



LOCAL TRANSIT FEASIBILITY STUDY

City of Beaumont | FINAL REPORT

Executive Summary

The City of Beaumont engaged ISL Engineering and Leading Mobility Consulting to conduct a feasibility study on local transit. The primary objective of this project was to assess the challenges and advantages associated with establishing a local transit service, including potential delivery models and engaging with the public. Initially, the study was intended as an input to discussions between the City and the Edmonton Metro Transit Services Commission (EMTSC), which was anticipated to oversee the provision of local transit services. However, during the project, the EMTSC was disestablished on May 31, 2023 and relinquished its responsibility for regional transit services. Consequently, the City may utilize this report to inform their decision on potentially self-administering local transit and/or collaborating with regional partners for its implementation in the future.

Current State of Transit Service

Beaumont began operating a commuter transit service to the City of Edmonton since 2017. From September 2022 to May 1, 2023, Beaumont offered regional transit service between the Ken Nichol Regional Recreational Centre to the Heritage Valley Transit Centre in the City of Edmonton. Starting on May 1, 2023, Beaumont changed the service to and Mill Woods Transit Centre. Current service is offered for two hours during the AM and PM peak hour, with a 40-minute frequency. In 2022, Beaumont Transit budgeted annual operating expenses of \$456,000, equal to approximately 1% of the municipality's annual operating budget along with budgeted revenue of \$79,000.

Previous plans for intermunicipal transit, through the EMTSC, would have provided connectivity to the Mill Woods Transit Centre on a 30-minute peak and 60-minute midday frequency, with connectivity to the Edmonton International Airport. With the discontinuation of the EMTSC, City of Beaumont's Council, directed Administration to explore options with City of Leduc and Leduc County to implement sub-regional transit services. City of Beaumont Administration will return to City Council with an update on the sub-regional transit planning in July 2023.

Local Transit Feasibility – Opportunities

Centre-Ville, Montrose and Montalet areas have the highest potential to generate local transit travel. The mix of land uses in these areas are attractive for a transit user such that they have access to multiple purposes in a single trip. These areas also include retail, food services, administration and other employment types which are known to generate a higher potential of generating work related transit trips. Other areas that could generate transit trips include student travel to schools such as the Composite High School (almost 1,000 students) and to recreational centres (Ken Nichol Recreational Centre, Beaumont Sport/Recreational Centre).

Aspects of the City's transportation network, which support transit, include the strong and highly connected active transit network and the internal ring road that connects to the four quadrants of the City. In addition, a strong intermunicipal transit network that connects Beaumont with regional destinations such as Edmonton, Leduc County (Nisku), City of Leduc and the Edmonton International Airport will increase the potential local transit trips, assuming they will have access to a centralized intermunicipal transit hub.

Local Transit Feasibility – Challenges

80% of residents travel to destinations outside of Beaumont for work purposes based on the latest 2021 StatsCAN Journey to Work data. As a result, success of a local transit system will partially rely on a strong regional transit system but will depend on the type of transit services provided. Low housing density reduces the number of potential passengers along transit routes in a fixed-route system, although it is noted that future density targets directed by the EMRGP are better aligned with the necessary density requirements. The City has several disconnected roadway networks including neighbourhoods with a limited number entry points, large spacing between arterials and a circuitous street networks which make it challenging to create transit routes in a fixed-route system. There are also some areas of disconnected bike paths (northeast and southeast quadrants). To setup a fixed route transit service there is a lack of transit infrastructure (concrete pads for bus stops, shelters etc.). Highway 625 access controls will limit connectivity from existing areas to the future lands on the south side of the highway.

Local Transit Services Alignment with Policy

Alignment of local transit services with existing policies is as follows:

- **Municipal Development Plan (MDP):** Beaumont's Municipal Development Plan, *Our Complete Community* outlines the importance of access to a multi-modal transportation system and identifies the need for connectivity between land uses, pedestrian and cycling linkages, the street network, and to future transit corridors.
- **Transportation Master Plan (TMP):** Beaumont's Transportation Master Plan, *Our Connectivity*, provides similar guidance on how Beaumont will plan, build, operate and sustain its transportation system into the future. Transit accessibility, particularly at peak times of day, is listed as a priority for major community destinations such as schools, recreation centres, medical offices, shopping areas, employment areas and medium and high-density residential areas.
- **Center-Ville Area Redevelopment Plan (ARP):** The Centre-Ville ARP outlines plans for a new transit centre in the southwest corner of the Ken Nichol Regional Recreation Centre, for the provision of local and regional bus service.
- **Environmental Master Plan (EMP):** The Environmental Master Plan, 2021 – 2026 (2021) recommends piloting on-demand transit by 2025 as a supporting connection to regional transit service.
- **Winter City Strategy:** The Winter City Strategy (2022) suggests that minimizing wait times for transit is essential when the weather is cold/snowy and for transit shelters to include heaters and be protected from wind.

Local Transit Demand Ridership Forecasts

This study reviewed transit ridership from other similar sized cities in Alberta to understand potential ridership for Beaumont. Since most of the data available was from 2020 and 2021, historical annual ridership levels were reviewed from the previous 15 years to understand the impact that COVID-19 had on ridership levels. It was found that local transit trips per capita, adjusted for COVID-19, ranges from 0.93 to 2.1 for communities with a 37% to 47% internal trip capture rate, including Spruce Grove, Airdrie, Fort Saskatchewan and Leduc. These communities have a transit mode split ranging from 1 to 2%.

In comparison, Beaumont's internal trip capture rate is 20%, with 80% of residents travelling outside of the City for employment. This translates to an annual transit ridership estimated at 0.31 to 0.94 per capita for an assumed transit mode split ranging from 1 to 3%. This is equal to approximately 6,500 to 18,500 annual local transit trips, based on the existing number of dwellings and dwelling types from the City's most recent municipal census and is comparable to ridership data from comparison municipalities.

Public Engagement

A two-phase public engagement process was designed to inform the feasibility study. In the first phase of engagement, the public was asked to share feedback on the needs and desire for local public transit, as well as future/potential destination and routes. A survey ran from September 23 to October 11, 2022. A second phase of engagement was held from April 5 to 19, 2023 where the public shared their level of support for the outlined transit delivery options.

- **Public Engagement Results (Phase 1):** Respondents indicated that, currently, they typically travelled within Beaumont as a driver in a personal vehicle (76%) or walked (65%). Just over half (54%) of respondents indicated that they or a family member would use local transit in Beaumont. 46% indicated they would not. Respondents indicated that local transit would be used for a range of purposes, with over half of respondents indicated they would use it for recreation (67%), shopping (65%), and appointments (59%). Work (50%) and school (46%) also received a high number of responses. 7% of respondents indicated they would use transit for other purposes, including visiting friends and family and travelling to sites of worship. Respondents indicated that during weekdays, afternoon was the most useful time for local transit (73%-77% Monday – Friday). On the weekend, daytime was the most selected time frame (83%-84%).
- **Public Engagement Results (Phase 2):** There is about a 50/50 split in support for maintaining the status quo or implementing a transit system. Support for a fixed route and on-demand was similar. The detailed results indicated that 124 participants strongly support or somewhat support a pilot on-demand transit system and that 114 somewhat do not support or do not support a pilot on-demand system.

Recommendations / Implementation Plans

A local on-demand transit system is expected to be more suitable for Beaumont as it will more effectively overcome the challenges outlined in this study compared to a fixed-route system. Detailed comparison of the two systems is summarized in the following points:

- **City Wide Coverage:** On-demand transit is expected to provide city-wide coverage compared to a fixed route system that only provides coverage along the designated transit routes.
- **Low Demand on Fixed Routes:** If a fixed route transit system were in place, its success would be limited because of the lower levels of residential densities and lower proportion of residents that work within Beaumont. On-demand transit relies less on a residential density along transit routes since routes are not fixed compared to fixed route transit which requires at least 10 to 37 dwellings per net hectare (du/nrha), compared to 12 du/nrha measured in some neighbourhoods. Even higher residential densities are needed because demand for local travel is lower, with 80% of Beaumont residents travelling outside of the City for work.
- **As/When Needed:** On-demand transit will only be activated on an as-needed basis during operational time periods compared to a fixed route which maintains a schedule and frequency of service regardless of demand.
- **More Direct Routing:** On-demand transit routes can use the most direct point to point route. The efficiency of a fixed transit route will be impacted to limited connectivity between some neighbourhoods, incomplete roadway networks in some communities and an overall circuitous roadway network.
- **Convenience:** On-demand transit is expected to be more convenient compared to fixed route transit. New technologies for on-demand transit have made it easy for users to book trips as they can use a smartphone or web application. Users also can choose to call an operator to book a trip as needed.

Based on the above the following is recommended:

- **One-year On-demand Transit Pilot:** It is recommended that the City pursue on-demand transit in the form of at least a one-year pilot. Operating a one-year pilot provides the City an opportunity to trial run the transit system and to collect transit data before committing to a long-term transit system. Options for implementing this system are as follows:
 - **Option 1 – Third Party Operator:** In this approach the City of Beaumont would develop a Request for Proposal (RFP) for a third party to provide an on-demand transit pilot. Specifically, the third party would be responsible for day-to-day operations, vehicle maintenance (including the provision of the fleet), an on-demand technology provider for trip assignment and customer bookings as well as customer service. City staff would be responsible for the parameters and performance management of the contract. In the preparation of the RFP, City staff will need to determine the operating hours for on-demand transit, service objectives (e.g. maximum wait time for service, connectivity to regional transit service, curb-to-curb or fixed stop model) and key performance indicators. Specific key performance indicators could include maximum wait times, maximum travel time, on time performance, net direct cost per trip, passenger trips per revenue hour and customer satisfaction.
 - **Option 2 – Partner with Leduc Transit:** The City of Beaumont could explore partnering with the Leduc Transit by “piggybacking” on their existing contracted services agreement as both municipalities have the same third-party provider for transit services. The City of Beaumont could potentially add an additional on-demand transit zone within the agreement.



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1.0 Introduction

The City of Beaumont has engaged ISL Engineering and Leading Mobility Consulting to conduct a feasibility study on local transit. The primary objective of this project is to assess the challenges and advantages associated with establishing a local transit service, including potential delivery models and engaging with the public. Initially, the study was intended to facilitate discussions between the City and the Edmonton Metro Transit Services Commission (EMTSC), which was anticipated to oversee the provision of local transit services. However, during the project, the EMTSC was disestablished on May 31, 2023 and relinquished its responsibility for regional transit services. Consequently, the City may utilize this report to inform their decision on potentially self-administering local transit or collaborating with regional partners for its implementation in the future.

1.1 Study Outline

The following provides an outline of this study:

- **Section 2.0 – Background Review:** Review background materials implicating the feasibility and development of local transit. This includes a review of existing transit services in the south region (City of Beaumont, Leduc County and City of Leduc), review of land use and transportation compatibility for supporting local transit, review alignment and direction for local transit based on existing plans/policies, community surveys and other plans.
- **Section 3.0 – Local Transit Demand Forecasting:** High level estimate of ridership forecasting for work-based and non-work-based trips to understand the peak hour need based on trips originating and captured within Beaumont's boundary.
- **Section 4.0 – Public Engagement:** Conduct public engagement to advise the public of the study and to gather feedback on the project deliverables.
- **Section 5.0 – Service Standards and Delivery Models:** Develop service standards which align both regionally and with the City's plan/policies and review several different transit service delivery models, including options for traditional or on-demand transit services and others.
 - Section 5.2 – Intermunicipal Transit: This section also provides a summary of the current state of intermunicipal transit between City of Beaumont, City of Leduc and Leduc County.
- **Section 6.0 – Summary, Conclusions and Recommendations:** Prepare an implementation plan identifying phasing, operational requirements (e.g. fleet, stop locations, facilities) and staffing (e.g. determination of the most appropriate service delivery model for the proposed service concept).
- **Section 7.0 – List of Acronyms, Glossary of Terms and References:** Summary of referenced terms and material.

2.0 Background Review

2.1 State of Transit Service Overview within the South Regional Service Area

Existing Beaumont Transit Service

From September 2022 to May 1, 2023, Beaumont offered regional transit service to Heritage Valley Transit Centre in the City of Edmonton. Starting on May 1, 2023, Beaumont changed to offer point-to-point weekday peak period transit service (Route 540) between the Ken Nichol Regional Recreation Centre and Mill Woods Transit Centre. From Mill Woods Transit Centre, transit users have access to Edmonton Transit Service, connecting throughout the City of Edmonton. Beaumont Transit is operated with a branded fleet of 40-foot New Flyer Low Floor buses with day-to-day operations provided by a third party.

Table 2.1: Service Span and Frequency of existing Beaumont Transit Service

Route	Weekday Service	Frequency (Minutes)	Weekend Service
Beaumont -> Ken Nichol Rec Centre-> Mill Woods Transit Centre	6:00-8:00	40	No Service
	16:20-18:20		
Mill Woods Transit Centre -> Ken Nichol Rec Centre -> Beaumont	6:20-7:40	40	No Service
	16:00- 18:00		

In 2022, Beaumont Transit budgeted annual operating expenses of \$456,000, approximately 1% of the municipality's annual operating budget along with budgeted revenue of \$79,000.

Table 2.2: Beaumont Transit Annual Ridership

Year	Annual Ridership	Notes
2019	6,025	
2020	1,599	No Service from April 2020 to September 2021 (COVID-19 Pandemic)
2021	2,011	Service returned in September 2021
2022	4,044	Significant ridership return in September 2022 from 273 boardings to 1,031 boardings in September 2022. September 2022 was the highest ridership month for Beaumont Transit in four years.

Existing Leduc Transit Service

Leduc Transit provides service within the City of Leduc and Leduc County to connections to the City of Edmonton (at Century Park LRT Station) and the Edmonton International Airport. Each Leduc Transit service is targeted for specific ridership markets and coverage as documented below:

- **Leduc Route 1:** This is primarily a commuter service that connects residents of the City of Leduc to the City of Edmonton (at the Century Park LRT Station) with a one-way peak oriented service through Nisku. This service only operates during weekday peak periods and is operated by commuter style 40-foot New Flyer Low Floor buses.

- **Leduc Route 10:** This is primarily an employment connection service between the City of Leduc, Edmonton International Airport and nearby Outlet Mall. This service is primarily operated with an hourly frequency utilizing low-floor community shuttle buses. Route 10 is operated through an Airport Accord Agreement between the City of Leduc, Leduc County, Edmonton International Airport and the City of Edmonton.

Table 2.3: Service Span and Frequency of existing Leduc Transit Service (as of January, 2023)*

Route	Weekday Service	Weekday Frequency (Min)	Saturday Service	Sunday & Holiday Service	Weekend & Holiday Frequency (Min)
Route 1: Leduc -> Nisku -> Edmonton	5:19-9:17	30	No Service		
	14:55-18:52				
Route 10: Leduc -> Nisku -> Premium Outlet Collection -> Edmonton International Airport	7:20-9:06	35	9:06- 22:17	10:06- 20:17	60
	9:06- 22:17	60			
On Demand Service (Within the City of Leduc and Nisku Business Park)	5:00-18:50	On-demand	No Service		

*Services may have change since this writing

Leduc Transit consolidated local transit services into on-demand transit in the summer of 2021, while maintaining commuter service to the City of Edmonton (Route 1) and employment-oriented service to Edmonton International Airport and the nearby Outlet Mall (Route 10). Day to day operations of Leduc Transit services are contracted to a third party.

Table 2.4: Leduc Transit Annual Ridership and Operating Costs

Year	Annual Local Ridership	Annual Commuter Ridership	Annual On-demand transit ridership	Total Ridership	Annual Operating Costs
2019	45,867	67,169	0	113,036	\$1,422,188
2020	23,496	28,382	0	51,878	\$1,377,731
2021	18,185	21,820	6,794	46,799	\$1,339,009
2022 (to end of October)	19,225	29,464	20,407	69,096	\$1,292,395

Previously Planned Services by EMTSC

On January 19, 2023, the EMTSC board of directors approved the necessary actions needed to dissolve the Commission due to withdrawal from the EMTSC by the City of Edmonton. It was determined that the EMTSC cannot operate without the funding of this key regional partner. Although the EMTSC has ceased operations it is worth noting they had developed an opening day service including Metro Southeast which provides a connection from Beaumont into Edmonton via 50 Street to the Mill Woods Town Centre Transit Centre.

This service would have operated weekdays on a 30-minute peak and 60-minute midday service with a peak period extension to the Edmonton International Airport. The City of Beaumont was a member of the EMTSC, and it was assumed that Beaumont Transit will be transitioned to the EMTSC in 2023.



Figure 2.1: Proposed EMTSC Metro Southeast Service Proposal

Following the decision to wind down operations of the EMTSC, Beaumont's Council motioned for City administration to prepare a report that provides options for effective regional transit service delivery through partnerships with municipalities such as Leduc County and City of Leduc. Going forward, the City of Beaumont could potentially seek partnerships with these regional municipalities to implement a smaller scale of regional transit in the Southeast portion of the Edmonton Metropolitan Region.

To follow up on Councils motion, several meetings, including one facilitated by ISL Engineering and Leading Mobility, were held between the three administrations (Leduc County, City of Leduc and Beaumont) as a preliminary discussion of potential service concepts. The meeting outcomes are summarized in Section 5.2 of this report.

2.2 Land Use and Transportation Network Compatibility Review

The sub-sections below outline the opportunities and constraints associated with the current compatibility between land use and transportation, focusing on their role in supporting local transit.

Opportunities

Opportunities for supporting local transit include land uses generating local transit trips and transportation network connectivity as follows:

- **Land Uses Generating Work Based Transit Trips:** Transit mode split for high work-based transit uses which exist in Beaumont are based on the 2021 StatsCan commute to work data for the City of Edmonton, since there is no local transit in Beaumont. Transit mode split is used as an indicator of potential transit local Beaumont trips.
 - **Food Services and Retail:** Transit mode split from 16.1% for food services and 12% for retail is reported for these types of employees. Several relevant businesses are within the retail business areas within Montrose Business Park, Centre-Ville and Montalet.
 - **Professional, Services, Administration, Finance and Insurance:** 7.2 to 11.4% of work trips made by public transit, with many of these land uses located within the Centre-Ville area.
- **Land Uses Generating Non-Work Based Transit Trips:** Passenger demographics and travel information published by the American Public Transportation Association (APTA) from 2017 identifies that 78% of transit passengers travel for employment purposes or as students and are likely to travel at peak times. The remaining 22% include retired persons (7%), unemployed (6%), homemakers (3%) and other (6%). This information is summarized as it relates to Beaumont based on the 2021 Stats Canada census profile.
 - **Retired Persons:** Demographics that may be potential users of transit include retired persons assumed to be 65 or greater, in which 1,945 people living in Beaumont are between 65 and 85 years of age and 140 people are 85 years of age or greater.
 - **Unemployed:** People that may travel for non-work-based reasons are those without employment, in which 985 Beaumont residents reported to StatsCan (2021) as unemployed.
 - **Other Categories:** Other categories identified by the APTA (homemakers and other) are not easily identifiable in the census information.
- **Land Uses Attracting Transit Trips:** Places which may attract transit trips are summarized as follows:
 - **Medical Facilities:** Medical facilities where appointment times vary throughout the day. Medical facilities in Beaumont include two appointment-based facilities one in Montrose Business Park and another within Centre-Ville, supported by DynaLife Medical Labs also located in Centre-Ville;
 - **Retail Shopping:** Retail shopping trips that occur mostly during peak travel times but also during the mid-day, evening and/or weekend periods. These are located generally within the retail business areas including Montrose Business Park, Centre-Ville and Montalet.
 - **Drinking Places:** Trips to drinking places that occur during peak travel times but also in the evening and/or late evening. These businesses are placed at similar locations as retail shopping areas.
 - **Centre-Ville:** Trips to Centre-Ville can connect to multiple businesses including employment, retail groceries, medical and others. Generally, the land uses within Centre-Ville are attractive for a transit user such that they have access to multiple services along their trip.
 - **Recreational Uses:** There are several recreational areas that could attract transit trips, including the Ken Nichol Regional Recreational Centre (arenas, curling, banquet hall), Beaumont Sport and Recreational Centre (arena, fieldhouse, gymnasium, aquatics centre, fitness centre and more) and West Recreational site.
 - **Junior High and High Schools:** Schools for children of junior high age or high school may be potential destinations for transit users. The largest of these is the École Secondaire Beaumont Composite High School which has almost 1,000 grade 10 to 12 students, plus staff. Other schools with a smaller population of potential transit riders include, École Dansereau Meadows School (partial junior high), École Mother d'Youville School (Grades 5 to 9) and École Champs Vallée School (K to 9).

- **Transportation Network Connectivity:** Roadways and active transportation connections are significant in the City.
- **Roadways:** The “ring road” that circles Centre-Ville comprising of 55 Avenue, 44 Street, 43 Avenue and 57 Street presents itself as a direct and simple transit route that could connect residents to all four quadrants of the City.
- **Active Transportation Connections:** Ample pedestrian infrastructure is available such as sidewalks and multi-use path which make accessing transit easier.

Constraints

Constraints for developing a local transit system are discussed as follows:

- **High Proportion Population Commuting Outside of Beaumont:** 80% of residents commute outside of Beaumont for work purposes (2021 StatsCAN). This proportion is very high compared to other similar sized municipalities in the Edmonton Region that offer local transit. Example municipalities that have local transit and their proportion of commuters that travel outside of their municipality include Fort Saskatchewan (53%), Leduc (57%) and Spruce Grove (63%). More detailed discussion and comparison is provided in Section 3.2 (Peer Municipal Comparison).
- **Low Densities:** Minimum density requirements to support a fixed route transit system vary greatly depending on the community in which transit is located. Such variables include the proportion of work within the community and outside of the community, the strength of the active transportation network, connectivity to higher order transit systems (regional or higher frequency services) and density along the transit route. Minimum density to support a fixed use transit routes range from 4 to 15 dwelling units per net acre (10 to 37 dwellings per net hectare) (Pushkarev and Zupan) or a minimum of 7.5 units per gross acre (TRB Transit Capacity Manual) but depends on the above factors. Higher density targets such as 8 dwellings per net acre or more for Beaumont needs to be pursued because of City’s relatively low proportion of commuting trips within their borders and limited regional transit service. Example densities are shown in the following images.



Figure 2.2: Density Example, Eaglemont neighbourhood, Beaumont
(5 units/net acre, 180 dwellings @ ~36 net acres or 12.3 du/nrha)



Figure 2.3: Density Example, Brookside neighbourhood, Beaumont
(4.8 units/net acre, 117 dwellings @ ~24 net acres or 11.8 du/nrha)

- **Planned Densities:** It should be noted that Beaumont's density targets as directed through the Edmonton Metropolitan Region Growth Plan are a minimum of 14 dwellings for net acre (35 du/nrha) , which will increase the feasibility of a local transit system. Neighbourhoods that will be built to the Growth Plan's density standards include, Elan, Le Reve, and any new Area Structure Plan adopted by Council.
- **Disconnected Transportation Network:** Certain components of the City's transportation network are disconnected and will result in longer travel times for transit to service customers, described as follows:
 - Limited Neighborhood Access Roads: Some existing neighbourhoods have limited entry points and will be difficult to service with transit.
 - Arterial Grid Spacing: 1,600 m spacing between arterials in the City (Range Road 243, 50 Street, Range Road 241, TWP Road 510, 50 Avenue and Highway 625) reduce the overall connectivity and increase travel time for all modes, including transit.
 - Lack of Grid Patterns: In general, the current residential street network is circuitous and will make efficient transit route planning and access to transit stops difficult.
 - Parks and Golf Courses: The layout of parks and golf course limit the connectivity of roadways between neighbourhoods, such that connecting transit trips between neighbourhoods will be challenging. Transit buses may need to run an 'out and back' trip to/from neighbourhoods.
 - Examples – A collection of examples are shown in the following images.

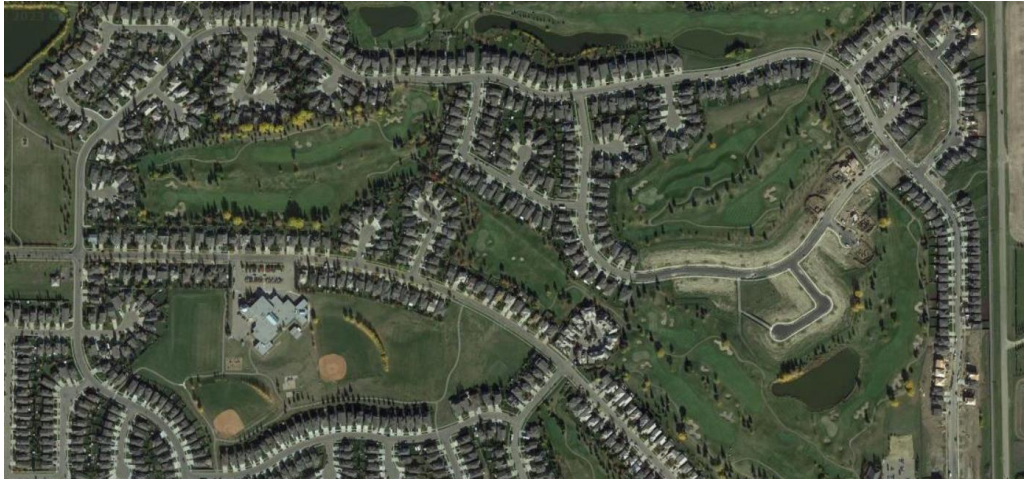


Figure 2.4: Limited Neighbourhood Access, Coloniale neighbourhood, Beaumont

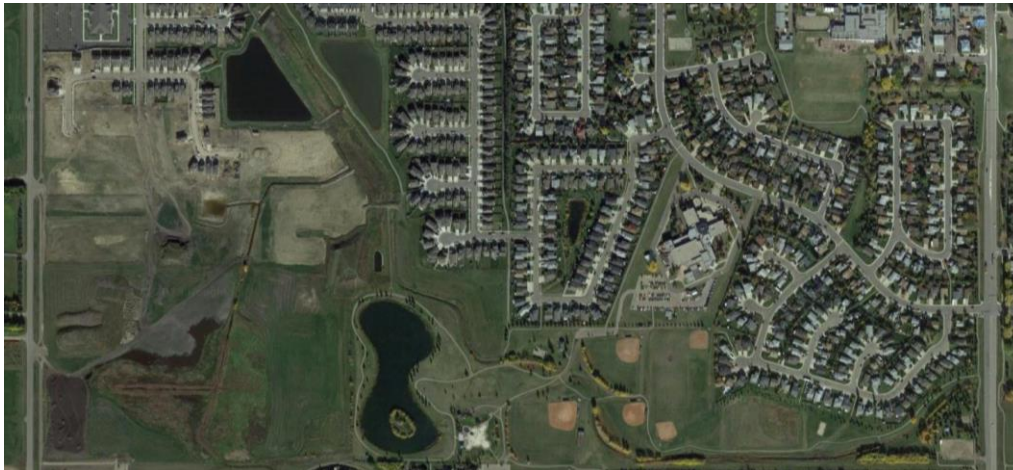


Figure 2.5: No Connectivity Between Neighbourhoods, Goudreau Terrace neighbourhood, Beaumont

- **Limited Mixed-Land Use Areas:** Transit users choosing to travel on foot need supporting land uses such that other trip purposes are possible. For example, a person walking to a transit stop for work-based travel would benefit from retail shopping opportunities (e.g. pharmacies, groceries), professional services and accessible within their trip.
- **Lack of Existing Transit Infrastructure:** There is no existing local bus stop infrastructure. Easement agreements on private property may be needed along fixed-route transit service and on-demand transit services (if a physical stop model is employed).
- **Planning Reviews:** Development review processes will need to be updated to ensure transit is planned with associated infrastructure (e.g. connecting sidewalks, crosswalks) in new neighbourhoods through the Area Structure Plan and Outline plan processes.
- **Integration with Regional Services:** Regional transit in Beaumont is currently only provided during peak hours. A challenge posed is the ability to ensure ridership throughout the day with local transit services, ensuring there are adequate destinations to encourage transit demand within the City of Beaumont.

- **Highway 625 Functional Planning Study (FPS):** Highway 625 ownership/control is currently with Alberta Transportation and is expected to remain in the foreseeable future. The FPS, completed in 2014, prior to the City's annexation of the lands to the south applies the provinces classification of the roadway as a multi-lane highway with a high degree of vehicle mobility, maintaining higher speed limits (70 km/h), limiting access to 1,600 m spacing and resulting in loss of developable land due to significant right-of-way requirements. The large spacing between accesses (1,600 m) also creates large gaps in opportunities for crossing points for transit and active transportation and significantly promotes vehicle travel as the first choice of travel mode. Highway 625 crossing points will be limited to existing public roadways, Range Road 243, 50 Street and Range Road 241.

Table 2.5: Summary of Challenges and Opportunities for the provision of local transit service within the City of Beaumont

Opportunities	Challenges
• Centre-Ville, Montrose and Montalet areas have the highest potential to generate work-based travel. The mix of land use are attractive for a transit user such that they have access to multiple services in a single trip. • Student travel to schools such as the Composite High School (almost 1,000 students) • Recreational areas (Ken Nichol Recreational Centre, Beaumont Sport/Recreational Centre) • Ring road providing connectivity to the four quadrants of the City. • Strong and highly connected active transportation network. • Travel by retired persons with over 2,000 people >65 years of age. (increased demand for non-peak travel).	• 80% of residents travel to destinations outside of Beaumont for work purposes. • Low density of housing reduces the number of potential passengers along transit routes. • Disconnected roadway network including neighbourhoods with limited entry points, large spacing between arterials, circuitous street network. • Some areas of disconnected multi-use paths (northeast and southeast quadrants). • Lack of transit infrastructure (concrete pads for bus stops, shelters etc.) • Need to implement updated planning review processes to ensure transit is planned with the community. • Regional transit only operates at peak hours. • Highway 625 access controls limiting connectivity from existing areas to the future lands on the south side of the highway.

2.3 Policy and Plan Summaries

Municipal Development Plan

Beaumont's Municipal Development Plan (MDP), *Our Complete Community*, provides direction for local development, services and land-use. The MDP outlines the importance of access to a multi-modal transportation system and works to provide that through a series of strategic pillars or goals. As part of creating a healthy vibrant community, the plan states that neighbourhoods shall be designed and developed to encourage modes of transportation other than private vehicles including barrier-free walking/wheeling connections, accessible transit options, and active transportation. The plan states that future development should align with adjacent land use and should ensure pedestrian and cycling linkages to pathways, the street network, and to future transit corridors. Furthermore, as part of the responsible development goal, medium and higher-density residential development should have good access to major roads, trails and walkway connections, and be within a five-minute walk (400m) to public transit.

Transit-oriented development shall be implemented at community commercial/ employment centers (such as Centre-Ville) and at medium to high-density residential areas with convenient, direct, and safe pedestrian linkages at all transit stops and park-and-ride facilities. Additionally, the MDP denotes that all public facilities must also be accessible by transit.

In addition, achieving a local transit system in addition to a regionally connected transit system is a priority for Beaumont. This includes a regional park and ride facility and policy that indicates that transit opportunities shall be located within a five-minute walk (400m) from schools and major community destinations, such as recreation centres and grocery stores.

As part of the effective movement of people and goods goal, supporting a multi-modal transportation network that supports walkability and transit while minimizing conflict between motorized and non-motorized modes of transportation is also highlighted in the plan through the implementation of complete streets. This also includes transit being barrier free and accessible to mobility, hearing, and sight-impaired users.

Transportation Master Plan

Beaumont Transportation Master Plan, *Our Connectivity*, provides guidance on how Beaumont will plan, build, operate and sustain its transportation system into the future. The plan focuses on accessibility rather than mobility, especially for those most dependent on it (young people, seniors, persons with disabilities and persons below the poverty line) and sets precedence to expand public transit in the area to keep up with the growing development and population. The three core objectives relating to transit in the plan are as follows:

- Plan transit facilities and routes that are effectively integrated with active transportation facilities as well as supportive land uses.
- Harmonize local and regional transit and increase service provision as Beaumont grows.
- Coordinate the planning and management of transit services with regional partners.

Expanding transit service is anticipated to begin once Beaumont Transit shifts from Century Park LRT to Mill Woods Transit Centre upon the opening of the Valley Line LRT in the near future. Congestion management techniques such as transit-priority lanes are also suggested particularly at the regional scale. Corridors that connect regional destinations, such as 50 Street or Highway 625, are recommended to be designed to accommodate transit priority measures in the future to support service reliability if congestion related travel delays are consistently observed. It should be noted that a barrier to planning transit for Highway 625 will be that Alberta Transportation and Economic Corridors (ATEC) has retained ownership and control of the Highway even after the City's annexation. Similar to the MDP, transit accessibility, particularly at peak times of day, is listed as a priority for major community destinations such as schools, recreation centres, medical offices, shopping areas, employment areas, medium and high-density residential areas. Policy within the plan indicates that these locations should be within 400-800m or a five to ten-minute walk of transit. The plan also denotes that transit planning is required in all new Area Structure Plans, including identifying roads available for buses and potential bus stop locations.

Centre-Ville Area Redevelopment Plan (ARP)

The Centre-Ville ARP outlines plans for a new transit centre in the southwest corner of the Ken Nichol Regional Recreation Centre site, for the provision of local and regional bus service. The transit centre will be a transit-oriented development that has an active building frontage, provides a range of commercial uses, and includes a public parking facility. This transit centre will prioritize frequency of service with supplemental local service within Centre-Ville to be routed along arterial streets. The following transit policies are listed within the plan:

- The focus of Beaumont's transit service within Centre-Ville should be on frequency of service.
- If there is demand for local service within Centre-Ville at locations other than the transit centre, service shall be routed along arterial streets. Other streets should only be used as turn arounds.
- The use of lay-bys for bus stops should only be allowed at major hubs such as the transit centre.
- Bus stops should use curb extensions if adjacent to on-street parking.
- Bus stops shall be accessible, include a concrete pad and a shelter, and connect to sidewalks.
- Mid-block bus stops shall be located near mid-block crosswalks.
- Digital signs displaying arrival information should be used along major bus stops and transit hubs.

2.4 Other Relevant Information

Additional plans, studies and reports and their relevant information is provided in the following table.

Table 2.6: Summary of Other Relevant Information

Document	Relevant Information
Citizen Satisfaction Survey (2017)	• Latest version published, no more recent version available at the time of this writing. • 375 telephone interviews with Beaumont Citizens aged over 18. • 12% reported a lack of public transit/driving as the only option. • 4% responses noted public transit/transit to Edmonton as the most important issues facing Beaumont.
Bus On-Demand (Committee of the Whole, October 2020)	• Outlines the need for providing on-demand transit as a supplemental service to the regional transit service.
Environmental Master Plan, 2021 – 2026 (2021)	• States 2016 transit mode share of 1.73%. • Regional travel on Beaumont Transit has 28,818 trips in 2019. • Recommends piloting on-demand transit by 2025, as a supporting connection to regional transit services.
Winter City Strategy (2022)	• Vision to increase the number of trips during winter for active modes and transit. • Minimizing wait times for transit is noted as essential when the weather is cold/snowy. Appropriate transit shelters that include heaters and protected from wind are a part of providing winter proofing for transit. • Notes a key objectives and practices such as winterizing transit assets and facilities, providing snow clearing services for walkways connected to transit location.

Document	Relevant Information
Council Strategic Plan, 2022 – 2026 (2022)	• No specific direction related to transit. • Objectives such as “community’s growth are guided by Environmental principles” could be interpreted as supporting the need for local transit services.
Local Transit Planning (May 10, 2022 Council Report)	• Re-iterated the need to look at local transit based on alignment with the City’s MDP and TMP • Reported on the results of the 2021 on-demand transit survey. Although focused on regional transit, it showed that there is not enough information regarding local transit needs for administration to plan. • Recommended the need for completed a local transit study and was approved by Council.

3.0 Local Transit Demand Forecasting

The following section forecasts local transit demand based on the proportion of vehicle trips captured within Beaumont, assumed mode split and compares the estimates to transit mode share from other Alberta municipalities.

3.1 Internal Trip Capture Rate

The internal trip capture rate is the percentage of commute to work trips that are captured within the City's borders. It is representative of the proportion of Beaumont residents that work within Beaumont. Statistics Canada provides journey to work data that indicates the level of daily travel that remains within Beaumont and this is provided in the following table.

Table 3.1: Daily Journey to Work Data (2016)

Commute Area	Total
Commute Within Census Subdivision (Beaumont)	1,170
Commute Outside of Census Subdivision	6,160
Total	7,330
Internal Trip Capture Rate	16%

After the original writing based on the 2016 data, StatsCAN released updated data from the May 2021 census. Commute to work within the City of Beaumont increased from 16% (2016) to 20%. Data from the 2021 census is more detailed showing the exact location of work. The detailed information is provided in the following table and includes location of work for Edmonton, Leduc, Leduc County and Strathcona County which comprise 94% of destinations in the region.

Table 3.2: Daily Journey to Work Data (2021)

Commute Area	Total
Beaumont	1,200
Edmonton	3,005
Leduc	555
Leduc County	650
Strathcona County	325
Other	360
Total	6,095
Internal Trip Capture Rate	20%

The slight increase in commuting within Beaumont could be due to an increased number of people working at home, but only if this is reported as their main work address. StatsCan reports that commute destination is the normal work address regardless of whether employees worked at home on a regular basis.

3.2 Local Vehicle Trip Estimates

The following estimates the number of vehicle trips generated for the entire City, based on the number of dwellings, dwelling type and by applying a standard trip rate. This is then converted to local trips by multiplying the total by 20% which is the proportion of trips staying with Beaumont's borders based on the 2021 StatsCan Journey to Work data, described in the previous section. The number of households in the City is based on the 2021 Municipal Census.

Table 3.3: Vehicle Trip Estimates (based on number of households)

Dwelling Type	Total in Beaumont~	Trips		
		PM Peak Trip Rate*	PM Peak Hour Trips (Total)	PM Peak Hour Trips (Local) – 20%
Single Family	5,560	1	5,560	1,112
Semi-detached and Row Housing	905	0.75	678.75	136
Apartments	475	0.75	356.25	71
Total			6,595	1,319 (20%)

~2021 Beaumont Municipal Census *Institute of Transportation Engineers – Trip Generation Manual 11th Edition

Based on the above estimate approximately 1,319 vehicle trips are generated daily in PM peak hours from residential land uses and captured within the local municipal boundary. The following subsection translates this to potential transit trips based on anticipated transit mode share.

3.3 Local Transit Mode Share Estimates

Converting local vehicle trips to transit trips is based on potential transit ridership levels expected. Mode share for transit in the Edmonton region is published as 2.1% based on the 2015 Household Travel Survey by the City of Edmonton (2018). This is the average value for all regional municipalities and is depending on the level of transit service provided. This is shown in the following figure along with the City of Edmonton's transit mode share.

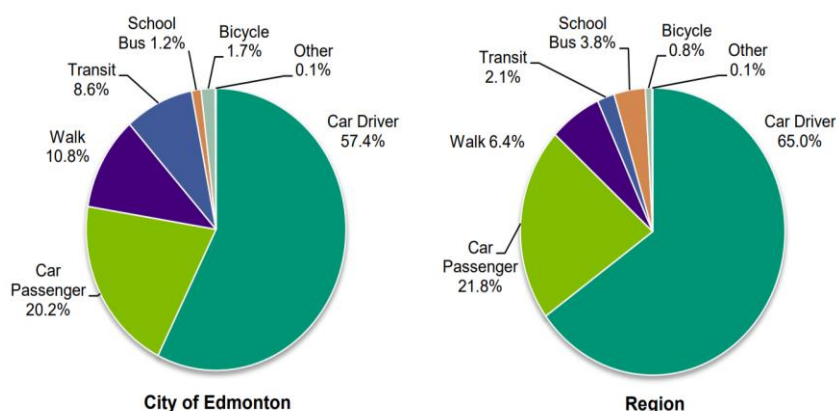


Figure 3.1: 2015 Household Travel Survey (Source: City of Edmonton, 2018)

The above figures show that transit mode split for communities in the Edmonton region is 2.1%. To estimate the number of local transit trips in Beaumont, this is applied to the number of estimated local vehicle trips from Table 3.3, for a range transit mode splits from 1 – 3%, since this will vary. Since the estimated trips in Table 3.3 are one-way peak hour trips these are multiplied by two (to convert to two-way trips) and then by 250 days, which is the amount of workdays per year.

Table 3.4: Peak and Annual Transit Trip Estimates

Transit Mode Split (assumed)		1%	2%	3%
Estimate Local Vehicle Trips	1,319	13	26	39
Annual Trips (Peak only)*		6,500	13,000	18,500

Peak trips multiplied by two by 250 days in a year

Beaumont is forecasted to have an annual amount of transit trips ranging between 6,500 to 18,500 depending on the mode split percentage.

3.4 Peer Municipal Comparison

Transit ridership from peer municipalities is provided to compare with the forecasted trips. This is discussed based on the following sources:

- **Transit Ridership:** Historical transit ridership data is provided to understand transit ridership impacts due to COVID-19.
- **Transit Mode Split:** Commute to work data (identifying the share of transit mode) from StatsCAN.
- **Residential Tax Base:** Proportion of residential tax share based on data provided by Alberta Municipal Affairs. The residential tax base is a general indicator of the amount of employment that is locally accessible.

Ridership (Canada)

Before sharing ridership data, the historical number of transit trips need to be discussed because of the large reduction in trips due to COVID-19 in 2020 and 2021 and that most transit data is only available up to 2021. The annual number of transit trips in billions for all of Canada is provided in the following figures.

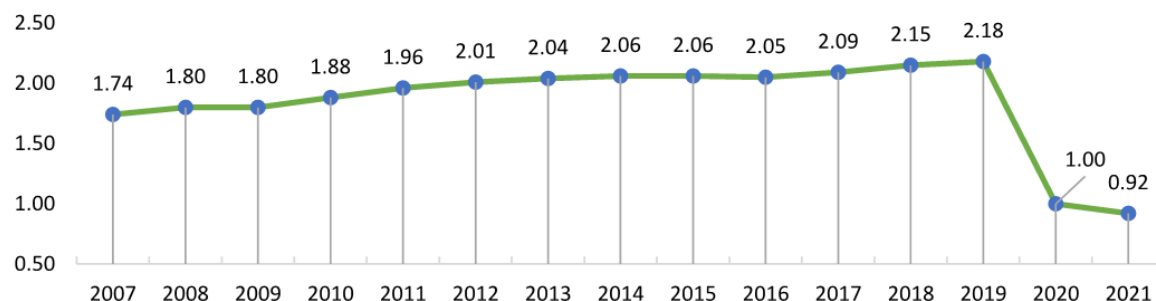


Figure 3.2: Canada, Annual Transit Trips (Billions) (Source: CUTA)

The above figure shows the significant reduction in transit use due to the COVID-19 pandemic. The Canadian Urban Transit Association has reported that transit ridership nationally has recovered to an

average of 73% of pre-pandemic ridership with variations across the country. The City of Edmonton has reached 100% ridership recovery on the bus network earlier this year.

Ridership and Mode Split (Alberta)

The annual transit trips and transit mode split are compared to other similar municipalities in Alberta that offer transit services for reference and to demonstrate credibility of the estimates. Transit delivery model, population, mode split, transit trips annually and per capita are provided in the following table.

Table 3.5: Ridership Comparison

Municipality	Transit Model	Total Population (2021)	Transit Mode Split*	Annual Transit Ridership~	Annual Per Capita Ridership
Beaumont	N/A	20,888	1 – 3% (estimated)	6,500 – 18,500 (Estimate)	0.33 – 0.94
Airdrie	Fixed Route and On-demand	74,100	1.3%	165,680 (2021)	2.23
Cochrane	On-demand Only	34,467	2.7%	33,318 (2021) 48,223 (2022)	0.97 (2021) 1.4 (2022)
Grande Prairie	Fixed Route	67,627	2.0%	203,220 (2021)	3.0
Hinton	Fixed Route, 12 passenger bus	9,817	1.6%	25,000 (2017) 15,607 (2021)	2.55 (2017) and 1.59 (2021)
Fort Saskatchewan	Fixed Route with regional service, Standard Bus	27,088	1.2%	48,140 (2021), includes regional transit	1.77
Leduc (City & County)	On-demand and Fixed Route	34,094	0.9%	46,799 (2021), includes regional transit.	1.37
Peace River	Fixed Route (suspended in 2021)	6,619	Unknown	6,000 (2011)	0.91
Spruce Grove	Fixed Route	37,645	1.1%	46,915 (2021, includes regional transit)	1.25

*Source: Journey to Work Data (StatsCAN) ~Source: 2021 CUTA, except Hinton Transit System Review (2018)

It should be noted that annual per capita ridership is based on the total population, not just the population serviced by transit.

Residential Tax Base

To provide additional context, the above municipalities are compared to Beaumont based on their land use context and proportion of residential tax base. The residential tax base is a good indicator of the amount of employment local accessible.

Table 3.6: Comparison Municipalities (Land Use, Residential Tax Base)

Municipality	Residential Tax Base*	Land Use Context	Population	Local Travel~	Local Transit
Beaumont	92%	Suburban city south of Edmonton.	20,888	20%	No
Airdrie	84%	Suburban city north of Calgary.	74,100	39%	Yes
Cochrane	88%	Suburban city west of Calgary.	34,467	82%	Yes
Grande Prairie	71%	Small city in northern Alberta.	67,627	79%	Yes
Chestermere	95%	Suburban city, similar to Beaumont, east of Calgary.	22,163	12%	No* - regional service provided
Hinton	48%	Rural town, with significant resource related industries within their border.	9,817	89%	Yes
Fort Saskatchewan	55%	Suburban city, north of Edmonton with significant non-retail (resource) related employment within their border.	27,088	47%	Yes
Leduc	65%	Suburban city, with industrial land uses.	34,094	43%	Yes
Peace River	63%	Rural town, with significant resource related industries within their border.	6,619	89%	Yes
Spruce Grove	82%	Suburban city west of Edmonton.	37,645	37%	Yes
Whitecourt	57%	Rural town, with significant resource related industries within their border.	9,927	88%	No

*2021 Financial Year (Source: Alberta Municipal Affairs) ~2016 Journey to Work (StatsCAN)

The following is observed in reviewing the ridership, residential tax proportion and land use discussion in the above two tables:

- 2021 ridership data is likely 50% less than pre-COVID-19 levels. Ridership is slowly recovering, with Leduc reporting ridership values much higher in 2022, compared to 2020 and 2021, as discussed in Table 2.3.
- Per capita ridership is expected to double the values presented in the table and expect to range from 2.5 to 4.5 annual transit trips per capita for communities with a 37% to 47% internal trip capture rate, including Spruce Grove, Airdrie, Fort Saskatchewan and Leduc. Since the per capita rates include both local and regional travel, the estimated local transit per capita value is in the range of 0.93 to 2.1 based on the internal capture rate for those communities.
- Beaumont's internal trip capture rate is 20% with an estimate of 0.33 to 0.94 annual local transit trips per capita, for a mode split that ranges from 1 to 3%. The estimated per capita annual transit trips are comparable to the local transit trips per capita in other municipalities reviewed.
- Beaumont and Chestermere appear to have similar characteristics with a similar population, land use context and residential tax base. Beaumont could collaborate with Chestermere as a peer City as they may have common transportation related issues. Chestermere offers a regional transit service like Beaumont's current regional services with two AM peak and two PM peak trips per day provided by Calgary Transit.

- Hinton, Peace River and Whitecourt are half the size of Beaumont (or less) and offer local transit, possibly with demand originating from a much higher level of work-based trips captured locally.

3.5 Non-work-based Travel

Approximately 25% of transit trips are expected to occur for non-work-based purposes. The transit ridership estimates were based on an assumed mode split based on a vehicle trip rate, which does not provide a split between work and non-work.

4.0 Public Engagement

A two-phase public engagement process was designed to inform the feasibility study. In the first phase of engagement, the public was asked to share feedback on the needs and desire for local public transit, as well as future/potential destination and routes. A survey ran from September 23 to October 11, 2022. A second phase of engagement was held from April 5 to 19, 2023 where the public shared their level of support for the outlined transit delivery options.

Engagement for both phases was carried out at the “CONSULT” level, to obtain feedback and perspectives that were taken into consideration for the study. As part of the decision-making process, decisions are made using technical requirements and information, incorporating direction from city policies and council, and considering feedback from the public.

A summary of engagement is provided in the following sections.

4.1 Phase One

Methods

Phase 1 included an online survey and pop-up event described as follows:

- **Pop-up Event:** The project team setup a pop-up table at Taste of Beaumont on September 24, 2022 at the Beaumont Community Centre from 5 p.m. to 8 p.m. Staff greeted over 100 attendees and provided information about the project and directed community members to the online survey. Paper copies of the survey were also available at the event.
- **On-line Survey:** The online survey was open from September 23 to October 11. The survey was promoted on the City’s website, social media, as well as in La Nouvelle Beaumont News and on posters and handbills around the city. The survey consisted primarily of close-ended questions regarding the use of local transit, potential travel destinations and travel times. A total of 263 respondents completed the online survey. Two people completed a paper copy and returned them to the project team at the pop-up event.

Detailed engagement materials includes sample ads and the pop-up display boards are provided in the Appendix.

Results

Highlights of the results from the online survey are as follows:

- **Age:** Community members from a range of age groups responded to the survey; the largest group was 35 to 44 years of age (35%) followed 45 to 54 years of age (27%).
- **Gender:** The majority of respondents identified as female (66%) with 27% of respondents identifying as male.
- **Residence:** Respondents came from across Beaumont, with the largest number of respondents living in Coloniale Estates (15%), Montalet (10%), and Dansereau Meadows (9%).
- **Current Travel Mode:** Respondents indicated that, currently, they typically travelled within Beaumont as a driver in a personal vehicle (76%) or walked (65%).

- **Desire for Transit:** Just over half (54%) of respondents indicated that they or a family member would use local transit in Beaumont. 46% indicated they would not.
- **Transit Purpose:** Respondents indicated that local transit would be used for a range of purposes, with over half of respondents indicated they would use it for recreation (67%), shopping (65%), and appointments (59%). Work (50%) and school (46%) also received a high number of responses. 7% of respondents indicated they would use transit for other purposes, including visiting friends and family and travelling to sites of worship.
- **Transit Destinations:** 71% of respondents indicated that they would use local transit to go to the Beaumont Sport and Recreation Centre, Centre Ville (66%) and Montalet shopping area (56%) also received a high number of responses. 13% of respondents indicated other locations, including dental, doctor, and optometry offices, the library, seniors' centers, and RuminariLive Arts. 22% of respondents indicated they would use transit to travel to school; over half of those respondents specified Ecole Secondary Beaumont Composite High School (57%) or a junior high school (Ecole J.E. Lapointe School, Ecole Coloniale Estates School) (52%).
- **Time-of-day:** Respondents indicated that during weekdays, afternoon was the most useful time for local transit (73%-77% Monday – Friday). On the weekend, daytime was the most selected time frame (83%-84%).
- **Previous Beaumont Transit Use:** 38% indicated that they had used the existing Beaumont Transit service to Edmonton.

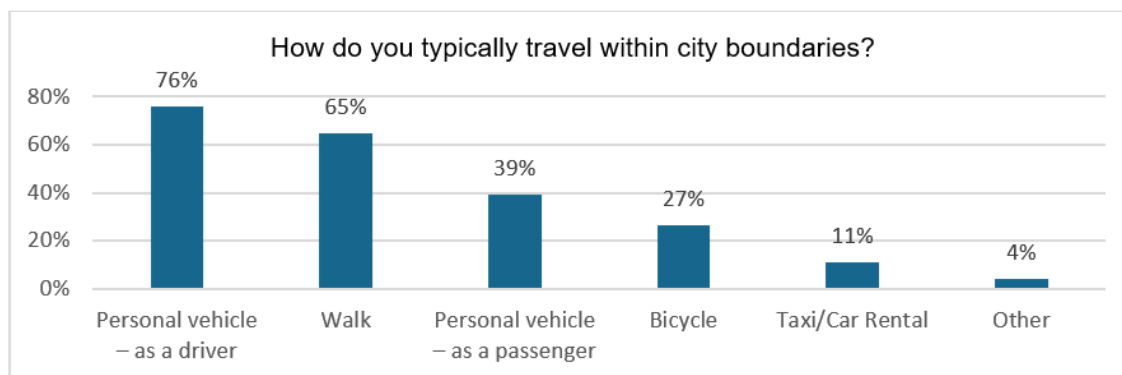


Figure 4.1: Current Mode of Travel

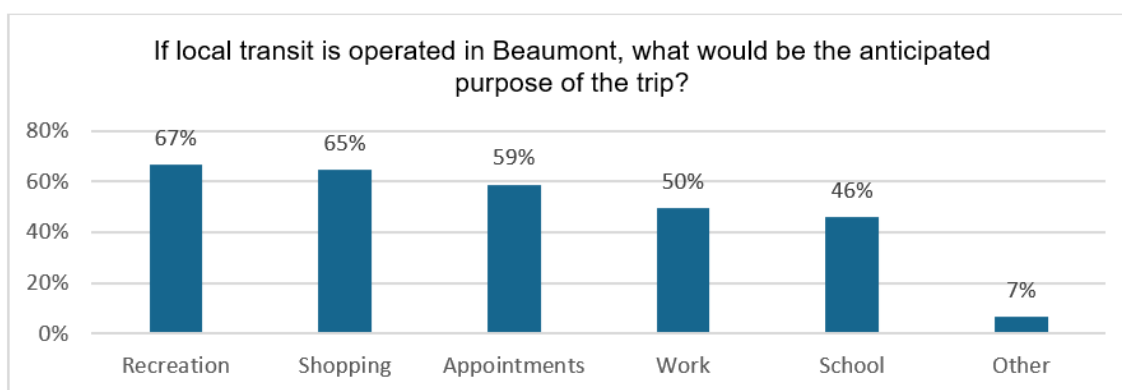


Figure 4.2: Local Transit Trip Purpose (if available)

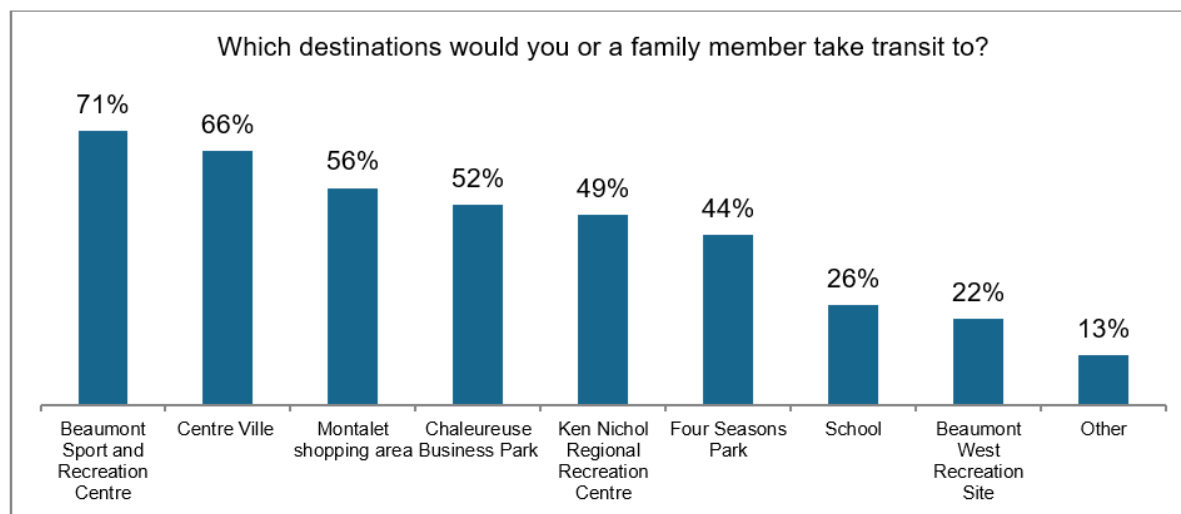


Figure 4.3: Local Transit Destinations (if available)

Table 4.1: Travel Time and Days

	Morning (6a.m. - 9a.m.)	Daytime (9a.m. - 3p.m.)	Afternoon (3p.m. - 6p.m.)	Evening (6p.m. - 10p.m.)	Late Night (10p.m. - 3a.m.)
Monday	58%	61%	73%	53%	12%
Tuesday	58%	62%	75%	51%	12%
Wednesday	58%	62%	75%	51%	12%
Thursday	58%	61%	76%	50%	12%
Friday	60%	61%	77%	57%	17%
Saturday	32%	83%	76%	65%	25%
Sunday	33%	84%	81%	56%	17%

Additional comments for the project team were generally supportive, with many respondents expressing enthusiasm and excitement for a potential local transit service. Many noted reasons for being unable to drive, such as age, ability, and recent immigrants without a license. Some parents remarked that local transit would facilitate children's evening activities, such as sports.

A few comments identified on-demand service as a useful model; one commenter noted the Cochrane's transit system may be a useful model.

Many comments also referred to improvements to regional transit, such as better connections and increased frequency, which are out of scope for this project. Some comments suggested the existing regional bus make more stops within Beaumont.

4.2 Phase Two

Methods

The second phase of engagement was held exclusively on-line, from April 5 to 19, 2023 and included the following:

- **Project Video:** A short project video was posted on the project webpage. The video was created to share the project information and findings for the Local Transit Feasibility Study with participants. The video was viewed 260 times. (link to video: <https://www.youtube.com/watch?v=n-Zb9L9rLfc>)
- **Online Survey:** An online survey was used to ask about level of support for the one-year pilot program and to gather feedback. It was shared on the project webpage and participants were encouraged to watch the short video before completing the survey. More than 250 participants completed the survey.

To promote the project and engagement opportunities, the following communication methods were used:

- **Beaumont News:** Two advertisements were placed in Beaumont News
- **Social Media:** Project information were shared on social media, one post for the launch of video and survey were made available and one post before the survey closed
- **Webpage:** A project webpage was updated and hosted both the project video and online survey to share information about the study. More than 790 participants visited the project webpage from April 5 to 19, 2023.

Phase 2 engagement materials are provided in the Appendix.

Results

The survey asked three questions.

1. Question 1 – Rank the local transit delivery model from most supported to least supported.

The rank of 1 equals the most support and the rank of 4 equals the least support. The number of occurrences for each result is shown in the following table.

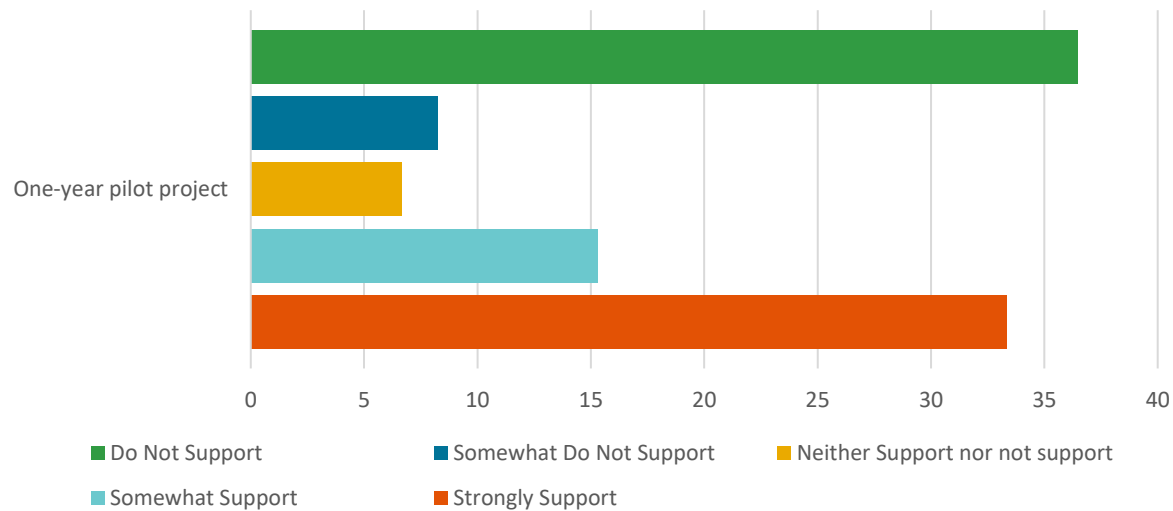
Table 4.2: Ranking Occurrences (Transit Model Support)

Ranking	Number of Responses			
	Status Quo	Fixed Route	Hybrid	On-demand
1 – Most Supported	105	60	28	57
2	22	72	92	64
3	21	62	101	66
4 – Least Supported	102	56	29	63

The detailed results in the above table indicate the following:

- **Status Quo:** There is about a 50/50 split in support for maintaining the status quo.
- **Fixed Route and On-demand:** Support for Fixed route and on-demand is similar.

2. Question 2 – What is your level of support for a one-year pilot project for a local on-demand transit service?



The results indicate that 85 participants strongly support the pilot project, 39 somewhat support, 17 neither support nor not support, 21 somewhat do not support and 93 strongly do not support. There is a similar 50/50 split of support for implementing or not implementing the pilot study, which is similar to the results in the first question.

3. Is there anything else you would like to share with the project team about local transit?

- Key themes arising from participants who **Strongly support and somewhat support**:
 - Great for seniors, students and others who do not drive
 - Beaumont's population is growing and there is an interest in local transit
 - Beaumont needs a local transit system and improved regional transit
 - On-demand works well in other municipalities of similar size in Alberta
 - Great alternative to walking in winter conditions
 - Concerns about the cost of local transit for both users and taxpayers
 - The inner loop/ring road would be a great route for transit in Beaumont
- Key themes arising from participants who **Strongly do not support and somewhat do not support**:
 - People who live in Beaumont should know they need a car
 - It is a small enough city that people can walk
 - Taxes are too high; money should not be used to support transit for a few people
 - On-demand transit is a government funded solution that the private sector already services (Uber, taxis, etc.)
 - Improve transit to Edmonton before bringing in local transit

Additional responses not specific to a local transit service included comments on the regional transit services as follows:

- To Edmonton
 - Expand services including destination (to Mill Woods and Century Park) and times (later in the mornings and evenings)
 - Expand the stops in Beaumont to include stops along 50 Street or the inner loop/ ring road
 - Heritage Valley drop-off not supported as it adds time between connections to other Edmonton Transit Services (LRT)
 - Concerned about crime coming into Beaumont from Edmonton on the bus
- To Leduc, the airport and area
 - Integrate Beaumont transit with Leduc and Nisku
 - Add services to the airport and the shopping district at the airport

■ 5.0 Service Standards and Delivery Models

5.1 Potential Service Delivery Models for Beaumont Transit

Fixed-Route Transit

Fixed-route transit service is a traditional model in which a predetermined number of vehicles operate along a predetermined route to arrive at stops at scheduled times. Passengers are responsible for planning their trip based on the transit stop nearest to them, the routes available, and the set arrival/departure times to get to their desired destination. Passengers can find information about routes from agency websites, mobile apps, maps at transit stations, and customer information service lines. Once a passenger has decided on their trip plan, they must go to a bus stop or transit station where they and other passengers can board a transit vehicle.

Fixed routes allow for the movement of large groups of people to key destinations, for example, getting commuters to a downtown core. This mass movement is done by having frequent service to key destinations and multiple routes that connect different parts of a region to the network. Due to the preplanned nature of fixed routes, they are generally reliable and frequent users can plan their travel journeys in advance and adapt their journey using other network routes in case of delays or interruptions. For example, if someone missed a bus they were planning to board, there are immediate options, such as waiting for the next scheduled time or boarding another bus that intersects with that route or leads to your destination in a different way.

Routes and stops for this type of service are selected based on a variety of factors such as population density, employment and educational opportunities, recreational and cultural opportunities, rider demand, road networks and more. These routes are planned with account of peak ridership hours, frequency, efficiency and accessibility. Ridership feedback, land use changes, and performance statistics are measured and used by transit agencies to adjust service accordingly. In the case of Beaumont, future urban growth will need to be taken into consideration in the long-term routing of fixed-route transit services.

Fixed routes are also ideal for moving large amounts of people in a shorter time because the services are planned to allow for the influx of people travelling. Note, however, that the rigidity of the schedule could contribute to the surge in usage since people may travel when the service is most frequent. Fixed routes make it easier to ensure all areas in a region are served by transit, and the immediate availability of service may encourage those who do not regularly take transit to do so. Fixed routes also influence land use, as seen with transit-oriented development. Transit-oriented development occurs near major transit centers/hubs (key nodes in a fixed route system). Transit-oriented development promotes sustainable mobility by encouraging the development of amenities near transit centers, allowing people to access the amenities using the sustainable mode.

There are also several limitations for fixed route systems. Low ridership on a fixed route system is cost ineffective since the bus will have to cover the same route regardless of occupancy. Additionally, fixed routes are inflexible; therefore, if specific destinations are not accounted for or accessible via the transit schedule, then that can cause people not to use transit. The cost burden of fixed routes may result in many times, such as evenings and weekends, receiving less service and limiting people's options to travel on transit.

Service standards and expected performance are partially explained through bus schedules and route planning on a fixed-route system. The following are key service standards for this model:

- Types of service (Express, Local, Crosstown)
- Frequency of service
- Span of service (e.g. time periods: peak period, midday, evenings, weekends)
- Route design principles
- Service coverage/walking distance to transit stops
- Transit facility design
- Access to customer information

When planning a fixed route, stops should be located by key commercial, health, recreational and education areas, and routes should connect these areas to residential hubs. Buses should travel along main/arterial streets, and planned routes should be efficient in that direct paths are preferred, and backtracking is minimized. Fixed routes can be designed in a radial (multiple routes converging to a single center), nodal (multiple routes connecting to various nodes) or grid pattern. Radial design is preferable if there is a single zone a majority of people are trying to access (e.g. downtown core), nodal is preferable for areas with multiple equally busy zones, and the grid is preferable when diverse movement is needed throughout a service area.

On-Demand Transit

On-Demand transit service is a model in which rides are provided to passengers between a set number of hours on a nonscheduled basis. This means passengers can request a trip in real time via a mobile phone app or call-in service line. A vehicle is then dispatched to pick them up at a designated location and drop them off while also picking up and dropping off additional passengers along the way. Passengers can also book trips in advance, resulting in better waiting times and closer pick-up areas. The scheduling of on-demand transit is done by a software program that takes all transit requests and outputs the optimal route, timing and number of passengers each vehicle is responsible for.

Across major Canadian cities, on-demand service has been used as a supplementary service to traditional fixed-route service. On-demand transit is typically applied in areas with lower transit demand, low population density, few employment hubs, or areas with disconnected road networks. On-demand can also supplement low-demand time periods such as evenings, overnights and weekends where implementing a fixed route transit service would be too costly. On-demand transit services can be tailored to the demand and reduce operating costs by utilizing different-sized vehicles such as transit buses, shuttles, vans, or sedans. There has been an expansion of on-demand transit services within the region over the past couple of years in the City of Edmonton, City of Spruce Grove, Town of Stony Plain and Strathcona County. In 2021, the City of Leduc transitioned most of the local fixed-route transit service to on-demand.

The benefits of an on-demand program include more efficient use of resources as vehicles are only deployed when trips are requested, thereby reducing empty or underperforming buses. This results in both financial savings and reduced vehicle emissions. In Beaumont specifically, implementing an on-demand system would eliminate the need for additional bus stop infrastructure and could instead link passengers to the existing regional transit service. Local routes with insufficient ridership may be converted to on-demand service or switch to on-demand at certain times of the day or on certain days of the week.

Additionally, new on-demand zones can be added as development in the outer areas of the municipality occurs, helping to provide cost-effective and appropriate levels of service for all residents. On-demand transit is also more flexible than fixed-route and can offer more late-night and weekend service. With on-demand transit, passenger experience could improve compared to fixed route service with shorter wait times, reduced travel time, and fewer transfers. These improvements can help increase transit usage and attract new customers.

On-demand also has various limitations. Newer online booking technologies may be a barrier for some customers with limited technology familiarization. On-demand has a higher level of variability and is less flexible if a trip is cancelled or cannot be fulfilled within a specific time frame. Additionally, trip duration and route changes with the number and order of boarding riders. If a different route is used to accommodate the other passengers, this may cause frustration for frequent users. Other considerations include capital costs and training required to replace a fixed route system with on-demand. Lastly, the variability in demand for the service can result in a need to adjust the supply and service hours, this makes planning operating costs and budgets more difficult than on a fixed route system. When looking at other on-demand transit services, one on-demand transit vehicle can typically accommodate between 5 to 8 passengers per hour, anything beyond that would have to be accommodated with fixed-route transit.

To ensure enjoyable, convenient and reliable service, on-demand has a unique set of service standards. The following should be outlined:

- Hours of operation
- Expected wait times
- Maximum wait time
- Distance to pick up/drop off areas
- Expected trip duration
- Accessibility throughout the region
- Booking process (e.g online, through a smartphone app)
- Accessibility
- Fares

To plan an on-demand service, extensive research is needed on the existing and forecasted demand for the service. Decisions regarding hours of operation, vehicles on the road and suitable pick-up/drop-off locations must be made in accordance with budgetary parameters, customer demand and feasibility.

5.2 Intermunicipal Transit

It is believed that a strong intermunicipal transit network that connects Beaumont with regional destinations such as Edmonton, Leduc County (Nisku), City of Leduc and the Edmonton International Airport will increase the potential local transit trips, assuming they will have access to a centralized intermunicipal transit hub. A local transit system provides another option for residents to travel to the intermunicipal transit hub.

While this report is focused on studying the feasibility of local transit, plans for intermunicipal transit services have evolved as this study has progressed. The current state of intermunicipal transit is summarized in the following subsections.

Intermunicipal Transit (Beaumont, Leduc and Leduc County)

City of Beaumont's Council, on December 20, 2022, directed Administration to explore options with City of Leduc and Leduc County to implement sub-regional transit services. City of Beaumont Administration will return to City Council with an update on the sub-regional transit planning in July 2023.

Feasibility of On-demand Transit Service to Edmonton

Connecting on-demand transit between Edmonton and Beaumont has been the subject of discussion and the City requested that feasibility of on-demand transit be reviewed at a high level as part of this study. Considerations which impact the feasibility of on-demand transit between Edmonton and Beaumont include:

- **Traveler Frustration:** Pick-up and drop-off points in the City of Edmonton could vary by 20 to 30 minutes or more, such that on-demand travel time for trips with more than one passenger will vary. Passengers will become frustrated because the travel times will be unpredictable since it is dependant on the pick-up or drop-off point of the other passengers. There is additionally a risk of high trip cancellation and trip refusals (e.g. lack of available vehicle) due to the likelihood of high wait times. For comparison the average wait time for an on-demand transit vehicle in the City of Edmonton was 10 minutes in 2022.
- **Limited Round Trips (per vehicle):** Round trip travel time to Edmonton is about 70 minutes for a single point to point pick-up between central Beaumont and central Edmonton. Round trip travel time with multiple passengers could take well beyond 70 minutes, depending on pick-up and drop-off points. As a result, the number of round trips per transit vehicle will be unpredictable and could result in buses making only a single round trip during the 7 to 9 AM and 4 to 5 PM peak hours. Current on-demand app providers do provide a timed transfer option
- **Unserviced Demand:** Buses on-route that cannot service potential transit riders will result in cancellations of a trip request or the need to wait until the transit bus is back in Beaumont. It will be challenging for transit riders to trust that a transit bus will be available when needed and will likely cause riders to find other transportation options.
- **Large Fleet Requirements:** Beaumont will require a larger transit fleet to ensure access to transit is available to residents due to the very long round trips, which make transit inaccessible while on-route

6.0 Summary, Conclusions and Recommendations

6.1 Study Summary

The City of Beaumont engaged ISL Engineering and Leading Mobility Consulting to conduct a feasibility study on local transit. The primary objective of this project was to assess the challenges and advantages associated with establishing a local transit service, including potential delivery models and engaging with the public. Initially, the study was intended as an input to discussions between the City and the Edmonton Metro Transit Services Commission (EMTSC), which was anticipated to oversee the provision of local transit services. However, during the project, the EMTSC was disestablished on May 31, 2023 and relinquished its responsibility for regional transit services. Consequently, the City may utilize this report to inform their decision on potentially self-administering local transit and/or collaborating with regional partners for its implementation in the future.

6.2 Conclusions

The following was concluded based on this study.

- **Current State of Beaumont Transit Service:** From September 2022 to May 1, 2023, Beaumont offered regional transit service to Heritage Valley Transit Centre in the City of Edmonton. Starting on May 1, 2023, Beaumont changed the service to offer point-to-point weekday peak period transit service (Route 540) between the Ken Nichol Regional Recreation Centre and Mill Woods Transit Centre. Current service is offered for 2 hours during the AM and PM peak hour, with a 40-minute frequency. In 2022, Beaumont Transit budgeted annual operating expenses of \$456,000, approximately 1% of the municipality's annual operating budget along with budgeted revenue of \$79,000.
- **Previously Planned Services by the EMTSC:** Previous plans for service included a connection from Beaumont into Edmonton via 50 Street to the Mill Woods Transit Centre. This service would have operated weekdays on a 30-minute peak and 60-minute midday service with a peak period extension to the Edmonton International Airport. On January 19, 2023, the EMTSC board of directors approved the necessary actions needed to dissolve the Commission due to withdrawal from the EMTSC by the City of Edmonton. It was established that the EMTSC cannot operate without the funding of this key regional partner.
- **On-going Intermunicipal Transit Planning:** City of Beaumont's Council, on December 20, 2022, directed Administration to explore options with City of Leduc and Leduc County to implement sub-regional transit services. City of Beaumont Administration will return to City Council with an update on the sub-regional transit planning in July 2023.
- **Opportunities for Supporting Local Transit in Beaumont:** Centre-Ville, Montrose and Montalet areas have the highest potential to generate local transit travel. The mix of land uses are attractive for a transit user such that they have access to multiple services in a single trip. Student travel to schools such as the Composite High School (almost 1,000 students) and to recreational centres (Ken Nichol Recreational Centre, Beaumont Sport/Recreational Centre) also generates local transit travel. The ring road provides connectivity to the four quadrants of the City could be utilized as a transit corridor. The City has a strong and highly connected active transportation network that supports transit. A strong intermunicipal transit network that connections Beaumont with regional destinations such as Edmonton, Leduc County (Nisku), City of Leduc and the Edmonton International Airport will increase

the potential local transit trips, assuming they will have access to a centralized intermunicipal transit hub.

- Challenges for Supporting Local Transit in Beaumont:** 80% of residents travel to destinations outside of Beaumont for work purposes. As a result, success of a local transit system will partially rely on a strong regional transit system, but will depend on the type of transit model offer. Low density of housing reduces the number of potential passengers along transit routes in a fixed-route stem, although it is noted that future density targets directed by the EMRGP are in line with the necessary requirements to support local transit. The City has several disconnected roadway networks including neighbourhoods with limited entry points, large spacing between arterials and a circuitous street networks which make it challenging to create transit routes in a fixed-route system. There are also some areas of disconnected bike paths (northeast and southeast quadrants). To setup a fixed route transit service there is a lack of transit infrastructure (concrete pads for bus stops, shelters etc.). Regional transit has limited services and only operates for two hours during the AM and PM peak hours. Highway 625 access controls will limit connectivity from existing areas to the future lands on the south side of the highway.
- Plan/Policy Alignment:** Beaumont's Municipal Development Plan (MDP), *Our Complete Community* outlines the importance of access to a multi-modal transportation system and identifies the need for connectivity between land uses, pedestrian and cycling linkages, the street network, and to future transit corridors. Furthermore, as part of the responsible development goals, medium and higher-density residential development should have good access to major roads, trails and walkway connections, and be within a five-minute walk (400m) to public transit. Beaumont's Transportation Master Plan, *Our Connectivity*, provides similar guidance on how Beaumont will plan, build, operate and sustain its transportation system into the future. Similar to the MDP, transit accessibility, particularly at peak times of day, is listed as a priority for major community destinations such as schools, recreation centres, medical offices, shopping areas, employment areas and medium and high-density residential areas. Policy within the plan indicates that these locations should be within 400-800m or a five to ten-minute walk of transit. The Centre-Ville ARP outlines plans for a new transit centre in southwest corner of the Ken Nichol Regional Recreation Centre site, for the provision of local and regional bus service. The transit centre will be a transit-oriented development that has an active building frontage, provides a range of commercial uses, and includes a public parking facility.
- Other Information:** The Citizen Satisfaction Survey (2017) reports that 12% of respondents found a lack of public transit/driving as the only option and 4% respondents noted public transit/transit to Edmonton as the most important issues facing Beaumont. The Environmental Master Plan, 2021 – 2026 (2021) recommends piloting on-demand transit by 2025 as a supporting connection to regional transit service. The Winter City Strategy (2021) suggests that minimizing wait times for transit is essential when the weather is cold/snowy and for transit shelters to include heaters and be protected from wind.
- Local Transit Ridership Forecasts (Comparison):** This study reviewed transit ridership from other similar sized cities in Alberta to understand potential ridership for Beaumont. Since most of the data available was from 2020 and 2021, historical annual ridership levels were also reviewed from the previous 15 years to understand the impact that COVID-19 had on ridership levels. It was found that local transit trips per capita, adjusted for COVID-19, ranges from 0.93 to 2.1 for communities with a 37% to 47% internal trip capture rate, including Spruce Grove, Airdrie, Fort Saskatchewan and Leduc. These communities have a transit mode split ranging from 1 to 2%.

- **Local Transit Ridership Forecasts (Beaumont):** Beaumont's internal trip capture rate is 20% and annual transit ridership per capita is estimated at 0.31 to 0.94 for an assumed transit mode split ranging from 1 to 3%. This is equal to approximately 6,500 to 18,500 annual local transit trips, based on the existing number of dwellings and dwelling types from the City's most recent municipal census. The estimate is comparable to ridership data from comparison municipalities.
- **Public Engagement:** A two-phase public engagement process was designed to inform the feasibility study. In the first phase of engagement, the public was asked to share feedback on the needs and desire for local public transit, as well as future/potential destination and routes. A survey ran from September 23 to October 11, 2022. A second phase of engagement was held from April 5 to 19, 2023 where the public shared their level of support for the outlined transit delivery options.
- **Public Engagement Results (Phase 1):** Respondents indicated that, currently, they typically travelled within Beaumont as a driver in a personal vehicle (76%) or walked (65%). Just over half (54%) of respondents indicated that they or a family member would use local transit in Beaumont. 46% indicated they would not. Respondents indicated that local transit would be used for a range of purposes, with over half of respondents indicated they would use it for recreation (67%), shopping (65%), and appointments (59%). Work (50%) and school (46%) also received a high number of responses. 7% of respondents indicated they would use transit for other purposes, including visiting friends and family and travelling to sites of worship. Respondents indicated that during weekdays, afternoon was the most useful time for local transit (73%-77% Monday – Friday). On the weekend, daytime was the most selected time frame (83%-84%).
- **Public Engagement Results (Phase 2):** There is about a 50/50 split in support for maintaining the status quo or implementing a pilot transit system. Support for a fixed route and on-demand was similar. The detailed results indicated that 124 participants strongly support or somewhat support a pilot on-demand transit system and that 114 somewhat do not support or do not support a pilot on-demand system.

6.3 Recommendation / Implementation Plans

It is believed a local on-demand transit system is expected to be more suitable for Beaumont as it will more effectively overcome the challenges outlined in this study compared to a fixed-route system. Detailed comparison of the two systems is summarized in the following points:

- **City Wide Transit Coverage:** On-demand transit is expected to provide city-wide coverage compared to a fixed route system that only provides coverage along the designated transit routes.
- **Low Demand on Fixed Routes:** If a fixed route transit system were in place, it's success would be limited because of the lower levels of residential densities and lower proportion of residents that work within Beaumont. On-demand transit relies less on a residential density along transit routes since routes are not fixed. Fixed route transit requires at least 10 to 37 dwellings per net hectare (du/nrha), although higher residential densities are needed because demand for local travel is low, with 80% of Beaumont residents travel outside of the City for work. This is compared to 12 du/nrha measured in some communities.
- **As/When Needed:** On-demand transit will only be activated on an as-needed basis during operational time periods compared to a fixed route which maintains a schedule and frequency of service regardless of demand.
- **More Direct Routing:** On-demand transit routes can use the most direct point to point route. The efficiency of a fixed transit route will be impacted by limited connectivity between some communities, incomplete roadway networks in some communities and an overall circuitous roadway network.

- **Convenience:** On-demand transit is expected to be more convenient compared to fixed route transit. New technologies for on-demand transit make it easier than ever for users to book trips as they can use a smartphone or web application but is still accessible to users that may choose to phone to book a trip as needed.

Based on the above the following is recommended:

- **One-year On-demand Transit Pilot:** It is recommended that the City pursue on-demand transit in the form of at least a one-year pilot. Operating a one-year pilot provides the City an opportunity to trial run the transit system and to collect transit data on local trips before committing to a long-term transit system. Options for implementing this system are as follows:
 - **Option 1 – Third Party Operator:** In this approach the City of Beaumont would develop a Request for Proposal for a third party to provide an on-demand transit pilot. Specifically, the third party would be responsible for day-to-day operations, vehicle maintenance (including the provision of the fleet), an on-demand technology provider for trip assignment and customer bookings as well as customer service. City staff would be responsible for the parameters and performance management of the contract. In the preparation of the RFP, City staff will need to determine the operating hours for on-demand transit, service objectives (e.g. maximum wait time for service, connectivity to regional transit service, curb-to-curb or fixed stop model) and key performance indicators. Specific key performance indicators could include maximum wait times, maximum travel time, on time performance, net direct cost per trip, passenger trips per revenue hour and customer satisfaction.
 - **Option 2 – Partner with Leduc Transit:** The City of Beaumont could explore partnering with the Leduc Transit by “piggybacking” on their existing contracted services agreement as both municipalities have the same third-party provider for transit services. The City of Beaumont and Leduc Transit, through negotiations, could potentially partner to establish an on-demand zone in Beaumont.

6.4 Costs

Cost for providing on-demand transit are dependant upon multiple factors. To help understand probable costs, on-demand transit services costs are summarized in the following table.

Table 6.1: Example On-demand Transit Services

Location	Population (2021)	Service Type	Riders/Service Hour (2021)	Cost/Service Hour	Annual Ridership	Operating Budget
Barrie, On	147,829	On-demand and Fixed	1	55		
Cochrane, AB	34,467	On-demand	4.6	64	33,318 (2021)	\$667,210
Leduc, AB	34,094	On-demand and Fixed	n/a	n/a	69,096 (end of Oct 2022)	\$1,292,395
Milton, On	132,979	On-demand and Fixed	2.31	42.45		

In reviewing the above table, Beaumont should plan an operating budget of at least \$500,000 for the pilot depending on the service hours offered and ridership levels.

6.5 Areas of Further Study

Areas that require additional study include:

- **Anticipated Operating Costs:** On-demand transit systems are still relatively new in Canada and there is limited data available on their operational aspects. It is recommended that additional study be completed to understand the potential cost implications of this system, including direct contact with other municipalities providing the service to collect their operational data. Data to collect include service hours, operating cost, operating revenue, ridership, other transit models provided and land use info. This data can be compared against StatsCAN Journey to Work Data such as local transit travel mode split, internal trip capture rate. The data can be used to further understand potential costs for the City of Beaumont, beyond the limited information in Table 6.1.
- **Service Standards:** Operating hours for on-demand transit, service objectives (e.g. maximum wait time for service, connectivity to regional transit service, curb-to-curb or fixed stop model) and key performance indicators need additional review. It will be an iterative process that is adjusts the estimate operating costs for the service objectives against the available operating budget.

7.0 List of Acronyms, Glossary of Terms and References

7.1 Acronyms

Table 7.1: List of Acronyms

Acronym	Full Name
APTA	American Public Transit Association
ARP	Area Redevelopment Plan
ASP	Area Structure Plan
CUTA	Canadian Urban Transit Association
EMRB	Edmonton Metropolitan Region Board
EMRGP	Edmonton Metropolitan Region Growth Plan
EMTSC	Edmonton Metropolitan Transit Services Commission
ITE	Institute of Transportation Engineers
MDP	Municipal Development Plan
TMP	Transportation Master Plan
TRB	Transportation Research Board

7.2 Glossary of Terms

Table 7.2: Glossary of Terms

Acronym	Full Name
Annual Transit Ridership	Transit passenger totals over the course of a year.
Fixed-route Transit	Transit that travels along a designated transit route with a fixed schedule and frequency.
Intermunicipal Transit	Transit services connecting between municipalities, such as Beaumont, Edmonton, Leduc and Leduc County. This is also referred to as regional transit.
Internal Trip Capture Rate	The percentage of work-related trips captured within the City's borders.
Local Transit	Transit services that function within the City's borders. They may connect to transit hubs that provide in intermunicipal transit.
On-demand Transit	Transit services provided to passengers on-demand. Unlike fixed route transit, they do not circulate on a designated transit route with a fixed schedule and frequency.
Per Capita Transit Ridership	Transit ridership per population, reported on an annual basis.
Transit Mode Share	Refers to the proportion of trips which use transit, amongst all other transportation modes.

7.3 References

Table 7.3: References

Source	Link Information
Alberta Transportation and Economic Corridors	Highway 625 Functional Planning Study – Not available on-line.
City of Beaumont – Our Complete Community	https://www.beaumont.ab.ca/DocumentCenter/View/3142/Municipal-Development-Plan-Our-Complete-Community-2019
City of Beaumont – Our Connectivity	https://www.beaumont.ab.ca/DocumentCenter/View/4996/Attachment-1---Transportation-Master-Plan
City of Beaumont – Our Centre-Ville	https://www.beaumont.ab.ca/DocumentCenter/View/4644/966-19-Our-Centre-Ville-Area-Redevelopment-Plan
City of Edmonton Household Travel Survey	https://www.edmonton.ca/public-files/assets/document?path=PDF/2015_HTS_Summary_Report.pdf
CUTA	Transit Operators Statistics – Available to Members Only
ERMGP	https://www.emrb.ca/growth-plan
ITE	Trip Generation Manual – Available by purchase only.
Pushkarev and Zupan	Urban Densities for Public Transportation – Available by purchase only.
StatsCan – Journey to Work Tables (2021)	https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/dt-td/Index-eng.cfm?LANG=E&SUB=98P1003&SR=0&RPP=10&SORT=date
TRB	Transit Capacity Manual - https://www.trb.org/Main/Blurbs/169437.aspx



APPENDIX
Public Engagement Materials

A

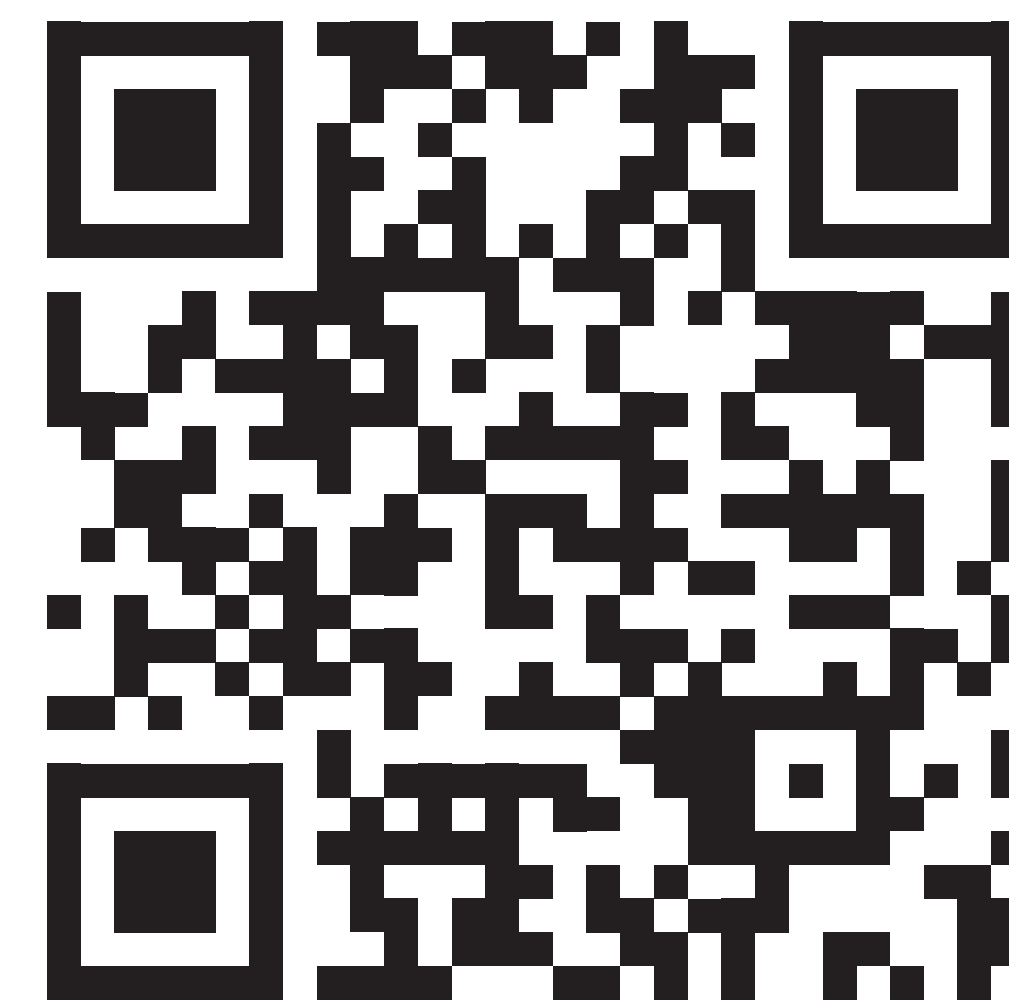
SHARE YOUR THOUGHTS ON BEAUMONT'S LOCAL TRANSIT STUDY

The City is exploring the need for local transit within our community.

Beaumont currently does not offer a transit service within its borders. The City has started a project to understand the need for a local transit system in Beaumont. The project team will explore, develop and compare different options for types of local transit services and recommend the most suitable system.

This first phase of the project is asking residents to share their needs and possible destinations or routes within Beaumont for transit services.

Scan the QR code for more information and to take the online survey, available from **September 23 to October 11.**

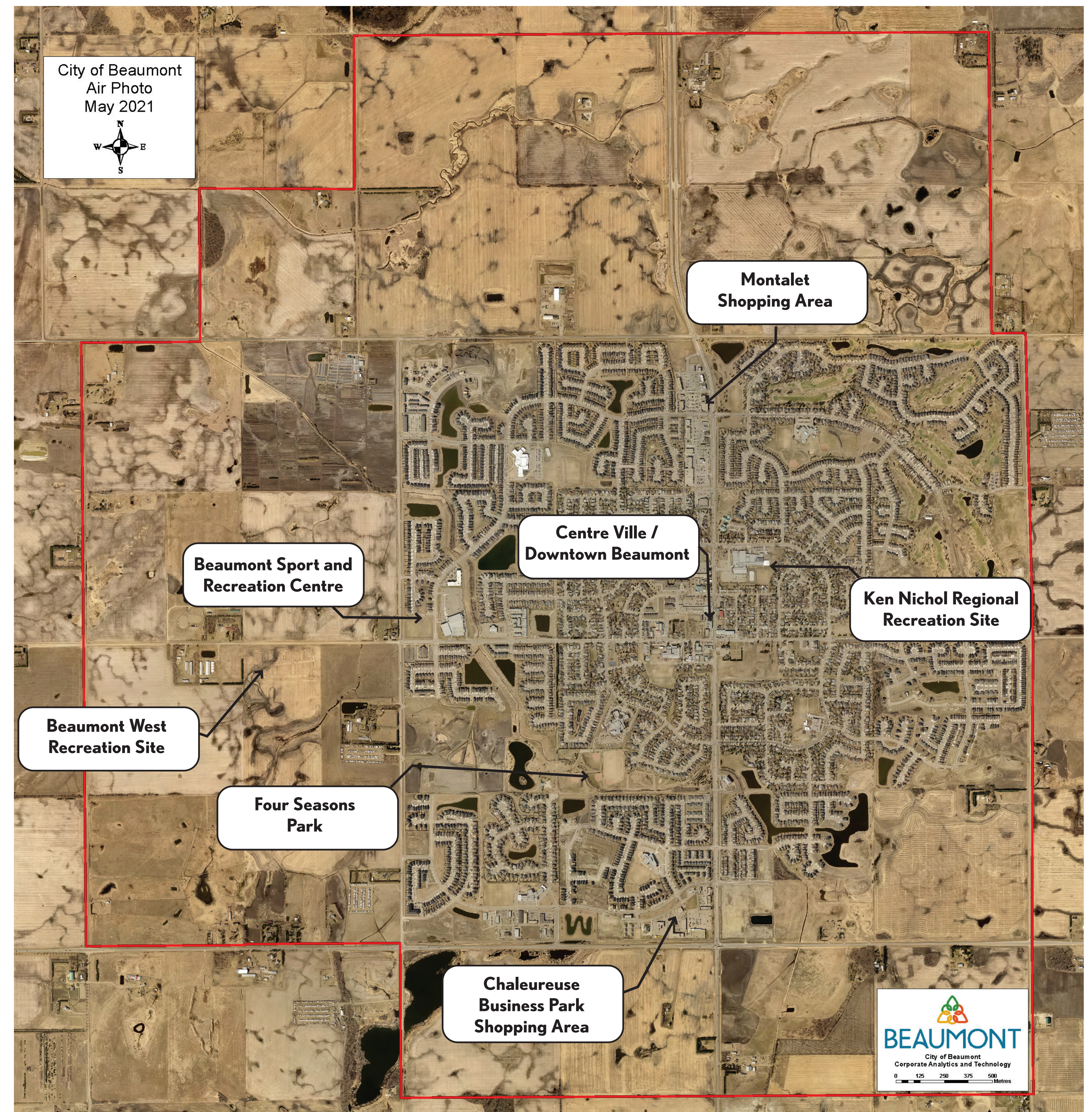


For more information on local transit in Beaumont, visit **beaumont.ab.ca/localtransit**



BEAUMONT'S LOCAL TRANSIT STUDY

- Place a green dot on where you would like transit to go / stop
- Place a yellow dot on where you would start your transit trip





SHARE YOUR THOUGHTS ON BEAUMONT'S LOCAL TRANSIT STUDY

The City is exploring the need for local transit within our community.

Beaumont currently does not offer a local transit service within city limits. The City has started a project to understand the need for a local transit system in Beaumont. The project team will explore, develop and compare different options for types of local transit services and recommend the most suitable system.

You're invited to visit the project team at the Taste of Beaumont to share your thoughts and ask questions.

Saturday, September 24

5 - 9 p.m.

Beaumont Community Centre

5204 50 Avenue, Beaumont



Can't make the Taste of Beaumont? Share your thoughts. Take the online survey by visiting beaumont.ab.ca/localtransit or scan the QR code.

For more information on local transit in
Beaumont, visit **beaumont.ab.ca/localtransit**





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Scan the QR code for more information and a survey available online from **September 23 to October 11.**

For more information on local transit in Beaumont,
visit **beaumont.ab.ca/localtransit**



Beaumont Local Transit Feasibility Study

Key Findings

April 2023



Council direction to start the study

Phase 1 Engagement

- Pop-up Event at Taste of Beaumont
- Online Survey

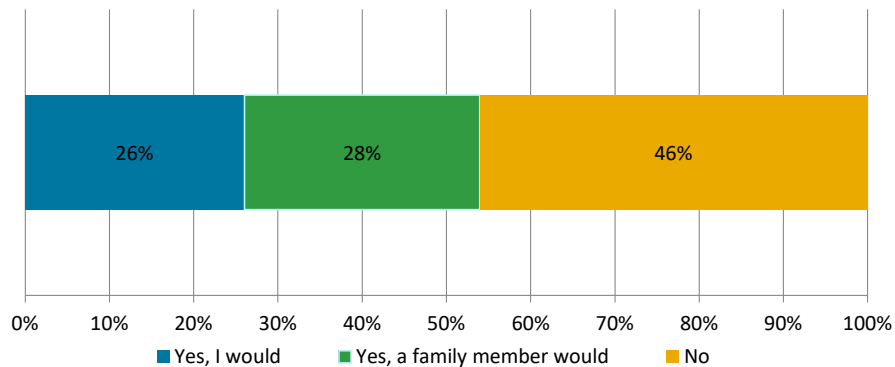
Feasibility Study

- Review current land use, roads, policies and plans
- Explore opportunities and constraints
- Transit option review

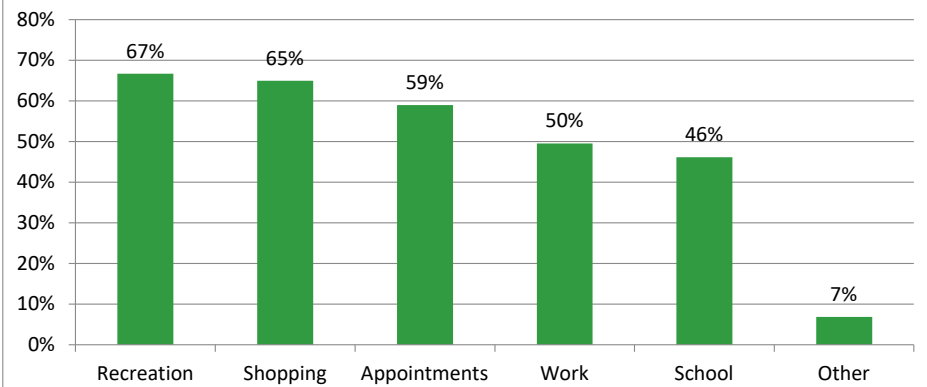
Final Report

What We Heard - Phase 1 Engagement

If local transit is operated in Beaumont, would you or a family member take local transit within Beaumont?



If local transit is operated in Beaumont, what would be the anticipated purpose of the trip?



Feasibility Study Highlights

Transit Challenges

- Travel outside the City
- Ridership recovery (post COVID-19)
- Low Density and limited mixed land uses
- Some missing active transportation connections
- Some neighbourhoods not well connected by roadways
- Missing/no transit infrastructure

Feasibility Study Highlights

Transit Opportunities

- Destinations (Montalet, Centre-Ville, Montrose)
- Connectivity with regional transit
- New transit service delivery models
- Active transportation
- Policy and Planning alignment

Transit Options

Option	Description	Considerations
Status Quo	Continue without local transit	
Fixed-Route Transit	A conventional transit system with fixed routes and schedule	Fixed routes, schedule and frequency Costs for bus stops and shelters Only covers fixed routes Connections to regional transit
Hybrid Transit	Similar to traditional transit system without fixed stops	Fixed routes and frequency without dedicated stops Riders flag a bus
On-demand Transit	Accessed by a smart phone app or phone call	Uses virtual or fixed stops Higher coverage than traditional fixed routes New technology

Transit Model Delivery Option

Considered Delivery Model: A one-year pilot project for on-demand transit

Local on-demand pilot goals:

1. Understand travel patterns and demand for local travel
2. Connect with existing regional transit services
3. Explore operating the pilot in midday, evening and weekend periods
4. Evaluate against success measures

Beaumont.ab.ca/LocalTransit

