



# Transit Needs & Feasibility Assessment

May 2023



# Acknowledgements

In collaboration with Leduc County, Watt Consulting Group would like to thank all those citizens, elected officials, municipal staff, stakeholders and service providers who provided their feedback and ideas into this process.

In particular, we are grateful to the contributions of the project team members who provided guidance and input:

- ▶ Khushnud Yousafzai, *Senior Infrastructure Engineer*
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- ▶ Lindsay Chambers, *Communications Coordinator*
- ▶ Kevin Wenzel, *Manager of Public Transportation [City of Leduc]*

# Introduction

The purpose of the Leduc County Transit Needs & Feasibility Assessment was to undertake a comprehensive transit needs and feasibility assessment to better understand how transit could most effectively serve local and regional travel needs. This assessment includes potential options for the type of service that could be offered and its frequency, operating model, and economic impact for Leduc County.

Existing transportation needs within the County are very diverse. They include commuters travelling regionally to major employers in Nisku and at the Edmonton International Airport, as well as residents connecting to services, shopping and healthcare in the City of Leduc and Edmonton from New Sarepta, rural areas of the County, and the municipalities of Calmar, Thorsby, and Warburg.

The County's transit needs are currently served through Leduc Transit and its innovative partnership with the City of Leduc. While the future of that arrangement was for a period of time made uncertain through the introduction of the Edmonton Metro Transit Services Commission, which originally prompted this Transit Feasibility Assessment, the Commission has since been dissolved and the County's and City's resolve to continue to work together to improve transit in their area has been renewed. Therefore, in tandem with this existing partnership and other potential opportunities to build further partnerships in the region and south Edmonton sub-region, this Assessment provides a framework for considering further improvements to transit.

Supported by transportation specialists Watt Consulting Group, the Leduc County Transit Needs & Feasibility Assessment involved analysis, best practices review, and outreach to residents, businesses, stakeholders, and existing transportation providers to determine how transit services could best be delivered in the future to continue to serve local and regional needs in a cost-effective and

sustainable way.

The objectives of the Leduc County Transit Needs & Feasibility Assessment were to:

- ▶ Understand and explore opportunities to address local and regional mobility.
- ▶ Determine how connections can best be delivered and coordinated to accommodate the area's diverse needs, including opportunities to optimize service as efficiently as possible through service adjustments, consolidation, and potentially further growing partnerships with existing transportation providers.
- ▶ Develop and deliver a Feasibility Assessment and Implementation Plan that describes recommended service types and levels, projected operating and capital costs, operating and governance models, and potential funding sources and partnerships to assist decision makers in moving forward on improved mobility where feasible.



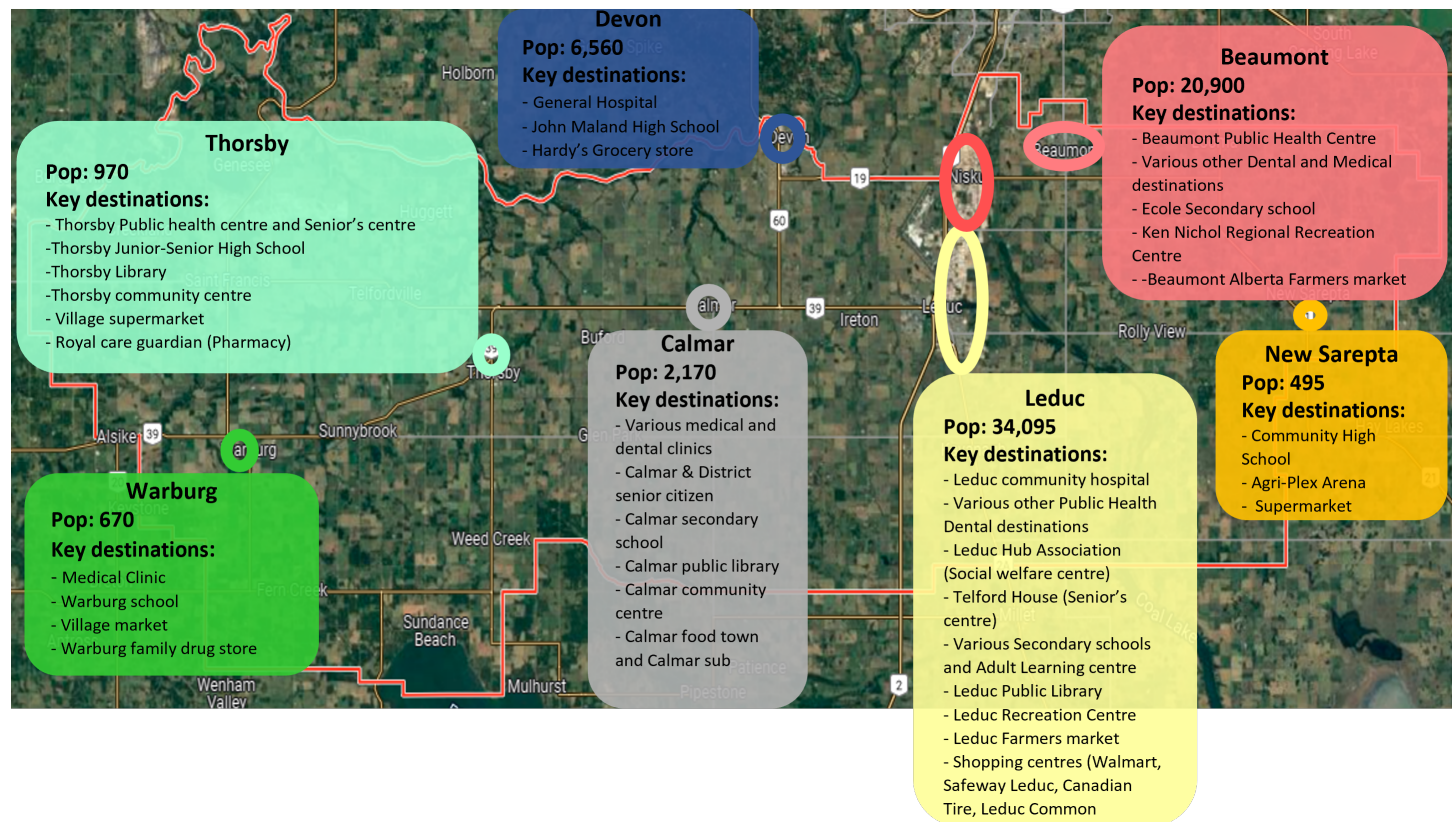


# Community Context

Leduc County spans 105 kilometers east to west and 32 kilometers north to south, bordering to the north with the City of Edmonton. Within and around Leduc County, a number of communities exist that have importance when considered transportation options at the regional level. These communities were considered as part of this assessment and their connections to and from the County:

- City of Leduc
- City of Edmonton
- City of Beaumont
- Town of Calmar
- Town of Devon
- Hamlet of New Sarepta
- Town of Thorsby
- Village of Warburg

These communities represent very diverse transportation needs and as such were part of the engagement process to better understand whether the existing transportation options suffice, if there are any transportation needs unmet, and what the long term vision is for each community.





# Community Context - Demographics

A high-level analysis of population and sociodemographic trends was completed for communities within the study area to understand population growth and potential transportation needs by demographic group. Population was grouped by age categories that generally align with typical transit customer market types. The following were some of the key takeaways:

- ▶ The age-group of **60 years and above** is significantly increasing in the region. This shows a potential increase in transit demand as older adults tend to drive less (e.g., driver license expires, some sort of disability, discomfort driving in challenging weather conditions like snow or at night) Similar to the other communities, older adults over the age of 60 are increasing at a significant pace and are considered a prime market for transit.
- ▶ The average total income for some of the communities within Leduc County are significantly lower than the County average. This applies to the “workforce” of each community (**25-59 age group**), which includes lower-middle class households that may not have access to a vehicle or second vehicle to get around.
- ▶ **Children and youth** (under the age of 24) comprise of 1/3rd of Leduc County’s population. This is an emerging market of transit users and one where demand would be consistent for recreational/leisure trips (e.g., access sport events, going shopping, etc.). As compared to others, the City of Beaumont shows the highest increase in the age-group 15-24. As compared to others, the Town of Thorsby and the New Sarepta area show highest increase in the age-group 15-24. This is significant as children between 15-20 do not necessarily own vehicle and are an emerging market for public transit.



# Community Context - Demographics

	Leduc County		City of Leduc		City of Beaumont		Town of Devon		Town of Thorsby		Town of Calmar		Village of Warburg		Hamlet of New Sarepta	
	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016	2021 Census Data	% Change from 2016
Total Private Dwellings	5,990	1%	13,507	10%	7,168	20%	2,588	4%	442	3%	937	9%	325	-3%	203	-7%
Average Age	41	1.7%	37.6	3%	34.6	6%	40	6%	39.6	21%	39	7%	46.1	8%	35.8	4%
Total Population	14,425	5%	34,095	14%	20,900	20%	6,560	-0.5%	970	-2%	2,170	-3%	670	-11%	495	-5%
Population by Age Group																
0 to 14 years	2,740	7%	7,435	16%	5,325	16%	1,325	-5%	200	-20%	405	-11%	110	-21%	115	-15%
15 to 24 years	1,540	-3%	2,300	-32%	3,710	81%	685	-2%	100	25%	235	-15%	60	-20%	55	38%
25 to 59 years	6,530	-1%	16,400	9%	10,265	15%	2,975	-8%	435	-3%	1,100	-6%	265	-22%	245	-9%
60 to 74 years	2,815	19%	4,575	29%	2,475	59%	1,160	27%	175	21%	330	22%	135	8%	65	18%
75 years and over	800	19%	1,975	25%	535	84%	415	28%	60	0%	100	54%	100	33%	15	-25%

# Transit Today

Currently, the County of Leduc is being serviced by Leduc Transit, which is an inter-municipal transit partnership between the City of Leduc and Leduc County. Leduc Transit offers service that connects the Leduc and Nisku areas and also stops at the Edmonton International Airport, the Premium Outlet Collection and the Century Park LRT station in south Edmonton

In mid-August 2021, Leduc Transit transitioned some of its operations from fixed routes and schedules to an on-demand transit format. The on-demand transit model uses existing bus stops as well as new virtual bus stops within the City of Leduc and Nisku Business Park. It operates during the similar time period as previous fixed routes (from 5:00AM to 6:50PM on weekdays) and replaced local routes 2, 3, 4, and 5.

Route 1, the commuter service from City of Leduc to the City of Edmonton and the Amazon warehouse in Nisku Business Park, remains on a fixed schedule and route. Route 10 also operates similarly, providing daily service from City of Leduc to Nisku, the Premium Outlet Collection, and the Edmonton International Airport.

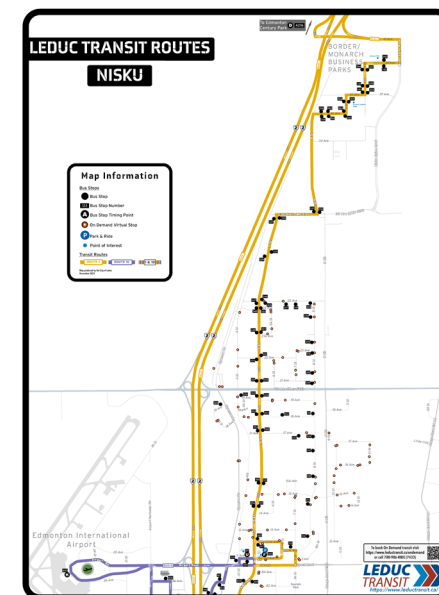
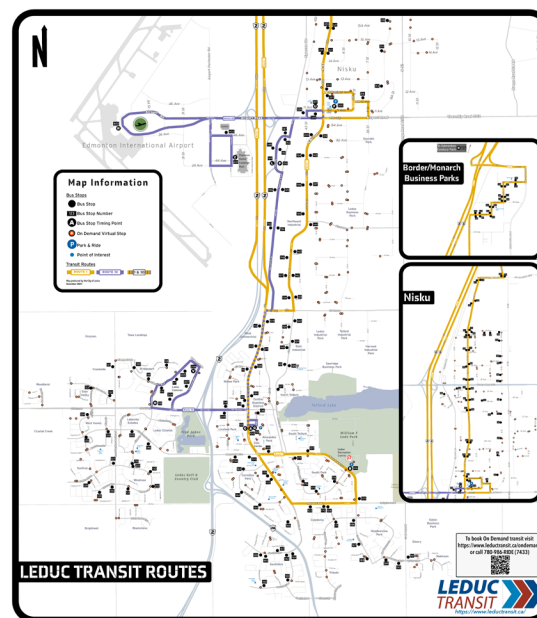
Leduc Transit also offers Leduc Assisted Transportation Service (LATS) on weekdays, a door-to-door, driver-assisted transportation service available for seniors (over 65 years old) and for people with cognitive, physical, and/or temporary disabilities.

In addition, Leduc County provides funding as part of the Airport Accord to operate the Edmonton International Airport (EIA) transit services, which deploys shuttle buses from the airport terminals to elsewhere on EIA lands, such as Costco or the Premium Outlet Collection mall.

Reviewing average monthly passenger data for 2022, Route 1 serves the highest number of passengers with approximately 2,200

passengers per month. On-demand transit is also popular for Leduc Transit with 1,900 monthly passengers, and ridership has been consistently growing on this route. Lastly, Route 10 sees around 1,600 passengers on a monthly basis.

Leduc Transit is scheduled to be part of the Arc Card, Edmonton region's electronic fare payment system, in 2023, which will allow for seamless travel between Edmonton and Leduc County using one fare product.





# Engagement - Overview

Consultation with the general public and key stakeholders was key to the project's success in order to understand the transportation needs and opportunities for residents, major employers and stakeholders of the County and its adjacent areas, including the Nisku, New Sarepta, City of Leduc, Edmonton International Airport, the Towns of Calmar and Thorsby and the Village of Warburg.

The public engagement process was focused on understanding primary characteristics about existing regional travel patterns:

- ▶ What are the main local and regional destinations people are travelling to?
- ▶ What is the purpose of this travel and how often does it occur?

The public engagement also built upon and complemented an earlier phase of engagement that conducted outreach with key stakeholders to better understand:

- ▶ What are the existing or potential transportation services and resources available in the community and the region and how might they change in the coming years?
- ▶ What other types of partnerships and opportunities might be available to help fund, operate and govern Leduc County transit services?

The project team sought input from the public on transportation needs and priorities by hosting three pop-up open houses in New Sarepta, Calmar, and Nisku, between September 27th and 28th, 2022 to gather ideas from the public. In addition, an online survey and a paper survey were made available from September 20th to October 11th, 2022 to gather feedback.

The open house locations and the survey were promoted using social media, posters on Leduc Transit buses, mail-out posters, and local advertising/paid media. More than 300 members of the public participated during the engagement period

Related comments made via Facebook during the engagement period were also reviewed and included in the summary by the project team.

A high-level summary of what we heard is presented in this section, a more detailed summary is available in the *Engagement Summary – What We Heard Report*.

Interviews with stakeholders, existing transportation providers and municipal staff included the following:

- City of Leduc
- City of Edmonton – Edmonton Transit Service (ETS)
- City of Edmonton – ARC – Smart Fare
- City of Beaumont
- Town of Calmar
- Town of Devon
- Village of Warburg
- Pacific Western Transit (PWT)
- Edmonton International Airport (EIA)
- Drive Happiness
- New Sarepta Golden Pioneers
- Amazon
- The Little Potato Company
- Boys & Girls Club of Leduc

# Engagement - Key Themes

The list below outlines the key takeaways from the public engagement activities:

- ▶ The **most frequented destinations** are the City of Leduc, City of Edmonton, and Nisku Business Park.
- ▶ The majority of respondents indicated that their **most common transportation mode** is driving their own vehicle (70% of respondents), or being a vehicle passenger with a family member (36% of respondents). Close to one third of respondents (33% of respondents) said that they use transit to travel.
- ▶ Just less than half of the respondents (46%) answered that they have **used existing transit / public transportation services** within the last year.
- ▶ In the past year, two thirds of the respondents have used **Edmonton Transit Service** (65% of the respondents), followed by **Leduc Transit – Routes 1 and/or 10** (64% of the respondents). A significant number of respondents indicated that they have used **Leduc Transit – On Demand services** (42% of the respondents).
- ▶ Of those respondents who indicate they use transit, the majority use it regularly, with 32% using it every work day (4-5 times per week) and 26% using transit every day.

- ▶ The most important transit service requirements to enable people to start using existing transit services within the County area or use it more often were the following:

1. More service during weekday commuter times (30% of the respondents)
2. Direct connection between City of Edmonton and Nisku Business Park (28% of the respondents)
3. Direct connection between City of Leduc and the airport area (26% of the respondents)

- ▶ When asked what the most important characteristic for an introductory level transit service for rural areas of the County would be that would encourage them to use it, respondents identified:

1. Same day travel to and from City of Leduc (37% of respondents)
2. Same day travel to and from Edmonton (35% of respondents)
3. Reliable service (29% of respondents)

It should also be noted that 25% of the respondents answered that nothing would encourage them to use the service, either because they do not live in those areas or they would not use it.

Compared to survey respondents, open house participants were found to be more likely to drive their own vehicle, more likely to not have used existing transit and public transportation services in the last year (88%), and one out of four open house participants (27%) would never use transit if a rural transit service was introduced in their area.

# Operational Opportunities

The following themes in terms of operational opportunities for enhancing transportation options based on the engagement with key stakeholders and review of baseline conditions in Leduc County:

- ▶ The on-demand service model is working well for Leduc Transit. Considerations could be given to integrate LATS with the on-demand service.
- ▶ PWT is providing additional capacity to the airport and expressed that they could offer additional operational and dispatch capacity.
- ▶ EIA Administrative staff expressed that they could be open to partnering and trying an on-demand service that is seamless and efficient for airport users.
- ▶ Hotels could be considered as partners or contributors for providing transportation in the area.
- ▶ Smart Fare can be flexible and be incorporated in any transportation system, but it comes with a price.
- ▶ After the EMTSC dissolved, many communities (such as Devon, Beaumont) have expressed interest in exploring partnerships to provide regional transportation options.
- ▶ Devon owns a community bus, which opens the prospect for the County to engage in a potential partnership to share this asset and in hand share the costs associated.
- ▶ Village of Warburg, in partnership with the Cloverleaf Manor and the Leduc Regional Housing Foundation, own a van that is used occasionally for seniors to access key destinations. This asset is being under-utilized currently, and a partnership could be formed with the County to share this van and the costs associated.

- ▶ Drive Happiness is an example of an organization who would be open to work together with the County and offer dispatch services for an on-demand transportation service.





# Travel Needs

Further to operational opportunities, a number of travel needs surfaced that Leduc County should consider when planning transit for the future. The list below includes markets, unmet travel demand and gaps in the existing transportation services:

- ▶ A commuter pattern/demand is present between City of Leduc – Nisku and to some extent Nisku –Edmonton.
- ▶ There is significant travel demand within Nisku and the Airport zone, particularly around lunch time.
- ▶ In addition to air travellers, there is a further potential unexpected market for transit connecting people who for economic reasons are staying in Nisku hotels and travelling to Edmonton hospitals.
- ▶ Calmar was identified as a key origin for travel demand (FCSS Survey). This was echoed in our discussions with Drive Happiness.
- ▶ One-third of the County's population is under the age of 24 (children & youth), which represents a significant market for transit.
- ▶ Significant development in the Nisku area in the future.
  - East Vistas proposed development expects around 23,000 people to live in that area.
  - Nisku Major Employment Centre ASP identifies one of the policies that public transportation connections shall be considered in local ASP or redevelopment plans.



# Recommendations

During the process of this assessment and building on the analysis of the baseline conditions for transportation in Leduc County, the feedback received from the public and key stakeholders, recent updates in the region with regards to transit (i.e., Edmonton Metropolitan Transit Services Commission dissolvment), a number of scenarios were explored in regards to transportation options for the County.

The options presented in this section take into consideration potential non-transit forms of supporting transportation, but acknowledge that Leduc County has already invested into transit service and has a successful partnership with the City of Leduc.

These options provide a roadmap for next steps that will effectively have a benefit to the County either in terms of service provided or costs saved through efficiencies and/or partnerships.



In this section the following topics will be discussed:

- ▶ **Service Priorities:** A suite of actions are presented that aim to enhance transportation options across Leduc County. Those are broken into two targeted areas, those focused on commuter services, primarily for the workforce and the rural transit options which are broken into east and west. Options present a range of investment levels that respond in different ways in public engagement heard and potential partnership opportunities. Each service priority is presented separately. Additionally complementing initiatives are presented for the County's consideration that aim to improve the customer's experience and the make transit more cost-effective.
- ▶ **Operating & Governance:** Governance defines the highest-level decision-making and coordination for community transportation, including setting direction and providing oversight.
- ▶ **High-level Estimated Annual Impacts:** These sections present high-level, conservative financial and performance estimates for each of the service recommendations.

# Service Priorities - Overview

Priority		Description
Service Priorities		
Commuter Service	Option 1. Targeted Improvements to Service Span	Provides 3 additional trips to extend the service earlier and later during weekdays for Route 1
	Option 2. Targeted Improvement to Service Frequency	Provides an additional 3 trips in the morning and 3 trips in the evening during weekdays for Route 1
	Option 3. Improvement to Service	Builds on Option 1 and provides same number of trips during the weekend for Route 1
	Option 4. Expansion to all-day / all-night service for Route 10	Improved frequency and expansion of service span from 4:00am to 2:00am
	Option 5. Introduce Commuter Service to Beaumont	Targeted Weekday Commuter Service with 3 trips in the morning and 3 trips in the afternoon via EIA - Nisku - East Vistas - Beaumont
	Option 6. Introduce Commuter Service to Devon	Targeted Weekday Commuter Service with 3 trips in the morning and 3 trips in the afternoon via Nisku - EIA - Devon
Rural Transit	Option 7. West Connector via Devon - Calmar - City of Leduc	On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)
	Option 8. West Connector via Warburg - Thorsby - Calmar - City of Leduc (No EIA,Nisku)	On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)
	Option 9. East Connector via New Sarepta - Rolly View - City of Leduc	On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)
	Option 10. East Connector via New Sarepta - Beaumont - East Vistas - Nisku - EIA	On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)
	Option 11. Combine LATS with On-demand	Both services operate on similar vehicles, use similar booking systems and by consolidating these services there is potential to achieve cost saving.



# Service Priorities - Option 1.

## Targeted Improvements to Service Span

Provides 3 additional trips to extend the service earlier and later during weekdays for Route 1.

This option provides the bare minimum service expansion to address comments received by major employers in regards to their work hour shifts. In discussions with those key stakeholders, we heard that the existing service does not align with the start / end time of their shifts, making transit a difficult choice for employees as they are not guaranteed a return trip. This option addresses the current commuter schedule gaps by adding one trip in the morning and two trips in the evening to allow for employees to use the bus when starting and ending their shift. The drawback with this option is that it adds service only during weekdays, whereas some of the major employers operate seven days per week.

- **Potential Partnerships:** Ideally this option would build on the existing transit partnership with the City of Leduc.
- **Alignment with Engagement Results:** This option also aligns with feedback received during the public engagement, where the most important transit service aspect for respondents to use transit or use it more often would be “more service during weekday commuter times” (31% of respondents).
- **Key Ridership Markets Served:** People working in areas of Leduc County, predominantly the Nisku Business area.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
0 Vehicles	Low	High
1,140 Annual Service Hours	\$75,800	\$96,600 Annual Operating Cost
8,000 Annual Passengers	\$47,800	\$68,600 Net Annual Operating Cost
\$28,000 Annual Revenue		

# Service Priorities - Option 2.

## Targeted Improvement to Service Frequency

**Provides an additional 3 trips in the morning and 3 trips in the evening during weekdays for Route 1.**

This option provides an improvement to Route 1 by adding three trips in the morning and three trips in the evening to improve service during the weekdays. This option would still aim to align some of those trips to major employer's shift start / end times to enable more people to use transit for commuting, however it will not operate on weekends or statutory holidays (similar to existing schedule). This option effectively improves service on Route 1 by 50% increasing its daily trips from 12 to 18 and starting to build towards consistent service throughout the day. In order to achieve that improvement in frequency it is likely that another bus will be required based on the existing schedule.

- ▶ **Potential Partnerships:** Ideally this option would build on the existing transit partnership with the City of Leduc.
- ▶ **Alignment with Engagement Results:** This option also aligns with feedback received during the public engagement, where the most important transit service aspect for respondents to use transit or use it more often would be “more service during weekday commuter times” (31% of respondents).
- ▶ **Key Ridership Markets Served:** People working in areas of Leduc County, predominantly the Nisku Business area.

### Initial High Level Estimate - Additional Impacts

#### Numbers

1 Standard Vehicle  
2,270 Annual Service Hours  
15,900 Annual Passengers  
\$55,700 Annual Revenue

#### Estimated Cost Range

Low	High
\$150,200	\$191,600 Annual Operating Cost
\$94,500	\$135,900 Net Annual Operating Cost

# Service Priorities - Option 3.

## Improvement to Service

**Builds on Option 1 and provides same number of trips during the weekend for Route 1**

This option takes a similar approach to Option 1, whereby it adds three trips to existing weekday service (one additional trip in the morning and two in the evening) to align with major employer shift start / end times. However, in addition it also carries over that service level to weekends and statutory holidays. Therefore, this option will be more effective in capturing start / end times of work shifts and building regular transit users as it will align with major employers' shift schedules seven days per week.

- ▶ **Potential Partnerships:** In addition to ideally building onto the existing transit partnership with the City of Leduc, this option presents opportunities for potential partnerships / funding from major employers. Thus, it may also become more financially viable if such a partnership is in place. Partnership or funding could take the form of contract or financial contribution, potentially in tandem with a fare component.
- ▶ **Alignment with Engagement Results:** This option also aligns with feedback received during the public engagement, where the three most important transit service aspects for respondents to use transit or use it more often was “more service during weekday commuter times” (31% of respondents), direct connection between Edmonton & Nisku (29%), and more service on weekends (27%).
- ▶ **Key Ridership Markets Served:** People working in areas of Leduc County, predominantly the Nisku Business area.

### Initial High Level Estimate - Additional Impacts

#### Numbers

0 Vehicles  
3,700 Annual Service Hours  
25,900 Annual Passengers  
\$90,700 Annual Revenue

#### Estimated Cost Range

Low	High
\$241,000	\$308,400 Annual Operating Cost
\$150,300	\$217,700 Net Annual Operating Cost



# Service Priorities - Option 4.

## Expansion to All-Day/Night Service for Route 10

### Improved frequency and expansion of service span from 4:00am to 2:00am

This option provides the most significant change in Leduc Transit and would be highly recommended to be pursued if a partnership with the area hotels is feasible. Route 10 currently is designed to serve most of the hotels identified along the Nisku Business Area and the EIA. This improvement is targeted to Route 10 and effectively increases it's service span from 4:00am to 2:00am to align with the Edmonton International Airport's (EIA's) operational hours. This option assumes that during existing operating hours (7:20am – 10:17pm on weekdays, 9:06am – 10:17pm on Saturdays, 10:06am – 7:17pm on Sundays and statutory holidays), Route 10 will have service doubled to operate with 30 minutes frequency (instead of hourly frequency which is the status quo). Outside of those hours, service would be extended and would offer hourly service. This option will allow for improved connections at EIA with the ETS Route 747 Edmonton International Airport Service.

- **Potential Partnerships:** Nisku area hotels plus major employers, in addition to building on existing transit partnership with the City of Leduc. This option is only financially viable if a partnership with area hotels is in place, a potential option to be explored that would help fund this service expansion could be through a hotel tax (similar example has been implemented in Whistler where hotel tax subsidizes free transit service on the Village loop routes).
- **Alignment with Engagement Results:** This option aligns with feedback received during the public engagement and addresses 4 out 5 most important transit service characteristics that respondents indicated that would enable them to use transit or use it more often. Those were “more service during weekday commuter times” (31% of respondents), more service on weekends (27%), direct connection between City of Leduc & airport (26%), direct connection between City of Leduc & Nisku (25%).
- **Key Ridership Markets Served:** This option has the potential to serve predominantly people that want to access the EIA, visitors to Leduc County that want to reach the hotels in Nisku, employees to the EIA and Nisku areas, and general public that wants to use the service that Route 10 serves.

*One consideration for this service is that partnering hotels may want its routing within Nisku altered to come closer to their location. If so, potentially the Leduc Common loop at its end within the City of Leduc could be eliminated in order to make this possible and maintain a steady hourly/half-hourly frequency. This change might require additional on-demand service to fill the gap that the routing alteration could create. This consideration would need to be reassessed at time of implementation.*

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
1 Shuttle Vehicle	Low	High
8,060 Annual Service Hours	\$523,600	\$670,600 Annual Operating Cost
56,400 Annual Passengers	\$326,200	\$473,200 Net Annual Operating Cost
\$197,400 Annual Revenue		

# Service Priorities - Option 5.

## Introduce Commuter Service to Beaumont (via East Vistas)

Targeted Weekday Commuter Service with 3 trips in the morning and 3 trips in the afternoon via EIA - Nisku - East Vistas - Beaumont

This option builds on discussions with City of Beaumont staff during the stakeholder engagement that suggested that there is a demand for service for Nisku, EIA, and the City of Leduc. One of Beaumont’s goals is to increase commuter ridership and provide more regional transit connections. This option proposes an introductory commuter service between the EIA and Beaumont with stops in the East Vistas and Nisku, with three trips in the morning and three trips in the evening. This option will allow for connections at EIA with the ETS Route 747 Edmonton International Airport Service.

- **Potential Partnerships:** City of Beaumont, plus builds on existing transit partnership with the City of Leduc.
- **Alignment with Engagement Results:** Based on data from the public engagement, respondents that live within Leduc County and outside of larger urban centres (City of Leduc, Beaumont, New Sarepta, Devon, Calmar, Warburg, Thorsby) travel to Edmonton (30%), City of Leduc (28%), and Beaumont (14%).
- **Key Ridership Markets Served:** This route has the potential to serve both commuters from Beaumont and future residents of the East Vistas to EIA and Nisku and conversely provide transportation options for residents of Leduc County that want to travel to Beaumont.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
1 Shuttle Vehicle	Low	High
2,270 Annual Service Hours	\$150,200	\$191,600 Annual Operating Cost
15,900 Annual Passengers	\$70,700	\$112,100 Net Annual Operating Cost
\$79,500 Annual Revenue		

# Service Priorities - Option 6.

## Introduce Commuter Service to Devon

### Targeted Weekday Commuter Service with 3 trips in the morning and 3 trips in the afternoon via Nisku - EIA - Devon

This option builds on discussions with Town of Devon staff during the stakeholder engagement that suggested that there is a demand for service for EIA. Based on public engagement that Devon has completed over time, Devon staff suggested there is a demand to access post-secondary institutions and employment opportunities, namely the EIA and West Edmonton Mall. This option will allow for connections at EIA with the ETS Route 747 Edmonton International Airport Service.

- ▶ **Potential Partnerships:** Town of Devon, plus builds on existing transit partnership with the City of Leduc.
- ▶ **Alignment with Engagement Results:** Based on data from the public engagement, respondents that live within Leduc County and outside of larger urban centres (City of Leduc, Beaumont, New Sarepta, Devon, Calmar, Warburg, Thorsby) travel to Edmonton (30%) and City of Leduc (28%).
- ▶ **Key Ridership Markets Served:** Similar to Option 5, this route has the potential to serve both commuters from Devon to EIA and Nisku and conversely provide transportation options for residents of Leduc County that want to travel to Devon.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
	Low	High
1 Shuttle Vehicle		
3,030 Annual Service Hours	\$199,200	\$254,400 Annual Operating Cost
21,200 Annual Passengers	\$93,200	\$148,400 Net Annual Operating Cost
\$106,000 Annual Revenue		

# Service Priorities - Option 7.

## West Connector via Devon-Calmar-City of Leduc

### On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)

This option is based on providing introductory rural transit service between Devon and the City of Leduc with a stop in the Town of Calmar. Both Devon and Calmar have expressed an interest in a transportation option that would enable people to travel to larger urban centres and access destinations such as shopping, medical appointments, recreational opportunities, or family. The recent FCSS survey, found that residents of Calmar have a strong desire for alternative options to driving that would enable them to access those key destinations.

This option is a hybrid model between on-demand and fixed route service, whereby the public would be informed that there are two trips scheduled with a flexible window time and they would be able to book a seat for those trips. For instance, a trip operating between 10:00am and 11:00am and a return trip between 3:00pm and 4:00pm. If there is not enough demand, the trip will not be made. On the other hand, there is flexibility in the routing of the trip in order to accommodate for people that live along the way or if a small detour is required in order to get on the bus.

- ▶ **Potential Partnerships:** Towns of Devon and Calmar, plus builds on existing transit partnership with the City of Leduc.
- ▶ **Alignment with Engagement Results:** Based on the public engagement, the top three aspects of an introductory rural service were to enable same day travel to City of Leduc (37%), to City of Edmonton (35%), and to be reliable (29%). This option has the potential to capture all of those desired characteristics.
- ▶ **Key Ridership Markets Served:** Residents of Calmar, Devon and surrounding areas of the County who do not currently have access to their own vehicle in order to access medical appointments, shopping and services. These ridership groups may include youth, seniors and lower income families and adults.

### Initial High Level Estimate - Additional Impacts

#### Numbers

0 Community Bus Vehicles\*  
350 Annual Service Hours  
1,800 Annual Passengers  
\$18,000 Annual Revenue

#### Estimated Cost Range

Low	High
\$24,900	\$31,300 Annual Operating Cost
\$6,900	\$13,300 Net Annual Operating Cost

\*Assumes use of an existing Leduc Transit vehicle



# Service Priorities - Option 8.

## West Connector via Warburg-Thorsby-Calmar-City of Leduc

### On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)

This option is similar to Option 7 with a different routing pattern that serves the communities of Warburg, Thorsby and Calmar, as well as residents of Leduc County that live along the way.

- ▶ **Potential Partnerships:** Town of Thorsby, Town of Calmar and Village of Warburg, plus builds on existing transit partnership with the City of Leduc. Alternatively, this option could make use of an existing Warburg shuttle vehicle.
- ▶ **Alignment with Engagement Results:** Based on the public engagement, the top three aspects of an introductory rural service were to enable same day travel to City of Leduc (37%), to City of Edmonton (35%), and to be reliable (29%). This option has the potential to capture all of those desired characteristics.
- ▶ **Key Ridership Markets Served:** Residents of Calmar, Thorsby and Warburg and surrounding areas of the County who do not currently have access to their own vehicle in order to access medical appointments, shopping and services. These ridership groups may include youth, seniors and lower income families and adults.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
	Low	High
0 Community Bus Vehicles*		
490 Annual Service Hours	\$33,900	\$42,800 Annual Operating Cost
2,500 Annual Passengers	\$8,900	\$17,800 Net Annual Operating Cost
\$25,000 Annual Revenue		

\*Assumes use of an existing Leduc Transit vehicle or potentially using Warburg van

# Service Priorities - Option 9.

## East Connector via New Sarepta-Rolly View-City of Leduc

### On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)

This option is similar to Options 7 and 8 but operates on the east side of the County. It would connect the communities of New Sarepta and Rolly View to the City of Leduc. Service would be two trips per day, two days per week.

- ▶ **Potential Partnerships:** Ideally, this option builds on the existing transit partnership with the City of Leduc.
- ▶ **Alignment with Engagement Results:** Even though a small sample size participated in the New Sarepta open house, about 45% of open house participants in New Sarepta indicated that they would use a rural transit service at least a couple times a week.
- ▶ **Key Ridership Markets Served:** This option has the potential to serve local communities and people living in rural parts of Leduc County with a transportation option that provides them access to shopping, medical appointments, visit family, recreational opportunities.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
	Low	High
0 Community Bus Vehicles*		
250 Annual Service Hours	\$18,400	\$23,000 Annual Operating Cost
1,300 Annual Passengers	\$5,400	\$10,000 Net Annual Operating Cost
\$13,000 Annual Revenue		

\*Assumes use of an existing Leduc Transit vehicle

# Service Priorities - Option 10.

## East Connector via New Sarepta-Beaumont-East Vistas-Nisku-EIA

On Demand Transportation Using Trip Windows: Two Days per Week - (e.g. Every Tuesday and Saturday)

Similar to option 9, this option offers a rural transit service to residents in order to access key destinations. This option is slightly longer than Option 9 as it goes through Beaumont, Nisku and the EIA, but not the City of Leduc. Users of this service would have the ability to access key destinations in Beaumont, take the on-demand transit from the Nisku area to the City of Leduc, or catch the Route 747 to the City of Edmonton.

- ▶ **Potential Partnerships:** City of Beaumont, plus builds on existing transit partnership with the City of Leduc.
- ▶ **Alignment with Engagement Results:** Based on public engagement, City of Beaumont was the fourth destination (24%) in the survey, after City of Leduc, City of Edmonton, and Nisku. This routing option offers access to 3 of the 4 top destinations.
- ▶ **Key Ridership Markets Served:** This option has the potential to serve local communities and people living in the City of Beaumont, future residents of the East Vistas, and rural parts of Leduc County with a transportation option that provides them access to shopping, medical appointments, visit family, recreational opportunities. with a transportation option that provides them access to shopping, medical appointments, visit family, recreational opportunities.

Initial High Level Estimate - Additional Impacts		
Numbers	Estimated Cost Range	
	Low	High
0 Community Bus Vehicles*		
370 Annual Service Hours	\$26,200	\$32,900 Annual Operating Cost
1,900 Annual Passengers	\$7,200	\$13,900 Net Annual Operating Cost
\$19,000 Annual Revenue		

\*Assumes use of an existing Leduc Transit vehicle

# Service Priorities - Option 11.

## Combine LATS with On-Demand Service

Both the Leduc Assisted Transportation Service (LATS) and Leduc Transit's On Demand service operate on similar vehicles and use booking systems. By consolidating these services there is potential to reallocate service to better meet demand or increase hours of operation.

LATS provides an on-demand door-to-door, driver-assisted transportation service for seniors (65+) and for persons with cognitive and/or physical disabilities within the City of Leduc. While attention would need to be taken to ensure that existing LATS users retained the service availability and level of care that they currently receive, Leduc Transit could potentially benefit by integrating and consolidating LATS and On Demand services. Doing so would enable available vehicles and service hours to be better shared between the two services when one may be underutilized and the other is oversubscribed. It would also reduce occurrences where two different types of vehicles were potentially travelling to the same destination within the City. Integration could improve overall availability of service within both the City and County On Demand areas.

- **Considerations:** Currently LATS is operated by City of Leduc employees while the On-Demand service is contracted. In some cases, other transit systems have achieved similar consolidations by swapping which portions of service are operated by each entity (i.e. maintaining relatively the same number of hours between the two operating entities but changing the nature of those services, such as exchanging LATS for fixed route).



# Service Priorities - Estimated High-level Annual Impacts

Service Options	Annual Service Hours	Annual Rides	Additional Vehicles	Annual Operating Costs		Annual Total Passenger Revenue	Potential Partners	Annual Total Net Operating Costs		One Time Capital Costs (if not leasing)
				Low	High			Low	High	
Commuter Service										
Option 1. Targeted Improvements to Service Span	1,140	8,000	0	\$75,800	\$96,600	\$28,000	City of Leduc	\$47,800	\$68,600	-
Option 2. Targeted Improvement to Service Frequency	2,270	15,900	1	\$150,200	\$191,600	\$55,700	City of Leduc	\$94,500	\$135,900	\$580,000
Option 3. Improvement to Service	3,700	25,900	0	\$241,000	\$308,400	\$90,700	Major Employers	\$150,300	\$217,700	-
Option 4. Expansion to all-day / all-night service for Route 10	8,060	56,400	1	\$523,600	\$670,600	\$197,400	Hotels	\$326,200	\$473,200	\$230,000
Option 5. Introduce Commuter Service to Beaumont	2,270	15,900	1	\$150,200	\$191,600	\$79,500	City of Beaumont	\$70,700	\$112,100	\$230,000
Option 6. Introduce Commuter Service to Devon	3,030	21,200	1	\$199,200	\$254,400	\$106,000	Town of Devon	\$93,200	\$148,400	\$230,000
Rural Transit - West Connector										
Option 7. West Connector via Devon - Calmar - City of Leduc	350	1,800	0	\$24,900	\$31,300	\$18,000	Devon/ Calmar	\$6,900	\$13,300	-
Option 8. West Connector via Warburg - Thorsby - Calmar - City of Leduc (No EIA,Nisku)	490	2,500	0	\$33,900	\$42,800	\$25,000	Warburg/ Thorsby/ Calmar	\$8,900	\$17,800	-
Rural Transit - East Connector										
Option 9. East Connector via New Sarepta - Rolly View - City of Leduc	250	1,300	0	\$18,400	\$23,000	\$13,000	City of Leduc	\$5,400	\$10,000	-
Option 10. East Connector via New Sarepta - Beaumont - East Vistas - Nisku - EIA	370	1,900	0	\$26,200	\$32,900	\$19,000	City of Beaumont	\$7,200	\$13,900	-
Option 11. Combine LATS with On-demand	Likely provides opportunities to reallocate savings to improved service									

Below are some of the assumptions that were used to develop the high-level annual impacts for each service option:

- Builds on the existing partnership with Leduc Transit
- Average of 2019 actuals from Leduc Transit adjusted for inflation
- Cost ranges are presented to reflect the differences between typical non-profit or private transportation provider costs
- Revenue estimates assume the existing fare structure of Leduc Transit (Route 1 & Route 10 - \$5, On-demand Transit - \$2)
- Ridership estimates are based on Leduc Transit historical data
- Costs are estimated higher than likely, revenues and ridership lower

# Complementing Initiatives

**Recommendations that aim to improve cost-effectiveness of service and enhance regional connections, as well as improve customers experience.**

Currently, Leduc Transit is providing funding towards the operation of an on-demand transit system within the Edmonton International Airport (On-Airport Transit). This on-demand service offers a free transportation option to the public that wishes to travel between the EIA parking, the airport terminal, the Premium Outlet, Century Mile Casino, and the Redtail Landing Golf Club. Leduc County could explore opportunities and leverage on this partnership that might allow achieving cost-savings. Those opportunities might be:

- ▶ **Storage for the fleet:** If there are space constraints at the existing facility that Leduc Transit operates and as transit service potentially expands/improves there might be a need to acquire more space to store additional vehicles for the transit fleet. Leduc Transit could approach the EIA to explore the feasibility of storing part of the fleet within the boundaries of the Airport City.
- ▶ **Consolidation of the fleet:** Leduc Transit and the EIA could explore the feasibility of consolidating their fleets and achieving some efficiencies through having one fleet.
- ▶ **Integration of the On-demand software:** Provided that On-Airport Transit and Leduc Transit utilize on-demand transit services, a partnership between the two could be explored for the integration of one on-demand software that would enhance transit experience and enable transit users to request a trip both within the Airport City but also within the operating area of the on-demand service for Leduc Transit.

- ▶ **“Economies of scale”:** Given the above points and the fact that service could be provided in a more cost-effective way if Leduc Transit and On-Airport Transit consolidated from an operational, logistical, maintenance, and capital perspective, the two agencies could explore the integration of On-Airport Transit as part of Leduc Transit. Consideration should be given to the benefits that could be achieved especially in regards to costs towards the operating company, improved level of service, reduced maintenance costs, etc.

Another recommendation that stems from the public and stakeholder engagement was the desire for direct travel options from Leduc County to the City of Edmonton. Currently, Route 747 operates between Century Park and the EIA and a transfer issued on Route 747 is valid fare for Leduc Transit Route 10 from EIA. Between Route 747 and Leduc Transit Route 1 there are some similarities in routing. With that in mind, Leduc Transit could explore opportunities to work with Edmonton Transit Service to potentially look into introducing service in the Nisku Business Park by adding some stops close to major employment destinations, and/or design Route 747 and Route 1 act as an express route and local route offering service from City of Leduc to Century Park in a way that frequency is improved for transit users wanting to travel to and from Century Park and the EIA.

# Operating & Governance

## Overall Partnership Structure

A successful partnership has been established between Leduc County and the City of Leduc, forming Leduc Transit. This partnership has proven to be a cost-effective, flexible, and resilient approach to offer transit services to the community.

## Operating Structure

Currently there is an agreement between the City and the County to share the cost of operating Leduc Transit, with the City of Leduc paying 65% and the County contributing 35%. The transit service offered at this time is under contract and operated by Pacific Western Transportation (PWT). The LATS service is operated by the City.

It is recommended that Leduc County continue to have its transit service operated through its Leduc Transit partnership, and consolidate as much service as possible to make it efficient, including consideration of consolidating LATS and On-Airport Transit with On-demand transit.

Lastly, Leduc Transit could consider including the Town of Devon, the City of Beaumont, and/or the EIA in a contractual agreement to expand the service and capitalize on economies of scale.

## Governance Structure

Leduc Transit already has a governance structure that resembles the committee-based model, that is when two or more municipalities form an agreement to regionally collaborate on transit. Decisions are discussed through a regional committee with resulting recommendations referred to municipalities for formal approval. One local government authority (in this case the City of Leduc) would still need to act as the primary operating contract holder. Supporting staff and resources will need to be designated through agreement.

This approach is considered appropriate as it allows for potential additional representation by other partners, if Leduc Transit expands its service and includes further partners to offset some of the costs.

The establishment of a staff level committee to help provide guidance on the strategic direction of Leduc Transit, such as provide guidance on service levels, can be particularly effective. Once recommendations are formulated through this committee, they can be presented to each Council for formal approval. This staff level committee could include transit staff from the local governments (such as the Towns of Beaumont and Devon) and operating company, representatives from key organizations within Leduc County (e.g., FCSS representative from Calmar, Thorsby, Warburg), other members that might provide funding towards Leduc Transit (e.g., large employers, establishments offering lodging, etc.). Through this committee, many key stakeholders can provide feedback on the transit system and have an impact towards enabling more residents, employees, and visitors of Leduc County to use transit as their mode of transportation.

# Longer-Term Considerations

The following presents high-level transit service options that aim to address issues and opportunities and provide improved transportation options to Leduc County in a cost effective way.

- ▶ Add on-demand service as required to maintain response times, and address unmet trip requests. This should be a priority before then potentially considering the expansion of the on-demand service area.
- ▶ Depending on the option(s) selected to implement, Leduc Transit should continue layering transit service to that direction with the focus on building workforce and consistent service across more days.
- ▶ Adjust routing as required, particularly to areas of growth such as the East Vistas.
- ▶ Adjust service to best match demand based on a detailed analysis of ridership. This should also include assessing if smaller shuttle-style buses should be purchased and used as part of Leduc Transit.





# Conclusions

The Leduc County Transit Needs & Feasibility Assessment provides a number of observations and recommendations that the County could implement to improve mobility in the region for those who have fewer transportation options. This is based on the established and successful partnership between Leduc County and the City of Leduc.

The recommended service priorities provide a suite of transportation options for residents, employees, and visitors of the County. Even if not all recommendations are pursued, many of these options offer a way to improve the utilization and benefit the community with the existing partnership that has been established with the City of Leduc. There may be also opportunities to further leverage regional transportation assets through coordination with surrounding communities, such as Devon and Beaumont.

This report presents the service priorities that should be considered to meet the identified transportation needs. It also highlights the recommended service delivery models and partnerships that the County should pursue to move forward on implementing these options in a cost-effective way.

This assessment started during the existence of the EMTSC and the regional transit context has changed significantly in the last months. While the Commission has been disbanded, one thing is certain, there is an appetite by communities to support a regional partnership to support travel between those communities.

Recommended next steps for moving forward:

- ▶ Continue to work with the City of Leduc to identify opportunities to enhance the existing commuter service, as well as consider extension of the existing coverage area to other parts of the County.
- ▶ Reach out to the City of Beaumont and the Town of Devon to further build and consolidate transit options in the south part of the region.
- ▶ Work with the City of Edmonton and potentially the EIA to serve the Leduc / EIA / Edmonton corridor as efficiently as possible.
- ▶ As opportunities arise, look to larger employers and the hospitality sector to achieve improved transit service for Leduc Transit.

