

Accelerating Transit in the Edmonton Metropolitan Region: Building a Regional Transit Services Commission

ADDENDUM

01 June 2020



Building a better
working world



 **Anderson**
BUSINESS CONSULTING INC.

Table of contents

1	EXECUTIVE SUMMARY	3
2	RTSC TRANSIT SERVICE DELIVERY REVISIONS	5
3	FINANCIAL MODEL REVISIONS.....	15
4	BUSINESS CASE IMPLICATIONS	30
5	RECOMMENDATIONS.....	34



Background

Ernst & Young LLP (“EY”) was retained by the City of Edmonton in collaboration with twelve additional municipalities in the Edmonton Metropolitan Region through a request for proposal process to develop a Regional Transit Services Commission (“RTSC”). The thirteen municipalities involved in the project included: The City of Beaumont, the Town of Devon, the City of Edmonton, the City of Fort Saskatchewan, the City of Leduc, Leduc County, the Town of Morinville, Parkland County, the City of Spruce Grove, the City of St. Albert, the Town of Stony Plain, Strathcona County, and Sturgeon County.

On January 22, 2020, the RTSC Transition Team, comprised of elected officials from each of the thirteen municipalities listed above, publicly released *Accelerating Transit in the Edmonton Metropolitan Region: Building a Regional Transit Services Commission* Final Report that articulated how the RTSC would conceptually operate and deliver services in the region. That report (the “Final Report”) documents the development of the RTSC including its strategy, regional transit service design concept, transit service delivery model, regional service levels and guidelines, operating model, governance model, funding model, cost sharing approach, implementation plan, strategic plan, and business case. A copy of the full report can be found on municipalities’ websites, including [here](#).

Based on the business case outlined by the Final Report, each of the thirteen municipalities voted on whether they would participate in moving forward with an application to the Government of Alberta to formally establish the Commission under the Municipal Government Act (MGA). This voting occurred between February and May 2020.

Ten of thirteen municipalities voted in support of becoming a member of the Commission and are actively engaged in submitting a joint application to the Province to stand up the RTSC. Strathcona County voted not to join the RTSC, as per the results of a special council meeting held on February 11, 2020. Leduc County motioned to continue their participation in the RTSC Transition Team on February 25, 2020 and after further consideration, later voted to not join the Commission on May 5, 2020. Sturgeon County also motioned to continue their participation in the RTSC Transition Team and after further consideration, later voted to not join the Commission. However, Sturgeon County have indicated their support of the Commission and have expressed a desire to actively participate on any advisory type committees the Commission may create; this would enable the County to provide input on key issues in the future.

To assess the impacts of the new membership of the Commission with the remaining ten municipalities, a revised business case is required to reconfirm the viability of key aspects of the Commission, including the conceptual transit services design and financial model. At the direction of the remaining RTSC Transition Team members, the business case revisions contained herein will form part of the official submission of the application.

For more information about this addendum, please contact:

Alan Thom

Alan.Thom@ca.ey.com
+1 780 638 6648

Josh Colle

Josh.Colle@ca.ey.com
+1 416 941 1958



Purpose of this addendum

This document serves as the Addendum to the Final Report, titled *Accelerating Transit in the Edmonton Metropolitan Region: Building a Regional Transit Services Commission* released to the public on January 22, 2020.

The purpose of this Addendum is to highlight aspects of the RTSC Business Case that have been revised as a result of the change in proposed membership of the Commission to include the following ten municipalities:

- ▶ City of Beaumont
- ▶ Town of Devon
- ▶ City of Edmonton
- ▶ City of Fort Saskatchewan
- ▶ City of Leduc
- ▶ Town of Morinville
- ▶ Parkland County
- ▶ City of Spruce Grove
- ▶ City of St. Albert
- ▶ Town of Stony Plain

At this time, Strathcona County, Leduc County and Sturgeon County¹ will not be written into the legislation as members of the RTSC.

It should be noted that only those aspects of the Final Report and original RTSC Business Case that are materially impacted by the change in proposed membership to the Commission are addressed in this Addendum. All other aspects of the Final Report not mentioned herein should continue to be taken under consideration.

Disclaimer

In preparing this addendum, EY relied upon statistical, operational, and financial data and information from a variety of sources including from the thirteen municipalities involved in the work, their representatives, and numerous other stakeholders through workshops, meetings, data requests, and conversations; collectively referred to as the “supporting information”. EY reserves the right to revise any analysis, observations or comments referred to in this addendum, if additional supporting information becomes available to us after the release of this addendum.

EY has assumed the supporting information to be accurate, complete and appropriate for the purposes of this addendum. EY did not audit or independently verify the accuracy or completeness of the supporting information. Accordingly, EY expresses no opinion or other forms of assurance in respect to the supporting information and does not accept any responsibility for errors or omissions, or any loss or damage as a result of any persons relying on this addendum for any purpose other than that for which it has been prepared.

¹ While Sturgeon County indicated they will not be joining the Commission membership, their Council expressed interest in participating through a form of advisory committee should the board of the RTSC create such a body, recognizing that the intention of such a group would be to provide advice and considerations to the Board in a non-binding manner and with no voting or governance authority. For more information, please see the following [news release](#).



Since the final report titled *Accelerating Transit in the Edmonton Metropolitan Region: Building a Regional Transit Services Commission* was released in January 2020, ten of thirteen municipalities in the Edmonton Metropolitan Region have expressed their intent to join the RTSC. The purpose of the Commission is to connect communities through convenient, simple, reliable, efficient, and affordable transit service that seamlessly integrates with other modes of transportation and prepares the region for future growth.

Through an analysis of the impact of Strathcona County, Leduc County and Sturgeon County not joining the RTSC, revisions have been made to the conceptual transit services design, transit and financial model, as well as municipal requisitions. The strategy, operating model and implementation activities required to effectively stand up and operate the Commission remain unchanged.

Proposed changes to the conceptual transit service design maintain a viable and more efficient transit network for the purposes of a business case, while maintaining consistency with the design previously presented in the Final Report based on participating municipalities. Specifically, **total estimated savings from operational efficiencies per year at maturity in 2026 remain positive at \$3.9 million** in comparison to the \$5.5 million estimated with the membership of all thirteen municipalities.

After removing the three municipalities from the transit and financial models, **the Commission is still expected to realize a net savings in annual shortfall of \$2.2 million compared to the updated Base Case**; this is in contrast to the \$3.4 million estimated net savings with membership from all thirteen municipalities in the region.

A smaller membership in the Commission comes with lower one-time startup costs, which have been reduced by nearly \$1.4 million due to decreased implementation complexity.

Implementation costs have also been smoothed over 2020 and 2021 to recognize the impact of COVID-19 on the timing of these activities. **Recurring costs have decreased by \$2.8 million with \$1.8 million of that derived from a reduction in staffing requirements.** This reduction reflects municipalities' expectation that the Board and CEO will monitor start up and deliver on the recommended operating model to effectively oversee and manage administrative cost buildup.

After factoring in the incremental one-time and recurring costs, it is estimated the Commission will have a cumulative net deficit of approximately \$290 thousand by the end of 2026 compared to an estimated surplus of \$800 thousand during the same time period forecasted if all thirteen were to join the RTSC. This delta is driven primarily by the reduction in savings in operational efficiencies that are available for capture by the Commission, given a smaller number of routes can be consolidated and less non-revenue hours can be eliminated with fewer transit agencies joining the Commission. **This cumulative deficit is forecasted to be recovered in Q1 of 2027 instead of by Q3 in 2026, as originally estimated in the Final Report.**



By combining resources and capabilities of the remaining ten municipalities, the Commission can still operate at a lower cost than the cumulative costs of the existing transit agencies continuing to deliver their own individual services. **Overall, the net funding shortfall allocations passed back to municipalities from the Commission continue to be reasonable compared to their own costs of transit, especially when assessed against the increased services and opportunities that become available within the region.** Savings realized by the RTSC can be reinvested into the improvement of transit service for the region or returned to municipalities through reduced requisitions. Furthermore, residents from RTSC member municipalities will have access to transit as an essential service and be better connected across the region.

The Final Report made several observations related to the basis for creating a Regional Transit Services Commission. **The impact the current COVID-19 pandemic has had on the movement of people within the region due to public health and safety requirements should be acknowledged, including the financial consequences to municipalities from reduced ridership. However, the creation of a RTSC would represent a long-term decision that could prepare and benefit municipalities for decades to come and not just over the next two to three years.** Key benefits of the Commission initially highlighted though the Final Report continue to hold true under the revised business case and demonstrate compelling evidence in a commission's ability to:

- ▶ Deliver more seamless transit services to improve mobility across the region;
- ▶ Provide a more consistent and enhanced customer experience to riders;
- ▶ Enable the more efficient use of transit assets and resources; and,
- ▶ Establish a unified approach to transit service delivery that can meet the evolving needs of the region into the future.

Based on the revised business case and comprehensive evidence collected through this process, it is recommended that the ten municipalities in the Edmonton Metropolitan Region move forward in establishing a Regional Transit Services Commission.



2.1 Overview

This section describes key revisions to the conceptual transit service design, illustrating how regional services could be delivered under the RTSC with membership from the ten municipalities. In addition, it also reflects changes resulting from the cancellation of service by the City of Spruce Grove into Edmonton which is not expected to be resumed in the foreseeable future. This section includes updated transit model insights, including revised service hours by municipality, route reallocations and resulting service hour savings.

Revisions to RTSC transit service delivery were approached in a deliberate and methodical manner whereby:

- ▶ Changes maintain the methodology and level of detail demonstrated by the original business case without updating basis service planning and design;
- ▶ The network continues to provide long distance travel options within Edmonton and the Region;
- ▶ Transit network changes and route reallocation discussions were minimized to maintain integrity of the model for comparison purposes;
- ▶ Emphasis is placed on retaining service hour efficiencies achieved through route consolidations;
- ▶ It is acknowledged that further service planning is still required to occur upon formation of the Commission; and,
- ▶ The analysis remains conceptual for the purposes of demonstrating network feasibility, with limited changes to non-revenue service and an unchanged service hour contingency of 15% despite a smaller overall system due to the absence of service from three municipalities.

The proposed RTSC transit service level guidelines that describe how regional services would be planned and continuously improved by the Commission remains unchanged from what was presented in the Final Report.

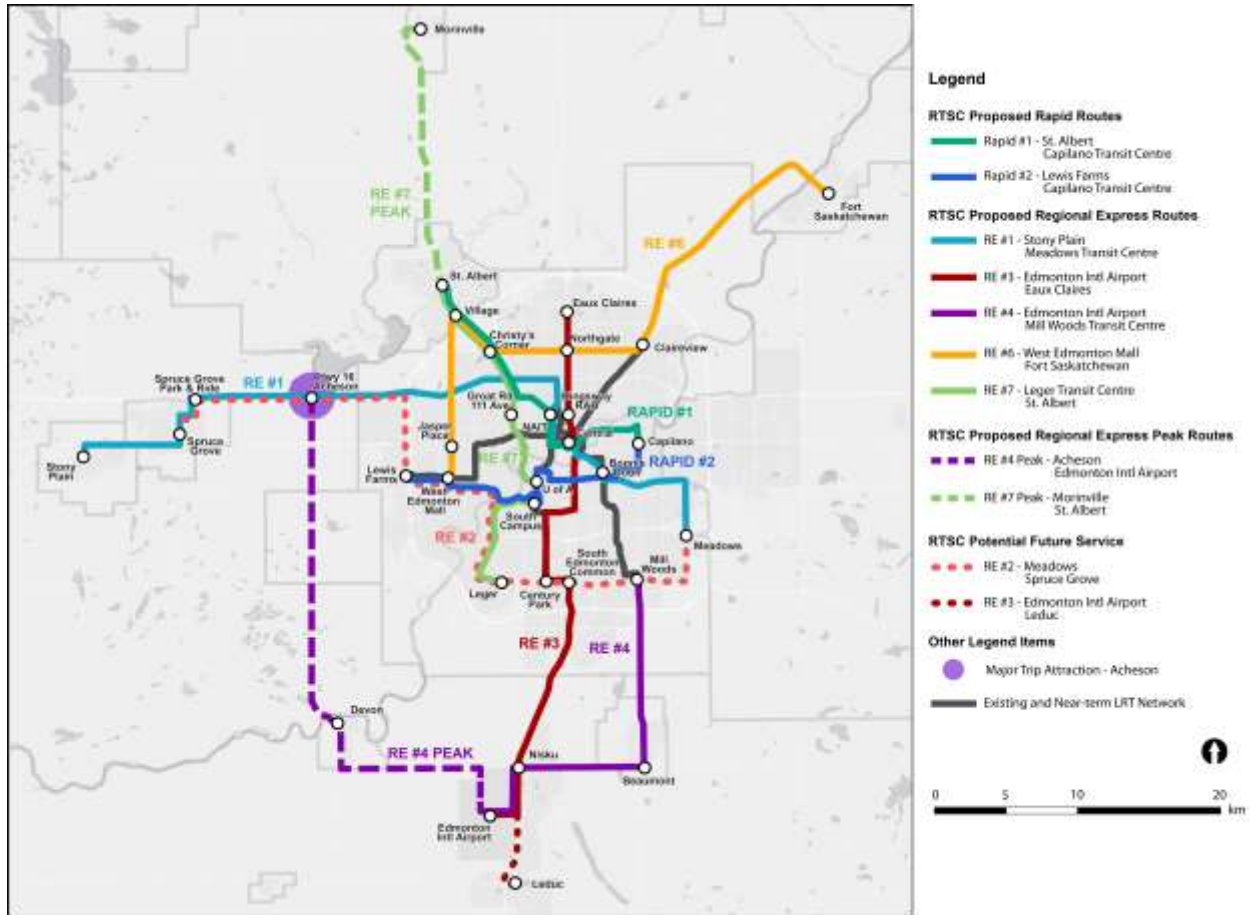
2.2 Revised RTSC conceptual transit service design

The revised conceptual transit service design summarizes the regional services that could be delivered under a RTSC amongst the ten municipalities, including the nature of the services and where they would run. The original conceptual design was modelled and validated with municipalities. Necessary revisions to the design were validated again with remaining municipalities when Strathcona County, Leduc County and Sturgeon County services were removed, and certain component of Spruce Grove service was cancelled. The intent of the conceptual design is to provide a framework by which potential route planning, service hours and costs can be evaluated against. It should be used by the RTSC to develop, through further consultation, the detailed services to be provided across member municipalities at the time of implementation.



In alignment with the RTSC Transit Service Guidelines, the revised conceptual transit services design still includes all three service types shown in the original design: Rapid Transit, Regional Express, and Major Trip Attractions. The specifics of conceptual routes that have been altered or redesigned and the value they add to a regional transit network is explained in this section.

Figure 1 - Revised RTSC conceptual transit service design



While local services play an important role in “feeding” regional services, a review of local route design for transit services that operate solely within a municipality was not in-scope nor a focus of the original design or this revision. Therefore, local services are not included in the conceptual design diagram (they are, however, included in the transit and financial modelling). Ongoing regional collaboration with municipalities that are not members of the RTSC will continue to enhance a regional transit network; however, it is not within scope of this work to analyze how external transit agency services could align with services provided by the Commission.

To serve as a reminder, this design would be finalized and implemented once detailed transit service planning, demand analysis and public engagement occur under the Commission. Although the routes and services shown in the map are subject to change, they are valuable for the purposes of comparing services envisioned under the RTSC with current transit service across the ten municipalities.

2.3 Revisions to Rapid Transit (RT) routes

These routes integrate services across municipal boundaries and consolidate multiple overlapping routes into a single, more rapid service. They are designed to attract customers by being competitive with private vehicle travel times by connecting high ridership destinations with only key transfer locations.

Two RT routes were revised as a result of Strathcona County not participating as a member of the RTSC, as follows:

Table 1 - Summary of revisions to RT routes

	Original design	Revised design and rationale
Rapid #1	<ul style="list-style-type: none"> Was intended to provide a direct connection between St Albert Transit (StAT) Centres, Downtown Edmonton, and Strathcona County's Bethel Transit Centre 	<ul style="list-style-type: none"> Becomes a radial route that consolidates StAT and Edmonton Transit Service (ETS) service into the Downtown core With the removal of Strathcona County Transit (SCT), this route has been adjusted to terminate at Capilano Capilano is a logical terminus on the east edge of Edmonton; it also aligns with the future Mass Transit network, which has multiple connections at Capilano and represents a future development opportunity Alignment was adjusted to match Edmonton's Bus Network Redesign (BNR) (Route 1B) from Downtown, as ETS currently has no service on 98 Avenue Headways were also adjusted to match the number of StAT and ETS trips along the corridor
Rapid #2	<ul style="list-style-type: none"> Was intended to connect West Edmonton Mall, South Campus, the University of Alberta, Bonnie Doon Transit Centre, as well as Strathcona County's Ordze and Bethel Transit Centres along a major demand corridor in south-central Edmonton 	<ul style="list-style-type: none"> Becomes a southern circulator route that provides connections to the University of Alberta With the removal of SCT service, the route's terminus is adjusted to occur at Capilano This routing aligns well with Edmonton's City Plan and Mass Transit Study which represents Capilano as a hub It also aligns well with Edmonton's Frequent Transit Network (FTN) Route #4 and creates a transfer point with Rapid #1, which results in an improved regional connection While this route is entirely within Edmonton, it provides a critical element of the regional network



2.4 Revisions to Regional Express (RE) routes

These routes provide fast and convenient connections for longer distance trips throughout the region, both inside the City of Edmonton and between municipalities that surround it. RE services follow established patterns of demand, providing a fast and reliable travel option. A basic level of all-day service is recommended with peak extension service during peak hours to support developing ridership markets in strategic areas.

Due to cancellation of certain services by Spruce Grove routing of RE #1 was realigned to provide a direct service between Stony Plain and Spruce Grove and RE #2 has been removed as a regional route for the current model and reflected as potential future service. As a result of Leduc County's decision to not participate in the RTSC there have been service modifications to RE #4. Finally, RE #5 was revised as a result of Strathcona County's decision to not participate as a member of the RTSC.

Table 2 - Summary of revisions to RE routes

	Original design	Revised design and rationale
RE #1	<ul style="list-style-type: none"> ▶ Was intended to be a direct Downtown and NAIT service connecting Stony Plain, Spruce Grove and the growing Southeast quadrant of Edmonton 	<ul style="list-style-type: none"> ▶ Routing has been realigned to provide a direct service between Spruce Grove and Stony Plain, which benefited from hours available for redeployed from RE #2 given its removal from the model as noted below
RE #2	<ul style="list-style-type: none"> ▶ Was intended to be a South Edmonton crosstown connector service between Mill Woods and West Edmonton Mall with an extension to Spruce Grove 	<ul style="list-style-type: none"> ▶ Spruce Grove Transit cancelled their route #562 service to West Edmonton Mall (WEM) primarily due to low ridership ▶ This left the RTSC with a route that would have existed solely within the City of Edmonton boundaries and had less of a regional aspect to it ▶ RE #2 has therefore been removed from the conceptual transit service design and reclassified as a future potential RE service for consideration by the RTSC ▶ Transit services within the City of Edmonton will continue to provide connections across the East and West corridors through existing routes



	Original design	Revised design and rationale
RE #4	<ul style="list-style-type: none"> ▶ Was intended to be a Regional circulator service that connects Edmonton, Beaumont and Leduc County with a peak extension to Devon and to provide developmental service to Parkland County 	<ul style="list-style-type: none"> ▶ RE #4 was already under consideration to have an additional stop at the Edmonton International Airport (EIA) and this has been articulated in this revised model and now provides both Beaumont and Devon with direct airport connections ▶ With the decision by Leduc County not to participate in the RTSC only a single stop is planned in Nisku to connect into RE #3 before connecting with EIA ▶ Cost sharing between certain participants of RE #4 have also been adjust resulting from Leduc County's decision ▶ Adjustments can be made to service plans with City of Leduc to reflect removal of service that was previously integrated directly with Leduc County
RE #5	<ul style="list-style-type: none"> ▶ Was intended to be an inner Edmonton crosstown service connecting West Edmonton Mall, NAIT and then direct service to Strathcona County and an extension to Fort Saskatchewan 	<ul style="list-style-type: none"> ▶ This route serving Strathcona County and Fort Saskatchewan with a connection to NAIT was removed from the conceptual design ▶ Without Strathcona County's membership in the Commission, this is no longer a regional route under the RTSC conceptual design ▶ Based on the results of a sensitivity analysis, there are limited service hour efficiencies available with the remaining internal pattern that could be served by ETS ▶ Alternative routing is available from Fort Saskatchewan to NAIT via Northgate, however there will no longer be service connecting Fort Saskatchewan with Sherwood Park

2.5 Revisions to Major Trip Attraction (MTA) services

These routes provide customized service to cover origins and destinations to maintain a fast and reliable regional service. They primarily serve industrial employment centers which have an important economic role, however, are difficult to directly serve due to their location and relatively low density. The schedule of travel demands to service these locations are also highly variable resulting in the need for a customized service that is adapted to large employer shift needs and other localized concerns.



Of the three MTA services initially included in the RTSC conceptual transit service design, two have since been removed. First, the service to the Edmonton Garrison has been removed due to the cancellation of this route by Sturgeon County following a prior Council decision in 2019. This was the only service provided to and from the County under the original design. Sturgeon County has shown their support for the RTSC through their commitment to acquiring services from the Commission in the future should they reach an appropriate level of demand from their residents. Second, the service within Nisku has also been removed due to the decision by Leduc County not to participate in the RTSC. While a stop is still contemplated in Nisku, there will be no formally planned service in that area. Acheson continues to be the only Major Trip Attraction destination with no change in planned services since the Final Report was originally prepared.

2.6 Revised service hours required under RTSC Case

The RTSC Case regional transit model - both the original and this current revision - is comprised of three different service types: Regional, Local, and Enhanced Services. This section outlines the revised estimated total required service hours under the RTSC Case, including hours from these three service types, to determine the expected service hour efficiencies under the Commission compared to current transit services delivered even without Strathcona County, Leduc County or Sturgeon County.

Through the amalgamation of services and the formation of a regional network, synergies continue to be possible when compared with the separate agency delivery model across the ten participating municipalities. Based on the reallocation of services developed with the working team members and the modelled service hours as shown in the table on the next page, a total system savings can still be realized under the revised conceptual service model. As with the original model, the revised service model is also subject to a number of assumptions that will need to be validated in future planning efforts; however, a service contingency of approximately 15% is maintained under the revised model despite a decrease in the overall complexity of the regional model. This approach to calculating service savings is conservative with a focus on service adjustments that have a higher probability of being realized. The following section discusses the fundamental drivers behind those savings and any potential service risks.

The table on the following page reflects the revised allocation of service hours by each of the ten municipalities. It starts with the weekly hours that each municipality produces under their own systems. It then adds new service hours as identified through the revised conceptual model. The third column reflects the revised reallocations of regional hours. The remaining columns are explained in the subsections that follow. Through the synergies realized through the consolidation of services, approximately 1,256 hours of savings can be captured by municipalities under the revised model compared to 1,538 hours under the original model. This figure needs to be reduced by a service contingency of 641 hours as previously described. This results in a net savings of approximately 615 hours per week under the revised model compared to 850 hours reflected in the original model. These service hour efficiencies from consolidating services are reflected in the revised financial model.

This approach allows for the better coordination of approximately 5,500 weekly hours of service that are currently being delivered across the region. **By combining the resources and capabilities of ten municipalities under the RTSC, a robust network can be built to provide an improved service while achieving an estimated total savings of 615 service hours per week. That translates to approximately \$3.9 million in efficiency savings per year when synergies are fully realized.**




 Please refer to Table 34 on page 108 of the Final Report for the original table

Table 3 - Revised potential regional service savings

	Existing weekly revenue service hours	Revised additional weekly service hrs reflected in RTSC model	Revised Regional Service reallocation by municipality to the RTSC	Revised savings realized through consolidation	Revised weekly revenue service hrs after Regional Service reallocation	Contingency hrs @ 15%	Revised direct Enhanced Services	Revised Local Service reallocated to RTSC by municipalities	Revised weekly revenue service hrs with regional local upload
City of Edmonton	37,652		(4,159)		33,493			-	33,493
RTSC	-	-	5,527	(1,256)	4,271	641	97	1,355	6,364
Strathcona County	-	-	-		-		-	-	-
St. Albert	1,570	-	(720)		850		-	(850)	-
Spruce Grove	334	-	(229)		105		-	(105)	-
Parkland County	105	39	(144)		-		-	-	-
City of Leduc	314	-	-		314		(97)	(217)	-
Fort Saskatchewan	194	-	(65)		129		-	(129)	-
Sturgeon County	-	-	-		-		-	-	-
Beaumont	43	23	(66)		-		-	-	-
Stony Plain	43	54	(43)		54		-	(54)	-
Leduc County	-	-	-		-		-	-	-
Morinville	-	35	(35)		-		-	-	-
Devon	-	66	(66)		-		-	-	-
	40,256	217	-	(1,256)	39,217	641	-	(0)	39,857



Revised Regional Service hours required

Based on the results of re-running the transit model and shown in the table below, the total service required to deliver on the revised conceptual design is 4,271 revenue hours per week compared to 5,255 revenue hours under the original model. An estimate of per week hours was scaled to annual hourly estimates using a factor of 52, which is the same approach taken for this calculation under the original model.

Added to these weekly service hours is a contingency of 641 hours or about 15% of the estimated service requirement.


 Please refer to Table 35 on page 109 of the Final Report for the original table

Table 4 - Revised total weekly regional service hours required under the RTSC Case

RTSC Case route	Modelled regional service hours required	Contingency (15%)	Revised total regional service hours required
Rapid #1	965	145	1,110
Rapid #2	970	146	1,116
RE #1	323	48	371
RE #3	1,067	160	1,227
RE #4*	149	22	171
RE #6	427	64	491
RE #7*	335	50	385
MTA - Acheson	35	5	40
Total	4,271	641	4,912

*Refers to RTSC routes that include a peak hour extension.


In addition to the estimation of savings related to revenue hours of service in the revised conceptual model, an updated estimate of non-revenue savings was developed. This was achieved by comparing the potential routing of non-revenue service to and from the nearest garage facilities to operate the regional services. An estimate of 127 hours per week of savings were identified by the model, subject to the development of a specific operating plan for services across the network. These additional savings have all been reflected in the financial model.

Revised Local Service hours required

To recap, the original MOU signed by the municipalities called for regional services to be transferred to the Commission first, with local services to transfer later. During this work, the municipalities identified that by reallocating their regional routes to the Commission, the local services they would retain could not be delivered in a cost-effective manner due to lost economies of scale; Edmonton was the only exception to this. This approach has not changed under the revised RTSC transit model.

Based on the revised model results shown on the following table, the new total service required for Local Services is 1,355 revenue hours per week compared to 2,965 revenue hours under the original model. The delta is derived primarily from the removal of Strathcona County, whose transit agency delivered the second highest number of local service hours of all municipalities in the region equating to about 1,500 weekly revenue hours at the time the Final Report was published. An estimate of per week hours was scaled to annual hourly estimates using a factor of 52.

Table 5 - Revised total weekly local service hours transferred to the Commission under the RTSC Case

 Please refer to Table 36 on page 110 of the Final Report for the original table


Municipality	Modelled local service hours	Revised total local transit service hours transferred to the Commission
City of Edmonton	33,493	-
City of St. Albert	850	850
City of Spruce Grove	105	105
Parkland County	-	-
City of Leduc	217	217
City of Fort Saskatchewan	129	129
City of Beaumont	-	-
Town of Stony Plain	54	54
Town of Morinville	-	-
Town of Devon	-	-
Total	34,848	1,355

Enhanced Service hours required

Based on the results of re-running the transit model and shown in the following table, the total revised amount of Enhanced Service is 97 revenue hours per week compared to 447 revenue hours under the original model. The delta in Enhanced Service hours is directly derived from the removal of Strathcona County from the model, which had requested 350 enhanced hours be included in the RTSC Case.

Under the original model, the 97 hours was shown as an 65/35 allocation between the City of Leduc and Leduc County to provide Enhanced Service for Leduc Route 1 (which is part of the current City of Leduc service). With the removal of Leduc County from the regional transit model, the cost of delivering this service has been fully allocated to the City of Leduc who operates this route and is expected to retain this service. An estimate of per week hours was scaled to annual hourly estimates using a factor of 52.

Table 6 - Revised total weekly enhanced hours requested by municipalities under the RTSC Case

 Please refer to Table 37 on page 111 of the Final Report for the original table

Municipality	Revised total modelled enhanced service hours requested by municipalities
City of Edmonton	-
City of St. Albert	-
City of Spruce Grove	-
Parkland County	-
City of Leduc	97
City of Fort Saskatchewan	-
City of Beaumont	-
Town of Stony Plain	-
Town of Morinville	-
Town of Devon	-
Total	97

How are synergies in regional transit provision impacted by model revisions?

Synergies and service efficiencies are clearly demonstrated under the revised regional transit model, as they were under the original model. While the overall savings realized through consolidation is somewhat less than it would have been if all thirteen municipalities had confirmed their intent to join the Commission, there continues to be a substantial number of weekly service hour savings that come with a regionally integrated network. Beyond the synergies that will be realized by reducing service overlap, the revised conceptual design offers a regional transit service that is faster for customers travelling long distances compared to the current state. The services are more direct to major destinations, provide streamlined routing through the region and provide better connections between municipalities that surround the City of Edmonton.

While the two major Rapid Transit routes previously intended to seamlessly connect multiple communities with Strathcona County east of Edmonton, revisions to Rapid #1 and Rapid #2 retain their integrity and value in providing frequent, high-speed service in major corridors. These important routes will eventually support the use of transit signal priority measures, further increasing the value and return on transit services in the future.

In summary, the revised conceptual transit service design and model results continue to demonstrate that a more integrated regional network streamlines services for customers, improves connections between communities and will result in service hour savings from consolidation.



3.1 Overview

This section describes key revisions to the financial model, which compares the estimated costs of operating the RTSC to the total cost of the ten municipalities continuing to deliver transit services separately. In making updates to the financial model to remove Strathcona County, Leduc County and Sturgeon County, the same methodology and approach were followed as was used to develop the original financial model shown in the Final Report.

Below is a summary of key steps taken to revise the financial model:

- ▶ The base costs of Strathcona County, Leduc County and Sturgeon County each delivering transit services separately without the Commission were removed from the model;
- ▶ Costs of the remaining ten municipalities were consolidated into annualized figures to provide a revised Base Case for the business case period from 2020 to 2026 inclusive;
- ▶ Incremental one-time startup and recurring costs of standing up and operating the Commission were reviewed and revised, where necessary;
- ▶ Revised service efficiency savings recalculated in the previous section were deducted from the cost build-up to follow the same approach used for the original Business Case;
- ▶ A revised net and cumulative net annual shortfall compared to Base Case was calculated to show how much more/less transit services are expected to cost if they are to be operated by the Commission; and,
- ▶ Revised, forecasted municipal requisition amounts to allocate the cumulative net annual shortfall between the ten municipalities were prepared.

It is important to note that the approach taken to the original and revised cost build-up for the RTSC Case is conservative in nature. Contingencies are built into the financials in several areas, including in: the hourly rate used to calculate service efficiency savings; the 15% service contingency; the way service efficiencies are gradually realized over the base case period as opposed to being immediate; and contingency expenses are budgeted for year-over-year to account for other incremental costs of operating.

Additionally, the financial forecasts do not account for the elimination of costs associated with access agreements for the ten municipalities expected to join the Commission. The Commission may also generate additional revenue through the negotiation access agreements with non-member municipalities who seek to operate within the jurisdiction served by the Commission (i.e. collective boundaries of member municipalities). Under the MGA, RTSC member municipalities will have the authority and flexibility in utilizing roads, bus stops and transit stations within its jurisdiction. As a Commission, the RTSC can also generate revenue by delivering transit services under contract agreements to interested organizations and non-member municipalities in accordance with established agreements. Finally, as with the original financial model in the Final Report, revenues associated with potential future grants or potential access to tax levies have not been forecasted. These savings and revenue opportunities are deliberately not included in the financial model to err on the side of conservative estimates.

3.2 Revised RTSC Case annual summary

Background

The below table represents the summary of information discussed in this section. It takes the revised Base Case funding shortfall associated with the cost of ten municipalities continuing to provide their own transit services (or plan to deliver transit), adds additional costs related to standing up and operating the RTSC, and then deducts efficiency savings which can be realized through the consolidation of services.

The one-time startup costs associated with the Commission include incremental costs such as branding and marketing, stakeholder engagement activities, and additional costs related to future detailed route planning for integration, which have been revised from the original model. They also included the incrementally higher resource costs estimated for the staff and contractors that would continue to operate their own transit services in 2020 and 2021 while the Commission requires similar resources to stand-up and begin their own planning and operational activities. Service efficiency savings were addressed in the *Revised RTSC Transit Service Delivery* section of this Addendum and are related to savings realized due to the reduction of duplicative or overlapping routes along with a reduction in non-revenue hours.

Table 7 - Revised RTSC Case annual summary



Please refer to Table 41 on page 124 of the Final Report for the original table

Thousands \$CAD

Account	2020	2021	2022	2023	2024	2025	2026
Total Base Case Funding Shortfall	-	-	37,198	37,788	38,608	39,383	40,152
Add: One-time/Start-up Costs	414	1,647	662	300	-	-	-
Add: Recurring Incremental Costs	8	1,695	1,601	1,661	1,698	1,691	1,650
Less: Service Efficiency Savings	-	-	(1,191)	(1,641)	(2,554)	(3,467)	(3,886)
Total RTSC Funding Shortfall	422	3,342	38,271	38,109	37,752	37,607	37,916
Net Increase (Savings) in Annual Shortfall Compared to Base Case	422	3,342	1,073	321	(856)	(1,776)	(2,236)
Cumulative Net Increase (Savings) in Annual Shortfall Compared to Base Case	422	3,765	4,838	5,158	4,302	2,525	289

One-time, startup and recurring incremental costs

A smaller membership in the Commission comes with lower one-time startup costs, which have been reduced by nearly \$1.4 million due to decreased implementation complexity. Implementation costs have also been smoothed over 2020 and 2021 to recognize the impact of COVID-19 on the timing of these activities. Recurring costs have decreased by \$2.8 million with \$1.8 million of that derived from reduced staffing requirements. This reduction reflects municipalities' expectation that the Board and CEO will monitor ramp up and deliver on the recommended operating model to effectively oversee and manage administrative cost buildup.



Service efficiency savings

By combining the resources and capabilities of the ten municipalities under the RTSC, a more robust network can be built to provide an equivalent or better service while achieving an estimated total savings of 615 service hours per week, plus efficiencies through the reduction of non-revenue service hours as noted in the Final Report. That translates into approximately \$3.9 million in efficiency savings per year when synergies under the revised regional network are fully realized, which is down from the \$5.5 million figure under the original business case, but still significant to the region. These savings are recognized gradually over time, first realized in 2022 with \$1.2 million of efficiency savings and building, at the same rate recognized in the Final Report, up to \$3.9 million in 2026 under the revised model.

Net savings in annual shortfall compared to Base Case

A net savings in annual shortfall compared to Base Case of approximately \$2.2 million could be realized from 2026 onward, compared to \$3.4 million estimated under the original model that included all thirteen municipalities. The revised net annual shortfall compared to Base Case increases significantly in 2021 as it did under the original model, resulting from the stacking of one-time costs and recurring incremental costs at Commission start-up. As the one-time costs drop off, the incremental costs stabilize, and service efficiency savings are realized.

A net annual funding shortfall under the revised model continues through 2023 with a peak in 2021 at an estimated \$3.3 million additional funding shortfall in excess of the Base Case, which is less than the \$4.4 million peak in 2021 forecasted under the original model. In both the original and revised financial model, these additional shortfalls resulting from the Commission are forecasted to reverse in 2024 whereby efficiency savings begin to exceed incremental costs. This demonstrates that the Commission can operate at a lower aggregate cost compared to the cost of operating separate, existing transit agencies. These estimated savings would be projected to continue past the business case period and can be used to reduce the Commission's annual funding shortfall or reinvested back into transit service enhancements.

Cumulative net savings in annual shortfall compared to Base Case

When the incremental one-time and recurring costs are factored in, it is estimated the Commission will have a cumulative net deficit of approximately \$290 thousand by the end of 2026 compared to an estimated surplus of \$800 thousand forecasted if all thirteen municipalities were to join the RTSC. This delta of \$1.1m is driven primarily by the reduction in savings in operational efficiencies that are available for capture by the Commission, given fewer routes can be interlined and less non-revenue hours can be eliminated with fewer transit agencies joining the Commission. This cumulative deficit will be recovered in Q1 of 2027 instead of by Q3 in 2026, as initially estimated in the Final Report.

While compared to the original model it is expected to take less than one additional year for the Commission to begin running at cumulative savings with only ten member municipalities, there are many ways the Board and executive leadership can accelerate savings. For instance, savings realized through consolidation could be captured at a more aggressive rate, an increase in the cost of access agreements with non-member municipalities could be negotiated, and other revenue streams explored, such as delivering contracted services at a mark-up to third-party organizations.



Recovery of one-time startup and recurring incremental costs

The pace at which estimated savings, and break even, can be accelerated is through additional funding sources, including grant contributions, to offset the one-time costs associated related to standing up the Commission. As explained in the Final Report, no additional revenue sources such as grant funding have been recognized as part of the creation of the RTSC because they cannot be sure to be realized. Should they have been included in the financial model but not later realized, municipalities would be left accountable to cover unanticipated additional costs which would have negative consequences.

Estimated RTSC incremental costs, service efficiencies and cash flow requirements

Given there will be a cumulative net cash flow requirement in excess of the aggregate Base Case contribution, it is anticipated that the Commission will also utilize a short-term revolving loan facility under the revised model. The projected financing required under the revised model reaches a peak cumulative drawdown of approximately \$5.2 million in 2023. This is compared to an estimated \$6.7 million peak cumulative drawdown under the original model in the same year.

As RTSC operations begin to stabilize in the later years of the business case, increased service efficiencies are estimated and the proceeds of which will go towards repayment of the short-term financing facility. Full repayment of the financing facility is expected in 2026, but this short-term funding can be reduced through a series of different savings and revenue generation approaches mentioned earlier.

3.3 Revised Base Case

As explained in the Final Report, the Base Case is defined as the operational forecast of each municipality, consolidated to form a single annualized figure for the duration of the business case. Under the revised model, it provides a benchmark estimate of expected revenues, expenses and resulting operating shortfall (or surplus) of existing and future transit services should they continue to be delivered by separate municipal transit agencies across the ten municipalities without a commission.

Summary of revised Base Case financials

The average annual estimated Base Case funding shortfall through the duration of the business case period is approximately \$38.6 million under the revised model, compared to \$57.8 million under the original model. Base Case figures were obtained from individual municipalities who are either currently providing transit services or will commence services within the business case period.

Following the publication of the Final Report in January, Base Case figures have been revised to no longer include Strathcona County, Leduc County or Sturgeon County financials due to the results of Council voting. Base case figures have also been adjusted for Spruce Grove, Stony Plain and Parkland County, related to changes in their current service offerings which are described in the *Revised Transit Service Delivery Model* section of this Addendum. In addition, Edmonton has seen a reduction in service hours they expect to reallocate to the Commission resulting from many of the route adjustments previously noted.

The revised net aggregate funding shortfall of continuing to operate separate municipal transit agencies across the ten municipalities over a five-year period is forecasted to be approximately \$193.4 million compared to \$288.7 million under the original model.

The following table summarizes revised Base Case financials both by municipality and in aggregate. For purposes of assessing the financial impact to municipalities, the forecasted funding shortfall for each year of the business case period will be compared to the funding shortfall of operating under a commission in the RTSC Case.

Table 8 - Annual Base Case funding shortfall summary table



Please refer to Table 47 on page 130 of the Final Report for the original table

Revised Base Case Funding Shortfall <i>Thousands \$CAD</i>	Revised Annual Base Case transit operations forecasted for business case operating period (2022-2026)						
	2022	2023	2024	2025	2026	Avg	% of total
City of Edmonton	20,438	20,742	21,179	21,599	22,015	21,195	54.9%
City of St. Albert	10,702	10,861	11,090	11,310	11,528	11,098	28.7%
City of Spruce Grove	1,714	1,754	1,799	1,845	1,892	1,801	4.7%
Parkland County	561	570	582	593	605	582	1.5%
City of Leduc	1,471	1,515	1,562	1,593	1,624	1,553	4.0%
City of Fort Saskatchewan	1,292	1,311	1,338	1,365	1,391	1,339	3.5%
City of Beaumont	392	398	406	414	422	406	1.1%
Town of Stony Plain	446	452	462	471	480	462	1.2%
Town of Morinville	0	0	0	0	0	0	0.0%
Town of Devon	182	185	189	193	196	189	0.5%
Revised Base Case Funding Shortfall Total	37,198	37,788	38,608	39,383	40,152	38,626	100.0%

3.4 Revised RTSC Case

As explained in the Final Report, the RTSC Case defines the costs and savings associated with transitioning to a commission structure of transit services delivery over a seven-year period from 2020-2026. Following the same approach taken in the original model, the revised RTSC Case was built up with incremental costs of standing up and operating the Commission by adding them the Base Case funding shortfall. Revised savings from the more efficient delivery of services under the RTSC are then deducted to arrive at an updated aggregate annualized funding shortfall.

Summary of RTSC Case financials

The following table summarizes the revised RTSC Case financials on an annual basis, built up from the revised estimated Base Case funding shortfall. It describes the forecasted funding shortfall under the Commission for each year of the business case period the RTSC is expected to be operating and delivering regional transit services across the ten municipalities from 2022-2026. It also incorporates anticipated implementation and incremental operating costs due to start-up activity and financing requirements in the two years prior to regional services being rolled out under the RTSC in 2022.

**Table 9 - Revised RTSC Case:
Funding shortfall build-up**



Please refer to Table 48 on page 133 of the Final Report for the original table

Revised RTSC Case - Funding Shortfall Build-up	Non-Operating Period		Operating Period					Total
	2020	2021	2022	2023	2024	2025	2026	
<i>Thousands \$CAD</i>								
Base Case Funding Shortfall Total	-	-	37,198	37,788	38,608	39,383	40,152	193,129
One-time / Startup Costs								
Branding	-	100	150	300	-	-	-	550
Infrastructure & Assets	-	76	-	-	-	-	-	76
Legal and professional	40	80	80	-	-	-	-	200
Organizational	74	461	82	-	-	-	-	618
Public Engagement	-	100	100	-	-	-	-	200
Service Delivery	-	250	250	-	-	-	-	500
Program Delivery	300	580	-	-	-	-	-	880
Total one-time / startup costs	414	1,647	662	300	-	-	-	3,024
Recurring Incremental Costs								
Incremental Resourcing Cost	-	1,340	1,140	1,167	1,195	1,224	1,253	7,320
Office Lease & Utilities	-	96	99	101	103	106	108	613
Policy & Legal	-	29	29	30	31	32	32	184
Technology Licenses and Service	-	70	90	99	102	104	106	571
Interest carrying costs	8	81	163	184	187	145	69	837
Other Incremental Costs	-	80	80	80	80	80	80	480
Total recurring incremental costs	8	1,695	1,601	1,661	1,698	1,691	1,650	10,005
Total Incremental Costs	422	3,342	2,264	1,961	1,698	1,691	1,650	13,028
Service Efficiency Savings								
Revenue Hours	-	-	986	1,359	2,116	2,872	3,219	10,553
Non-Revenue Hours	-	-	204	282	438	595	667	2,186
Total Service Efficiency Savings	-	-	1,191	1,641	2,554	3,467	3,886	12,739
RTSC Funding Shortfall Total	422	3,342	38,271	38,109	37,752	37,607	37,916	193,418
Net Increase (Savings) in Annual shortfall Compared to Base Case	422	3,342	1,073	321	(856)	(1,776)	(2,236)	
Cumulative Net Increase (Savings) in Annual Shortfall Compared to Base Case	422	3,765	4,838	5,158	4,302	2,525	289	

Key takeaways of RTSC Case financials

As shown above, the revised aggregate net funding shortfall of operating the RTSC over a seven-year period is forecasted to be an estimated \$193.4 million (\$287.9 million under the original model), which is comparable to the revised aggregate Base Case figure of \$193.1 million (\$288.7 million under the original model) over a five-year period.

As previously mentioned, funding shortfalls could be reduced through a variety of funding mechanisms, including municipal, provincial, and federal operating contributions and grants. Contributions used in the model are comprised of existing municipal operating contributions only and escalated to account for the inflation of costs and revenues, as well as short term financing as required. Use of a short-term financing facility was incorporated to mitigate increases to each of the ten municipality's contributions for services, as forecasted in the revised Base Case. Financing is discussed in more detail below and will help municipalities avoid increases in their required contributions to the RTSC until savings from efficiencies can be realized to offset initial financing draws.



3.5 Revised incremental costs

Background

As explained in the Final Report, there are costs associated with forming and operating the Commission that are above and beyond what municipal transit agencies are otherwise forecasted to spend to provide services under the Base Case. These are defined as “incremental costs,” which are classified either as:

- ▶ **One-time / Startup Costs:** These costs are derived from implementation plan activities required to form the RTSC and transition to service delivery under the Commission; or,
- ▶ **Recurring Incremental Costs:** These represent the elevated ongoing costs associated with operating a commission year over year.

Summary of revisions to incremental costs

The highest aggregate incremental costs of the Commission under the revised model are expected to be incurred in 2021 at an estimated \$3.3 million compared to \$4.4 million under the original model, given municipal transit agencies and the RTSC will be operating concurrently and resource capacity is needed across both. Revised recurring incremental costs are estimated to be approximately \$1.7 million on an annual basis thereafter unlike under the original financial model where these costs were approximated to be about half a million dollars higher at \$2.2 million annually going forward.

Alignment of new roles, and the related costs, to the operating model and execution of the strategic plan from 2022 through 2026 will be the responsibility of the CEO and the Board

One-time and start-up costs are expected in the year prior to the RTSC being formed and for three years after. This investment will facilitate a smooth transition to the RTSC from municipal transit agencies, of which the latter will cease to operate by mid-2022 with some exceptions. Under the revised financial model, one-time and start-up costs have been adjusted downward to reflect fewer expenses resulting from a smaller commission (with ten vs thirteen municipalities) and less service complexity. The timing of costs has also been adjusted to reflect likely postponements of activities due to COVID-19 impacts.

3.6 Revised financial value of service efficiencies


Background

Service efficiencies are realized through the consolidation of routes and stop locations, which results in a reduction in the number of hours required to deliver the same service. This reduction in service hours equates to a lower service delivery cost. Efficiencies gained through the consolidation of the service delivery model can be classified into two categories:

- ▶ **Revenue hour:** scheduled hours of service available to passengers for transport on routes. Calculated on a route-by-route basis for all hours that a revenue vehicle is in operation.
- ▶ **Non-revenue hour:** non-revenue earning service hours (movement of a transit vehicle without passengers aboard) required to deliver planned transit service.

It is important to note that service efficiency savings do not include estimated savings from potential reductions in operating costs, which may be realized through the consolidation of procurement processes and other operational efficiencies over the business case period, all still possible under the revised business case. The revised estimated annual efficiency savings are calculated using the same hourly operating costs (rates) used under the original model. This is equivalent to the estimated direct operating costs of service, as provided by ETS.

Table 10 - Hourly rates used to calculate service efficiencies under both the original and revised financial model


 Please refer to Table 49 on page 135 of the Final Report for the original table

Type of service hour efficiency	Rate per hour
Non-revenue	\$101
Revenue	\$101

As was demonstrated under the original model, the revised annual service efficiencies estimated through consolidation are also realized gradually in a step-wise manner over the course of the business case to remain conservative; this is because as it will take time for the Commission’s operations to stabilize and for service efficiencies to be fully realized. It is incumbent upon future RTSC leadership to remain focused on realizing the operational efficiencies available to them on behalf of the ten member municipalities.

The estimated annual service efficiencies expected to be realized under the revised model are summarized in the table below. Revenue hour savings are calculated using approximately 615 hours per week as per the analysis in section 2.6 of this addendum report.

Table 11 - Revised annual realized service efficiencies

 Please refer to Table 50 on page 135 of the Final Report for the original table

Thousands \$ CAD

Service Efficiency	2022	2023	2024	2025	2026	Average
Revenue Hours	986	1,359	2,116	2,872	3,219	2,111
Non-Revenue Hours	204	282	438	595	667	437
Total	\$ 1,191	\$ 1,641	\$ 2,554	\$ 3,467	\$ 3,886	\$ 2,548
Estimated Realization of Potential Efficiency (%)	30.64%	42.22%	65.72%	89.21%	100.00%	65.56%

3.7 Revised municipal requisitions

Each municipality’s revised requisition for the Commission’s average annual operating shortfall is shown in the following table. As noted in the original report, the estimated municipal requisitions for the RTSC do not include capital requisitions, which are intended to cover fixed asset reserve contributions and lifecycle costs, such as engine and transmission overhauls. Refinement and approval of the asset transfer framework is underway to help municipalities understand potential implications to both their municipality’s specific asset portfolio and financial position.

Table 12 - Revised municipal requisition per municipality for duration of business case operating period



Please refer to Table 54 on page 141 of the Final Report for the original table

Revised Municipal Requisitions

Thousands \$CAD

	2022	2023	2024	2025	2026	Avg	% of total
City of Edmonton	20,388	20,707	21,160	21,587	22,008	21,170	54.8%
City of St. Albert	10,621	10,789	11,033	11,262	11,487	11,039	28.6%
City of Spruce Grove	1,695	1,723	1,759	1,794	1,829	1,760	4.6%
Parkland County	534	543	553	562	572	553	1.4%
City of Leduc	1,488	1,514	1,544	1,574	1,605	1,545	4.0%
City of Fort Sask	1,281	1,303	1,329	1,355	1,381	1,330	3.4%
City of Beaumont	350	355	361	367	374	361	0.9%
Town of Stony Plain	501	509	518	527	537	518	1.3%
Town of Morinville	178	180	183	185	188	183	0.5%
Town of Devon	163	165	167	169	171	167	0.4%
Total Revised Annual Requisition	37,198	37,788	38,608	39,383	40,152	38,626	100.00%

The following table indicates the updated annual difference between the allocated municipal requisitions and Base Case financials for each of the ten municipalities throughout the business case operating period. This represents the estimated increase (or decrease shown by bracketed numbers) over the annual revised Base Case funding shortfall.

Table 13 - Revised municipal requisition difference from Base Case for duration of business case operating period



Please refer to Table 55 on page 142 of the Final Report for the original table

Thousands \$CAD

Municipality	2022	2023	2024	2025	2026	Total	Average
City of Edmonton	(51)	(35)	(19)	(12)	(7)	(124)	(25)
City of St. Albert	(81)	(72)	(57)	(48)	(40)	(299)	(60)
City of Spruce Grove	(19)	(31)	(40)	(51)	(63)	(203)	(41)
Parkland County	(27)	(27)	(29)	(31)	(32)	(147)	(29)
City of Leduc	17	(1)	(18)	(19)	(19)	(38)	(8)
City of Fort Saskatchewan	(10)	(8)	(9)	(10)	(10)	(48)	(10)
City of Beaumont	(42)	(42)	(45)	(47)	(48)	(224)	(45)
Town of Stony Plain	55	56	56	56	57	280	56
Town of Morinville	178	180	183	185	188	914	183
Town of Devon	(20)	(20)	(22)	(24)	(25)	(111)	(22)
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

As highlighted by the original report, these figures will continue to be refined by the RTSC through their annual planning and budgeting cycle and will be impacted by actual operating results. These estimates are provided for municipalities to consider the revised potential funding shortfall allocated to them through annual requisitions compared to their planned funding shortfall they would otherwise expect to realize if the ten municipalities continued to deliver transit services separately without a Commission or continued to not receive transit under the Base Case.

When compared to municipalities anticipated future net funding shortfall amounts to deliver transit, for those that have existing agencies or intend to commence transit services in the next two years, the revised annual contributions continue to be comparable and thereby reflect that their costs under the RTSC do not need to increase considerably.



For those that are not able to receive transit services without the support of the RTSC, the revised costs associated with obtaining those services also remain reasonable and provide a lower cost of entry than if they were to provide the services on their own.


Finally, for those that are increasing service levels because of the Commission, the incremental costs are outweighed by the benefits of the additional services offered under the revised model and allocations.

Overall, the revised, net funding shortfall allocations passed back to the ten municipalities from the Commission are reasonable compared to their own costs, especially when assessed against the improved services and opportunities within the region.

3.8 Revised example build-up of funding shortfall allocation

The following table provides a revised summary of the build-up of the average annual municipal requisition throughout the RTSC business case operating period. Each of the ten municipalities are allocated a portion of the Base Fee, Regional, Local, and Enhanced Services funding shortfall per the respective component methodologies described in the original report.

Table 14 - Revised example build-up of funding shortfall allocation per year (average)

 Please refer to Table 56 on page 143 of the Final Report for the original table

Thousands \$CAD

Municipality	Base Fee	Local Service	Regional Service	Enhanced Service	Total Cost per Municipality	% System Shortfall
City of Edmonton	2,043	-	19,127	-	21,170	54.8%
City of St. Albert	190	4,933	5,915	-	11,039	28.6%
City of Spruce Grove	123	420	1,217	-	1,760	4.6%
Parkland County	119	-	434	-	553	1.4%
City of Leduc	114	868	-	563	1,545	4.0%
City of Fort Saskatchewan	102	516	712	-	1,330	3.4%
City of Beaumont	87	-	274	-	361	0.9%
Town of Stony Plain	87	216	215	-	518	1.3%
Town of Morinville	71	-	112	-	183	0.5%
Town of Devon	64	-	103	-	167	0.4%
Total	\$ 2,999	\$ 6,954	\$ 28,110	\$ 563	\$ 38,626	100.0%

3.9 Revised Base Fee Forecasts

As explained in the original report, the Base Fee is intended to serve as a 'cost of entry' to the RTSC and is composed of a variable (\$2 per capita) and fixed (\$50,000) component. The structure of the fee and proportions of fixed and variable components were designed to balance a reasonable fee against the capacity of municipalities' budgets to absorb incremental cash outflow over existing annual budgets.

The following table demonstrates the revised, forecasted Base Fee per municipality for each year of the Commission's operations throughout the business case period (2022-2026). Note that individual municipality base fee requisitions have not changed as a result of non-participating municipalities. They only change in the revised model is a lower total collection of base fees.

Table 15 - Revised forecasted base fee per municipality yearly

Please refer to Table 57 on page 144 of the Final Report for the original table

Thousands \$CAD

Municipality	2022	2023	2024	2025	2026	Average
City of Edmonton	1,990	2,016	2,042	2,069	2,096	2,043
City of St. Albert	186	188	190	192	194	190
City of Spruce Grove	121	122	123	124	125	123
Parkland County	117	118	119	119	120	119
City of Leduc	112	113	114	115	116	114
City of Fort Saskatchewan	100	101	102	102	103	102
City of Beaumont	86	87	87	88	88	87
Town of Stony Plain	86	86	87	87	88	87
Town of Morinville	70	71	71	71	72	71
Town of Devon	64	64	64	64	64	64
Total	\$ 2,933	\$ 2,966	\$ 2,999	\$ 3,032	\$ 3,066	\$ 2,999

3.10 Revised service based allocations

Following the Base Fee allocation, the remainder of the funding shortfall is allocated according to the type of service and the degree of service provided to each municipality. Each service type (Regional, Local, and Enhanced) is assigned an estimated Funding Shortfall per hour rate, which has been updated from the original model and is shown below in the following table.

Table 16 - Updated transit service rate table for the funding shortfall allocation methodology

Please refer to Table 59 on page 146 of the Final Report for the original table

Funding shortfall allocation - revised hourly service rate table (in \$CAD)						
Service type	2022	2023	2024	2025	2026	Average rate
Regular service	107.30	109.01	111.50	113.83	116.13	111.55
Small bus	73.94	75.42	76.90	78.43	80.06	76.95
Enhanced service (Leduc)	107.30	109.01	111.50	113.83	116.13	111.55
Average growth rate	-	1.85%	2.04%	2.03%	2.00%	

In comparison to the rates provided in the original model, these hourly rates have decreased as the overall cost to deliver the system has gone down due to the nature of the participating municipalities included under the revised model.

3.11 Summary of revised service allocations

Each service type, the weekly hours, and the classification of annual funding shortfall rate assigned are summarized in the *Revised RTSC service summary and annual shortfall calculation table* on the next page. Taking the same approach as with the original model, Regional Service routes are estimated on a per-route basis, while Local and Enhanced Services are estimated on a per-municipality basis under the revised model. The projected service hours for Regional, Local, and Enhanced Services are used to forecast the annual operating shortfall associated with each of the different service types.

Table 17 - Revised RTSC service summary and annual shortfall calculation table²



Please refer to Table 60 on page 147 of the Final Report for the original table

RTSC (Regional) Route Service		Weekly Hours	Hourly Rate	Annual Cost	% of Total
Regional Service	Rapid #1	1,110	111.55	6,437,343	17%
	Rapid# 2	1,116	111.55	6,470,697	18%
	RE #1	371	111.55	2,154,675	6%
	RE #3	1,227	111.55	7,117,766	19%
	RE #4	171	76.95	685,637	3%
	RE #6	491	111.55	2,848,441	8%
	RE #7	385	111.55	2,234,725	6%
	MTA (Acheson)	40	76.95	161,056	1%
Total Regional Service Hours		4,912	-	\$ 28,110,339	77.18%
Local Direct Service		Weekly Hours	Hourly Rate	Annual Cost	% of Total
Local Service	City of Edmonton				
	City of St Albert	850	111.55	4,933,026	13%
	City of Spruce Grove	105	76.95	420,145	2%
	Parkland County	-	76.95	-	0%
	City of Leduc	217	76.95	868,300	3%
	City of Fort Saskatchewan	129	76.95	516,178	2%
	City of Beaumont	-		-	
	Town of Stony Plain	54	76.95	216,075	1%
	Town of Morinville	-		-	
	Town of Devon	-		-	
Total Local Direct Service Hours		1,355	-	\$ 6,953,724	21.30%
Enhanced Direct Service		Weekly Hours	Hourly Rate	Annual Cost	% of Total
Enhanced Service	City of Edmonton				
	City of St Albert	-		-	
	City of Spruce Grove	-		-	
	Parkland County	-		-	
	City of Leduc	97	111.55	562,669	1.5%
	City of Fort Saskatchewan	-		-	
	City of Beaumont	-		-	
	Town of Stony Plain	-		-	
	Town of Morinville	-		-	
	Town of Devon	-		-	
Total Enhanced Direct Service Hours		97	-	\$ 562,669	1.52%
Total for Allocation		6,364	-	\$ 35,626,733	100%
Base Fee				\$ 2,999,057	
Total Annual Funding Shortfall for Allocation				\$ 38,625,789	

² Note: Annual costs represent show average annual cost for each route or service for duration of business case operating period (2022-2026).

3.12 Regional Service updates


The regional service allocation is distributed across the ten participating municipalities according to the following methodology. The new annual funding shortfall for the Regional Service, which is reflected by the revised RTSC conceptual transit services design, is estimated by:

- ▶ Multiplying the respective annual shortfall rate by the number of weekly service hours, as done under the original model; and,
- ▶ Multiplying the resulting figure by 52 to arrive at the revised annual estimated funding shortfall per Regional route.

The total revised funding shortfall of each route is then allocated by assigning an estimated percentage of each route to municipalities receiving the service. As highlighted in the original report, this continues to serve as *an interim model* proposed for the business case operating period. The final percentage allocations of each Regional route are subject to confirmation by the RTSC prior to commencing operations and then annual thereafter during each planning cycle. In general, the percentage allocations reflect the amount of service or benefit received by each respective municipality. In adhering to the principles and intent of the Commission, the assignment of Regional Service route funding shortfall values was completed using integers in intervals of 5%.

The total, estimated, revised Regional Service funding shortfall allocated to each of the ten municipalities per year of the operating period is provided in the following table.

Table 18 - Revised Regional Service cost per municipality

 Please refer to Table 61 on page 148 of the Final Report for the original table

Thousands \$CAD

Municipality	2022	2023	2024	2025	2026	Average
City of Edmonton	18,397	18,691	19,118	19,518	19,912	19,127
City of St. Albert	5,690	5,780	5,913	6,036	6,158	5,915
City of Spruce Grove	1,171	1,190	1,217	1,242	1,267	1,217
Parkland County	417	425	434	443	452	434
City of Leduc	-	-	-	-	-	-
City of Fort Saskatchewan	685	696	712	727	741	712
City of Beaumont	264	269	274	280	285	274
Town of Stony Plain	207	211	215	220	224	215
Town of Morinville	107	109	112	114	116	112
Town of Devon	99	101	103	105	107	103
Total	27,037	27,471	28,097	28,684	29,263	28,110

As a recap, throughout the consultation process with the Transition Team, multiple potential funding allocation methodologies were evaluated, including those that relied on proportion of population and fixed assessment values. The long-term goal of the RTSC is to harmonize the service levels and resulting funding shortfall across the Region to provide an improved service to all municipalities. As such, the use of route-based allocation percentages serves as an interim model.

The intent was to arrive at an interim allocation model that aligns with the principles described above, while balancing the resulting municipal requisitions with the estimated Base Case funding shortfall. The *Regional Service route allocation methodology* has been updated to reflect the change in anticipated membership and revised conceptual routing. It provides percentage allocation of each Regional Service route and the resulting funding shortfall allocated to each municipality under the revised model.

Table 19 - Revised Regional Service route allocation methodology³

Please refer to Table 62 on page 149 of the Final Report for the original table

RTSC (Regional) Route	Rapid #1	Rapid #2	RE #1	RE #3	RE #4	RE #6	RE #7	MTA	Total Shortfall
City of Edmonton	40%	100%	30%	100%	15%	50%	35%	5%	19,127,075
City of St Albert	60%					25%	60%		5,915,351
City of Spruce Grove			55%					20%	1,217,283
City of Leduc									-
Parkland County			5%		30%			75%	434,216
City of Fort Sask						25%			712,110
City of Beaumont					40%				274,255
Town of Stony Plain			10%						215,468
Town of Morinville							5%		111,736
Town of Devon					15%				102,846
Total % Allocation	100%	100%	100%	100%	100%	100%	100%	100%	\$ 28,110,339

The revised average annual shortfall for each Regional Service route is provided in the table to the right. Each Regional route's annual estimated shortfall is allocated to the associated municipality per the percentages assigned above. It is important to note that the revised annual shortfall for allocation shown represents the average cost across the business case operating period (2022-2026).

Route	Annual Shortfall for Allocation
Rapid #1	6,437,343
Rapid #2	6,470,697
RE #1	2,154,675
RE #3	7,117,766
RE #4	685,637
RE #6	2,848,441
RE #7	2,234,725
MTA	161,056
Total	\$ 28,110,339

3.13 Local Service updates

Local Service uploaded to the RTSC is calculated as the number of annual service hours multiplied by an estimated shortfall per hour rate, which is the same approach used under the original model. The cost of Local Service is directly assigned to the respective community that receives that service. The revised annual estimated Local Service costs are provided in the following table. Note that in this updated model the local services previously allocated under Parkland County related to the Acheson shuttle have been reallocated to the Regional Service section to better align with the nature of the services. There have been no cost impacts as a result of this change.

Please refer to Table 63 on page 150 of the Final Report for the original table

Table 20 - Revised Local Service cost per municipality

Municipality	2022	2023	2024	2025	2026	Average
City of Edmonton	-	-	-	-	-	-
City of St. Albert	4,745	4,820	4,931	5,034	5,135	4,933
City of Spruce Grove	404	412	420	428	437	420
Parkland County	-	-	-	-	-	-
City of Leduc	834	851	868	885	903	868
City of Fort Saskatchewan	496	506	516	526	537	516
City of Beaumont	-	-	-	-	-	-
Town of Stony Plain	208	212	216	220	225	216
Town of Morinville	-	-	-	-	-	-
Town of Devon	-	-	-	-	-	-
Total	6,686	6,801	6,950	7,093	7,238	6,954

³ Note: Average annual costs for duration of the business case operating period are shown.

3.14 Enhanced Service updates

Enhanced Services include those developed in consultation with individual municipalities, which under the revised model only included City of Leduc. The cost of these services is allocated at 100% to the respective municipalities receiving the service, which was the same approach used under the original model.

As per the MOU, municipalities may request services that directly benefit their community and go beyond the level of service suggested by the RTSC Transit Service Level Guidelines. As such, Enhanced Service are allocated using an increased hourly service rate that is different for each community. The following table demonstrates the allocation of Enhanced Services to the respective municipalities who requested this component out of the ten participating municipalities. The table below reflects the removal of enhanced services for Strathcona County and Leduc County due to their non-participation.

Table 21 - Revised Enhanced Service cost per municipality



Please refer to Table 64 on page 151 of the Final Report for the original table

Thousands \$CAD

Municipality	2022	2023	2024	2025	2026	Average
City of Edmonton	-	-	-	-	-	-
City of St. Albert	-	-	-	-	-	-
City of Spruce Grove	-	-	-	-	-	-
Parkland County	-	-	-	-	-	-
City of Leduc	541	550	562	574	586	563
City of Fort Saskatchewan	-	-	-	-	-	-
City of Beaumont	-	-	-	-	-	-
Town of Stony Plain	-	-	-	-	-	-
Town of Morinville	-	-	-	-	-	-
Town of Devon	-	-	-	-	-	-
Total	541	550	562	574	586	563

As highlighted in the original report that included figures for all thirteen municipalities, it is important to note that the revised estimated funding shortfall allocations for each service type are developed from budgeted operating figures provided by municipalities. The actual funding shortfall required each year will vary depending on the real costs incurred and the timing of services being transferred to the RTSC.



As explained in the Final Report, a Multiple Account Evaluation (MAE) framework was used to evaluate the costs and benefits of developing and implementing a RTSC. The MAE framework explicitly includes costs and benefits that are quantified, as well as qualitative factors in its evaluation approach recognizing that several factors may be difficult or impossible to quantify. The weighting and the relative importance of the evaluation account conclusions will be influenced by an individual’s own values, interests and beliefs.

The revised business case is based on the detailed, quantifiable cost and revenue numbers provided by the ten municipalities, leading practice and other inputs gathered through focus groups prior to the release of the Final Report. Any implications to the business case presented in the Final Report are highlighted in the table below and are based on a cost benefit analysis associated with a comparison

Table 22 - Summary of business case implications and key takeaways from the MAE evaluation of implementing the RTSC under the revised model

Evaluation account	Business case implications	Key takeaways
<p>Financial Account: Assesses the financial implications of delivering regional transit, considering forecasted costs and savings of providing services</p>	<ul style="list-style-type: none"> ▶ Net savings in annual shortfall compared to Base Case of \$2.2m compared to \$3.4m under the original financial model ▶ Total estimated savings from operational efficiencies per year at maturity in 2026 remain positive at \$3.9 million compared to \$5.5 million under the original financial model ▶ Lower service delivery risk to municipalities over the transition period with fewer members relative to before ▶ Recurring incremental costs due to the Commission are approximately \$1.7m under the revised model compared to \$2.2m estimated per year after stabilization under the original financial model resulting in a lower cost under the revised model ▶ It is estimated the Commission will have a cumulative net deficit of approximately \$290 thousand by the end of 2026 compared to an estimated surplus of \$800 thousand however the recovery of this difference will take less than nine months 	<p>While the savings realized through consolidation are less under the revised RTSC Case than they would be if all thirteen municipalities joined, the recurring incremental costs have also reduced which provides an offset. The Commission can still operate at a lower cost than the cumulative costs of the ten municipalities operating transit services separately.</p> <p>The directional assessment of the Financial Account remains net positive (moderate) given it contributes \$2.2m per year in positive savings to reinvest back into regional transit initiatives</p>



Evaluation account	Business case implications	Key takeaways
<p>Transit User Account: Assesses the customer experience implications of delivering regional transit, considering interactions and measures of service performance</p>	<ul style="list-style-type: none"> ▶ Compared to the original regional transit model, the revised design may provide a less uniform travel experience for customers moving from Commission managed routes to destinations in Strathcona County and Leduc County ▶ Through collaboration between the RTSC and non-participating municipalities a regional network benefiting the transit user can be maintained 	<p>The revised regional transit services network continues to provide more seamless and efficient movement of people across municipalities boundaries, resulting in a better customer experience as a result of factors such as increased, directness, speed of travel and simplicity of trip planning.</p> <p>The directional assessment of the Transit User Account remains net positive (Moderate).</p>
<p>Service Provider: Assesses the Commission's potential to achieve regional objectives through transit service delivery, considering the size and complexity of operations</p>	<ul style="list-style-type: none"> ▶ With ten of thirteen municipalities still participating in the RTSC, there continues to be a strong regional brand identity with higher degrees of influence in advocating for transit ▶ Under the original RTSC Case, 13/13 municipalities would receive transit services instead of 11, while under the revised case, 10/10 municipalities will receive transit, including Morinville which does not currently provide transit ▶ Less complex stakeholder engagement to address the needs of a regional customer base under the revised model ▶ Under the revised RTSC Case, the ten member municipalities would have a greater degree of influence in advocating for transit and negotiating access agreements 	<p>A regional transit services provider is still better equipped than an individual municipality to action on regional objectives and enlist both support and investment in transit for the purposes of improving service delivery and facilitating regional mobility on a larger scale.</p> <p>The directional assessment of the Service Provider Account remains net positive (high), as ten thirteen municipalities (10 of 12 who plan on operating transit) forms a significant critical mass.</p>
<p>Community Account: Assesses the social impacts of delivering regional transit, considering quality of life, safety and community vitality</p>	<ul style="list-style-type: none"> ▶ The influence the RTSC would have on communities remains unchanged for the ten members, such as the positive impacts on: ▶ The ability for municipalities to retain residents in their communities ▶ Quality of life and productivity ▶ The extent to which opportunities exist to align land-use and transit planning ▶ Capacity to engage stakeholder and perform public engagement ▶ The degree to which sophisticated safety and security measures can be improved across the service network 	<p>By connecting the ten municipalities with regional transit services, residents across these communities can become less reliant on personal vehicle use and have more choice when it comes to where they want to live, work and play, which equates to a higher quality of life and community prosperity.</p> <p>The directional assessment of the Community Account remains net positive (Moderate-High).</p>



Evaluation account	Business case implications	Key takeaways
<p>Economic Account: Assesses the economic impacts of delivering regional transit, considering business investment and regional prosperity</p>	<ul style="list-style-type: none"> ▶ Under the revised RTSC Case, the Commission will provide people from across the ten municipalities with greater access to employment opportunities and make it more attractive for business investment resulting from integrated transit services ▶ While a smaller membership in the Commission comes with lower one-time startup costs, which have been reduced by nearly \$1.4 million due to decreased implementation complexity, the RTSC still requires upfront investment to secure return on investment over the long term ▶ With 10 participating municipalities the ability to advocate for greater support for investment in transit due to the relative size of operations continues 	<p>Regional transit services improve the connectivity and economic growth of the region by increasing access to employment and attractiveness for business investment, which are benefits amplified by the disruption caused by COVID-19 and economic imperative of delivering services better than before.</p> <p>The directional assessment of the Economic Account remains net positive (Moderate).</p>
<p>Environmental Account: Assesses the environmental impact of delivering regional services, considering resource use and sustainability</p>	<p>▶ Given the reduction in the size of operations of the Commission under the revised RTSC Case, the amount of operational efficiencies and therefore positive impact of the following factors exist but to a somewhat lesser degree:</p> <ul style="list-style-type: none"> ▶ Reduced Greenhouse Gas Emissions ▶ Improved air quality and public health ▶ Increased capacity to implement environmental management system ▶ Greater flexibility and ability to deploy fleet, so vehicle capacity matches demand 	<p>While less pronounced under the revised RTSC Case, a regional transit service still allows for a more efficient network to reduce waste and emissions, and supports a mode shift away from personal vehicles, reducing overall environmental impact to the region.</p> <p>The directional assessment of the Environmental Account remains net positive (moderate) as operational efficiencies both today and in the future can be realized through coordinated planning across ten municipalities.</p>



In summary, all six account evaluations remain positive despite the change in anticipated membership under the Commission from thirteen to ten municipalities in the Edmonton Metropolitan Region. The Transit User, Community and Economic Account evaluations remain directionally positive and generally unchanged under the revised business case. The Financial, Service Provider and Environmental Account evaluations' directional assessments remain net positive overall, but there are some lost opportunities as it relates to:

- ▶ The amount of service hour savings possible through consolidation given the overall system is smaller and opportunities to reduce overlap within the system have decreased;
- ▶ The potential to achieve regional objectives through transit service delivery, considering the size and complexity of operations of the RTSC with ten members instead of thirteen; and,
- ▶ The degree of positive environmental impact anticipated given service redundancies will continue to exist where non-member municipality routes overlap with RTSC routes.
- ▶ It is worth noting that through continued collaboration within the region between the RTSC and non-participating municipalities, some of these diminished opportunities could potentially be mitigated. We encourage ongoing discussions with all transit service providers as implementation of the RTSC continues.



It should be emphasized that many aspects of the Final Report remain the same despite the change in proposed membership.

The impetus for establishing the RTSC in the context of the future of mobility and transit improvement opportunities identified through the current state analysis not only continues to be valid but is amplified by the disruption caused by COVID-19 and the economic imperative of delivering services better than before.

The purpose, vision, mission and strategy of the Commission continue to provide clear, overarching intent and priorities for activation by future RTSC leadership and the Board.

The governance model continues to balance regional and municipal interests to enable the RTSC to make important strategic and financial decisions that benefit communities.

The conceptual transit services design, transit model, projected service hour efficiency savings and financial model demonstrate a more seamless regional network, while still fiscally viable.

While the timing of key activities and milestones that form the implementation plan may adjust due to COVID-19 implications, the activities and milestones themselves do not change and the success factors in facilitating a smooth transition to operating under the RTSC also hold true.

Based on the revised business case and comprehensive evidence collected through this process, it is recommended that the ten municipalities in the Edmonton Metropolitan Region take the next step in forming a Regional Transit Services Commission.

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. For more information about our organization, please visit ey.com.

© 2020 EYGM Limited.

All Rights Reserved.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.
ey.com

