some aspects of the programming may be valuable for both registered SMART Bus passengers and those who are not, and thus coordination amongst them can improve the efficiency of the service.

Introducing Travel Training would likely require additional resources in the form of additional staffing or funding for a contract. Both options provide opportunities and challenges. Creating a position with responsibilities related to Travel Training can improve coordination with RMWB and ensure the service is as targeted to meeting the agency's goals as possible. However, implementing such a program would be challenging as it would add another role to an existing staff member's responsibilities. It may be required that an additional 0.5 FTE is hired to develop and operate the Travel Training program.

Alternatively, establishing a contract with an outside agency can build upon the strengths and expertise of organizations that already work with the community. This may result in greater "buy-in" from community members that are targeted for Travel Training and improve overall relationships with community groups. The level of funding can also be set in advance with opportunities for a smaller initial investment to pilot the service and evaluate its impacts. However, there may be a limited number of community organizations that would have the resources and expertise to provide Travel Training in the Regional Municipality of Wood Buffalo.

The ideal outcome of a Travel Training program is to improve mobility options for existing and potential RMWB Transit passengers, both those using SMART Bus and conventional services. As well, cost savings can be incurred due to a reduction in specialized transit trips which have a higher cost on a per-trip basis than conventional transit, as passengers would instead be able to utilize conventional service for some or all of their trips. This would also be a necessary step if the Eligibility recommendations are implemented, as Travel Training provides an opportunity for individuals not approved for SMART Bus or those approved as a Conditional passenger to better understand how to use the conventional transit service.

In order to increase cost efficiency, the cost associated with Travel Training must be less than the cost of specialized transit trips that would be moved from specialized to conventional service. Registrants who are conditionally eligible may require the support of Travel Training to start using conventional transit in place of specialized transit.

Taking a broader goal of encouraging transit usage across all demographics (not just specialized transit customers), Travel Training has different benefits that would be felt across RMWB Transit as a whole. These include higher conventional ridership, which is a high priority for the agency. As well, offering Travel Training would reduce barriers and improve the level of customer service offered to all passengers who are considering using the service.

3.8.2 Recommendation

It is recommended that RMWB introduce a Travel Training program for both conventional and specialized transit passengers with the purpose of increasing ridership and improving access to fixed route transit (and thus, mobility) to the entire community.

The initial Travel Training curriculum would be developed and designed by RMWB Transit staff or an outside agency. The actual provision of Travel Training would be conducted by partnering community

organizations based on a predetermined rate per passenger. The service would also be available more broadly in the community to encourage conventional transit ridership. By collaborating with partner community organizations, specific groups such as seniors, newcomers, and youth can access additional support in learning how to use conventional transit.

One-on-one travel training would be a second phase, and could be conducted by an outside organization (based on a fee per use) or by RMWB staff. This would be voluntary and offered to individuals that are denied SMART Bus registration, or that are provided with Conditional eligibility.

3.9 Technology

3.9.1 Discussion

Existing Conditions

SMART Bus trips are currently booked, scheduled, and dispatched manually by RMWB Transit staff (Specialized Dispatcher). A new scheduling software package has been produced by the Regional Municipality that will streamline this function and allow for greater coordination of trips and the ability to accommodate more same-day trips.

Registered SMART Bus passengers can book trips by phone or by email on weekdays between 8:00am and 4:00pm. RMWB Transit has not received concerns about passengers' inability to book trips outside of these hours.

Peer/Best Practice

Providing a variety of booking options is considered the industry best practice. This should include an online booking platform, which allows passengers to book independently at any time, regardless of the booking centre's operating hours. Furthermore, they provide a more convenient method of managing existing trips for passengers; the CUTA Best Practices report suggests that the ease of cancelling trips online can lead to a reduction in late cancellations.

Utilizing newer technology that automatically books, schedules, and dispatches trips can improve the flexibility of specialized transit service and optimize the existing resources available. This type of software can also provide higher levels of tracking and performance measurement, which can be used for more detailed reporting and support future decision-making.

Opportunities and Challenges

Introducing new software that automates booking, scheduling, and dispatch may lead to savings of staff time; these resources could in turn be utilized elsewhere more effectively. As well, this type of software can automatically optimize trip scheduling, resulting in more efficient groupings of trips.

Providing options for online booking increases the convenience and usability of the service for passengers, particularly outside of business hours when the Specialized Dispatch staff members is not in office. Online booking options is not currently available with the new scheduling software program procured by the Regional Municipality.

3.9.2 Recommendation

RMWB should move to implement the new schedule software recently procured. This new software should help increase ridesharing opportunities and allow for more same-day trip making once staff are properly trained on the software. The software should be set up to enter in conditions of eligibility and temporary eligibility based on the recommendations in **Section 3.3**. Alerts should also be set up to allow RMWB staff to reassess applicants every 3-4 years or to identify inactive users that have used the system in over a year.

In the future, the RMWB staff should also look for opportunities to include an online booking platform for passengers to increase the flexibility of trip booking and cancellation options.

The use and performance of On Demand transit should also be monitored and opportunities should be identified to have one common booking and scheduling platform for SMART Bus and On Demand transit.

3.10 Fares

3.10.1 Discussion

Existing Conditions

SMART Bus fares are $1.50 per trip, with multiple trip passes available for purchase. Conventional service is also $1.50 for regular fares. All seniors aged 65+, including registered SMART Bus passengers, ride free on conventional service but must pay the $1.50 fare for SMART Bus.

Peer/Best Practice

The best practice related to fares is for specialized transit to be the same as conventional service. Some transit systems also offer free fares for specialized transit users on conventional transit to encourage its use. The same fare platforms (e.g. passes, tickets) should be used for both systems, allowing passengers to receive the same discounts.

Opportunities and Challenges

RMWB Transit offers low fares compared to its peer systems, which can negatively impact cost recovery. This is particularly salient for SMART Bus service as the operating cost per trip and per hour are higher than for conventional, but fares are equivalent. There may be opportunity to adjust fares across the

RMWB system which would impact revenues and cost recovery rates for SMART Bus. Fare recommendations can be found in the **RMWB Transit Master Plan Section 4.5.2**

3.10.2 Recommendation

Fare parity should be maintained across the specialized and conventional systems. Any changes made to fare structure or fare payment technology should be implemented correspondingly for SMART Bus service.

3.11 Rural Service

3.11.1 Discussion

Existing Conditions

Service to rural communities – Anzac, Janvier, Conklin, and Fort McKay – is established when the need arises in each of these communities. Currently, registered SMART Bus users are only in Anzac and Janvier and receive service one day a week for each community (see **Section 2.0**). Rural areas of the Regional Municipality have lower demand and further distances required per trip. For example, the one-way trip time between downtown Fort McMurray and Anzac is approximately 40 minutes. These long distances are associated with higher operating costs, while the low demand for trips presents additional challenges to implementing cost-saving measures such as ride-sharing.

The rural areas of the Regional Municipality of Wood Buffalo have limited SMART bus registrants. As of 2021, the number of rural registrants are illustrated in **Table 9**.

Table 9: SMART Bus Registrants by Community

Registrant Community		# of Registrants
Urban	Thickwood	49
	Timberlea	144
	Downtown	200
	Abasand	7
	Beacon Hill	11
	Gregoire	14
	Saprae Creek	2
	Urban Total	**431 (99.3%)**
Rural	Anzac	1
	Janvier	2
	Fort Mckay	0
	Conklin	0
	Rural Total	**3 (0.7%)**
TOTAL REGISTRANTS		**434**

As displayed above, less than 1% of SMART Bus registrants reside in rural areas. In terms of trips, 0.03% of trips in 2019 (50 trips total) provided by SMART Bus were for rural service.

The RMWB Transit website lists specific days for service to Anzac (Wednesday) and Janvier (Thursday), which are negotiated with registered passengers in these communities. The current practice is for customers to call in and request trips. The demand for these trips is low, with approximately 2-4 requests per month.

Peer/Best Practice

The best practice is for specialized service to have the same area of availability as conventional service, ensuring equal access for all passengers. Currently, SMART Bus only operates to Anzac and Janvier, while conventional service also operates to Conklin and Fort McKay on specific days of the week. If a resident from Conklin or Fort McKay registered for SMART Bus service, RMWB Transit staff would also set up a day a week that the service would operate to these communities. This is therefore in line with best practices.

Opportunities and Challenges

The low demand for trips and long distances between rural communities leads to additional challenges in providing rural service.

An opportunity to increase rural trip availability without requiring additional resources would involve a form of integration with conventional rural service wherein the scheduled service could “flex” off-route slightly to pick up registered SMART Bus passengers at their door before continuing on the fixed route. This would require slight increases in scheduled travel time to accommodate these deviations from the route. It would also require a change of contract with the operator and the use of accessible vehicles. However, based on discussion with RMWB Transit staff, it was determined that the conventional rural service may provide additional challenges to specialized transit passengers and that co-mingling of passengers would not be appropriate.

3.11.2 Recommendation

Based on the minimal existing demand for rural transit, there are no further recommended changes to the service. If there is desire for additional accessible transit service in rural communities, a feasibility study of a co-mingled service would be required. Funding may be available through the Rural Transit Solutions Fund provided by Infrastructure Canada.

The RMWB Transit Rural Service page should be updated to reflect the current service to rural areas.

4.0 Financial Plan

Changes to operating and vehicle expansion costs were estimated over a 10-year period. Factors that were used to calculate this include:

1. Growth in registrants due to population growth.
2. Growth in vehicle hours due to service hour parity (**Section 3.2**).
3. Increases in vehicle occupancy due from the new scheduling software (**Section 3.9**).
4. Increase in same-day trips due to the new scheduling software (**Section 3.9**).
5. Reduction in trips per registrant due to increased number of conditionally eligible applications (**Section 3.3**) and increased use of conventional transit through travel training (**Section 3.8**).
6. Maintaining a low trip denial rate.

Growth in Registrants

Growth in registrants has remained fairly stable over the past 10 years. This is due to a relatively young population in the community, many of whom work in Wood Buffalo and retire elsewhere. To estimate growth in vehicles, it was assumed that the population, and subsequent number of registrants and attendants/companions would increase by 2% per year based on an assumption provided by staff at the Regional Municipality.

Growth in Vehicle Hours

As noted in **Section 3.1**, it is assumed that the service would be contracted to a non-dedicated contract in the short-term, and switched an integrated On Demand service in the long-term. In the short-term, a conservative estimate of $300 per trip based on 7 trips a week was used. If the service were to switch to a dedicated hourly service, the cost would increase to between approximately $355,000 and $452,000 annually. The extended service was assumed to be in place by 2023 and switched to the integrated On Demand service by 2027. No additional vehicles are required for this initiative.

Vehicle Occupancy

The CUTA Code of Practice identifies a best practice for ridesharing at 2.5 – 5.0 rides per hour, with the industry average for small systems of 3.01. SMART Bus currently provides approximately 1.53 rides per hour. This is below the peer average and partially contributes to the high cost per trip. The new scheduling software noted in **Section 3.9** should improve the ability to share rides, and also increase the number of same-day trips accommodated. It was assumed that SMART Bus would gradually improve towards 2.0 rides per hour over a 10-year period.

Increase in Same-Day Trips

The new scheduling software (**Section 3.9**) should increase the number of same-day trip requests that can be accommodated. It was assumed that this would result in a 3-5% increase in trips per registrant (approximately 1.5 to 2 additional trips annually per registrant) over a 10 year period.

Reduction in Trips per Registrant

It was assumed that the new eligibility process will result in 35% of new applicants being approved for conditional eligibility (or 30 new conditional passengers per year based on 85 applications). It was also assumed that conditional registrants make 30% fewer trips than unconditional registrants (33 annual trips versus 44 annual trips respectively). This would reduce the number of trips taken annually as more passengers would have opportunity to use an accessible fixed-route service. The introduction of travel training was also assumed to reduce the number of trips made by registrant by 1-2% over a 10-year period.

Growth in Vehicles and Operating Hours

SMART Bus operates 7 peak period buses, with a fleet of 9 buses. Two buses are no longer in service, and four new buses recently arrived, which would increase the total fleet to 11 in 2022. The number of peak buses in operation have not changed since the start of the start of the COVID-19 pandemic, despite the reduction in ridership. A typical spare ratio for a system this is 20%. The current spare ratio is 36%, which is above the typical target. This ratio would decrease as service requirements increase, bringing it in line with industry standards

To calculate the growth in service hours and vehicles, it was assumed that the following ratios taken from 2019 (prior to the pandemic) were used to calculate growth in service hours and vehicles:

- Each peak vehicle make approximately 2,800 trips annually. This increases gradually each year to accommodate an increase in boardings per revenue vehicle hour from 1.5 to closer to 2.0 over a 10-year period. The number of peak vehicles is then adjusted using this factor based on change in ridership;
- Total vehicles are based on a 20% spare ratio; and
- Each peak vehicle provides 1,824 annual hours of service (number of 2019 service hours divided by 2019 peak vehicles). This is used to increase the total number of annual service hours with each new peak vehicle added.

Based on the above approach, **Table 10** illustrates the projected registrants, ridership, vehicles and service hours.

With population growth (assumed 2% annually), the number of total trips provided will increase by approximately 10,000 from pre-pandemic levels. Even with the increase in same day trips, the adjustment to the eligibility criteria will reduce the number of trips per registrant over time.

New scheduling software is expected to see an increase in boardings per revenue vehicle hour to better match industry standards. This will result in no new growth in vehicles until the latter half of the 10-year period.

Operating hours and costs are set to increase due to a number of reasons:

- Ridership returning to normal in a post-COVID world;
- Growth in the number of same-day trips due to enhanced scheduling software;
- Increase in peak period vehicle requirements; and
- The introduction of early morning evening non-dedicated service to create service hour parity with conventional transit.

Costs were based on the existing hourly rate, and no increase in operating or administrative costs from inflation was incorporated into these projections.

Table 10: Projected Financial Plan (Operating Costs)

	2019	2020	2021	2026	2032
Registrants and Ridership					
Population	73,400	74,200	75,600	83,500	94,000
Registrants	352	394	435	480	541
Attendants	155	174	192	211	238
Annual trips (with attendants)	19,549	7,441	7,641	26,400	29,300
Vehicles					
Peak Vehicles	7	7	7	9	9
Total Vehicles	11	11	9	12	12
Spare Ratio	36%	36%	22%	25%	25%
Service Hours and Operating Costs					
Annual Revenue Hours	12,767	11,822	11,135	16,410	16,410
Annual Operating Costs	$1,373,240	$1,197,645	$1,373,562	$1,765,087	$1,765,087
Service Hour Parity Operating Cost	$0	$0	$0	$109,200	$0
Administration Costs	$957,525	$957,525	$957,525	$957,525	$957,525
Total Cost	$2,330,765	$2,229,119	$2,155,200	$2,831,800	$2,722,600
Key Performance Indicators					
Trips per Registrant and Attendant / Companion	38.6	13.1	12.2	38.2	37.6
Boarding/Vehicle Hour	1.53	0.63	0.69	1.56	1.72
Hours per Peak Vehicle	1,824	1,689	1,591	1,824	1,824
Cost per Trip*	$70.25	$170.89	$156.74	$66.86	$60.30

**Does not include administration costs*

5.0 Summary

A summary of all recommendations can be found in **Table 11** below. The recommendations reflect the need to improve both service for persons with disabilities and create policies that will make better use of an accessible conventional transit service for those that need it. This will have the impact of increasing efficiencies and providing better level of service on SMART Bus for those that require it.

Table 11: Summary of SMART Bus Recommendations

Theme	Recommendation
Trip Integration	1. Provide On Demand service with accessible fleet and provide opportunities for SMART Bus passengers in On Demand services to use the service with curb pick-up
Service Hours	2. Expand service hours to have parity with conventional transit using a Non-dedicated third-party contract model as a first step, then transitioning to an integrated On Demand Transit service
Eligibility	3. Consider removing the eligibility category of "Age"
	4. Strengthen the use and evaluation of conditions of eligibility
	5. Increase ease of filling out SMART Bus application
Evaluation of Applications	6. Revise Professional Verification Form
	7. Consider a Third Party Assessment process
Attendant and Companion Policy	8. Update Attendant and Companion Policy to differentiate attendants and companions and outline travel allowances for Companions
Appeals	9. Introduce an Independent Appeals Panel
No Shows and Late Cancellations	10. Track cancellations as "Cancelled in Advance" and "Late Cancellation"
	11. Maintain existing No Show and Late Cancellation Policy
	12. Monitor No Show and Late Cancellation occurrences and strengthen policy if required
Travel Training	13. Introduce Travel Training program to be administered by partnering community agencies
Technology	14. Implement new scheduling software with allowances for conditional and temporary eligibility
	15. Investigate opportunities for online booking platform, including potential for integrated Specialized and On Demand platform
Fares	16. No Recommendation
Rural Service	17. No Recommendation. Consider a feasibility study for co-mingling of specialized and conventional passengers on rural services if demand increases

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

Appendix F – Fleet & Infrastructure

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1.0 Introduction

The purpose of the Transit Infrastructure Asset Review is to document the current state of local transit infrastructure and identify any assets which require replacement in order to achieve the proposed service levels over the life of the Transit Master Plan.

1.1 Organizational Structure

The Public Works Department of the Regional Municipality of Wood Buffalo (RMWB) is responsible for maintaining Parks, Roads, Rural Operations, Transportation (includes transit services) and RMWB owned and operated facilities. As a division of the Public Works Department, Transit uses municipally-owned infrastructure to plan and operate conventional and specialized transit services within the region. Transit is responsible for stop and shelter maintenance, fare boxes, destination signs, and vehicle cleaning/refueling. Vehicle and building maintenance is managed by other departments within the Public Works Department.

2.0 State of Local Transit Infrastructure

This section on the state of local infrastructure sets out:

- The types of assets and their quantity or extent;
- The financial accounting valuation and replacement cost valuation for all assets;
- The asset age distribution and asset age as a proportion of expected useful life for all assets; and
- The asset condition based on standard engineering practices for all assets.

RMWB Transit uses assets that generally fall into four categories: fleet, facilities, on-street infrastructure, and supporting technology. These are the assets which will be considered throughout the remainder of this review. Although the fleet relies on the condition of other City assets such as roads to deliver its services, the asset management plan for roads is considered separate to Transit.

The replacement cost for RMWB Transit infrastructure is $94,612,500 (in 2022 dollars).

2.1 Asset Hierarchy

The asset hierarchy that will be used for the Transit Infrastructure Asset Review is presented in **Table 1**.

Table 1: Asset Hierarchy

Asset Category	Sub-Category
Fleet	Transit – Conventional
	Transit – Specialized
	Utility Fleet
Facilities	Bus Barn
	Transit Depot (Transit 160)
On-Street Infrastructure	Bus Stops / Bus Pads
	Shelters
	Signmount Structures
	Benches
Supporting Technology	Communication and Radio Systems
	Fare and Data Collection Equipment/Systems
	Information Technology Hardware/Software

All assets are considered point assets for the purpose of this review.

2.2 Asset Inventory

The inventory includes assets that are owned by the Regional Municipality of Wood Buffalo and are used by RMWB Transit to deliver transit services. The operation and maintenance of the transit system is provided by the Municipality. This document identifies assets not owned by RMWB Transit that are necessary to deliver the service.

The following section presents the inventory of assets, the accounting valuation, and the current estimated replacement cost for RMWB Transit's assets. The accounting valuation is defined as the net book value of RMWB Transit's assets. The net book value was calculated using the following equation:

Net Book Value = (*initial cost of the asset*) – (*accumulated amortization of the asset*)

The replacement cost of each asset was determined using 2021 costs. These costs were either a unit rate for the asset or cost information for each type of asset.

2.2.1 Useful Life

The expected useful life of an asset is used to estimate the replacement schedule for each asset. A summary of the expected useful life of each asset can be found in **Table 2**. These values were determined through consultation with RMWB Transit.

Table 2: Expected Useful Life

Asset Category	Sub-Category	Total Useful Life (Years)
Fleet	Transit-Conventional	16[1]
	Transit-Specialized	8[1]
	Utility Fleet	6.2-8.3[1]
Facilities	Bus Barn	55
	Transit Depot (160 Office)	48
	Transit Terminals	24[1]
On-Street Infrastructure	Shelters	24[2]
	Signmount Structures	15
	Benches	10
	Concrete Pads	29[3]
Supporting Technology	Communication and Radio Systems	5
	Information Technology Hardware/Software	5[4]

[1] Statistics Canada. Table C.1-4 List of depreciation rates under the new asset code classification — Transportation equipment and industrial machinery
[2] Statistics Canada. Table 34-10-0254-01 Average expected useful life of new publicly owned public transit assets, Infrastructure Canada

[3] Statistics Canada. Table 34-10-0072-01 Average expected useful life of new publicly owned road assets, Infrastructure Canada
[4] Statistics Canada. Table C.1-7 List of depreciation rates under the new asset code classification — Other machinery and equipment (continued), oil and gas exploration, mining exploration, research and development, and software

2.2.2 Fleet

The following section summarizes the asset inventory and current replacement cost of fleet assets. A breakdown of the inventory, age, and replacement cost for each fleet asset can be found in **Appendix 1**.

No expansion buses were considered as part of the asset management plan, as service hours are not being increased.

2.2.2.1 Transit – Conventional

RMWB owns and maintains a fleet of 73 conventional buses. There are 3 types of conventional buses included in the fleet assets:

- 40 foot buses;
- 35 foot buses; and
- 1 cut-away bus.

All of the conventional buses included in the fleet assets are fully accessible low-floor vehicles and have diesel propulsion. A summary of the conventional fleet inventory is presented in **Table 3**.

The capital cost (prior to any grant funding) estimated by RMWB Transit for purchasing conventional buses is $470,000 for 35 foot and $620,000 for 40 foot Buses. These values include IT and fare equipment, and were used to estimate the expected replacement cost for the conventional fleet vehicles. These values are presented in **Table 3**.

Table 3: Inventory of Conventional Fleet

Make	Model	Quantity	Delivery Year	Age	Accounting Valuation	Replacement Cost
New Flyer	D40LF	12	2008-2009	13-14	$774,942	$7,800,000
New Flyer	D40LFR	14	2010-2011	11-12	$1,357,526	$9,100,000
New Flyer	XD40	31	2011-2016	6-11	$6,834,575	$20,150,000
Eldorado	Ez Rider	2	2015	7	$55,290	$940,000
New Flyer	MD35	13	2016	6	$3,391,204	$6,110,000
GMC	Cut-away	1	2016	6	$60,657	$250,000
Total		**73**	**2008-2016**	**6-14**	**$12,474,195**	**$47,450,000**

No conventional buses have been refurbished to significantly extend their expected useful life.

2.2.2.2 Transit – Specialized (SMART Bus)

In the fleet assets, there are a total of 12 cut-away buses providing specialized (SMART Bus) transit services. A summary of the specialized transit vehicles and their replacement costs can be found in **Table 4**. The estimated replacement cost provided by RMWB for their specialized transit vehicles was $250,000.

Table 4: Inventory of Specialized Fleet

Make	Model	Quantity	Year in Service	Age	Accounting Valuation	Replacement Cost
Ford	Cut-away	7	2010-2014	8-12	$0	$2,000,000
GMC	Cut-away	4	2016	6	$212,299	$1,000,000
Total		**11**	**2010-2016**	**6-12**	**$212,299**	**$3,000,000**

A new engine was installed in one of the Ford cut-away specialized transit vehicles in the winter of 2018 to extend its useful life. The cost of an engine is estimated to be $50,000; however, this was not included in the accounting valuation above.

2.2.2.3 Utility Fleet

RMWB Transit owns 20 “non-revenue” vehicles that support daily operations. The inventory is comprised of crew cars, supervisor vehicles, general utility vehicles, a forklift, pressure washer, and trailers.

The costs used as a replacement cost for the utility fleet vehicles vary by vehicle type and were provided by RMWB. The age and estimated replacement cost for the utility fleet is highlighted in **Table 5**.

Table 5: Inventory of Utility Fleet

Make	Model	Quantity	Year in Service	Age	Accounting Valuation	Replacement Cost
CHEVROLET	EXPRESS CARGO	1	2009	13	$0	$90,000
FORD	F-150	1	2010	12	$0	$60,000
FORD	ESCAPE	4	2012	10	$0	$160,000
CHEVROLET	SILVERADO 1500	1	2015	7	$0	$60,000
TOYOTA	RAV4	1	2013	9	$0	$50,000
TOYOTA	RAV4	1	2013	9	$0	$50,000
TOYOTA	TUNDRA	1	2013	9	$0	$60,000
TOYOTA	TUNDRA	1	2013	9	$0	$60,000
TOYOTA	TUNDRA	1	2013	9	$0	$60,000
GMC	SIERRA	1	2013	9	$0	$60,000
FORD	F-150	1	2020	2	$42,609	$60,000

Make	Model	Quantity	Year in Service	Age	Accounting Valuation	Replacement Cost
KUBOTA	RTV1100	1	2013	9	$0	$30,000
NILFISK	CS7010	1	2020	2	$60,723	$80,000
YALE	GLP060	1	2010	12	$0	$80,000
AMER	HOTSY TRAILER	1	2014	8	$0	$40,000
JDJ	S/A TRAILER	1	2014	8	$0	$4,000
AMER	HOTSY TRAILER	1	2015	7	$0	$40,000
Total		**20**	**2009-2020**	**2-13**	**$103,332**	**$1,044,000**

2.2.2.4 Age Distribution

A summary of the age distribution for the fleet assets is highlighted in **Figure 1.** The stacked bar graph identifies the number of vehicles in each age category (years), with conventional, specialized, and utility fleet shown in different colours.

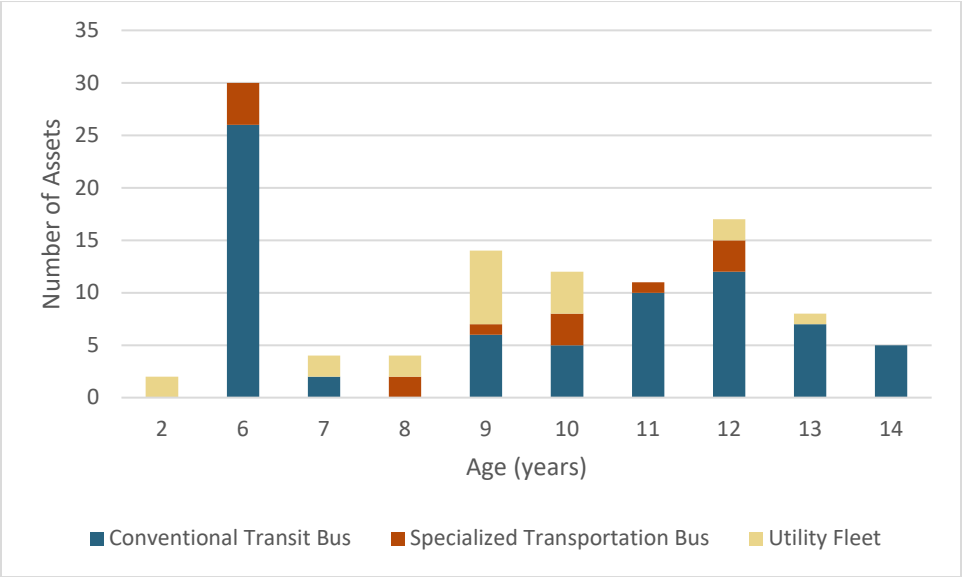

Figure 1: Age Distribution of Fleet Assets

The age of fleet assets is presented in **Figure 2** showing age as a percentage of expected useful life utilized. There are currently 28 fleet assets that have surpassed their expected useful life. A full fleet listing is available in **Appendix 1**.

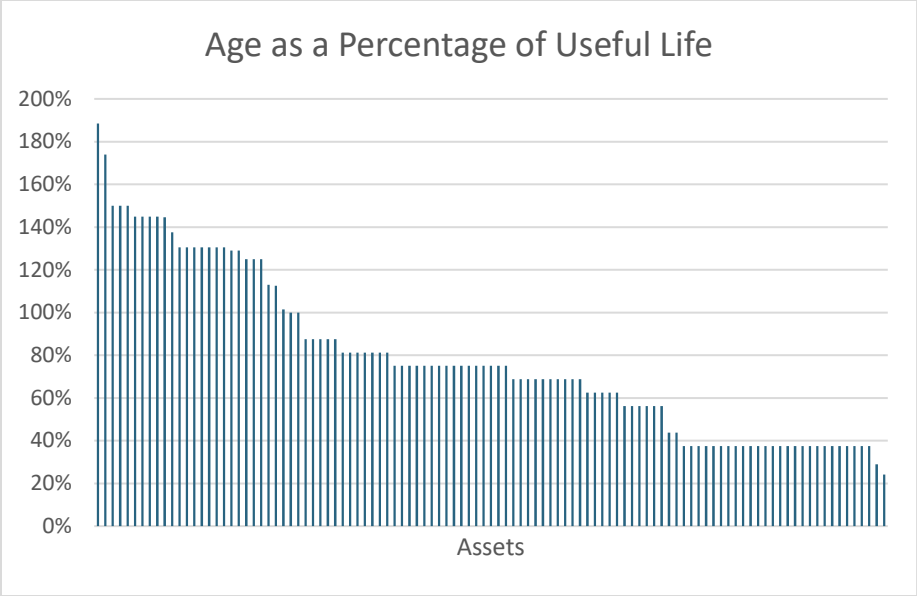

Figure 2: Age of Fleet Assets with respect to Expected Useful Life

The percentage of the fleet assets that are expected to be replaced in the next ten years is shown in **Figure 3.**

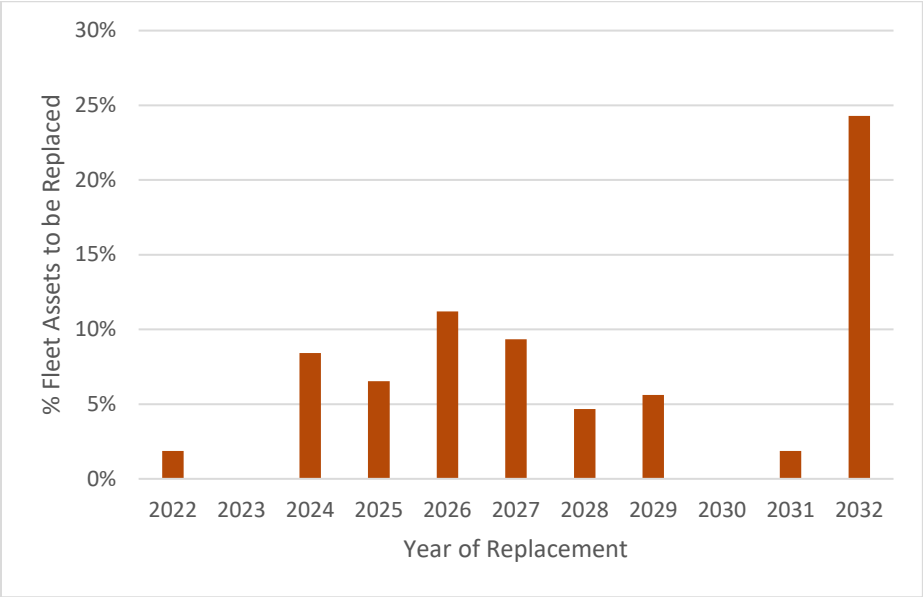

Figure 3: Percentage of Fleet Assets at the end of their Useful Life

2.2.3 Facilities

2.2.3.1 Bus Barn, Transit Depot, and RMWB South Operating Centre

A number of facilities related to the operations and maintenance of RMWB Transit are located at 160 Airport Rd in Fort McMurray. This includes the Bus Barn which was built in 2019/2020 and has capacity for approximately 80 conventional buses while also providing space for parts storage. The Transit Depot provides office space for transit administration, maintenance as well as bus cleaning facilities. It is located adjacent to the Bus Barn and was originally built in 2013/2014 and renovated in 2018. Also located on the site is the RMWB South Operating Centre. However, maintenance and the facilities associated are not directly within the purview of Transit and as such the South Operating Centre is not included for the purposes of this report.

The Bus Barn and Transit Depot buildings provide over 9,000 square meters of space for the following functions:

- Fleet storage;
- Operations facilities;
- Fleet servicing and maintenance; and
- Administration area.

A summary of the estimated replacement cost for the two transit garage buildings are presented in **Table 6**. The replacement costs do not include the contents of the buildings.

Table 6: Inventory of Transit Garages

Asset Description	Expected Useful Life	Expected Useful Life Remaining	Year in Service	Age	Accounting Valuation	Replacement Cost
Transit Depot	48	40	2014	8	$4,547,500	$5,457,000
Bus Barn	55	53	2020	2	$16,719,091	$17,350,000
Total					**$21,266,591**	**$22,807,000**

2.2.3.2 Transit Terminal

RMWB Transit owns and maintains two terminals, Timberlea Terminal and Thickwood Terminal. These are located along Confederation Way and Thickwood Boulevard respectively. These terminals were built in 2019 and each has three heated shelters and two operator washrooms. The asset inventory and replacement cost for these can be found in **Table 7**.

Table 7: Inventory of Transit Terminal Components

Asset Description	Expected Useful Life	Expected Useful Life Remaining	Year in Service	Age	Accounting Valuation	Replacement Cost

Timberlea Terminal	40	37	2019	3	$3,931,250	$4,250,000
Thickwood Terminal	40	37	2019	3	$3,931,250	$4,250,000
Total					**$7,862,500**	**$8,500,000**

2.2.3.3 Age Distribution

The age of the facilities' assets with respect to their expected useful life is presented in **Figure 4**.

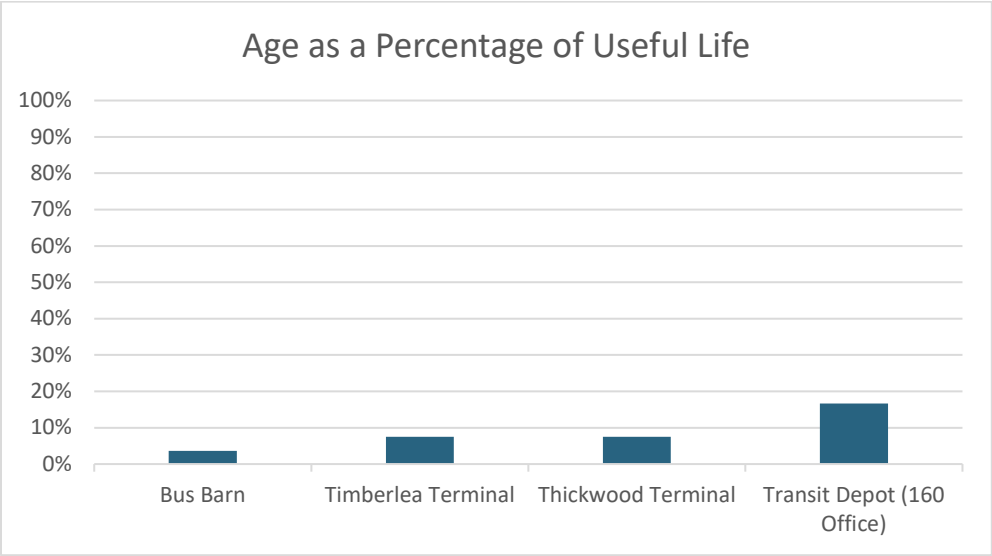

Figure 4: Age of Assets as a Percentage of Their Expected Useful Life (Facilities)

All facilities have been constructed within the past ten years and have yet to exceed 20% of their useful life therefore none of RMWB Transit's facility assets are estimated to be replaced in the next ten years.

2.2.4 On-Street Infrastructure

RMWB Transit has a variety of on-street infrastructure that supports bus service and the overall transit system. There are a total of 308 active bus stops in the RMWB Transit system, some of which are not currently served by RMWB Transit routes, but are used by industry bussing.

These bus stops may include several elements, such as bus shelters, sign mount structures, benches, waste receptacles and concrete pads. The infrastructure at each bus stop varies. There are a total of 288 shelters within the RMWB transit system, with the majority of these (260) being heated shelters. In 2020, over 40 shelters were without power. This is due to several reasons including damage (ie. wildfire, flood, abuse) awaiting repair and some shelters not being designed to accommodate heating infrastructure. Shelters without power are unable to be heated.
There are five sizes of shelters included in the inventory:

- Small (4 ft x 10 ft);
- Standard (5 ft x 10 ft);

- Medium (5 ft x 16 ft);
- Large (8 ft x 12 ft) ; and
- Extra Large (8 ft x 20 ft).

Table 8: On-Street Infrastructure Inventory

Asset		Unit Cost	Quantity	Accounting Valuation	Replacement Cost
Heated Shelters	Small	$32,000	3	$48,000	$96,000
	Standard	$32,000	177	$2,832,000	$5,664,000
	Medium	$48,000	60	$1,440,000	$2,880,000
	Large	$48,000	1	$24,000	$48,000
	Extra Large	$53,500	12	$321,000	$642,000
Standard Shelters	Small	-	0	-	-
	Standard	$15,000	10	$75,000	$150,000
	Medium	-	0	-	-
	Large	$25,500	1	$12,750	$25,500
	Extra Large	-	0	-	-
Sign Mount Structures		$200	134	$13,400	$26,800
Concrete Pads		$5,600	407	$1,139,600	$2,279,200
Total				**$5,905,750**	**$11,811,500**

2.2.5 Supporting Technology

A summary of the supporting technology assets is listed in **Table 9**, along with expected useful life. Supporting technology generally has a shorter life span before required replacement (or upgrades).

RMWB Transit recently purchased a transit dispatching and scheduling software. Additionally, an automated vehicle location (AVL) system was recently purchased by the RMWB Fleet Department and is used for transit vehicles. The contracts on these technologies are for 5 years, and it is likely that an upgrade or replacement will be required within 10 years.

Industry trends suggest that software systems such as these are likely to be procured on a subscription basis in future. Such arrangements would mean that these assets are not owned by the RMWB, with upgrades and maintenance provided by the software developer. As such, operational replacement costs are not listed here.

Table 9: Inventory of Supporting Technology

Asset Name	Asset Description	Expected Useful Life (Years)	Year in Service	Age
APC	Automatic Passenger Counting	10	2021	1
Sched21	Conventional Transit Scheduling	5	2022	0

Teledriver	Conventional Transit Dispatch	5	2022	0
TransView	Specialized Transit Scheduling and Dispatching	5	Not yet deployed	0
Geotab[1]	Automated Vehicle Location	5	2019	3
Total		**5**	**2022**	**0**

[1]Geotab is managed by the Fleet Department and will conform to their replacement schedule.

2.3 Replacement Cost Summary

The expected replacement cost for RMWB Transit's assets in 2022 is $94.6 million. The net book value of RMWB assets in 2022 is $47.4 million. A summary of the replacement cost and net book value is presented in **Table 10**.

Table 10: Current Valuation of Assets

Asset Category	Accounting Valuation	Replacement Cost
Fleet	$12,789,825	$51,494,000
Facilities	$29,129,091	$31,307,000
On Street Infrastructure	$5,905,750	$11,811,500
Total	**$47,824,666**	**$94,612,500**

3.0 Asset Management

3.1 Fleet

3.1.1 Conventional Fleet

The Regional Municipality of Wood Buffalo currently owns 73 conventional buses. The Transit Master Plan forecasts 34 operating buses during peak periods; 21 buses for regular service, and 13 buses for school service. With a 30% spare ratio to facilitate safe and reliable operations, the forecast overall fleet requirement is 45 buses in total. As such, the municipality owns and maintains a significant number of buses that are not forecast to be required for future operations. These buses were purchased previously with an expectation that RMWB Transit would see significant growth in its service hours. As this has not eventuated and is not part of the Transit Master Plan, it is recommended that RMWB Transit continue to right-size the fleet by retiring buses as they age beyond their economic service lives.

The availability of additional buses provides the opportunity for RMWB Transit to stagger their bus retirements. As seen in **Figure 3**, the current fleet age is unevenly distributed, leading to a significant future capital requirement to replace a large number of vehicles at the same time. The staggering of bus retirements made possible by having additional vehicles can spread future capital pressures over a number of years. This is in line with industry best practice, whereby most transit fleets replace around 8% of their fleet each year.

3.1.2 SMART (Specialized) Fleet

There are eight specialized transit vehicles which have exceeded their expected useful life, two vehicles which will reach the end of their expected useful life in 2022, and four vehicles which will reach the end of their expected useful life in 2024. Due to reduced demand and usage related to the COVID-19 pandemic, the useful life of these vehicles may be slightly longer than originally anticipated. It is expected that seven to nine vehicles will be required to provide service to the region over the next ten years, including three spare vehicles. The majority of buses are past or approaching the end of their useful life and will require replacement within the next few years. These buses have an expected useful life of 8 years and therefore all buses, including those that are replaced in the next three years, are likely to require replacement again within the 10-year planning horizon.

3.1.3 Utility Fleet

Nearly all of the utility vehicles have surpassed their useful life. These vehicles are providing support services to the transit operation however are not providing direct service to the customer. While these vehicles do need to be reliable to complete the support tasks, they do not have the ability to impact the customer experience therefore they may be extended beyond their useful life through good preventative maintenance. These vehicles should be replaced if the reliability of the vehicles introduces

a risk to service. This process has already begun, with RMWB Transit replacing four of their utility vehicles in 2022.

3.2 Facilities

The Thickwood and Timberlea transit terminals were recently built and are considered to be in very good condition. It is not expected that these facilities will require replacement within the life of the Plan. The service plan utilizes the new transit facilities as key connections within the network. As such, these facilities should be maintained to a high level to provide comfortable transfers for passengers. Any reported concerns regarding signage, condition of sidewalks or bus pads, or accessibility concerns should be prioritized at these locations. Upgrades to facilitate more efficient and faster bus access to the Thickwood Terminal are included in the Plan (see main report). This is proposed in Phase Three and, while focusing on bus access rather than terminal facilities, it would constitute a notable improvement to this facility.

The Downtown Terminal is a limited facility that requires upgrading to provide an attractive and functional experience with the proposed new transit network and service. Proposed upgrades include providing stops on both sides of Main Street, stops on Franklin Avenue, improved shelter, and passenger information. More details are available in the main report document.

Additional passenger facilities will be required in Phase Two of the Plan to facilitate transfers between the Airport On Demand service, and the Core Route to Downtown. This enhanced transfer stop will not be a formal transit terminal, but has been included here to reflect the need for additional investment compared to other transit stops.

The Bus Barn and Transit Depot have sufficient capacity to store and maintain the buses required to achieve the service level as outlined in the service plan. These buildings were also recently constructed and are in very good condition.

If RMWB Transit chooses to purchase electric or hydrogen vehicles in the future, the bus barn and overall site will require infrastructure modifications. These will vary depending on the technology selected, but could include charging infrastructure, hydrogen storage, a backup generator and/or battery, as well as the eventual removal of existing diesel infrastructure. These changes have the potential to reduce the overall storage capacity, as the current facility was not designed with space to accommodate bus charging infrastructure that is accessible when buses are parked close to each other. Based on the forecast fleet requirements, it is expected that 56 (conventional and SMART Bus vehicles) of the 80 available bus storage spaces will be regularly utilized. This should leave sufficient space to add alternate fuel infrastructure without compromising growth potential within the foreseeable future. However, garage operations may need to be optimized to maximize capacity in the future, with lanes being used for different uses at different times of the day (eg. some cleaning lanes can be used for storage when the entire fleet is off the road overnight).

3.3 On-Street Infrastructure

Repair and Replacement of On-Street Infrastructure

The on-street infrastructure is generally in fair condition. As described in **Section 2.2.4**, approximately 15% or 40 bus stop shelters are currently without power and do not have heating functionality. Shelters and bus pads along the routes identified in the service plan should be repaired with accessibility impacts being prioritized.

Repair of out of service heated shelters should be prioritized by how frequently the stop is served, and to a lesser extent, ridership. Caution should be taken when interpreting ridership data; winter ridership may be reduced as a result of the lack of heating and may not accurately reflect the true demand for the stop. To avoid this, ridership from non-winter months or from a time period prior to the mechanical breakdown of the heating function should be used. Other non-heating related bus stop and shelter repairs should be prioritized based on accessibility impacts.

It is recommended that shelters are of a consistent style. This would allow the same replacement parts to be used in all shelters across the system. As well, this allows bus shelters to serve as an extension of RMWB Transit branding. Consistent branding makes it easy for passengers to identify a RMWB Transit stop from afar. Utilizing a consistent size can make maintenance easier as glass and parts will be of the same size, reducing the spare parts inventory required. There are several different bus shelter sizes as shown in **Table 8** which limits the ability to consolidate all bus shelters to a single size quickly. However, when in need of replacement, new shelters can be limited to a single size and style. It is recommended that small (4 ft x 10 ft) and large (8 ft x 12 ft) shelters be removed and replaced with another size. There are 3 and 2 units of these shelter sizes respectively, which minimizes the cost impact of replacing them.

Removal of On-Street Infrastructure

The new network, as proposed in the TMP, has the potential to result in a limited reduction of active bus stops, subject to the level of route streamlining and straightening that is implemented. A number of stops that will not have scheduled service will nonetheless continue to be used as On Demand stops and as such the stop, and corresponding shelter, should be maintained. Other shelters no longer used by RMWB Transit may also be used by industry transit services. In these instances, Transit should work with industry to confirm usage, and whether/how maintenance should be funded. RMWB Transit may wish to dismantle bus stops that will not be served by any transit service to avoid the risk of graffiti or vandalism. However, the cost of removing and potentially re-installing shelters should be weighed against the likelihood of change in transit demand that could result in the reintroduction of the stop to active service. If a stop is currently inactive but has the potential to be reinstated in the future (based on anticipated future development, change in travel demand patterns, etc.), removal should be postponed until circumstances change. Furthermore, removal of shelters and stops should be subject to consultation with other transit providers who may potentially use these stops for their services. While the cost of maintenance and/or replacement of stops and shelters used by other transit service

providers should not be the responsibility of RMWB, existing infrastructure can remain in place to contribute to overall transit ridership in the Region.

Shelters which are removed can be used to repair or replace shelters along active routes which have been damaged.

3.4 Supporting Technology

The supporting technology used by RMWB Transit has been added recently or has not yet been implemented and therefore does not require replacement at this time. As electric or alternate fuel (hydrogen) buses are researched and potentially introduced to the fleet, additional technology or changes to existing technology may be required to be able to monitor vehicle charge levels and appropriately dispatch buses. Technology has a short useful life and, therefore, it is likely that a software upgrade will be required in the next ten years.

4.0 Capital Expenditure Forecast

A capital expenditure forecast was developed to identify the potential capital budget impacts of the recommendations identified in the preceding sections of this appendix. The proposed recommendations are intended to be phased in across the lifespan of the Transit Master Plan. The approximate implementation timeline and associated costs of recommendations are described in **Table 11.** These costs were forecasted through the five phase horizon of the TMP, and assume a capital inflation factor of 3.5% annually, which closely aligns with the historical 20-year annual average rate of inflation as witnessed in Statistics Canada's Building Construction Price Index[1].

[1] Statistics Canada. Table 18-10-0135-01 Building construction price indexes, by type of building. Calgary series, Non-residential buildings [622], Q4-2001 to Q4-2022

Table 11: Infrastructure and Technology Capital Costs by Phase

		Phase One	Phase Two	Phase Three	Phase Four	Phase Five
Fleet	Conventional Bus Replacement		$2,138,000	$4,554,000	$4,878,000	$5,225,000
	Specialized Bus Replacement	$474,000	$982,000	$789,000		$3,125,000
	Utility Fleet Replacement	$687,000		$71,000	$404,000	$874,000
Facilities	Downtown Terminal		$750,000			
	Thickwood Terminal			$1,000,000		
	Enhance Transfer Stops		$250,000			
On Street Infrastructure	On Street Infrastructure Repairs	$1,655,000	$4,158,000	$6,526,000	$6,474,000	$11,173,000

Appendix 1

State of Fleet Infrastructure Inventory Tables

Current Specialized (SMART) Bus Fleet

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
19-15	2010	Specialized Bus	Ford	Cutaway	1FDEE3FL5ADA81125	BRP6099	Gas	2018	12	8	0	$0	$ 250,000
19-16	2010	Specialized Bus	Ford	Cutaway	1FDEE3FL3ADA81124	BRP6190	Gas	2018	12	8	0	$0	$ 250,000
19-17	2010	Specialized Bus	Ford	Cutaway	1FDEE3FL6ADA87337	BRP6191	Gas	2018	12	8	0	$0	$ 250,000
19-18	2011	Specialized Bus	Ford	Cutaway	1FDEE3FL8BDB09906	BRP6192	Gas	2019	11	8	0	$0	$ 250,000
19-19	2012	Specialized Bus	Ford	Cutaway	1FDEE3FL8CDA25246	BRP6193	Gas	2020	10	8	0	$0	$ 250,000
19-20	2012	Specialized Bus	Ford	Cutaway	1FDEE3FL0CDA27928	BRP6194	Gas	2020	10	8	0	$0	$ 250,000
19-21	2013	Specialized Bus	Ford	Cutaway	1FDEE3FL3DDA57815	BRP6195	Gas	2021	9	8	0	$0	$ 250,000
19-22	2012	Specialized Bus	Ford	Cutaway	1FDEE3FLXCDB32511	BRP6196	Gas	2020	10	8	0	$0	$ 250,000
19-23	2014	Specialized Bus	Ford	Cutaway	1FDEE3FLXEDA68778	BRP6197	Gas	2022	8	8	0	$0	$ 250,000
19-24	2014	Specialized Bus	Ford	Cutaway	1FDEE3FL1EDA68782	BRP6198	Gas	2022	8	8	0	$0	$ 250,000
19-25	2016	Specialized Bus	GMC	Cutaway	1GD67UBL5G1332116	BWV1251	Diesel	2024	6	8	2	$53,075	$ 250,000
19-122	2016	Specialized Bus	GMC	Cutaway	1GD67UBL5G1328941	BWV1250	Diesel	2024	6	8	2	$53,075	$250,000
19-123	2016	Specialized Bus	GMC	Cutaway	1GD67UBL5G1327353	BWV1249	Diesel	2024	6	8	2	$53,075	$250,000
19-126	2016	Specialized Bus	GMC	Cutaway	1GD67UBL9G1325654	BWV1246	Diesel	2024	6	8	2	$53,075	$250,000

Current Conventional Bus Fleet

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
1950	2008	Conventional Bus	New Flyer	D40LF	2FYD4FV168E034986	CFX3550	Diesel	2024	14	16	2	$50,358	$650,000
1951	2008	Conventional Bus	New Flyer	D40LF	2FYD4FV188E034987	CFX3551	Diesel	2024	14	16	2	$50,358	$650,000
1952	2008	Conventional Bus	New Flyer	D40LF	2FYD4FV1X8E034988	CFX3552	Diesel	2024	14	16	2	$50,358	$650,000
1953	2008	Conventional Bus	New Flyer	D40LF	2FYD4FV118E034989	CFX3553	Diesel	2024	14	16	2	$51,541	$650,000
1954	2008	Conventional Bus	New Flyer	D40LF	2FYD4FV188E034990	CFX3554	Diesel	2024	14	16	2	$51,541	$650,000
1955	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV179C036663	CFX3555	Diesel	2025	13	16	3	$74,398	$650,000
1956	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV199C036664	CFX3556	Diesel	2025	13	16	3	$74,398	$650,000
1957	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV109C036665	CFX3557	Diesel	2025	13	16	3	$74,398	$650,000
1958	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV129C036666	CFX3558	Diesel	2025	13	16	3	$74,398	$650,000
1959	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV149C036667	CFX3559	Diesel	2025	13	16	3	$74,398	$650,000
1960	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV169C036668	CFX3560	Diesel	2025	13	16	3	$74,398	$650,000
1961	2009	Conventional Bus	New Flyer	D40LF	2FYD4FV189C036669	CFX3561	Diesel	2025	13	16	3	$74,398	$650,000
1962	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV16AB038248	CFX3562	Diesel	2026	12	16	4	$93,623	$650,000
1963	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV18AB038249	CFX3563	Diesel	2026	12	16	4	$93,623	$650,000
1964	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV14AB038250	CFX3564	Diesel	2026	12	16	4	$93,623	$650,000

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
1965	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV16AB038251	CFX3565	Diesel	2026	12	16	4	$93,623	$650,000
1966	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV18AB038252	CFX3566	Diesel	2026	12	16	4	$93,623	$650,000
1967	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV1XAB038253	CFX3567	Diesel	2026	12	16	4	$93,623	$650,000
1968	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV11AB038254	CFX3568	Diesel	2026	12	16	4	$93,623	$650,000
1969	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV13AB038255	CFX3569	Diesel	2026	12	16	4	$93,623	$650,000
1970	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV15AB038256	CFX3570	Diesel	2026	12	16	4	$93,623	$650,000
1971	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV17AB038257	CFX3571	Diesel	2026	12	16	4	$93,623	$650,000
1972	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV19AB038258	CFX3572	Diesel	2026	12	16	4	$93,623	$650,000
1973	2010	Conventional Bus	New Flyer	D40LFR	2FYD5FV10AB938259	CFX3573	Diesel	2026	12	16	4	$93,623	$650,000
1974	2011	Conventional Bus	New Flyer	D40LFR	2FYD5FV17AB038260	CFX3574	Diesel	2027	11	16	5	$117,028	$650,000
1975	2011	Conventional Bus	New Flyer	D40LFR	2FYD5FV19AB038261	CFX3575	Diesel	2027	11	16	5	$117,028	$650,000
1976	2011	Conventional Bus	New Flyer	XD40	2FYD8FV19BB039452	CFX3665	Diesel	2027	11	16	5	$113,688	$650,000
1977	2011	Conventional Bus	New Flyer	XD40	2FYD8FV19BB039453	CFX3666	Diesel	2027	11	16	5	$113,688	$650,000
1978	2011	Conventional Bus	New Flyer	XD40	2FYD8FV19BB039454	CFX3667	Diesel	2027	11	16	5	$113,688	$650,000
1979	2011	Conventional Bus	New Flyer	XD40	2FYD8FV14BB039455	CFX3668	Diesel	2027	11	16	5	$113,688	$650,000
1980	2011	Conventional Bus	New Flyer	XD40	2FYD8FV16BB039456	CFX3669	Diesel	2027	11	16	5	$113,688	$650,000
1981	2011	Conventional Bus	New Flyer	XD40	2FYD8FV18BB039457	CFX3670	Diesel	2027	11	16	5	$113,688	$650,000
1982	2011	Conventional Bus	New Flyer	XD40	2FYD8FV1XBB039458	CFX3671	Diesel	2027	11	16	5	$113,688	$650,000
1983	2011	Conventional Bus	New Flyer	XD40	2FYD8FV11BB039459	CFX3672	Diesel	2027	11	16	5	$113,688	$650,000
1984	2012	Conventional Bus	New Flyer	XD40	2FYD8FV16CC040750	CFX3673	Diesel	2028	10	16	6	$146,079	$650,000
1985	2012	Conventional Bus	New Flyer	XD40	2FYD8FV18CC040751	CFX3674	Diesel	2028	10	16	6	$146,079	$650,000
1986	2012	Conventional Bus	New Flyer	XD40	2FYD8FV1XCC040766	CGV9823	Diesel	2028	10	16	6	$146,079	$650,000
1987	2012	Conventional Bus	New Flyer	XD40	2FYD8FV16CC040764	CGV9824	Diesel	2028	10	16	6	$146,266	$650,000
1988	2012	Conventional Bus	New Flyer	XD40	2FYD8FV18CC040765	CGV9825	Diesel	2028	10	16	6	$146,266	$650,000
1989	2013	Conventional Bus	New Flyer	XD40	2FYD8FV1XDC042972	CGV9826	Diesel	2029	9	16	7	$175,886	$650,000
1990	2013	Conventional Bus	New Flyer	XD40	2FYD8FV11DC042973	CGV9827	Diesel	2029	9	16	7	$175,886	$650,000
1991	2013	Conventional Bus	New Flyer	XD40	2FYD8FV13DC042974	BRP6183	Diesel	2029	9	16	7	$175,886	$650,000
1992	2013	Conventional Bus	New Flyer	XD40	2FYD8FV15DC042975	BRP6184	Diesel	2029	9	16	7	$175,886	$650,000
1993	2013	Conventional Bus	New Flyer	XD40	2FYD8FV10DC042981	CHJ5374	Diesel	2029	9	16	7	$176,105	$650,000
1994	2013	Conventional Bus	New Flyer	XD40	2FYD8FV12DC042982	CHJ5373	Diesel	2029	9	16	7	$176,105	$650,000
1995	2015	Conventional Bus	Eldorado	Ez Rider	1N9MNAC68FC084021	BRP6187	Diesel	2023	7	16	1	$27,645	$470,000
1996	2015	Conventional Bus	Eldorado	Ez Rider	1N9MNAC6XFC084022	BRP6188	Diesel	2023	7	16	1	$27,645	$470,000
1997	2016	Conventional Bus	New Flyer	XD40	2FYD8FV10FB048160	BSR1775	Diesel	2032	6	16	10	$344,879	$650,000
1998	2016	Conventional Bus	New Flyer	XD40	2FYD8FV12FB048161	CHJ5372	Diesel	2032	6	16	10	$344,879	$650,000
1999	2016	Conventional Bus	New Flyer	XD40	2FYD8FV14FB048162	BSR1773	Diesel	2032	6	16	10	$344,879	$650,000
19-100	2016	Conventional Bus	New Flyer	XD40	2FYD8FV16FB048163	CGK4593	Diesel	2032	6	16	10	$344,879	$650,000
19-101	2016	Conventional Bus	New Flyer	XD40	2FYD8FV18FB048164	CGP3843	Diesel	2032	6	16	10	$344,879	$650,000

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
19-102	2016	Conventional Bus	New Flyer	XD40	2FYD8FV1XFB048165	CGK4594	Diesel	2032	6	16	10	$344,879	$650,000
19-103	2016	Conventional Bus	New Flyer	XD40	2FYD8FV11FB048166	CGP3844	Diesel	2032	6	16	10	$344,879	$650,000
19-104	2016	Conventional Bus	New Flyer	XD40	2FYD8FV13FB048167	CGP3845	Diesel	2032	6	16	10	$344,879	$650,000
19-105	2016	Conventional Bus	New Flyer	XD40	2FYD8FV15FB048168	CGK4595	Diesel	2032	6	16	10	$344,879	$650,000
19-106	2016	Conventional Bus	New Flyer	XD40	2FYD8FV17FB048169	CGP3846	Diesel	2032	6	16	10	$344,879	$650,000
19-107	2016	Conventional Bus	New Flyer	XD40	2FYD8FV13FB048170	CGK4596	Diesel	2032	6	16	10	$344,879	$650,000
19-108	2016	Conventional Bus	New Flyer	XD40	2FYD8FV15FB048171	CGK4597	Diesel	2032	6	16	10	$344,879	$650,000
19-109	2016	Conventional Bus	New Flyer	MD35	2FYD9KR04FB047861	CGP3847	Diesel	2032	6	16	10	$260,862	$470,000
19-110	2016	Conventional Bus	New Flyer	MD35	2FYD9KR06FB047862	BSR1776	Diesel	2032	6	16	10	$260,862	$470,000
19-111	2016	Conventional Bus	New Flyer	MD35	2FYD9KR08FB047863	BTD1925	Diesel	2032	6	16	10	$260,862	$470,000
19-112	2016	Conventional Bus	New Flyer	MD35	2FYD9KR0XFB047864	BTD1924	Diesel	2032	6	16	10	$260,862	$470,000
19-113	2016	Conventional Bus	New Flyer	MD35	2FYD9KR09GB048750	BTY6652	Diesel	2032	6	16	10	$260,862	$470,000
19-114	2016	Conventional Bus	New Flyer	MD35	2FYD9KR00GB048751	BTY6651	Diesel	2032	6	16	10	$260,862	$470,000
19-115	2016	Conventional Bus	New Flyer	MD35	2FYD9KR02GB048752	CGP3915	Diesel	2032	6	16	10	$260,862	$470,000
19-116	2016	Conventional Bus	New Flyer	MD35	2FYD9KR04GB048753	CGP3924	Diesel	2032	6	16	10	$260,862	$470,000
19-117	2016	Conventional Bus	New Flyer	MD35	2FYD9KR06GB048754	CGP3927	Diesel	2032	6	16	10	$260,862	$470,000
19-118	2016	Conventional Bus	New Flyer	MD35	2FYD9KR0XGB048755	CGP3928	Diesel	2032	6	16	10	$260,862	$470,000
19-119	2016	Conventional Bus	New Flyer	MD35	2FYD9KR0XGB048756	CGP3929	Diesel	2032	6	16	10	$260,862	$470,000
19-120	2016	Conventional Bus	New Flyer	MD35	2FYD9KR01GB048757	CGP3954	Diesel	2032	6	16	10	$260,862	$470,000
19-121	2016	Conventional Bus	New Flyer	MD35	2FYD9KR01GB048758	CGP3955	Diesel	2032	6	16	10	$260,862	$470,000
19-124	2016	Conventional Bus	GMC	Cutaway	1GD67UBL1G1329357	BWV1248	Diesel	2024	6	7	2	$53,075	$250,000

Current Utility Vehicle Fleet

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
02-181	2009	Pick-up Truck	Chevrolet	Express Cargo	1GCHG39K591104205	PYY611		2016	13	7	0	$0	$90,000
02-230	2010	Pick-up Truck	Ford	F-150	1FTFX1EV9AFD34705	BBL-1369		2017	12	7	0	$0	$60,000
02-294	2012	Pick-up Truck	Ford	Escape	1FMCU5K32CKB14303	BFN-4354		2019	10	7	0	$0	$40,000
02-295	2012	Pick-up Truck	Ford	Escape	1FMCU5K35CKB35582	BFN-2497		2019	10	7	0	$0	$40,000
02-296	2012	Pick-up Truck	Ford	Escape	1FMCU5K37CKB35583	BFN4298		2019	10	7	0	$0	$40,000
02-299	2012	Pick-up Truck	Ford	Escape	1FMCU5K33CKB45463	BFS-6900		2019	10	7	0	$0	$40,000
02-339	2015	Pick-up Truck	Chevrolet	Silverado 1500	1GCVKPEC3FZ148143	BPK4312		2022	7	7	0	$0	$60,000
02-355	2013	Pick-up Truck	Toyota	RAV4	2T3BFREVXDW034383	BRP6291		2020	9	7	0	$0	$50,000
02-356	2013	Pick-up Truck	Toyota	RAV4	2T3BFREV6DW037541	BRP6292		2020	9	7	0	$0	$50,000
02-359	2013	Pick-up Truck	Toyota	Tundra	5TFMY5F17DX296638	BRP6296		2020	9	7	0	$0	$60,000
02-360	2013	Pick-up Truck	Toyota	Tundra	5TFMY5F16DX286358	BRP6295		2020	9	7	0	$0	$60,000

Unit #	Year	Fleet Category	Make	Model	Vin #	License #	Fuel Type	Anticipated Replacement Date	Age (Years)	Expected Useful Life (Years)	Expected Useful Life Remaining (Years)	Net Book Value	Replacement Cost (2022 $)
02-361	2013	Pick-up Truck	Toyota	Tundra	5TFMY5F18DX295594	BRP6297		2020	9	7	0	$0	$60,000
02-362	2013	Pick-up Truck	GMC	Sierra	1GTN2TEA3DZ349805	BRP6299		2020	9	7	0	$0	$60,000
02-416	2020	Pick-up Truck	Ford	F-150	1FTFW1E58LFA85903	CGD-1349		2027	2	7	5	$42,608	$60,000
21-60	2013	RTV	Kubota	RTV1100	A5KC1HDAADG039181	N/A		2020	9	7	0	$0	$30,000
23-Jan	2020	Sweeper/Scrubber	Nilfisk	CS7010	1000070865	N/A		2028	2	8	6	$60,723	$80,000
24-20	2010	Forklift	Yale	GLP060	B8675B055040	N/A		2018	12	8	0	$0	$80,000
32-48	2014	Trailer	Amer	Hotsy Trailer	5N6200E21E1042039	4VS964		2020	8	6	0	$0	$40,000
32-49	2014	Trailer	JDJ	S/A Trailer	2MSUFC529E1008374	4VS963		2020	8	6	0	$0	$4,000
32-51	2015	Trailer	Amer	HOTSY Trailer	5N6200E21F1046139	4VS961		2021	7	6	0	$0	$40,000

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Transit Master Plan

Appendix G – Organization Review

January 2023 – 21-1297

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Figures

Tables

1.0 RMWB Transit Today

While not immediately apparent to riders, a transit system's structure and administrative processes can have a significant impact on the efficiency and effectiveness of its service delivery. This document explores RMWB Transit's organizational structure and administrative processes, comparing them with peer transit systems and industry best practices.

This review was undertaken using data available at the commencement of the Transit Master Plan process, providing the context necessary to develop other elements of the Plan. As such, minor changes to specific details may occur between the review being undertaken and completion of the overall Transit Master Plan.

1.1 Existing Organizational Arrangements

1.1.1 Governing Body

The Regional Municipality of Wood Buffalo's Transit and Fleet Services department is housed within the municipality's Public Works department, operating entirely within the local government. All budgetary and operational decisions are ultimately approved by City Council.

1.1.2 Organization Structure

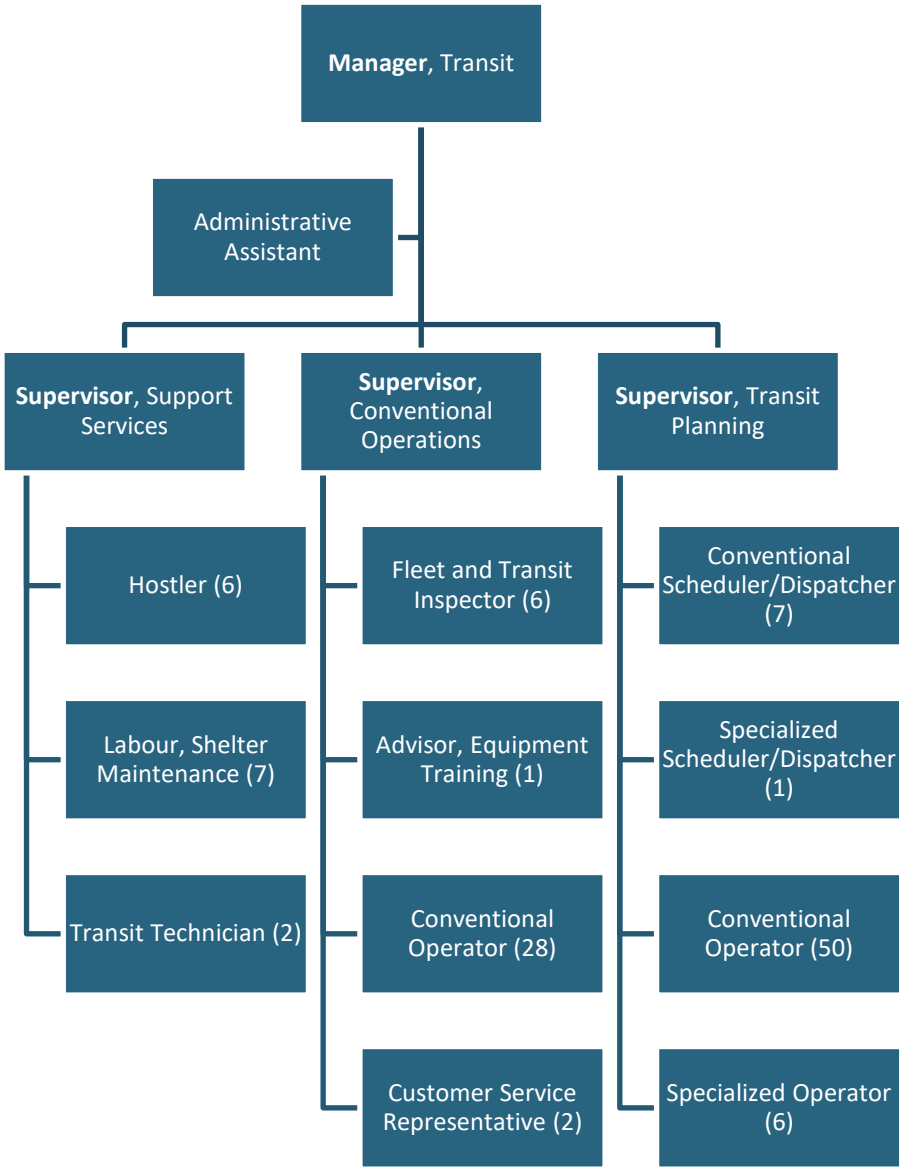
The Manager, Transit Operations reports to the Senior Manager, Transportation and Facilities. This position has overall responsibility for the planning, delivery, and management of conventional and specialized transit services, including their support services (eg. Shelter maintenance, cleaning, customer service, etc.).

There are 3 positions that directly report to the Manager:

- **Supervisor, Conventional Operations**– responsible for conventional transit operations including customer service, training, and on-street support;
- **Supervisor, Transit Planning** – responsible for conventional and specialized operators, scheduling, planning, and dispatch;
- **Supervisor, Support Services** – responsible for vehicle servicing, vehicle maintenance, fleet management, and building/equipment maintenance;

The organization chart, detailing reporting relationships and the number of full-time equivalent positions (FTE), is shown in Figure 1.

Figure 1: Transit Operations Organizational Chart



1.2 Organization Structure Comparisons with Peer Systems

1.2.1 Generic Transit Functions

There are generic functions that must be carried out to develop, deliver, and manage a public transit service. While there are variations in how these functions are organized and coordinated, they are common to any jurisdiction that provides public transportation.

To facilitate analyses and comparisons, these functions are named and defined here for clarity.

In general, these functions are divided into two types:

- **Line Functions** are ones that directly advance the core mandate of the transit organization (e.g. planning, scheduling, operations, fleet management, passenger information, customer service); and,
- **Staff Functions** are ones that assist the transit organization with specialized advisory and support services (e.g. human resources, finance, information technology, occupational health and safety).

Table 1 lists the name and descriptions of generic functions (and, in some cases, sub-functions) for public transit used in this report.

Table 1: Generic Functions for Public Transit

Type	Function	Sub-Function	Generic Description
Line Functions	**General Management**		• Overall direction and management of the public transit organization
	Service Development	Transit Planning	• Long range planning and coordination of transit planning with urban planning • Route network planning, service monitoring, stop/shelter location planning • Special projects
		Scheduling	• Timetabling and vehicle blocking • Run-cutting and rostering
	Marketing		• Creation and distribution of passenger information materials • Development and execution of marketing programs • Design of transit identity (logo, bus livery, bus stop graphics) • Preparation of internal and external communication programs
	Customer Service		• Passenger assistance (customer call centre) • Commendations/complaints administration • Lost and found administration • Fare media sales
	Transit Operations	Division Management	• Overall responsibility for transit operations • Creation and maintenance of positive relationships with internal and external stakeholders
		On-Street Inspection	• Day-to-day regulation, supervision, and adjustment of on-street transit service • Provision of on-street support and direction to bus operators • Investigation and resolution of operational concerns of customers, business owners, and residents
		Control Centre	• Provides day-to-day guidance and assistance to bus operators and inspectors via the transit radio communications system • Provides leadership and direction to bus operators to ensure safe, efficient, high quality bus service to customers
		Dispatch	• Preparation and coordination of the daily dispatch of bus operators and buses to scheduled and unscheduled transit service

Type	Function	Sub-Function	Generic Description
		Bus Operator Supervision	• Provision of ongoing supervision, counsel, guidance, coaching, mentoring, performance review, and career development for the bus operator workforce
		Training	• Training of new bus operators in the knowledge, skills, and expectations required to safely and efficiently operate a transit vehicle and to provide customer service. • Provision of refresher and continuing education for bus operator workforce
		Operations Planning	• Planning and coordination of temporary routings for detours • Planning and coordination of special event service
	Specialized Transit		• Planning and delivery of specialized transit service (including passenger registration, trip reservations, trip scheduling, trip confirmation, vehicle dispatch, passenger pickup and drop-off) • Public outreach, travel training, customer service and complaint resolution
	Plant and Equipment	Division Management	• Overall responsibility for plant and equipment functions
		Bus Maintenance	• Preventative maintenance, repair and overhaul, and refurbishing of transit vehicles
		Bus Servicing	• Daily fueling, exterior cleaning, and interior cleaning of transit vehicles
		Stops, Shelters, Terminals	• Installation and maintenance of bus stops, transit shelters, bus loops, and transit terminals (including supplementary snow clearing) • Installation of accessibility features for stops, shelters, and terminals
		Building Maintenance	• Maintenance and cleaning of garages, transit centres, and transit offices
Staff Functions	**Finance**	Budget and Finance	• Financial planning and preparation of operating and capital budgets • Financial analysis and reporting • Accounting/financial activities • Fare Policy development and administration • Fare agreement administration (e.g. U-Pass)
		Treasury	• Design, production, and distribution of fare media • Accounting of fare receipts • Cash management and deposits
	Human Resources		• Provides support for employee recruitment and selection, employee development, organizational development, compensation and benefits administration, and other HR policy development
	Information Systems		• Identification of opportunities for application of information technology to improve business processes and customer service

Type	Function	Sub-Function	Generic Description
			• Application development and support for internal information systems • Integration services for external information systems and for vendor-supplied systems • Development of strategy for the integration of data amongst applications
	Occupational Health and Safety		• Collaborates with other divisions to identify and resolve safety issues • Administers occupational health and safety programs

1.2.2 Peer Systems Overview

Based on information contained in the 2019 edition of the CUTA Fact Book, and discussion with peer systems, **Table 2** provides an overview of key indicators of the peer systems compared to those of the Regional Municipality of Wood Buffalo. These systems differ somewhat from those in the Peer Review document (**Appendix A**), reflecting that sufficiently-detailed organizational information is not available for all of the systems described therein.

As detailed in the table below, transit in the Regional Municipality of Wood Buffalo is delivered through a municipal department, similar to three other systems (Oakville, Guelph, and Strathcona County), while a Commission is the governing authority for the two other systems (St. John's and St. Catharines).

Table 2: Peer Systems Comparison of Key Indicators

Indicator	Wood Buffalo	St. John's	Oakville	Guelph	St. Catharines	Strathcona County
Organization Type	Municipal Department	Commission	Town Department	City Department	Commission	County Department
Conventional Transit	Yes	Yes	Yes	Yes	Yes	Yes
Specialized Transit	Yes	Yes	Yes	Yes	Yes	Yes
Buses in Fleet[1]	84[2]	54	95	102	78	75
Annual Revenue Hours	88,840	134,107	212,008	205,820	168,774	112,219
Number of Employees[3]	131 FT	132 FT 16 PT	183 FT 32 PT	199 FT 21 PT	167 FT 5 PT	139 FT 23 PT

[1] For Conventional Transit (i.e. Fixed Route service) only

[2] Figure is from 2019 - current fleet has reduced to 76

[3] Includes Bus Operators, Other Transportation Operations, Mechanics, Other Vehicle Maintenance and Servicing, Plant and Other Maintenance, and Administration

Indicator	Wood Buffalo	St. John's	Oakville	Guelph	St. Catharines	Strathcona County
Number of Bus Operators[1]	93 FT	74 FT 12 PT	125 FT 28 PT	144 FT 19 PT	123 FT	79 FT 21 PT
Operators per Bus	1.11	1.59	1.61	1.60	1.58	1.33
Annual Revenue Hours per Operator	1,485	1,559	1,386	1,263	1,372	1,122

1.2.3 Mapping of Transit Functions

This section maps generic transit functions to the organizational structures of the peer systems described above.

The following information is summarized for each function across the six transit systems:

Item	Description
Manager Responsible	• The management or supervisory position directly responsible for the function
Manager Level	• The level in the organization of the *Manager Responsible* • The General Manager (or equivalent) is considered to be Level 1 in the transit organization • Those reporting directly to the General Manager are considered Level 2, etc.
# of Staff	• Number of staff assigned to the function, *exclusive of the Manager Responsible*
Staffing Indicators	• Various indicators provided where appropriate

Table 3, shown on the following two pages, summarizes this information for each transit system. Note that the table organized by functions and that, as such, staff performing more than one function may be listed more than once.

Table 3: Mapping of Generic Functions Across Transit Systems

Function	Characteristics	Wood Buffalo	St. John's	Oakville	Guelph	St. Catharines	Strathcona County
General Manager	Title: Reports to: # Direct Reports:	Manager, Transit Senior Manager, Transportation and Facilities 3	General Manager Commission Chair 7	Director of Transit Commissioner of Community Services 4	General Manager Deputy Chief Administrative Officer 4	General Manager Commission Chair 5	Director of Transit Associate Commissioner 6
Service Development: *Transit Planning*	Mgr Responsible: Mgr Level: # of Staff:	Supervisor Transit Planning 2 0 (Undertaken by dispatch staff)	Manager, Marketing &Information Services 2 1	Mgr, Planning & Demand Responsive Svcs 2 1, Transit Analyst	Supervisor, Planning & Scheduling 2 1	Manager of Transportation 2 1	Manager, Planning & Customer Service 2 2
Service Development: *Scheduling*	Mgr Responsible: Mgr Level: # of Staff:	Supervisor, Transit Planning 2 6 FT, 4 Casual (Scheduler/Dispatcher)	Manager, Marketing & Information Services 2 0, Performed by Transit Planner	Mgr, Planning & Demand Responsive Svcs 2 1, Transit Scheduler	Supervisor, Planning &Scheduling 2 1	Manager of Transportation 2 0, Performed by Transit Planner	Manager, Planning & Customer Service 2 1
Marketing	Mgr Responsible: Mgr Level: # of Staff:	Function provided by Municipality's Communications department	Manager, Marketing & Information Services 2 1	Mgr, Planning & Demand Responsive Svcs 2 1, Marketing/Customer Srvc Coordinator	Supervisor, Transit Business Services 2 1	Supervisor, Marketing & Customer Service 2 0	Coordinator, Comm & Customer Experience 3 1
Customer Service	Mgr Responsible: Mgr Level: # of Staff:	Supervisor, Conventional Operations 2 2	Coordinator, Marketing & Information Services 3 4.5	Mgr, Planning & Demand Responsive Svcs 2 Performed by Mrkting/Customer Srvc Coordinator	Supervisor, Transit Business Services 2 Performed by Coordinator, Sales & Market Development	Supervisor, Marketing & Customer Service 2 1 FT, 3 PT	Coordinator, Comm & Customer Experience 3 2 FT, 1 PT
Transit Operations: *Division Management*	Mgr Responsible: Mgr Level: # Direct Reports:	Supervisor, Conventional Operations 2 0	Operations Manager 2 8	Manager, Operations 2 5	Manager, Transit Operations 2 17	Manager of Transportation 2 5	Manager, Conventional Transit 2 4
Transit Operations: *On-Street Inspection*	Mgr Responsible: Mgr Level: # of Staff: Operators per Staff:	Supervisor, Conventional Operations 2 6 FT, 4 Casual (Fleet & Transit Inspector) 16 (per FTE)	Operations Manager 2 4 23	Senior Transit Supervisor 3 7 19	Manager, Transit Operations 2 9 (Route Supervisors) 19	Manager of Transportation 2 2 68	Supervisor, Inspectors 3 5 16
Transit Operations: *Dispatch / Control Centre*	Mgr Responsible: Mgr Level: # of Staff: Operators per Staff:	Supervisor, Transit Planning 2 7 FT, 4 PT 13 (per FTE)	Operations Manager 2 2 47	Senior Transit Supervisor 3 5 27	Manager, Transit Operations 2 5 (Route Supervisors) 34	Manager of Transportation 2 2 68	Supervisor, Dispatch 3 4 20
Transit Operations: *Bus Operator Supervision*	Mgr Responsible: Mgr Level: # of Staff: Operators per Staff:	Supervisor, Conventional Operations and Supervisor, Transit Planning 2 Performed by two supervisor positions 47	Senior Transit Supervisor 3 1 93	Senior Transit Supervisor 3 Performed by this position 135	Manager, Transit Operations 2 0, performed by Route Supervisors	Manager of Transportation 2 1 136	Manager, Conventional Transit 2 0, Shared with Supervisors 26
Transit Operations: *Training*	Mgr Responsible: Mgr Level: # of Staff: Operators per Staff:	Supervisor, Conventional Operations 2 1 (Advisor, Equipment Training) 93	Operations Manager 2 1 93	Manager, Operations 2 1 135	Manager, Transit Operations 2 2, but also act as Route Supervisors 85	Manager of Transportation 2 0, Performed by Transit Supervisors	Manager, Conventional Transit 2 1 79

Function	Characteristics	Wood Buffalo	St. John's	Oakville	Guelph	St. Catharines	Strathcona County
Transit Operations: *Operations Planning*	Mgr Responsible: Mgr Level: # of Staff:	Supervisor, Transit Planning 2 7 FT, 4 PT	Manager, Marketing & Information Services 2 0, Performed by Transit Planner	Detours: Manager, Operations Special Events: Manager, Planning	Detours: Route Supervisors Special Events: Coordinator, Sales & Market Development	Manager of Transportation 2 0, Performed by Transit Supervisors	Joint function shared amongst Dispatch and Transit Planner
Specialized Transit	Mgr Responsible: Mgr Level: # of Office Staff: # of Operators:	Supervisor, Transit 2 0 7	Manager, Accessible Services 2 0 0, Contracted Out	Demand Responsive Supervisor 3 7 15, but 50% of Trips Contracted Out	Mobility Supervisor 3 2 11	Paratransit Supervisor 3 3 8	Manager, Specialized Transit 2 3 7 FT, 4 PT
Plant & Equipment: *Division Management*	Mgr Responsible: Mgr Level: # Direct Reports:	Supervisor, Support Services 2 0	Maintenance Manager 2 4	Manager, Fleet & Maintenance 2 4	Function provided by City's Fleet Services Department (Project Manager, QA and CI provides liaison)	Manager of Maintenance 2 2	Function provided by County's Fleet Services Department
Plant & Equipment: *Bus Maintenance*	Mgr Responsible: Mgr Level: # of Staff:	Function provided by Municipality's Fleet Services Department	Day/Night Foremen (3) 3 18	Maintenance Supervisor 3 16	Function provided by City's Fleet Services Department	Maintenance Supervisor 3 20	Function provided by County's Fleet Services Department
Plant & Equipment: *Bus Servicing*	Mgr Responsible: Mgr Level: # of Staff:	Supervisor, Support Services 2 6	Day/Night Foremen (3) 3 4 (duties include farebox handling)	Maintenance Supervisor 3 9	Function provided by City's Fleet Services Department	Maintenance Supervisor 3 8	Supervisor, Support Services 3 8
Plant & Equipment: *Stops / Shelters / Terminals / Buildings*	Mgr Responsible: Mgr Level: # of Staff:	Supervisor, Support Services 2 9	Maintenance Planning Supervisor 3 6	Mgr, Planning & Demand Responsive Svcs 2 Stops: Roads & Works Dep't Shelters: Contracted	Project Manager, QA and CI 2 Coordinates installations with other City departments / contractors	Maintenance Supervisor 3 1 Coordinates installations with other City departments / contractors	Supervisor, Support Services 3 2
Finance: *Budget & Finance*	Mgr Responsible: Mgr Level: # of Staff:	Manager, Transit Operations 1 Supported provided by the Municipality's Finance and Procurement Departments	Finance Manager 2 1	Director of Transit 1 Accounting: Town Finance Dep't	General Manager 1 Support provided by Supervisor, Transit Business Services	Manager, Finance & Administration 2 2 FT, 2 PT	Coordinator, Finance 2 2
Finance: *Treasury*	Mgr Responsible: Mgr Level: # of Staff:	Shared responsibilities between the three Supervisors, some functions shared with Municipal Finance department 2 0	Finance Manager 2 1 (shared with Maintenance Clerk)	Administrative Assistant 2 1 Presto: Business Systems Coordinator	Supervisor, Transit Business Services 2 1 (shared with Fleet Services)	Manager, Finance & Administration 2 Performed by Budget & Finance Staff	Coordinator, Finance 2 1
Human Resources	Mgr Responsible: Mgr Level: # of Staff:	Function provided by Municipality's HR Department	Manager, Human Resources 2 1	Function provided by Town's HR Department	Function provided by City's HR Department	Function provided by City's HR Department	Function provided by County's HR Department
Information Systems	Mgr Responsible: Mgr Level: # of Staff:	Function provided by Municipality's IT Department	Senior Systems Administrator 3 1.6	Function provided by Town's Information Services & Solutions Department	Function provided by City's IT Department	Manager, Finance & Administration 2 1	Function provided by County's IT Department
Occupational Health and Safety	Mgr Responsible: Mgr Level: # of Staff:	JOHSC and HS functions are the responsibility of Human Resources	Shared Responsibility between Manager, Human Resources and Maintenance Manager	Manager of Operations 2 One Transit Supervisor is member of joint Union-Management OHS Committee	Manager of Operations 2 Function shared with Project Manager and Manager of Fleet Services	Manager of Maintenance 2 0, Performed by Manager of Maintenance	Coordinator, OHS 2 0, Performed by Coordinator, OHS

1.2.4 Comparison of Common Features of Peer System Structures

Based on the information contained in **Table 3** and on discussions held with the Transit Operations staff, common features and preferences across the six peer system organization structures are summarized as follows for each major transit function:

Generic Function	Common Features	Role in Wood Buffalo
General Manager (Transit Manager)	• It is common across peer agencies that this role has between 4 and 7 direct reports, including administrative assistance. • Reporting structure is largely determined by number of line and staff functions assigned to the transit organization. Some functions (e.g. Plant and Equipment, Human Resources, Information Technology) are the responsibility of other municipal departments in some peer systems.	RMWB Transit's senior staffing is largely consistent with common industry practice. The General Manager (Transit Manager) has three reports that are directly responsible for transit services as well as an administrative assistant.
Service Development	• Responsible Manager reports directly to General Manager. • Manager usually directly involved in planning and scheduling technical work. • Average of 1 to 2 planning/scheduling technical staff in addition to the Manager.	Supervisor, Transit Planning is responsible for this function, supported by a Scheduler/Dispatcher who is assigned to "special projects". There are two staff members responsible for scheduling.
Marketing, Customer Services	• Common for these two functions to be the responsibility of a single Manager. • Responsible Manager usually reports directly to General Manager. • Manager often directly involved in marketing work. • An additional marketing position is common if Manager is responsible for other major functions. • Range of 2 to 5 front-line positions for customer service function.	The Supervisor, Conventional Operations oversees two (2) Customer Service Representatives who provided front-line assistance to passengers. RMWB Transit does not have marketing or communications staff. Communications are largely provided on corporate level by Regional Municipality of Wood Buffalo. The level of staffing is generally consistent with industry peers who do not themselves undertake their own marketing and outreach.

Generic Function	Common Features	Role in Wood Buffalo
Transit Operations	• Responsible Manager reports directly to General Manager • Manager typically has overall responsibility for Dispatch, Control Centre, On-Street Inspection, Training, and Bus Operator Supervision/Development functions • Common practice is to assign responsibility for Dispatch/Control Centre and On-Street Inspection to a single Senior Supervisor position (i.e. an "Assistant Manager") • Common practice is for transit supervisors to rotate amongst Dispatch/Control Centre and On-Street Inspection roles • Common practice is for Training function to report directly to Manager • Operations planning role varies (detour planning and implementation usually included in Operations function; special events planning often shared between Operations and Service Development functions) • Peer systems expressed need to improve Bus Operator Supervision/Development function (current practice is diverse – split amongst Responsible Manager, Supervisors, and Trainer) • It is typical that Dispatch/Control Centre and On-Street Inspection functions are managed by between 4 and 12 positions. • Common practice is for 1 position for Training in peer systems.	Responsibilities of this department is generally consistent with industry practice in regard to training, dispatch, and on-street inspection. Similar to other agencies, Transit Inspectors provide varying roles including on street inspection and control centre. In Wood Buffalo, Fleet and Transit Inspectors report directly to the Supervisor, Transit Operations rather than report through an assistant manager position. It is noted that there may be a need to improve on street operator oversight and alleviate pressure on the three supervisory positions by introducing an additional service supervisory role to whom the Inspectors could report and from whom they could receive direction.

Generic Function	Common Features	Role in Wood Buffalo
Specialized Transit	• Operations and maintenance functions 100% contracted out. In St. John's, approximately 50% contracted out in Oakville, and 100% operated by transit staff in Guelph, St. Catharines, and Strathcona County. • All systems retain responsibility for passenger registration, trip reservation, and scheduling functions. • Specialized Transit function is separate from Conventional Transit Operations in Strathcona County	In Wood Buffalo, specialized transit service is provided in-house and is overseen by the Supervisor, Transit Planning. The Supervisor oversees scheduling, dispatch, and operators of specialized service. Wood Buffalo's specialized transit service delivery model and organizational structure are generally consistent with industry practice.
Plant and Equipment	• Bus Maintenance is the responsibility of other City departments (e.g. Fleet Services) in Wood Buffalo, Guelph, and Strathcona County • Bus Servicing and Stops/Shelter/Loops are supervised by a transit staff member in Wood Buffalo, St. Johns, Oakville, and St Catharines. • Average of four direct reports to Maintenance Manager in St. John's and Oakville. • Common practice is for Bus Servicing staff to be assigned fare box handling. • Location/site planning for stops and shelters usually coordinated with Service Development function; installations performed by contractors or Plant and Equipment staff	In Wood Buffalo, the Transit Operations Department are responsible for stop and shelter maintenance, fare boxes, destination signs, and vehicle cleaning/refueling. Vehicle maintenance is the responsibility of the general Fleet department outside of Transit Operations. Wood Buffalo is generally consistent with industry practice apart from the high number of direct reports to the manager responsible - Supervisor, Support Services (15).
Finance	• Common for Budget/Accounting/Treasury functions to be assigned to a single Manager • Responsible Manager reports directly to General Manager in St. Catharines, Guelph, and Strathcona County • In Oakville, General Manager has responsibility for budgeting and revenue room operation, with Town Finance Department providing day-to-day accounting functions	In Wood Buffalo, most finance activities are a corporate function. Revenue from fare boxes is counted by supervisors. The Transit Operations budget is coordinated by the Transit Manager.

Generic Function	Common Features	Role in Wood Buffalo
	• An average of 1 to 2 positions for Budget and Accounting function • An average of 1 to 2 positions for Treasury/Revenue function	
Human Resources	• Services are provided by centralized municipal Human Resources Department in Wood Buffalo and peer systems, with designated staff assigned exclusively for transit.	Human Resources functions are provided by the Regional Municipality of Wood Buffalo.
Information Systems	• Generally, these services are provided by centralized municipal Information Technology Department. This is the case in Wood Buffalo, Oakville, Guelph, and Strathcona County.	Wood Buffalo is generally consistent with industry peers.
Occupational Health and Safety	• This function is usually included in duties of others (e.g. Maintenance Manager or Trainer) or provided by OHS staff in the Human Resources function • Common for peer systems to have a joint Union-Management OHS committee, with management representatives from Transit Operations and Plant and Equipment divisions.	In Wood Buffalo, Occupational Health and Safety is primarily overseen by the Municipality. Managers are also responsible for their respective departmental safety, and required inspections.

Based on information gained during interviews in October 2021, a review of the existing organizational structure, and on comparisons with organizational approaches used in other Canadian transit systems, some key issues were identified that warrant review as they deviate from general industry practice. This is not to say that the approach undertaken in Wood Buffalo is not the best way for the Municipality and residents at this time, but by considering some of the issues noted below there may be opportunities to increase efficiency and better align roles to meet the transit network's goals.

The following summarizes some points worthy of consideration as the Municipality and RMWB Transit evolve through the roll out of the new transit network.

2.0 Recommendations

Staffing levels for Wood Buffalo are generally quite similar to other systems for most line functions, with a few exceptions. As evidenced by the wide variety of formats for organizational structure and level of staffing at each level described above, there is no single best way to structure a transit organization; rather, the best option is that which most effectively supports the organization and staff in achieving their goals and desired outcomes. RMWB Transit's existing structure may be appropriate and function effectively for the Region in its current state.

However, as the Municipality and transit network grow and evolves, there may be a need to adjust existing practices to best address the ensuing changes. In the case of Wood Buffalo, there are a few divergences from common practice that may limit the organization's ability to respond to growth-related demand. Based on Dillon's review and discussion with Transit staff, the following recommendations relating to the organizational structure should be considered:

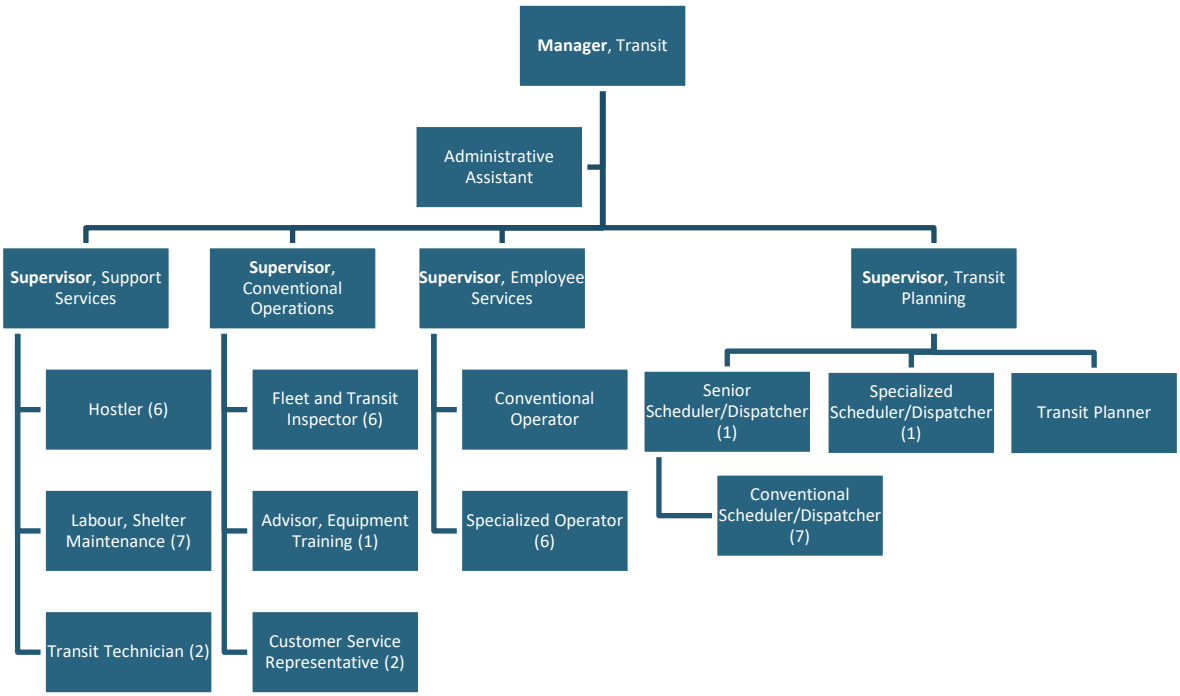
1. **Supervision of Bus Operators:** Amongst the peer systems, there is general consensus that the supervision of bus operators is under-resourced. This includes the daily supervision of on-street service, as well as the development role of counselling, guiding, coaching, and mentoring the bus operator workforce. This is a potential gap which was also identified in Wood Buffalo.

   In Wood Buffalo, conventional and specialized operators currently report directly to the Supervisor, Conventional Operations and Supervisor, Transit Planning. Front-line support is provided to Operators by the Fleet and Transit Inspector team; however, this occurs largely on an incident-by-incident basis. It is more typical in transit agencies for managerial staff equivalent to Wood Buffalo's Supervisors to have a small number of direct reports, who then supervise a high number of employees. Having the entire roster of operators (93) reporting directly to two Supervisors may limit both the amount of support and assistance operators receive as well as the ability for Supervisors to focus on the broader and more strategic aspects of their roles.

   It is recommended that the following options be considered to address this potential gap:

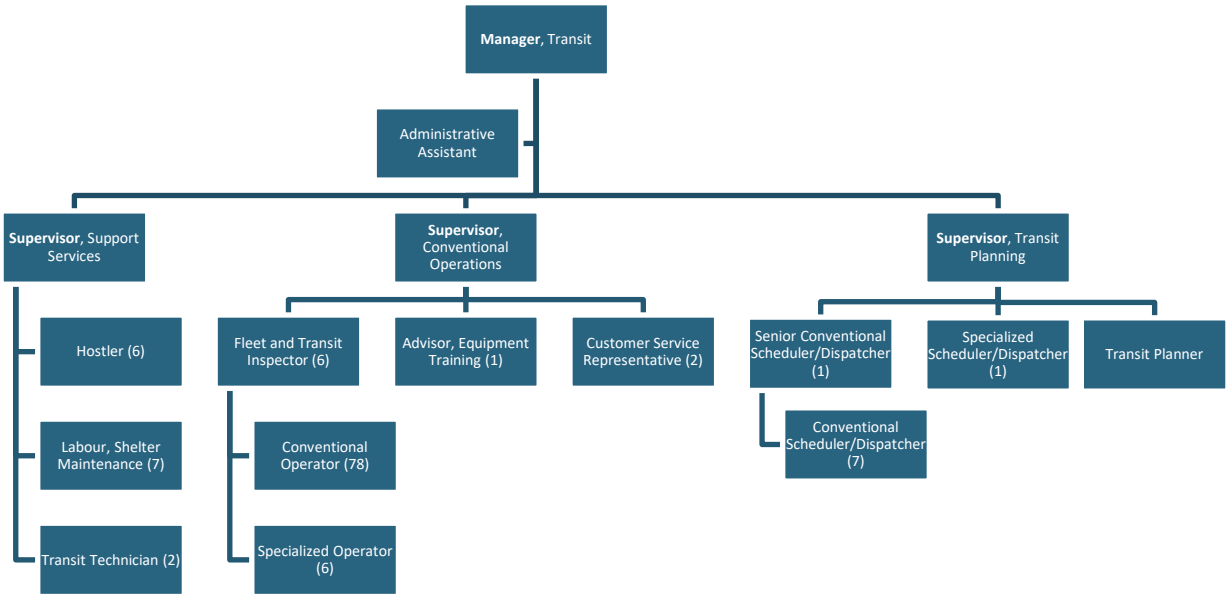
   - **Option A**: Consider the addition of a Supervisor of Employee Services to the RMWB Transit's staff complement to which all conventional and specialized operators report. This role would remove the majority of direct operator supervisory function from the Supervisor, Conventional Operations and Supervisor, Transit Planning, and ensure there is consistency in the application of disciplinary or HR Policies. Depending on the specific tasks assigned to this role, it is likely that this position could also supervise Transit Inspectors, and operators could report to them instead of the supervisor directly

Figure 2: Option A Organizational Chart (Operators Reporting to New Supervisor Role)



- **Option B**: Another way to improve the quality and availability of bus operator supervision without increasing strain on existing work force, or the addition of a new role, RMWB Transit may want to consider the addition of 2 – 3 additional Transit Inspectors, and assign these roles to specifically oversee the Employee Services function. By expanding the roster, a minimum of one Inspector could be scheduled to work in-office during the service day and provide higher levels of access to supervisors for operators. This would have the benefit of providing more continuity, leadership, and access to supervisors for the bus operators than is currently available. These positions could also work closely with the Advisor, Equipment Training and other staff members responsible for training to develop new or ongoing training as required.

Figure 3: Option B Organizational Chart (Operators Reporting to Inspectors)



Either of these options would result in higher levels of supervision of on-street service to ensure operators are fully supported in their roles as well as improving the ability of operators to access guidance and mentorship.

2. **Senior Scheduler/Dispatcher:** Scheduling and dispatch function plays an integral role in ensuring transit operates effectively. At present, the existing team of seven full time Schedulers/Dispatchers provide this function for RMWB Transit and report directly to the Supervisor, Transit Planning. In order to improve operational continuity and free up capacity for the Supervisor to address other tasks, RMWB Transit may want to consider the addition of a Senior Scheduler/Dispatcher which would provide oversight and supervisory function on day to day operations.

3. **Include Operational Social Media Notification into An Existing Job Description:** All transit-related public communications are provided by the corporate RMWB Communications team. Social media can be an effective tool to reach passengers and platforms like Twitter can be used to provide up-to-date information regarding existing service conditions and inform passengers about planned and unplanned detours, schedule changes, bus cancellations, etc. They also allow passengers to inquire directly and receive timely responses about the status of their bus/stop. While this may not require an entire dedicated position, there may be an opportunity to collaborate with RMWB Communications staff wherein Dispatchers would also have access and authority to create posts or

responses related to service disruptions outside of business hours. Dependent on the volume of messaging required to provide up-to-date information, RMWB may wish to consider the development of a RMWB Transit-specific Twitter account.

4. **Transit Planner**: While a Transit Planner job description has been developed, there is currently no such role active in RMWB Transit. Current transit planning functions are served by the Supervisor, Transit Planning, and a Scheduler/Dispatcher assigned to "special projects." While this structure may be appropriate for the current needs of the community, the introduction of a dedicated Transit Planner role could be a way forward to better accommodate future growth, providing a connection between land use planning and transit services, and to ensure transit is considered when development occurs.

5. **Combination of SMART Bus and On Demand Service:** SMART Bus is best suited to operate and manage On Demand due to similarities in fleet type, scheduling and booking technology, and dispatch. This combined *Demand Responsive* operation will be best-placed to efficiently and appropriately serve both demands, and reflects current trends within the specialized and on demand transit fields. While integration of these two services may not be possible as part of the initial implementation of On Demand transit in Wood Buffalo, steps should be taken to support their long-term integration.

6. **Review Ratio of Operators per Vehicle, and Service Hours per Transit Operator to Better Understand Optimal Staffing Requirements**: As described in **Table 2** above, the ratio of service hours to transit operators is higher at RMWB Transit than at all but one observed peer agencies (1,485 service hours per operator vs a peer group average of 1,365 service hours per operator). RMWB also has a notably lower ratio of operators per service vehicle (1.1 operators per vehicle, versus a peer group average of nearly 1.5). These two figures indicate that the operations' arm of RMWB Transit may see consistent and ongoing issues in having sufficient staff available to ensure that service on the street remains uninterrupted. With so narrow a margin for staffing, it is possible that operators may be required to undertake costly overtime to cover the shifts of their sick colleague, or for trips to be dropped altogether as there simply isn't an operator available to cover it. It is recommended that RMWB hire drivers over the life of this plan in order to achieve a ratio of 1.5 operators per vehicle, and provide adequate redundancy in the workforce. The Plan has been developed with this staffing ratio in mind and, as such, the main document identifies appropriate staffing levels to achieve this ratio based on the proposed routes and their frequencies.

REGIONAL MUNICIPALITY OF WOOD BUFFALO

Transit Master Plan

Appendix H – Implementation Plan

January 2023 – 21-1297

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Figures

Tables

1.0 Introduction

The Transit Master Plan proposes a substantial change to the existing conventional transit network in the Urban Service Area and introduces a new service delivery model for customers and operators with On-Demand Transit (ODT). The project team, in collaboration with the Municipality, has developed the following phasing and implementation plan with identified actions for each year of the five-phase Transit Master Plan.

The Implementation Plan seeks to incrementally transition to the new transit network, and pilot and scale the deployment of On-Demand Transit. In transitioning in a structured way, the plan is designed to keep operational costs stable across all phases. Additionally, it puts in place a series of stage gates to ensure change management, and engagement with all stakeholders (e.g. customers, operators, residents' groups, businesses, and Council) is conducted. There are several points during the five phase plan that would allow for adjustments to address any emerging concerns, lessons learned, and operational insights.

The focus of this document is to lay out the timing of the changes to transit within Fort McMurray. It speaks to the adjustments and check points that are proposed to occur through the five phases. Further details of the technical elements of the Plan, and how they align to these phases, is articulated in the main Plan document.

Throughout this document, and the broader Transit Master Plan, new routes are assigned route letters to disambiguate them from current routes (identified by numbers). These letters are only for route identification purposes and are not recommendations for public route identifiers when changes are made to the transit system.

2.0 Phase 1

2.1 Focus Area: Introduce and Pilot On-Demand Transit in Taiga Nova and Thickwood

The first actions in the implementation plan are to transition Route 18 Taiga Nova and Route 61 Thickwood during all time periods into the region's first On-Demand transit service. The one-year pilot will test On-Demand Transit technology as a service delivery model for all day transit services for a local employment area (Taiga Nova) and a residential area (neighbourhoods served by Route 61 Thickwood). These routes and the areas they serve were chosen because they experience some of the lowest boardings per revenue hour in the conventional transit system. It is anticipated that existing transit stops utilized by Route 18 and Route 61 will be converted to On-Demand stops and trips will be provided within the respective On-Demand zones to/from the Thickwood and Timberlea terminals.

Below is a series of actions to be undertaken in Phase One of the Transit Master Plan with the focus on piloting On-Demand Transit (ODT):

1. **Customer Outreach and Education**: Develop customer information materials with a focus on how to use the new On-Demand service (e.g. downloading and using the app, access, hours of service, fare payment etc.). Customer materials will be required on board transit vehicles, on the RMWB Transit website, and information panels at transit stops that are being converted from conventional to On-Demand transit services.
2. **Project Definition**: Determine the main goals, scope, and KPIs for the project through research, data analysis, internal engagement (e.g. operations, IT), and vendor outreach.
3. **Detailed Service Design**: Determine the detailed elements for design, including vehicles, drivers, service areas, trip booking, stop procedures and other details. ODT software providers often have the tools and resources to assist with this phase, but they must be already engaged and procured.
4. **Procurement**: Procure the ODT technology software program to implement the service.
5. **Contract Award**: Finalized procurement agreement (scope, schedule, and budget) and final project requirements with the selected vendor.
6. **Individual Element Testing**: Test each element involved in the new service individually so that they function as designed.
7. **Integration Testing**: Integration points between each element should be tested to ensure systems will function well together and integrate with existing transit agency software and data feeds
8. **Acceptance Testing**: The whole system should be tested as close to real conditions as possible.

9. **Employee Training**: Employees should be trained across the system close to the project go-live date to ensure retention of training information. Training will be required for operators picking up and dropping off customers with the new On-Demand service, on-street supervisors, dispatchers overseeing operations, and customer service agents supporting trip bookings that are not made on the app.
10. **Full-Scale Testing**: Dependant on the size of the project, a full-scale test including trained employees could be performed
11. **Go-Live**: The project is live with operators and customers
12. **Monitoring/Adjustments**: The system should be monitored, and minor adjustments made as necessary with feedback from customers, operations and the technology vendor.

3.0 Phase 2

3.1 Focus Area A: Evaluate On-Demand Pilot and Introduce First Core Route

After the On-Demand Transit pilots in the Taiga Nova and Thickwood areas have been conducted, it is advisable for RMWB Transit staff to undertake an evaluation of the pilot. Key focus areas for the service delivery evaluation could include the following:

- **Customer Satisfaction:** a qualitative measurement of how satisfied customers are with the customer experience using Wood Buffalo's On-Demand transit services, which includes booking, planning, riding and the overall customer service experience. This can be gathered through surveys (either through the app and/or on Transit's website), customer interviews, travel diaries and/or assessment of customer travel data
- **Passenger Trips Per Revenue Hour**: Increase in the average trips per revenue hour from the previous Route 18 and Route 61 conventional transit services
- **Net Direct Cost Per Trip**: Decrease in the net cost of providing passenger trips after the fare collected to offset operating costs. This is directly related to the passenger trips per revenue hour
- **Wait Times:** The time a customer spends waiting to board an On-Demand Transit vehicle. Wait times are measured from when a passenger books a trip (either through the app or by phone) or when they arrive at the stop and are waiting for the vehicle to board.
- **Travel Time:** The time a customer spends commuting on the On-Demand Transit service. Travel time excludes wait time.
- **On Time Performance:** The On-Demand trips for both wait time and on board travel time is provided within the acceptable window of time aligning with the service performance requirements and customer expectations.

In addition to the pilot evaluation, RMWB Transit staff could undertake a public engagement program for online and in-person feedback to inform the public on the next steps in the continued roll out of the Transit Master Plan. Public feedback and operational insights from the On-Demand pilot can be integrated into the deployment of future On-Demand Transit services throughout the Urban Service Area.

3.2 Focus Area B: Introduce of the first core route and expansion of On-Demand Transit service to Fort McMurray International Airport

In the second phase of the Transit Master Plan, Route 10 Gregoire – Prairie Creek, Route 11 Airport, and Route 16 Thickwood will be converted to the new core route H (Thickwood-Downtown-Gregoire). This will be the first high frequency service in the Urban Service Area. Simultaneously, the Airport On-Demand service will be implemented between the Fort McMurray International Airport and the intersection of Highway 69 and MacKenzie Boulevard. Both the Airport On-Demand Transit service and Route H need to be implemented at the same time, as there is an interdependency between both services for travel between Downtown and the Airport.

An enhanced stop with a heated shelter and real time information is recommended in the vicinity of Highway 69 and MacKenzie Boulevard to facilitate transfers between Core Route H and the Airport On-Demand service. Additionally, it is recommended that buses with sufficient capacity for limited airport luggage demands are used on Route H to facilitate convenient airport travel in combination with the Airport On-Demand service.

3.3 Phase Two Feedback

With the roll out of significant changes to transit network at the end of the second phase, there is a need to engage transit customers and the community on their insights and experiences in using the new transit service types (core, neighbourhood and ODT). This feedback provides an opportunity to adjust timing or course, with rider and community views on the new service types informing the continued evolution of the transit system. Adjustments to route alignments and schedules could be implemented as part of Phase Three of the Transit Master Plan.

4.0 Phase 3

4.1 Focus Area A: Introduction of new neighbourhood routes south of the Athabasca River

The third phase of the Transit Master Plan would see the conversion of some routes in neighbourhoods south of the Athabasca River, as detailed in **Table 1** below.

Table 1: Phase 3, Focus Area A Route Changes

Current Route	New Neighbourhood Route
7 - Abasand Heights	A – Abasand Heights – MacDonald Island
8 – Beacon Hill Drive	B – Beacon Hill – MacDonald Island
91 – Longboat Landing	B – Beacon Hill – MacDonald Island
92 – Syncrude Wellness Centre	A – Abasand Heights – MacDonald Island
99 – MacDonald Island	A – Abasand Heights – MacDonald Island and B – Beacon Hill – MacDonald Island

It is recommended that the service changes occur during or at the end of the Summer school holidays, in preparation for the new school year. Customer information and communications should occur in the Spring to inform customers of the transit service changes that will be occurring as one service package south of the Athabasca River. Service change information could include a feature page on the RMWB Transit website, stop cards at affected stops and terminals, and drop-in information sessions. Focus areas of the information sessions should include the new route alignments for the neighbourhood routes and information about the expansion of On-Demand Transit service to Abasand Heights, Beacon Hill, and portions of the Lower Townsite during the off peak periods when the neighbourhood routes are not operating.

4.2 Focus Area B: Introduction of new neighbourhood routes north of the Athabasca River

The third phase of the Transit Master Plan would also see the conversion of some routes in neighbourhoods north of the Athabasca River, as detailed in **Table 2** below.

Table 2: Phase 3 Focus Area B Route Changes

Current Route	New Neighbourhood Route
12 Thickwood to Timberlea	D – Thickwood to Timberlea
51 Wood Buffalo Estates	E – Wood Buffalo Estates

It is recommended that the service changes occur during or at the end of the Summer school holidays , in preparation for the new school year. Customer information and communications should occur in the Spring to inform customers of the transit service changes that will be occurring as one service package north of the Athabasca River. Service change information could include a feature page on the RMWB Transit website, stop cards at affected stops and terminals, and drop-in information sessions. Focus areas of the information sessions should include the new route alignments for the neighbourhood routes and information about the expansion of On-Demand Transit service to portions of Thickwood that no longer have fixed route service as provided by the existing Route 51, which will be transitioned to On-Demand transit services. Off peak transit service in the community of Wood Buffalo Estates will also be provided by On-Demand Transit.

5.0 Phase 4

5.1 Focus Area: Introduction of second core route and new neighbourhood routes in the Timberlea area

Phase Four would see the remaining legacy services across the network converted to core and neighbourhood routes, as noted in **Table 3** below.

Table 3: Phase 4 Route Changes

Current Route	New Neighbourhood Route
9 – Morgan and Harpe Heights	C – Morgan and Harpe Heights
15 – Timberlea	G – Timberlea – Downtown – Keyano College
17 – Parsons Creek	I – Parsons Creek
41 – Brett Drive – Eagle Ridge	F – Stone Creek – Eagle Ridge
42 – Stone Creek Village	F – Stone Creek – Eagle Ridge

It is recommended that the service change occur during or at the end of the Summer school holidays, in preparation for the new school year. Customer information and communications should occur in the Spring to inform customers of the transit service changes that will be occurring as one service package focused in the Timberlea area and along the Franklin Avenue corridor with the introduction of the second core route G. Service change information could include a feature page on the RMWB Transit website, stop cards at affected stops and terminals, and drop-in information sessions. Focus areas of the information sessions should include the new route alignments for the core and neighbourhood routes and information about the expansion of On-Demand Transit service during off peak time periods.

With the roll out of the entire transit network at the end of the fourth phase, this provides an ample opportunity to engage transit customers and the community on their insights and experiences in using the new transit services (core, neighbourhood and ODT) within the Urban Service Area. Adjustments to route alignments and schedules could be implemented in Phase Five of the Transit Master Plan.

6.0 Phase 5

6.1 Focus Area: Monitor and revise as required

Upon one year of service for the entire new transit network, RMWB Transit staff could commence a system wide service performance evaluation. This evaluation could be structured in a similar way to the previously discussed On-Demand Transit evaluation with a focus on the following:

- **Customer Satisfaction:** A qualitative measurement of how satisfied customers are with the customer experience when using Wood Buffalo's transit services. Engagement data and insights can be gathered through surveys (either through the app for On-Demand Transit services and/or on Wood Transit's website for all services), customer interviews, travel diaries, and/or assessment of customer travel data collected on-board transit vehicles.
- **Passenger Trips Per Revenue Hour:** Increase from the average trips per revenue hour from the previous conventional transit services (pre-implementation of the Transit Master Plan).
- **Net Direct Cost Per Trip:** Decrease in the net cost of providing passenger trips after the fare collected to offset operating costs, this is directly related to the passenger trips per revenue hour
- **Travel Time:** The time a customer spends commuting on any of the provided conventional transit services
- **On Time Performance:** Conventional services (core and neighbourhood) operate within +/- 3 minutes of the scheduled time.
- **Facility Improvements and Modifications:** How existing facilities, particularly bus stops, are used in the new system, with a focus on how to adapt these to best serve the evolving system. There are also opportunities to improve terminals – refer to **7.0 Other Improvements** below.

7.0 Other Improvements

To facilitate the introduction of the new Transit Master Plan, improvements and modifications to transit facilities across Fort McMurray are recommended. These changes should be made as soon as practicable, with a view to them occurring in parallel with the first four phases of the network implementation. Where noted, some improvements relate to specific network changes – in these cases, the changes should be timed to occur during the same phase.

Timberlea Terminal

- Exploration of a transit priority signal and eastbound exit at Confederation Way to provide additional operational flexibility for transit routes operating out of this terminal.

Thickwood Terminal

- Exploration of a transit priority signal and westbound exit at Thickwood Boulevard to provide additional operational flexibility for transit routes operating out of this terminal. This will be particularly helpful for Route D – Thickwood to Timberlea and Route E – Wood Buffalo Estates to reduce travel time and annual operating costs.

Downtown Terminal

- Customer and Operator facilities will remain at the Downtown Terminal.
    - Customer facilities should be improved to create a more attractive and welcoming stop area, with information that allows passengers to plan their trips at the terminal.
    - As this will remain the 'main terminal' it is highly recommended that the construction of a fit-for-purpose terminal focussing on providing high-quality services to passengers and staff would be considered.
    - The infrastructure of the current roadway will need to be addressed from a safety perspective in the long term if the current location is where the main terminal will be placed for the foreseeable future.
- With the new route alignments particularly for the new core routes G and H, it is recommended that new on-street stop locations be implemented on Franklin Avenue in the vicinity of Main Street. These on-street stops can also be utilized as a timing point and for operator reliefs.

Stops along Franklin Avenue

- With the introduction of the new high frequency core routes along Franklin Avenue, customers will be provided the opportunity to transfer between core routes and neighbourhood routes at several stops along this corridor. It is recommended that each stop is provided a heated shelter along with enhanced customer information.

Highway 69 and MacKenzie Boulevard

- With the introduction of core Route H and Airport On-Demand service, an enhanced transfer stop will be required at this location. It is recommended that the stop has a heated shelter and enhanced customer information.

Operator Recovery Timing Points

- Two new operator recovery timing points are recommended in this Transit Master Plan. MacDonald Island Park and the Syncrude Wellness Centre will be the terminus location for new core and neighbourhood routes. It is recommended that RMWB Transit staff enter into a partnership agreement with MacDonald Island Park and the Syncrude Wellness Centre to allow for Operators to utilize the washroom facilities and for the installation of enhanced transit stops (e.g. bus bay, heated shelter and enhanced customer information).

All key transfer points for the new conventional transit network are depicted in **Figure 1** below.

Figure 1: Key Transfer Points