

Transit Fare Strategy Final Report



Prepared for
Strathcona County Transit Department

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Executive Summary

Introduction

The 2012 Transit Master (TMP) recommended that a detailed assessment of the fare structure and policy be conducted. The issues noted in the TMP included:

- Balancing equity between the fares paid by users of the system and community support with subsidies generated from tax sources
- Ensuring all residents can afford transit
- Encouraging youth to use transit more frequently
- Increasing customer convenience
- Transitioning Mobility Bus fares to equal fixed route Commuter and Local fares
- Adopting tiered pricing for fares and parking
- Reviewing reciprocity with neighbouring systems
- Streamlining fare structure by consolidating similar fares

Methodology

This project was designed to examine each of the issues identified in the TMP and to delve into all aspects of fare policy and fare pricing. The scope of the project did not include examining fare collection hardware issues. The study included five key components including:

- Identification of existing conditions and issues
- Identification and review of fare systems at peer systems and best practices
- Stakeholder consultations and public outreach
- Alternatives and analysis
- Conclusions and Recommendations

Existing Conditions

The current fares are shown in Executive Summary Figure 1:

Executive Summary Figure 1 – Existing Conditions

Strathcona County Transit				Mobility Bus			
	Type	Local	Commuter	Type	Cash	Tickets	Pass
Cash	Adult	\$3.25	\$6.00	Sherwood Pk Local	\$5.00	\$4.50	n/a
	Senior	\$3.25	\$5.00	Strathcona County to Sherwood Pk	\$7.25	\$6.50	n/a
	Student/youth	\$3.25	\$6.00	Sherwood Pk to Edmonton	\$7.75	\$7.00	n/a
	Child >6	Free	Free	Strathcona County to Edmonton	\$15.00	n/a	n/a
Tickets (each)	Adult	\$2.20	\$4.20				
	Senior	\$2.20	\$4.20				
	Student/youth	\$2.20	\$4.20				
	Child >6	Free	Free				
Monthly	Adult	\$56.00	\$103.00				
	Senior	\$56.00/Free	\$28.00				
	Student/youth	\$56.00	\$93.00				
	Everybody Rides	\$24.00	\$24.00				
	Child >6	Free	Free				
Annual	Senior	n/a	\$332.25/\$155.00				

Peer Review

The peer review and best practices were conducted using a combination of literature/internet review and personal contacts. Data from more than 15 systems was collected for use in preparing the peer review and best practices synthesis. The review of peer systems confirms that transit fares are as diverse as the systems and communities they serve. A number of innovative approaches were identified that were later adopted in the recommendations. Overall the research suggests that transit service levels are the leading determinate of transit ridership. Research indicates that in the U.S. fares have only about one third the impact of service as an influence on ridership. However fares can also play an important role in ensuring equity and distributing ridership to time periods when excess capacity may exist or be less expensive to provide.

First Round Stakeholder Consultations and Public Survey

An initial round of consultations was held with selected stakeholders. Public input was solicited through an anonymous online survey. The list of stakeholders who participated in a personal meeting or telephone interview included:

- The Mayor
- County Council
- Family and Community Services
- The Chamber of Commerce representing the business community
- Local school boards
- Transit Marketing and County Communications staff
- Transit Department management team

In addition a workshop session was held with Strathcona County Transit operations staff (including operators) and one session was held with the Customer Service Representatives. In general the urban Councillors and Council members with longer service were more concerned with transit issues, but all councillors did discuss important issues related to fares.

Among Stakeholders outside of County Council the highlights of the consultations included:

- General support of means tests instead of general discounts for seniors.
- Support for more targeted discounts to encourage ridership in the off peak, among student/youth, special events or participants in County programs.
- Existing fare system was confusing and not consistent.

Findings and Initial Proposed Fare Changes

The current fare system has a number of issues that can be addressed through changes or additions to the product range or price structure. These proposed changes respond to the issues raised in the TMP or identified from the stakeholders, public or review of existing conditions. In some cases the proposed strategies have been adopted from the peer systems or best practices. These key issues are:

- The current fares discounts seem ad hoc, and there is no consistent price relationship between products.
- The Adult Commuter fare has a very low (17 trips) multiplier¹ compared to the cash fare. Compared to the peer agencies the cash fare is very high, but with the low multiplier the monthly pass still has a very low price point.

¹ The multiplier is the number of times a single cash fare must be multiplied to equal a day or monthly pass. For example, if the cash fare is \$5 and a Monthly Pass is \$100 the multiplier is 20.

- There is a multitude (8) of senior fares with different and inconsistent discounts but discount products are not provided in all markets.
- There are no existing incentives to specifically attract young riders as a means of gaining familiarity with transit and developing future adult riders.
- There is no fare product designed to attract riders to off peak and local services where there is abundant additional capacity.
- The arrival of the double-decker buses means that for the first time in many years there will be additional capacity on the peak hour service that can be marketed using special fare products.

Ten options were tested in an elasticity model to determine their impact on revenue and ridership. Each of the fares in the tariff is based on either the cash fare or a multiplier of the cash fare, rounded to the nearest \$0.05. This means that an increase or decrease in the adult cash fare will ripple through the entire fare structure and provide an equivalent fare adjustment. This will maintain the relationship of the fares. A number of new discount programs are proposed. Some are general discounts to improve the equity of the system and others are designed to encourage ridership at times when there is surplus capacity or in market segments that are currently under represented on Strathcona County Transit services. These include standardizing student/youth and senior discounts, and having them available on each fare product; cash, tickets and passes. Several new fare products are also offered to target specific population segments which do not seem to be using the system. These new products are targeted to both the commuter system (e.g. Day Pass and Event Pass) as well as the local system (e.g. new student/youth passes, and recreation pass). These changes are consistent with resolving the issues identified in the TMP.

The Everybody Rides program is expanded by adding a new local pass. Fares for seniors with incomes greater than the low income cut off will increase significantly, but commuter fares for seniors who meet the low income standard will only experience a minor increase. On local routes low income seniors will be able to ride at all times with the new local Everybody Rides monthly pass, in place of the existing free fare during off peak times. This action is consistent with the majority of comments received from stakeholders that significant fare discounts should be directed to those who need it most and is consistent with the County's draft Municipal Subsidy Strategy as well as the direction of many other systems including ETS and Calgary Transit. The means test program is expanded to all persons needing only a local pass and it is recommended that a single means test such as the Federal LICO standard be used. A second elasticity model projects ridership will grow approximately 13 percent from 2016 to 2020. Revenues are projected to increase by approximately 15 percent from 2016 to 2020. The recommended fare structure is shown in Executive Summary Figure 2.

The findings concur with the recommendations of the TMP that Mobility Bus fares should be aligned with the fixed route fares but that Everybody Rides passes not be accepted. This recommendation is based on the general approach to Human Rights as evidenced by legislation in Ontario, and actions on specialized transit fares by the Human Rights Commissions in Alberta and Saskatchewan. In the case of Strathcona County the precedents would apply to local service within Sherwood Park, and service between Sherwood Park and Edmonton, but not between Sherwood Park and the rural areas or the rural areas and Edmonton. Adopting fixed route fares on Mobility Bus will reduce revenues by approximately 41 percent. To mitigate this cost it is also recommended that persons with disabilities eligible for Mobility Bus be incentivized to use regular transit by providing them with free fares on commuter and local routes. The reduction in Mobility Bus fares are projected to increase ridership about 38 percent from around 17,000 annual trips to about 23,400 annual trips based on 2013 data. To accommodate this increase, additional resources will be required including new operators and vehicles.

The proposed changes affect every fare category. On balance the recommendations result in an overall system that is more equitable and incentivizes ridership growth. The recommendations concerning the fares for seniors, students/youth and Mobility Bus may be viewed as the most far reaching, however they are designed to respond to specific challenges raised in the TMP or by stakeholders and the public. The plan raises senior passes to 55 percent of full adult pass by 2020 from current 27 percent. Beyond 2020 the senior passes could be capped at 55 percent or continue to increase until they reach 75 percent of an adult pass.

Second Round of Consultations

A second round of stakeholder consultations was held to receive feedback on the proposed fare structure. The first step in this round of consultations was a presentation to the Strathcona County Council at their regular meeting on March 10, 2015. It was followed by a series of individual meetings with interested councillors, the Mayor, the County Finance Department and Family and Community Services as well as one-on-one meetings with representatives of the school boards, two public open houses, and telephone discussions with representatives of ETS and St. Albert Transit.

The feedback received at this round of consultations was generally favorable however several specific issues were raised that led to changes in the proposed fare structure. These changes included:

- Converting the proposed Day Pass (one adult) to a Family Day Pass valid for 1 adult and up to 4 children under age 13
- Extending the validity of the Event Pass from allowing 2 Adults and 3 Children under age 13 or 4 Adults to also permit 1 Adult and 4 Children under age 13
- Allow a Mobility Bus user to travel with a Personal Care Attendant free of charge when riding the fixed route service
- Delaying the implementation of increase in senior commuter monthly passes by one year in order to provide time for seniors to learn about and try other options including Everybody Rides passes or senior tickets and provide the option to cap the increase below 75 percent of the adult pass.

Future Considerations

The proposed fare structure has been designed around the adult commuter cash fare. A change to the adult commuter cash fare would result in a change in every other fare in the system. The monthly passes are based on a multiplier of the cash fares and the discounted fares are based on a fixed percentage reduction from the cash fare or adult passes. The current fares are designed to sustain an operating cost recovery of about 31 percent. The fares should be adjusted annually to maintain this level of cost recovery. If a decision is made to increase the cost recovery it is recommended that the multiplier for monthly passes be raised from the current 24 trips to up to 30 trips per month.

If the desire is to keep the farebox recovery at 31 percent it may be necessary to increase fares if operating costs grow faster than ridership. However other outside influences such as the price of parking in downtown Edmonton or the cost of gasoline may also have an impact on the ability of the County to raise fares without impacting ridership.

ETS is considering the implementation of an advanced electronic fare collection system centred on smartcard technology. When this technology is installed by ETS, other transit agencies in the region will

need to adopt the system in order to maintain (and enhance) fare reciprocity. The proposed fare structure for Strathcona County Transit is smartcard ready however the adoption of new technology would also create the opportunity for new fare products. This includes:

- Replacing tickets with stored value
- Elimination of transfers for cash fares
- Introducing new shorter period passes
- Implementing rolling passes
- Consider capping or best value fares

Final Recommendations and Implementation Schedule

The table in Executive Summary Figure 2 presents the recommended fares for Strathcona County Transit and Mobility Bus based on a phased implementation. The fare structure is designed to maintain a 31 percent cost recovery, which is based on the initial consultation with Council. The fares in the table would be rounded to the nearest \$0.05. A five year look found that an minor increase of \$0.25 in 2018 and 2019, and an increase of \$0.15 would be required to maintain the 31% cost recovery.

It should be noted that there is no single best practice for setting the level of cost recovery. Every transit system and its local community and financial resources are unique. However, fare levels and fare policy are not the only factor that determines recovery rates. The cost of operations including the level of service, the length of trips, the urban form or land use patterns and the cost of inputs such as labor and fuel all impact the cost recovery. To balance the local transportation, social and environmental needs and costs to provide services, the community decides what level of municipal subsidy is most appreciate to support the required level of service. If required, a higher cost recovery can be achieved through higher fares, lower level of service, and more efficient operations. In the future, if a higher cost recovery is deemed more appropriate for Strathcona County, fares could be increased to help achieve that. However, other factors, especially the required level of service also need to be considered to balance the community's transit needs and the level of municipal subsidy.

Executive Summary Figure 2 – Existing & Proposed Fares by Implementation Date

		Feb-15	Feb-16	Feb-17	Feb-18	Feb-19	Feb-20
Commuter & Mobility Bus to Edmonton~#	Adult Cash	\$ 6.00	\$ 6.00	\$ 4.50	\$ 4.60	\$ 4.75	\$ 4.90
	Adult Monthly	\$ 103.00	\$ 105.00	\$ 108.00	\$ 110.40	\$ 114.00	\$ 117.60
	Adult Ticket*	\$ 4.20	\$ 4.20	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Student Cash	\$ 6.00	\$ 6.00	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Student Ticket*	\$ 4.20	\$ 4.20	\$ 2.53	\$ 2.59	\$ 2.67	\$ 2.76
	Student Monthly	\$ 93.00	\$ 93.00	\$ 81.00	\$ 82.80	\$ 85.50	\$ 88.20
	Senior Cash	\$ 5.00	\$ 5.00	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Senior Ticket*	\$ 4.20	\$ 4.20	\$ 2.53	\$ 2.59	\$ 2.67	\$ 2.76
	Senior Monthly	\$ 28.00	\$ 30.00	\$ 32.00	\$ 38.64	\$ 51.30	\$ 64.68
Commuter	Senior annual	\$ 332.25	\$ 332.25	\$ 332.25	N/A	N/A	N/A
	Senior Low Income Annual	\$ 155.00	\$ 155.00	\$ 155.00	N/A	N/A	N/A
	FamilyDayPass@	N/A	N/A	\$ 11.25	\$ 11.50	\$ 11.88	\$ 12.25
	Everybody Rides Monthly	\$ 24.00	\$ 26.00	\$ 27.00	\$ 27.60	\$ 28.50	\$ 29.40
Local & Sherwood Park Mobility Bus~#	Adult Cash	\$ 3.25	\$ 3.25	\$ 2.33	\$ 2.33	\$ 2.38	\$ 2.45
	Adult Monthly	\$ 56.00	\$ 56.00	\$ 56.00	\$ 56.00	\$ 57.00	\$ 58.80
	Adult Ticket*	\$ 2.20	\$ 2.20	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Student Cash	N/A	\$ 3.25	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Student Ticket*	N/A	\$ 3.25	\$ 1.31	\$ 1.31	\$ 1.34	\$ 1.38
	Youth Monthly	\$ 54.00	\$ 54.00	\$ 42.00	\$ 42.00	\$ 42.75	\$ 44.10
	Senior Cash	N/A	\$ 3.25	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Senior Ticket*	N/A	\$ 3.25	\$ 1.31	\$ 1.31	\$ 1.34	\$ 1.38
	Senior Monthly	N/A	N/A	N/A	\$ 19.60	\$ 25.65	\$ 32.34
	Senior Free Off Peak	\$ -	\$ -	\$ -	N/A	N/A	N/A
Local	Everybody Rides Monthly	N/A	N/A	\$ 14.00	\$ 14.00	\$ 14.25	\$ 14.70
Special Products for Local or Commuter	Event Pass Family+	N/A	N/A	\$ 11.25	\$ 11.50	\$ 11.88	\$ 12.25
	Event Pass Single	N/A	N/A	\$ 6.75	\$ 6.90	\$ 7.13	\$ 7.35
	Employer Commuter Pass	N/A	N/A	\$ 81.00	\$ 82.80	\$ 85.50	\$ 88.20
	Employer Local Pass	N/A	N/A	\$ 42.00	\$ 42.00	\$ 42.75	\$ 44.10
	Super Off Peak Youth Local	N/A	\$ 20.00	\$ 21.00	\$ 21.00	\$ 21.38	\$ 22.05
	Rec Program Pass Weekly	N/A	N/A	\$ 11.20	\$ 11.20	\$ 11.40	\$ 11.76
	Classroom Tripper Local/Student	N/A	N/A	\$ 1.17	\$ 1.17	\$ 1.19	\$ 1.23
	Classroom Tripper Commuter/student	N/A	N/A	\$ 2.25	\$ 2.30	\$ 2.38	\$ 2.45
	Student Local Summer	N/A	\$ 32.00	\$ 33.60	\$ 33.60	\$ 34.20	\$ 35.28
Mobility Free			\$ -	\$ -	\$ -	\$ -	\$ -
Mobility Bus ²	Within Sherwood Park Cash	\$ 5.00	\$ 5.00	\$ 5.00	Same as Commuter Adult, Student & Senior Fares for cash, tickets and passes. Everybody Rides Not Accepted		
	Within Sherwood Park Tickets*	\$ 4.50	\$ 4.50	\$ 4.50			
	Sherwood Pk - Edmonton Cash	\$ 7.75	\$ 7.75	\$ 7.75	Same as Local Adult, Student & Senior Fares for cash, tickets and passes. Everybody Rides Not Accepted		
	Sherwood Pk - Edmonton Tickets*	\$ 7.00	\$ 7.00	\$ 7.00			
	Rural - Sherwood Park Cash [^]	\$ 7.25	\$ 7.25	\$ 7.25	\$ 7.25	\$ 7.25	\$ 7.25
	Rural - Sherwood Park Tickets [^]	\$ 6.50	\$ 6.50	\$ 6.50	\$ 6.50	\$ 6.50	\$ 6.50

* Tickets sold in books of 10

[^] MobilityBus Rural to Edmonton fare is Rural to Sherwood Pk fare plus applicable Sherwood Pk to Edmonton Fare

~Personal Care Attendant rides free between same origin and destination on fixed route

@ Day Pass valid for up to 1 adult and 4 children under 13

+Event Pass Family valid for up to 4 adults or 1 adult and 4 children under 13

N/A Not available

MobilityBus fares effective in 2018

1. Introduction

The primary purpose of collecting fares is to generate revenue to cover the cost of operating the transit system. However setting and collecting fares has a number of secondary purposes that are very important to a transit system. These secondary purposes include:

- Attracting, generating and retaining riders
- Encouraging the use of underutilized capacity
- Support of education in the community
- Tribute to seniors
- Relief for persons with disabilities
- Facilitating transfers between modes and transit agencies
- Ensuring equity

The 2012 Transit Master Plan (TMP) recognized the importance of fare policy and fare pricing and stressed the need to conduct a detailed transit fare strategy study. The TMP included a number of objectives and issues for the fare strategy study to address. These issues addressed both the primary, revenue generation issue, as well as the secondary purposes of fares. The issues noted in the TMP included:

- Balancing equity between the fares paid by users of the system and community support with subsidies generated from tax sources
- Ensuring all residents can afford transit
- Encouraging youth to use transit more frequently
- Increasing customer convenience
- Transition Mobility Bus fares to equal fixed route Commuter and Local fares
- Adopting tiered pricing for fares and parking
- Review reciprocity with neighbouring systems
- Streamlining fare structure by consolidating similar fares

These TMP identified fare issues form the core of the work conducted in this study. The conclusions of the work and the final recommendations address each of the points raised in the Master Plan. Reciprocity with transit systems other than ETS and StAT is being discussed at the Capital Regional Board and was not part of this study.

2. Methodology

The project has five key components. These are:

- Existing conditions and issues
- Identification and review of peer systems and best practices
- Stakeholder consultations and public outreach
- Alternatives and analysis
- Conclusions and Recommendations

The peer review and best practices were conducted using a combination of literature/internet review and personal contacts. Data from more than 15 systems was collected for use in preparing the peer review and best practices synthesis.

The stakeholder consultations were held with both internal and external interests. The public was consulted through a web based survey. The results of the consultations and survey combined with a review of the existing conditions including the current fare structure and policy identified the significant issues and confirmed the challenges and opportunities highlighted in the TMP.

A series of alternatives were developed to respond to the needs identified in the existing conditions report and to address the issues identified in the TMP. The alternatives included some of the approaches identified in the peer review and best practices synopsis that appeared suitable for implementation in Strathcona County. The alternatives were then analysed using a spreadsheet based elasticity model. The model is based on elasticity factors that were established based on industry experience and the unique characteristics of the Capital Region. Using this model the alternatives could be assessed to determine the impact of different fares levels on ridership and revenue.

In the next step the conclusions from the analysis of the alternatives were used to develop a set of recommended fare products and prices. The proposed new fare structure responded to all of the issues identified in the TMP with the exception of regional fare reciprocity which was outside of the scope of this study. The proposed fare structure is compatible with advanced fare collection technologies and in some cases it may be desirable to wait for new hardware to implement some of the fare products.

In the final phase of the project the consultant team returned to the stakeholders to present the proposed fare system. Public input was obtained through two outreach meetings and a second online survey. A section on future considerations including changes for new technology and a methodology for determining when fares should be adjusted was completed. The proposed fares were tweaked based on the input received from the stakeholders and survey prior to completion of this report.

A second elasticity model was developed to project the impacts of phasing the new fare structure over multiple years while maintaining the farebox cost recovery at 31 percent.

3. Existing Conditions

Strathcona County Transit is a County operated transit system with local service within Sherwood Park and commuter service to the University of Alberta, downtown Edmonton and NAIT. The Mobility Bus is a specialized transit service providing transportation for persons with disabilities. It offers service within Sherwood Park and from rural Strathcona County to Sherwood Park. Service is also provided from Sherwood Park or rural Strathcona County to Edmonton. The current fares for Strathcona County Transit and Mobility Bus are shown in Figure 1 - Strathcona County Fares.

Figure 1 - Strathcona County Fares

Strathcona County Transit			
	Type	Local	Commuter
Cash	Adult	\$3.25	\$6.00
	Senior	\$3.25	\$5.00
	Student/youth	\$3.25	\$6.00
	Child >6	Free	Free
Tickets (each)	Adult	\$2.20	\$4.20
	Senior	\$2.20	\$4.20
	Student/youth	\$2.20	\$4.20
	Child >6	Free	Free
Monthly	Adult	\$56.00	\$103.00
	Senior	\$56.00/Free	\$28.00
	Student/youth	\$56.00	\$93.00
	Everybody Rides	\$24.00	\$24.00
	Child >6	Free	Free
Annual	Senior	n/a	\$332.25/\$155.00

Mobility Bus				
Type		Cash	Tickets	Pass
Sherwood Park Local		\$5.00	\$4.50	n/a
Rural to Sherwood Park		\$7.25	\$6.50	n/a
Sherwood Park to Edmonton		\$7.75	\$7.00	n/a
Rural to Edmonton		\$15.00	n/a	n/a

4. Peer Systems & Best Practices

A review of the fare systems in peer systems was conducted for 8 transit systems in Canada and the United States. The review of peer systems confirms that transit fares are as diverse as the systems and communities they serve. Strathcona County Transit has the highest cash fare among the peers and the monthly pass is valued at just 17 cash trips or \$103. Within the peer systems the average multiplier for the regular or commuter and express passes is 31.5 trips. St. Albert was also close to Strathcona County with a multiplier of 19 trips. Systems with separate single zone or local fares also had an average pass multiplier of 31 times the cash adult fare.

In the United States transit systems are obligated to provide half price senior fares, including passes for use in off peak periods. The majority of systems provide half price or greater discounts all day rather than providing off peak only passes. Among the peers the average discount for senior passes in the US was 46 percent and in Canada 45 percent. In Strathcona County seniors who do not qualify for the *Everybody Rides* program receive a 72 percent discount on the adult price for Commuter passes. The peer systems with discounted student/youth passes priced them at an average of a 40 percent discount on the adult monthly pass. Strathcona County prices the student monthly pass at a 10 percent discount on the adult monthly pass. Several of the peer systems had innovation fare programs designed to target specific markets and grow ridership.

Overall the research suggests that transit service levels are the leading determinate of transit ridership. Research indicates that in the U.S. fares have only about one third the impact of service as an influence on ridership. However fares can play an important role in ensuring equity and distributing ridership to time periods when excess capacity may exist or be less expensive to provide. Using fares to encourage people to shift from single occupancy vehicles to transit involves pricing as well as making the fare products easy to use and acquire. Charging for parking and providing reserved spaces at park and ride lots is becoming a best practice. In 2007 about 3 percent of bus systems in the U.S. charged for parking, but by 2011 it had increased to 11 percent. It increases revenues and only passengers who can afford the option need to pay the additional money.

Most transit systems are well used during peak hours. Commuter services are often only fully utilized in the peak direction. The U.S. academic literature on the subject generally supports fare differentials by time of day, however in practice the time of day price differences become very problematic. Differential fares can lead to confusion among passengers and frequent fare disputes or apathy and decreased fare surveillance from operators. The U.S. literature and experience suggests that reducing off peak fares can result in increased ridership however if it results in a loss of revenue and the reduction of service, the negative consequences on ridership can have greater impact on the system. Service improvements that benefit all customers may have a more positive impact than fare reductions that only stimulate ridership among the lowest income riders. The use of a means test to target discounts only to persons with low incomes serves the social need and preserves transit revenues. This approach is becoming more common in Canada where a smaller percentage of riders are low income and represents a best practice. In the U.S. about 18 percent of systems have reduced prices for persons with low incomes or other groups who are not disabled.

In Canada the practice has been to give discounts to seniors based on age and not to provide discounts to all persons with disabilities. More and more systems are moving to offering more substantial discounts to anyone with financial need based on a means test and reducing or eliminating general discounts for seniors. In suburban communities the senior population does tend to be more affluent than in the urban cores and providing a larger discount only to those in greater financial need helps direct limited resources where they are needed most. The Federal Low Income Cut-Off (LICO) provides a

convenient benchmark of financial need that can be used to determine eligibility for a means tested transit pass. Provincial programs that identify persons with disabilities are being used to determine eligibility for low income pass products. Best practice in Canada appears to be offering mid-range or small discount based purely on age, and a larger discount based on a means test that would include anyone with a low income such as seniors, persons with a disability, working poor or single parents.

Fare increases are often difficult to achieve because of the required approval by a governing board or municipal council. It seems that the best practice would be to link fare adjustments to a reliable index such as the national consumer price index or the transportation price index. However in practice this is very difficult and may be too arbitrary as different inputs can have a major impact on operating costs at different times. The actual best practice would appear to be to tie fare changes to local cost drivers that are specific to the operation of the system. Farebox recovery would seem to be the best choice by reflecting local operating conditions and ridership.

In Canada, particularly outside of Ontario, there are few regulatory requirements for specialized transit services and transit operators are not required to meet unconstrained demand or provide specific price points. In the U.S. the Americans with Disabilities Act specialized transit fares cannot exceed two times the equivalent fixed route fare. Best practice in the U.S. has been to have fares that are higher than fixed route, often to two times limit, but offered in conjunction with free rides on fixed route for eligible specialized transit passengers and their personal care assistants. Tickets are sometimes offered for convenience, but even systems that have adopted Smartcards for their fixed route systems do not usually equip their specialized transit vans with Smartcard readers due to the cost and low number of boardings per day. Passes and discounts are rarely offered as the issue for most systems is to not encourage more trips or extra demand.

There is no statutory obligation in Canada require paratransit systems to accommodate all trips, and use of the fixed route system is more difficult due to snow and ice during the long Canadian winter. Canadian systems usually provide specialized transit at the same price per trip as fixed route for equity reasons, although in terms of cost the service is much more expensive to provide and has a lower farebox recovery. In Canada the best practice is to allow discounts through tickets and passes, but to provide a more constrained system and little effort has been made to encourage use of the fixed route services by persons with disabilities. Fixed route accessibility has also been slower to be adopted in Canada with few mandates.

Free public transit is offered in a few limited instances in North America. Most examples are on circulator routes or in limited geographic areas. Free public transit usually causes ridership to increase significantly. In three experiments in the U.S., in Denver CO, Trenton NJ, and Austin TX ridership grew anywhere from 10 to 36 percent on these systems. Using generally accepted elasticity factors one would have expected ridership to increase about 30 percent. In each instance where free fares have been attempted in large urban areas there have been accompanying problems with increased vandalism, homeless riders and rowdy behaviour on-board the vehicles. Seattle and Portland eliminated their free fare zones to increase revenue. In very small systems that have free transit such as Island Transit in Washington, Commerce City in Los Angeles, and Atomic City Transit in Los Alamos NM there is sufficient sales tax revenue that fares are not necessary.

Best practices would suggest that free transit is viable for small systems where rowdy passengers and overcrowding are not issues and there is a stable outside source of funding. However the concept of free fares has proven to be unworkable in larger systems due to overcrowding, homeless riders and increased rowdy behaviour.

5. Initial Stakeholder Consultations

Consultations were held with selected stakeholders and public input was solicited through an anonymous online survey. The list of stakeholders who participated in a personal meeting or telephone interview included:

- The Mayor
- County Council
- Family and Community Services
- The Chamber of Commerce representing the business community
- Local school boards
- Transit Marketing and County Communications staff
- Transit Department management

In addition workshop sessions were held with Strathcona County Transit operations staff (including operators) and Customer Service Representatives.

Strathcona County Council consists of representatives from 5 urban and 3 rural wards including several members, who were elected to their first terms in October, 2013. In general the urban Councillors and Council members with longer service were more concerned with transit issues, but all councillors did discuss important issues related to fares.

The interviews began by asking what fare issues were being raised by constituents and all reported that fare issues were rarely brought up by residents even though there was a recent fare increase. Fare equity issues were raised by at least one council member in the context of cash fares being too high in relation to monthly passes and that the fare structure for seniors was confusing. The importance of senior discounts was mentioned by another as being very significant in the community

Few Councillors had experience with fare products in other communities although there were positive comments about the use of advanced technology such smartcards and electronic fareboxes making possible convenient products such as stored value and day passes. It was also understood that there may be limited application for products such as day passes in a transit system focussed on commuters.

The issue of farebox recovery is very important to the fare policy discussion and the consensus of the discussion was that the current level of about 31 percent is sufficient. It was highlighted that improving the rate slightly could reduce the level of tax subsidy required. Most councillors were content with the current recovery level and the property tax support required to maintain existing service levels.

The U-Pass program for post-secondary students was strongly supported by all Council members and all were supportive of offering the same type of program to any institution or employer that was willing to adopt the concept. All members were in favour of developing programs that expanded access to fare products such as the employer programs offered by the Edmonton Transit System (ETS) and St. Albert Transit (StAT).

The councillors maintained their support of the approved pilot program of paid, reserved parking at the expanded Park and Ride lot. The idea of releasing reserved spots to the general public after a specific time such as 10 a.m. received mixed support.

The need for fare integration within the Capital Region was supported by a majority of council members as a logical approach to transit. One councillor did not agree that it was necessary, and one was cautious that it could lead to the possible loss of autonomy for Strathcona County. Everybody recognized that

the current fare integration with ETS was an important feature of the current fare system and should be maintained. It was also generally recognized that there would be few additional riders from fare integration but not having some ability to move seamlessly about the region on transit seemed counter-intuitive.

There seemed to be general acceptance that Mobility Bus fares should reflect the higher costs of providing the service compared to fixed route although the concept of some form of means test for persons who could not afford it was also supported. All were in favor of implementing incentives to encourage Mobility Bus passengers to use fixed route transit whenever possible.

There was consistent support for offering steep discounts to the sectors of the population with low income through a means test. It was felt that as long as an option for a means test discount was available the full fare could be increased when necessary. There was some support for senior discounts however the consensus seemed to be that senior discounts should be through a means test since many of the seniors in the community were among the most affluent.

Most recognized that pricing is not a significant issue in Strathcona County since it is an affluent suburb. The idea was raised at several interviews that since the cost recovery on the local service is low, and the ridership minimal, it may be worthwhile to simply offer free local or deeply discounted fares to stimulate ridership and end the perceived problem of empty buses.

There was no full consensus on how special event fares should be treated. Responses ranged from full cost recovery (most common response) to fully subsidize for events within Sherwood Park.

Among Stakeholders outside of County Council the highlights of the consultations included:

- General support of means tests instead of general discounts for seniors.
- Support for more targeted discounts to encourage ridership in the off peak, among youth, special events or participants in County programs.
- Existing fare system was confusing and not consistent.

A web survey was utilized to solicit input from the public. The results based on 94 surveys are not statistically significant but do provide an anecdotal snapshot of public opinions on fare related issues. About three quarters of the respondents to the survey rode Strathcona County Transit regular service including local, commuter or special event routes. Among non-users of the system the predominant reason for not riding was that the bus did not serve their residence or destination (57 percent) and only 19 percent felt fares were too high. The group was evenly divided among those who felt the fares were too low relative to the tax subsidy, or just right. About 14 percent felt that fares were too high relative to the subsidy amount.

The strongest support (43 percent) among these non-users was for maintaining senior, student/youth and low income as qualifications for fare discounts. Only ten percent felt that discounts should be limited to persons with low income. There was strong support (76 percent) for allowing persons eligible for Mobility Bus to ride regular transit at no cost. About 15 percent of these non-users felt that having reserved, paid parking at the transit terminal would encourage them to start riding transit.

The opinion on commuter pass and ticket prices was evenly divided among non-users with equal numbers believing that the price is too expensive, too inexpensive or just right. Most fixed route users felt the Mobility Bus cash and ticket prices were just right, although almost half felt the \$15 fare for rural residents travelling to Edmonton was too high.

Among users most (75 percent) feel the cash commuter fare is too expensive, and 64 percent believe the Commuter pass is too expensive. Fifty-three percent think tickets are expensive but among users about 50 percent feel the senior commuter pass of \$28 is just right. Student commuter passes at \$93 were also believed to be too expensive. Local tickets were thought to be just right and 62 percent said the free senior fare for local trips was just right

Among these existing users 58 percent felt the tax subsidy was just right and about 26 percent felt the share from the farebox was too high. Thirty-three percent of users felt that increases should be limited to the cost of providing service while about 20 percent believe that higher fares are acceptable if service is improved and 16 percent do not want any more money from the property tax dedicated to transit.

Among users only 31 percent know that *Everybody Rides* is a program to provide discounted passes to persons with low income. Among non-users only 19 percent know about the program. A majority of users (53 percent) believe that discounts should be provided to anyone with low income. About 32 percent of respondents were interested in new fare products that might make it less expensive to ride transit and attend events such as Oilers or Eskimos games. Currently a group of 4 adults would be required pay a total \$48 to ride the bus in order to attend a game.

Ten percent of the respondents said there was a program at their place of work for employees to purchase ETS or St. Albert transit passes. Among all respondents 56 percent said they would not be interested in such an option, while 21 percent said they would like to participate in this type of program.

There were not enough responses from Mobility Bus users to reach any meaningful conclusions about specialized transit fares from users of the system.

6. Findings and Initial Proposed Fare Changes

The current fare system has several issues that can be addressed through changes or additions to the product range or price structure. These proposed changes respond to the issues raised in the TMP or identified from the stakeholders, public or review of existing conditions. In some cases the proposed strategies have been adopted from the peer systems or best practices. These key issues are:

- The current fares discounts seem ad hoc, and there is no consistent price relationship between products.
- The Adult Commuter fare has a very low (17 trips) multiplier compared to the cash fare. Compared to the peer agencies the cash fare is very high, but with the low multiplier the monthly pass still has a very low price point.
- There is a multitude (8) of senior fares with different and inconsistent discounts but discount products are not provided in all markets.
- There are no existing incentives to specifically attract young riders as a means of gaining familiarity with transit and developing future adult riders.
- There is no fare product designed to attract riders to off peak and local services where there is abundant additional capacity.
- The arrival of the double-decker buses means that for the first time in many years there will be additional capacity on the peak hour service that can be marketed using special fare products.

The goals of any changes to the fare system should be to:

- Simplify by making the fare system more consistent and understandable and consolidating products where possible.
- Create price relationships that are consistent, and equitable to best industry practices.
- Create a consistent and equitable system of discounts based on demographics and income.
- Introduce new products to increase ridership by targeting new markets in both the local and commuter markets including youth.
- Create a fare system that is smartcard ready and can easily be converted to an electronic fare collection system.

Meeting these goals will require changes in virtually every fare category. The proposed new fare structure will result in an overall system that is more equitable and incentivizes ridership growth. The findings concerning the fares for seniors, student/youth and Mobility Bus may be viewed as the most far reaching, however resolving the issues is central to this project:

a. Seniors

Existing senior fares are inconsistent. Although age requirements are consistent, the Low Income Cut-Off (LICO) is used as the guideline for Everyone Rides and the Seniors Subsidized annual pass; the Off Peak Program uses a different annual household income, which has no rationale. The proposed fares standardize the discount for all services and use LICO as their guideline.

b. Student/Youth Fares

This is an important market segment, because it represents the future of ridership, and it has the potential to help increase use of local service which is often underutilized. The changes incentivize use of the local system, and recognize the limits of provincial school funding without creating the need to add service.

c Mobility Bus Fares

Human Rights Commission rulings in other communities have resulted in transit agencies being required to extend the fixed route fare structure to specialized transit. This report recommends proactive action to make this change before being ordered to reduce fares by the Human Rights Commission. It also creates fare incentives to encourage Mobility Bus users to ride regular transit when possible, helping reduce costs.

1. Fixed Route

Ten options were tested in an elasticity model for implementation in 2015 (assuming no increase in service and operating cost) to determine their impact on revenue and ridership. The highest ranking option was based on lowering the adult cash fare for the Commuter service to \$4.00 and raising the monthly pass by one dollar to \$104.00. Lowering the cash fares will help attract new occasional riders who may convert to full time riders in the future. The modest increase in the monthly pass should not cause any significant decrease in ridership, and help build revenue. Increasing the monthly pass up to \$108 (multiplier of 27) appeared to be possible without serious negative impacts according to the elasticity model.

Each of the other fares in the tariff is based on either the cash fare or a multiplier of the cash fare, rounded to the nearest \$0.05. This means that an increase or decrease in the adult cash fare will ripple through the entire fare structure and provide an equivalent fare adjustment. This will maintain the relationship of the fares.

A number of new discount programs are proposed. Some are general discounts to improve the equity of the system and others are designed to encourage ridership at times when there is surplus capacity or in market segments that are currently under represented on Strathcona County Transit services. These include standardizing student/youth and senior discounts, and having them available on each fare product: cash, tickets and passes. Several new fare products are also offered to target specific population segments which do not seem to be using the system. These new products are targeted to both the Commuter System (e.g. day pass and event pass) as well as the local system (e.g. new student/youth passes, and recreation pass). These changes are consistent with resolving the issues identified in the TMP.

The Everybody Rides program is enhanced and a new local fare is introduced. Fares for seniors with incomes greater than the Federal Low Income Cut Off (LICO) will increase significantly, but commuter fares for seniors who meet the LICO standard will only increase from \$24 to \$26 per month. On local routes low income seniors will be able to ride at all times for \$12 per month, in place of the existing free fare during off peak times. This action is consistent with the majority of comments received from stakeholders that significant fare discounts should be directed to those who need it most and is consistent with the direction of many other systems including ETS and Calgary Transit. In some cases the increases are significant and they should be phased in to reduce the impact. The means test program is expanded to all persons needing only a local pass and assumes that the same income levels are used for all means tested products.

The proposed fare structure is shown in Figure 2 - Strathcona County Transit Fixed Route Proposed Fare Structure. All fares are shown in 2014 dollars assuming no service and cost increase. The highlights include:

2. Commuter Recommendations

a. Cash Adult Commuter Reduced from \$6 to \$4.00

General consensus among stakeholders, users and review of peer systems found that this fare was too high. Lowering the fare will make the service more attractive to new or occasional users who may ultimately become regular riders.

b. Adult Day Pass

A new adult day pass valid for unlimited travel on Strathcona County Transit, ETS and St. Albert Transit would be introduced. The fare would be \$10.00 or \$2 more than a cash return trip between Sherwood Park and Edmonton. This fare would offer a significant savings for anyone who needs to make multiple trips within Edmonton after riding in from Sherwood Park. It is consistent with the existing agreement with ETS, and Strathcona County Transit already accepts the ETS Day Pass.

c. Adult Commuter Pass Increased from \$103 to \$104

The monthly pass currently has too great of a discount. The discount is one of the largest in North America and given the high cost of gasoline and parking there is room for a small increase with minimal ridership impacts. A larger increase (up to \$108) could be achieved with minor and temporary impacts, and be reflective of improved service with double-decker buses (fewer standees).

d. Standardized 25 percent Discounts for Commuter tickets, Students/Youth or seniors

This creates a single discount rate for tickets, students/youth and seniors to simplify the fare system. There is a further 25 percent discount for student/youth and senior tickets. New products could be phased in as stored value is introduced with Smartcards if there is a desire to minimize the number of fare products being produced or checked by operators. All fares levels are driven by adult cash fare and would move in unison if a fare change is implemented.

This represents an increase for seniors who do not have limited incomes. However any senior whose income is below an income cut off would be eligible for a bigger discount than is currently offered.

e. Standardized Student/Youth and Senior Commuter Monthly Pass Discounts

The discounted commuter monthly pass for seniors and students/youth is set at a 25 percent discount. The price for students/youth is a decrease from the current rate of \$93, but an increase for seniors not eligible Everybody Rides passes. Currently all seniors pay \$28 per month. The \$332.25 senior annual pass and the low income \$155 annual senior pass are eliminated.

f. Commuter Everybody Rides

Everybody rides is standardized at a 75 percent discount on the Commuter Monthly pass. This represents an increase from \$24 to \$26 or a potentially a reduction from \$28 to \$26 for some seniors.

Figure 2 - Strathcona County Transit Fixed Route Proposed Fare Structure

Category		Existing Fares	Proposed New Fares
Commuter	Adult Cash	\$ 6.00	\$ 4.00
	Adult Monthly	\$ 103.00	\$ 104.00
	Adult Ticket*	\$ 4.20	\$ 3.00
	Adult Day Pass	n/a	\$ 10.00
	Student Cash	n/a	\$ 3.00
	Student Ticket*	n/a	\$ 2.25
	Student Monthly	\$ 93.00	\$ 78.00
	Senior Cash	\$ 5.00	\$ 3.00
	Senior Ticket*	n/a	\$ 2.25
	Senior Monthly	\$ 28.00	\$ 78.00
	Senior Annual	\$ 332.25	n/a
	Senior Annual Discount	\$ 155.00	n/a
	Everybody Rides Monthly	\$ 24.00	\$ 26.00
	Average Commuter Fare	\$ 3.15	\$ 3.06
Parking	Monthly	n/a	#
	Daily	n/a	#
Local	Adult Cash	\$ 3.25	\$ 2.00
	Adult Monthly	\$ 56.00	\$ 48.00
	Adult Ticket*	\$ 2.20	\$ 1.50
	Student Cash	n/a	\$ 1.50
	Student Ticket*	n/a	\$ 1.15
	School Monthly/Student Monthly	\$ 54.00	\$ 36.00
	Senior Cash	n/a	\$ 1.50
	Senior Ticket*	n/a	\$ 1.15
	Senior Monthly	Free	\$ 36.00
	Everybody Rides Monthly	n/a	\$ 12.00
	Average Local Fare	\$ 1.94	\$ 1.53
Special	Event Pass Family	n/a	\$ 10.00
	Event Pass Single	n/a	\$ 6.00
	Employer Commuter Pass	n/a	\$ 79.00
	Employer Local Pass	n/a	\$ 36.00
	Super Off Peak Concession Local	n/a	\$ 18.00
	Rec Program Pass Weekly	n/a	\$ 10.00
	Classroom Tripper Local/Student	n/a	\$ 1.00
	Classroom Tripper Commuter/student	n/a	\$ 2.50
	Student Local Summer	n/a	\$ 48.00

* Tickets sold in books of 10

3. Local Proposals

a. Cash Adult Local Reduced from \$3.25 to \$2.00

The local service generates very low ridership for trips entirely within Sherwood Park. Lowering the fare will stimulate some ridership without a significant loss of revenue. The fare is set at a 50 percent discount to the adult cash commuter fare.

b. Local Monthly Adult

The local monthly adult pass is priced at 24 times the cash adult fare at \$48.00.

c. Standardized Local Discounts for Tickets, Students/Youth and Seniors

The same pattern of 25 percent discounts on adult cash fare is proposed for local tickets, students/youth and seniors. There is a further 25 percent discount for tickets in each category. New products could be phased in as stored value is introduced with Smartcards if there is a desire to minimize the number of fare products being produced or checked by operators. The existing school pass available to the Elk Island Catholic School (EICS) Board will be replaced by the regular students/youth monthly pass, which allows EICS students to ride local buses at any time. Though the regular local monthly pass for students/youth is lower than the existing school pass and has no time restriction, it would attract more students and youth to ride local services which are currently underutilized

d. Local Everybody Rides Monthly

Currently there is no Everybody Rides pass for local service, however there is a means tested free off peak local fare for seniors. The local service has abundant extra capacity and the proposed fare of \$12.00 per month for anyone who passes a means test offers good value. This fare offers new discounts during peak periods for seniors and everyone else who meet the means test standard.

4. Proposed New Targeted Products

a. Event Pass

The event pass would be sold on days when specific major events are held in Edmonton such as hockey or football games, Folk Fest, Fringe Festival or Heritage Days. The pass would offer a product priced to be competitive with driving and parking for a family but not over subscribe the available capacity of Strathcona County Transit. The pass functions like a Day Pass but allows up to 2 adults and 3 children, or up to 4 adults to travel with a single fare of \$10.00, on Strathcona County Transit. It would not be valid for transfers to ETS or StAT. It would not be valid during the morning peak period and only for designated events. If there is sufficient demand a single person pass with the same conditions could be created with a price of \$6.00.

b. Employer Program

Both Edmonton and St. Albert currently have a program to sell bulk monthly passes to employers. The employers can sell the passes at a minimum discount required by the program, or give the passes to the employees as a perk. Much of the ground work has been done for the program and Strathcona County could piggy back on the existing ETS and St. Albert Program.

c. Super Off Peak Local Student/Youth

The purpose of this pass, priced at just \$18.00 per month is to create a product that parents may be willing to buy on top of the yellow bus passes they receive or purchase. The yellow school buses only run at bell times and students/youth who stay late for extracurricular activities, or need to get to part time jobs or outside activities have to rely on parental rides. This product would not compete with yellow buses but provide a new option for parents and give students/youth added mobility. It would only be valid after 4 pm, and on weekends and holidays from September to June.

d. Local Student/Youth Summer Pass

This pass would replace the Super Off Peak Local Student/Youth pass during the summer break. A single pass would cover the entire summer giving students/youth freedom to travel within Sherwood Park. One pass would be sold and valid from the end of school to the start of school.

e. Recreation Program Pass

The Strathcona County Park and Recreation staff were enthusiastic in their support of transit access to their facilities as part of the cost of 1 or 2 week programs.

f. Classroom Tripper Local & Commuter

This product is designed as a win-win-win. It allows teachers to buy passes that would allow a whole class to travel on transit to a field trip location in Sherwood Park or Edmonton. It is a multiple win because it helps expose young students who may never have a chance to ride Strathcona County Transit; provides a teachable moment about public transit; provides the school boards with an economical means of doing field trips; and provides an interesting outing for the students.

g. Parking Charges

The proposed pilot of paid parking at the new transit terminal is a reasonable approach. If the pilot is successful it should be expanded.

5. Ridership and Revenue Impacts

In order to assess potential impacts on ridership and revenue for Strathcona County Transit an elasticity value of -0.3 is utilized. This is based on industry wide averages, and represents a conservative value. This value is most reliable for relatively small changes in price. The impact of large price changes is more difficult to forecast. Caution must also be recognized when other factors are changed at the same time such as fare product rules or eligibility. For example changing the price of a product and changing its period of eligibility (i.e. extending or reducing the time period during which it may be used) will likely result in different ridership impacts that cannot be predicted solely based on fare elasticity.

The elasticity model estimated that the overall impact of the proposed changes will be a ridership increase of about 7 percent. Ridership is forecasted to increase from about 1.524 million trips to 1.640 million trips. The increases are expected on both the local and commuter operations as well as from the sale of new products. Revenues are projected to increase about 2.3 percent from \$4,400,965 to about \$4,505,800.²

6. Mobility Bus Findings

The Transit Master Plan recommended that Mobility Bus fares should be aligned with the fixed route fares. This recommendation was based on the general approach to Human Rights as evidenced by legislation in Ontario, and actions on specialized transit fares by the Human Rights Commissions in Alberta and Saskatchewan. However this approach only applies to services offered by a transit system that correspond to the fixed route operation. In the case of Strathcona County the precedent would apply to local service within Sherwood Park, and service between Sherwood Park and Edmonton, but not between Sherwood Park and the rural areas or the rural areas and Edmonton.

The Human Rights Commissions have focussed on the consumer impact or relationship (e.g. cost of fares), rather than the taxpayer impact (e.g. farebox recovery) as the standard of equality. This has placed all transit systems in a difficult position. Human Rights Commission rulings in other jurisdictions have seemingly not considered that specialized transit costs are about ten times greater than fixed route costs on a per passenger basis. The Commissions have evaluated equity based on rider costs and focussed on reducing fares from about double the fixed route fare to equal to the fixed route fare, including general discounts based on demographics (senior, students, and youth) and accepting monthly fixed route passes on the specialized transit services.

7. Proposed Mobility Bus Fares

a. Within Sherwood Park

Same as local fixed route for cash, passes and tickets for adults, students/youth and seniors except that Everybody Rides is not accepted

b. From Sherwood Park to Edmonton within 400 metres of an operating Strathcona County Fixed Route Service or to a supplemental destination

Same as commuter fixed route for cash, passes and tickets for adults, students/youth and seniors except that Everybody Rides is not accepted.

c. Rural to Sherwood Park

No Change, \$7.25 with no discounts

d. Rural to Edmonton

Rural to Sherwood Park fare (\$7.25) plus the fare for Sherwood Park to Edmonton (Same as commuter fixed route for cash, passes and tickets for adults, students/youth and seniors except that Everybody Rides). This offers a reduction in cost to locations although the amount of the

² This is based on 2013 actual revenue, the most recent available at the time of the study

7. Second Round of Consultations

A second round of stakeholder consultations was held to receive feedback on the proposed fare structure. The first step in this round of consultations was a presentation to the Strathcona County Council at their regular meeting on March 10, 2015. It was followed by a series of individual meetings with interested councillors, the Mayor and senior staff at select County departments as well as one-on-one meetings with representatives of the school boards, public open houses, and telephone discussions with representatives of ETS and St. Albert Transit.

1. Strathcona County Council

The presentation to Council was well received and questions were asked about the event passes and day passes. Concerns were raised about the classroom tripper competing with privately owned yellow buses. It was explained that the classroom tripper was being created to provide an opportunity for young students to learn how to ride transit as well as provide a low cost access for a field trip experience.

One-on-One meetings were held with five of the Councillors and the Mayor. In general the proposed strategies were well received. Some of the specific concerns that were identified and responses that were provided are listed below.

- A council member was concerned that the classroom trippers would be creating competition for yellow school buses. It was noted that the purpose of the classroom tripper was to promote the use of transit by making the transit experience a field trip by itself. It would provide an opportunity to teach young students how to use the bus and expose many children to transit for the first time. It is designed to create teachable moments as well as providing access to destinations directly along Strathcona bus routes in Sherwood Park and Edmonton.
- Two of the members of council were concerned with the elimination of the large discount for seniors. They were somewhat reassured upon learning that seniors with low income would still qualify for low income passes. The councillors were also interested to hear that the new senior tickets offer a 44 percent discount.
- One member expressed the view that Day Pass should be a family pass as well. It was noted that the Event Pass was available, but the councillor clearly indicated that a regular family pass like the product available on ETS was needed. The final recommendations address this issue.
- One member felt that commuter monthly passes could be raised more than the proposed \$1.00 per month. It was noted by the consultants that in the previous round of consultations the current farebox recovery level was seen as sufficient and a \$1.00 increase was all that was required to maintain the recovery rate.
- One council member felt that commuters would not want to ride with elementary students using the Classroom Trippers. The consultants explained that the trippers would not be available for travel in peak periods and chaperons would be required. It was also found that the peer review found these programs to be popular and successful and help train students about using transit.

- One Councillor raised the issue of Personal Care Attendants riding the fixed route free. The member was assured the issue would be reviewed for the final recommendations.

Meetings were also held with representatives of the Finance Department and Family and Community Services. The representative of Finance raised the issue of cost recovery and inquired if the new fare structure could be used to increase revenue. It was explained that the recommended fare structure would maintain the existing cost recovery and if additional revenue was needed higher fares could be adopted while maintaining the relationship among the different components. The multiplier for the monthly pass rate was also able to be increased independently if needed, thereby increasing the monthly pass price alone.

Family and Community Services (FCS) were pleased with the expansion of the Everybody Rides program and the reduction in the number of different means tests to be used to determine eligibility for reduced fares. Family and Community Services fully supported the move to limit large discounts to persons with limited incomes and provide smaller discounts based solely on age or student/youth status. These recommendations are consistent with the County's draft Municipal Subsidy Strategy that is being finalized by FCS.

2. Schools

One-on-one meetings were held with Elk Island Public and Catholic School Boards. The proposed student/youth fares were very well received by the staff at both school boards. The Catholic Board currently purchases school passes and they were very pleased with the redefinition of the pass as an unrestricted student/youth pass with a price that can be fully covered with the provincial student transportation subsidy. The new Off Peak Student/Youth pass for travel home after school was also welcomed and the classroom tripper was also well received.

The staff at the public school board were very interested in the Off Peak Student/Youth pass and the classroom tripper and pleased that their students would have the ability to buy a reasonably priced student/youth pass to supplement the Yellow bus service. They also felt the classroom tripper and summer pass would be appreciated by teachers and the public school students.

3. Mobility Bus Users

Several Mobility Bus users attended the public open house session on Wednesday, March 24th, at Bethel Transit Terminal and Thursday March 25th at the Community Centre. The Mobility Bus users were unanimous in supporting the proposed recommendations.

Some of the participants raised the issue of Personal Care Attendants (PCA) on Mobility Bus. Under the current fare rules if a rider is identified as needing a PCA the PCA must ride with the passenger on every trip. The passenger may not ride Mobility Bus without a PCA. The recommended fare structure includes allowing Mobility Bus certified passengers to ride the fixed route system free of charge. Mobility Bus users were concerned that in order to take advantage of the free fare on fixed route a person with a disability might need a PCA, even though they do not require one on Mobility Bus. Under the current rules a PCA would not be allowed free travel on fixed route to accompany the person with a disability unless a PCA was required for Mobility Bus. The Mobility Bus users asked that consideration be given to relaxing the rule so that PCAs are not required on every Mobility Bus or fixed route trip if they are identified on the Mobility Bus certification.

4. Public Consultation

This round of public consultation included an open house at the Bethel Transit Terminal during the evening peak period and one at the Community Centre. Visitors to the two sessions were also invited to participate in a survey on the proposed changes on the Strathcona Transit homepage or to complete a hard copy to be input by Strathcona County staff. IPads were available at the meeting sites to access the on line survey.

Several hundred people passed through Bethel Transit Terminal but only about 25-30 engaged with staff or the consultants to discuss the proposed fare changes. About 7 members of the public attended the session at the Community Centre.

Most regular users at both events express indifference to the proposed increase of \$1.00 per month the adult commuter pass. The users were interested in the special Event Pass in order to allow groups of adults or families to attend activities in Edmonton. The question of how the pass would work for event such as the Folk Festival which lasted longer than six hours was also raised.

The concept of providing the largest discounts to those in the greatest financial need regardless of demographics or age was felt by most to be the most appropriate means of determining fare prices. The exception was among most, but not all seniors who attended the meetings. These seniors felt that they were entitled to substantial discounts regardless of their financial need, based purely on their age. Some of the seniors thought that the new senior tickets might be suitable replacement for the discounted passes.

5. Public Survey

A survey was available on line at the Strathcona County Transit homepage and hard copies were made available to individuals and groups of seniors. Although the survey was not statistically significant it does provide a good anecdotal snapshot of the range of public opinion on the proposed changes. The complete survey results are provided in Appendix 1.

A total of 249 completed surveys were completed. Among the returned surveys 79 percent were from passengers who use the commuter services and 18 percent were from rider who use the local services. A total of 12 percent of respondents never ride Strathcona County Transit and six percent (15) of the respondents use the Mobility Bus service. Almost half of the users of the Mobility Bus identified as being 65 years of age or older. Seniors generally ride less frequently that people under age 65. Only a quarter of seniors who ride Strathcona County Transit actually ride to Edmonton at least four times per week as shown in Figure 4 - Frequency of Trips to Edmonton by Age Group.

Figure 4 - Frequency of Trips to Edmonton by Age Group

How often do you Ride to Edmonton		
	Age 65 and Older	Under Age 65
At least 4 times/week	25%	48%
At least 2 or 3 times per week	25%	4%
3-6 times per month	21%	5%
Infrequently (less than once per month)	11%	33%
I don't ride to Edmonton	18%	10%
Total	100%	100%

On trips within Sherwood Park seniors were even less likely to ride frequently and 34 percent of seniors currently never take trips on transit entirely within Sherwood Park. Adults under age 65 also currently ride less frequently within Sherwood Park as shown in Figure 5 - Frequency of Trips within Sherwood Park by Age Group

Figure 5 - Frequency of Trips within Sherwood Park by Age Group

How often do you Ride in Sherwood Park	Age Group	
	Age 65 and Older	Under Age 65
At least 4 times/week	14%	26%
At least 2 or 3 times per week	17%	10%
3-6 times per month	10%	8%
Infrequently (less than once per month)	24%	20%
I don't ride within Sherwood Park	34%	36%
Total	100%	100%

Among users of the commuter bus about 50 percent also transfer to and from the local service. The remaining passengers predominately use the park and ride lots (33 percent) while other are driven to the terminal (11 percent) or walk or cycle (7 percent). Within Edmonton about 60 percent access Strathcona County Transit by walking or cycling to a stop while 29 percent transfer from an ETS bus. However 41 percent of seniors travelling to Edmonton say they connect with ETS. Two percent ride StAt and transfer to Strathcona County Transit and 4 percent get a ride to the Strathcona stop. One percent reported some other means of reaching the Strathcona Stop.

Among the respondents about 72 percent were between age 27 and 64 years old, 10 percent between 19 and 26, and 12 percent 65 or older. Four percent declined to answer and one percent was 18 or younger. About 12 percent reside alone while the remainder live in households with 2 or more residents. Fifty- six percent work or attend school in Edmonton, while 25 percent work or attend school in Sherwood Park and 12 percent were retired. Eighty percent live in Sherwood Park, 10 percent in rural Strathcona County and 8 percent in Edmonton. The remaining 2 percent live elsewhere.

The under representation of post-secondary students (19 to 26 age group) may be due to the U-Pass being unchanged. High School students likely did not respond since they are not involved in the purchase of their transit fares. Student cash fares, tickets and passes are likely purchased by parents or provided by the school board.

The seniors who responded had average household incomes well below the average income of persons under age 65 as shown in Figure 6 - Income and Household Size. The results also show that seniors typically have smaller household sizes. About 33 percent of the seniors who responded with their income data would be eligible for Everybody Rides, however only about 9 percent of other riders would qualify.

About one quarter of the survey respondents have school age students living in their home. About 59 percent have students in Elk Island Public Schools, and 41 percent have students in Elk Island Catholic School system. The survey results show a great deal of interest in the new, less expensive Youth Pass. The interest is highest among parents in the public school system with students in junior high, and parents in the Catholic schools with students in high school. Interest in the Summer Pass is also strong,

particularly among Catholic school parents. The response of “Not Sure” is likely due to uncertainty about plans for the summer such as camps or vacations; however a single pass for the entire summer should make it a popular product.

Figure 6 - Income and Household Size

	Income and Household Size			
	Household Income		Avg Household Size	
	Age 65 and over	Under age 65	Age 65 and over	Under age 65
20,000 - 34,999	33%	9%	1.50	2.66
35,000 - 49,999	22%	33%	1.75	2.00
50,000 - 59,000	6%	7%	1.00	2.75
60,000 - 74,999	22%	8%	1.75	2.46
75,000 - 99,000	11%	8%	2.00	3.26
100,000 - 124,999	6%	14%	3.00	2.95
125,000 - 150,000	0%	8%		3.07
More than 150,000	0%	13%		3.38
Total	100%	100%		

Figure 7 - Interest in Buying New Youth or Youth Summer Passes by School Board

	Would you buy \$36 Youth Pass During School Year?					
	Public Schools			Catholic Schools		
	Elementary	Junior High	Senior High	Elementary	Junior High	Senior High
YES - Would buy	13%	77%	44%	46%	50%	73%
NO - Would not buy	88%	23%	56%	54%	50%	27%
Total	100%	100%	100%	100%	100%	100%

	Would you buy \$48 Summer Pass for Local Transit					
	Public Schools			Catholic Schools		
	Elementary	Junior High	Senior High	Elementary	Junior High	Senior High
YES - Would buy	0%	54%	25%	46%	43%	73%
NO - Would not buy	88%	46%	31%	15%	29%	9%
Not Sure	13%	0%	44%	38%	29%	18%
Total	100%	100%	100%	100%	100%	100%

A majority of respondents (55 percent) were in favor of providing a significant discount for low income riders who are buying monthly passes, but 29 percent felt that discounts should be based on age, regardless of income. Fifteen percent did not have an opinion. When looked at by age group the under 65 population was in favor of income based discounts. The over 65 age group was almost evenly divided between supporting income discounts and age based discounts, as shown in Figure 8.

The proposal to have a 25 percent discount on transit fares for seniors and students/youth and a 75 percent discount for persons with low income was supported by 55 percent of respondents while 30

percent would prefer to leave the current 72 percent senior discount and 10 percent student discount in place. About 15 percent were unsure. As shown in Figure 9, seniors clearly favored keeping the existing student and senior discounts in place. Those under 65 however were strongly in favor of moving to a smaller discount for demographic categories.

Figure 8 - Age vs Income Based Discounts by Age Group

Do you believe fares should be discounted based on income rather than age?		
	Age 65 and over	Under age 65
Support discount based on income	47%	57%
Support discount based on age	50%	26%
Not sure	3%	17%
Total	100%	100%

Figure 9 - Support for 25 percent Demographic Discounts and 75 percent Discount for Income Based Discounts by Age Group

Would you support a 25% discount on transit fares for seniors and students and a 75% discount for low income		
	Age 65 and over	Under age 65
Support 25% discount for seniors and students who don't qualify for low income discount	28%	61%
I prefer to leave existing senior and student discounts in place	59%	25%
Not sure	14%	14%
Total	100%	100%

When asked if you support a 75 percent discount for low income riders 55 percent of respondents supported the concept. Just 26 percent supported retaining the existing pricing that offers variable discounts ranging from 57 to 100 percent for low income residents. About 19 percent were unsure how to respond. Figure 9 shows that in this case seniors were strongly in favor of a 75 percent discount based on low income.

Fully 73 percent of respondents supported lowering commuter cash and ticket prices, but 18 percent felt that cash and ticket prices should stay unchanged. Ten percent were unsure. Similarly 74 percent felt that lowering local fares was a good idea and 17 percent were opposed to the concept with 9 percent unsure.

The survey asked if you would be interested in an event pass that would allow a family of five or four adults to travel to Edmonton and back within 6 hours for a total price of \$10.00. A total of 63 percent of respondents would use such a pass. The pass was of no interest to 22 percent of respondents and 15 percent said they usually travel alone and would prefer an event pass priced for one person.

Figure 10 - Do you Support a 75 percent Discount for Low Income Riders by Age Group

Would you support a 75% discount on transit rides for all low-income residents	Age Group	
	Age 65 and over	Under age 65
I support a 75% discount for all low income users	68%	55%
I prefer to leave in place existing discounts that offer reductions of 57% to 100% for low income riders	21%	26%
Not sure	11%	18%
Total	100%	100%

One of the proposed changes would be to allow Mobility Bus registered users to ride free of charge on Strathcona County Transit. Eight of the 15 Mobility Bus users who responded to the survey said they would use this service. One person would need travel training to be able to use the fixed route service and two persons said they would ride only if their personal care attendant could also ride free. Reducing Mobility Bus fares to the same levels as Strathcona County Transit (except for Everybody Rides) would result in 9 of the 15 respondents increasing their use of Mobility Bus, and three would not ride more often. The remaining respondents did not specify.

The last question provided respondents to share any other comments about transit fares. Comments were found on 104 of the 249 surveys. Some commenters mentioned more than one subject resulting in about the discussion of 166 topics. There were 47 forms that included comments about service including routes and frequency of service. This was the dominant topic and was mentioned by about 19 percent of the respondents. There were 37 comments, representing 15 percent of respondents that liked some or all of the proposed changes. A total of 12 comments or 5 percent of respondents took exception with the increase in the seniors pass although there were no comments about the new reduced senior tickets or cash prices. Five respondents or 2 percent suggested that new fare collection technology be implemented to improve convenience. Three persons or 2 percent of respondents suggested that local transit should be free. There were about 28 other comments on other subjects made by either one or two persons. The complete list of comments is provided in Appendix 2.

6. Edmonton Transit System (ETS)/St. Albert Transit (StAT)

Telephone interviews were held with representatives from the Edmonton Transit System and St. Albert Transit.

ETS was concerned that reducing the price of the Strathcona County Transit cash fare and tickets might require the interagency agreement be amended to ensure that Strathcona fares do not fall below the price level of ETS tickets and cash. ETS staff supported the shift away from deep discounts based on demographics to the provision of deep fare discounts based on a means test. ETS was pleased to hear that the fare system was smartcard ready and could be adapted to new technology now under consideration. ETS welcomed the opportunity to have Strathcona County Transit join their employer pass program.

ETS currently has a program that allows Edmonton Eskimo ticket holders to ride ETS free to games at Commonwealth Stadium. This program, in combination with the proposed Strathcona Event Pass would

allow four adult fans or a family from Sherwood Park to travel to and from Eskimo Games for \$10.00. During the interview with ETS it was clarified that their Day Pass, which is accepted by Strathcona County Transit, is valid for one adult and up to four children under age 13 for \$9.00. The proposed Strathcona County Day Pass would be \$10.00 for one adult. Both Day Passes allow passengers to travel on both systems, although passengers holding an Edmonton Day Pass would have to pay an additional dollar to ride Strathcona Transit.

St. Albert Transit does not believe the new fare structure would impact the use of their services. Although StAT does accept monthly passes and transfers from Strathcona County Transit there is no formal agreement. Strathcona Commuter cash fares and ticket prices are being lowered but the fares will not be less than StAT fares when the \$2.00 StAT transfer surcharge is added. A \$4.00 cash Strathcona County Transit cash fare with transfer, plus the \$2.00 StAT surcharge is equal to the \$6.00 StAT cash fare. A \$3.00 Strathcona ticket with a \$2.00 StAT surcharge is still more expensive than a StAT \$4.12 commuter ticket.

With the addition of a number of new fare products including a day pass it may be desirable to create a memorandum of understanding between the two systems regarding which products are accepted and identify any applicable surcharges. The discussions should include adding a provision to allow the Strathcona County Transit day pass to be accepted on StAT.

7. Changes to Recommendations based on Consultations

As a result of the stakeholder consultation process is recommended that changes be incorporated into the proposed recommended fare structure. This includes:

- a. Day Pass – It is proposed that the Strathcona County Transit Day Pass adopt the same rules and eligibility as the Family Day Pass used by ETS. It is proposed that the fare rules be amended to include allowing up to four children under age 13 ride along with the adult pass holder. Mimicking the ETS rules will simplify the use of the pass for transit operators in both systems and provide a further benefit for families living in Strathcona. This extended pass will also resolve the issue for people wishing to attend day long events in Edmonton without having to purchase the Special Event Pass that is intended to be limited to 6 hours.
- b. Family Event Pass – It is recommended that the Event Pass be expanded from allowing 2 Adults and 3 Children or 4 Adults to also permit 1 Adult and 4 Children. It is also recommended that the pass be modified to set the maximum age for children to be under 13, consistent with the Day Pass. The Event Pass is valid for use on Strathcona County Transit only.
- c. It is proposed that Mobility Bus users also be allowed to bring one personal care attendant free of charge when riding a fixed route bus. This would not change the rules that apply regarding companions or personal care attendants when using Mobility Bus.
- d. It is proposed in the implementation that time be provided to allow seniors to fully understand the new fare structure including the revised means testing and the availability of new products such as reduced cash and ticket prices. The reduced commuter cash and ticket prices are also allow free transfers to ETS.

8. Additional Considerations

1. Managing Fare Increases

The proposed fare structure has been designed around the adult cash commuter fare. A change to the adult cash fare would result in a change to every other fare in the system. Monthly passes are based on a set multiplier of the cash fare while special fares and tickets are based on established discounts based on either the cash price or monthly pass.

The Commuter monthly adult pass is 24 times the commuter cash fare. The senior and student/youth cash fare is available for a 25 percent discount on adult cash fare. Tickets (in books of 10) are a 25 percent discount on the equivalent cash fare and senior and student/youth passes are 24 times the student/youth and senior cash fares. The local adult cash fare is 50 percent of the commuter cash fare. The multiplier for local monthly passes is 24 times the cash fare. Discounts of 25 percent are offered for student/youth and senior cash fares and a further 25 discount is available for tickets based on the cash price. Local and Commuter Everybody Rides passes are offered and a 75 per cent discount on the regular adult prices.

The Mobility Bus fares within Sherwood Park and between Sherwood Park and Edmonton are the same as the adult cash, ticket and pass prices. Between Sherwood Park and rural Strathcona County the fare is \$7.25 or 1.75 times the Commuter adult cash fare. This relationship should be maintained in the future as well so that as the adult commuter fare increases so does the rural mobility bus fare.

The Day Pass and Event pass are priced at 2.5 times the cash adult fare. The Super Off Peak Concession for local service is 50 percent of the full student/youth monthly pass. The summer student/youth pass costs less than a single monthly student/youth pass during the school term. The Recreation Program Pass and Classroom Tripper program passes are priced independently.

This means that a single change to the commuter adult cash fare would ripple through the entire fare structure except for the Recreation Program Pass and Classroom Tripper program passes. Determining how and when to seek a fare change is a separate issue.

The current fare levels are designed to sustain a cost recovery of about 31 percent. As long as this level of cost recovery is desired the fares should be adjusted annual to maintain the farebox recovery. At some point in the future it may become necessary to increase the level of farebox recovery. Rather than across the board fare increases it is recommended that the multiplier be increased from 24 to up to 30 for the monthly pass. The maximum multiplier that should be implemented is about 31, based on the peer survey. In order to increase revenue beyond this level it would be necessary to increase the cash fares and ticket prices or reduce the discounted fares from the recommended level of a 25 percent discount.

2. New Technology

The recommended fare structure is fully compatible with the available smartcard or mobile ticketing systems currently available. If a smartcard or mobile ticketing system is implemented in the near future it is recommended that further changes in the fare structure be implemented. These include:

a. Replace tickets with stored value.

With the smartcard technology, users can load money onto their smartcard. This will eliminate the need to print tickets and end the problem of dealing with aged or counterfeit tickets. The level of discount can be maintained by issuing bonus value when a certain amount of cash is loaded into the card based account. For example a 25 percent bonus would be given if at least \$25.00 is loaded onto the card.

b. Elimination of Cash Transfers.

Transfer fraud and abuse is one of the major forms of fare evasion on most transit systems. Bus operators do not have sufficient time to carefully inspect every transfer that is presented to them. Eliminating paper transfers removes this area of abuse and encourages the acquisition of smartcards, which in turn provides more data on ridership patterns and helps reduce cash dumping, counting, sorting and banking.

The smartcard system will automatically put a transfer on the card when a cash fare is deducted. The period of validity of the transfer is likewise determined by the smartcard system and either accepted upon the next boarding or a new fare is deducted.

c. Implement Rolling Passes

One of the major drawbacks of the current monthly pass system is the rush that is created at customer service windows at the end and start of each month as passengers form queues to buy new passes. This problem can be eliminated by introducing rolling passes that can be renewed on a schedule other than a calendar month basis. Many transit systems have converted to 30 or 31 day passes, but the most effective system would be to create a 4 week or 28 day pass. Thirty or thirty-one day passes create some confusion as passengers forget when the pass expires and may try to ride with expired passes creating hassles for the operators and a potential loss of revenue for the system. The advantage of a 4 week pass is that it expires on the same day every four weeks therefore it is much easier for passengers to remember when a new pass is required. Also most schedules for work or school are based on whole weeks and passengers can choose for their passes to expire at the weekend to coincide with vacations, holidays or the end of term. If the monthly pass was shortened to four weeks (28 days) the price could be reduced, making the passes appear less expensive.

Using the same technology a Day Pass could be valid for 24 hours rather than expiring at the end of service day. This would make the sale of day passes more attractive later in the day when it would be impossible to make enough trips to be a worthwhile purchase.

d. Alternative Pass Periods

Passes of 7 days or 14 days can be issued using paper media, however tracking expiry dates puts a burden on bus operators and selling the products creates extra work for customer service

representatives. Longer term paper passes create security problems as an annual transit pass could easily have a value of more than \$1,000 and become an attractive target for counterfeiting. Smartcard systems eliminate these hassles and allow transit agencies to sell both short and long term passes without the extra hassle or security issues. If and when a smartcard system is adopted by Strathcona County Transit it is recommended that consideration be given to create a 1 week or 2 week short term pass as well as an annual pass or an automatically renewing 28 day pass. The short term passes should include a premium over the 28 day pass while the subscription/annual pass could include a larger discount than is available through the purchase of monthly passes.

e. Capping/Best Value

Capping or best value are two terms that are used to describe a fare system that automatically issues a pass when a certain number of single trips are purchased. Some transit systems implement this system for day passes. Using the proposed Strathcona County Transit fares as an example a passenger would have \$4.50 deducted from their card on their first trip to Edmonton, and \$4.50 on their second trip back to Sherwood Park. However if they rode again that day within Sherwood Park the system would take \$2.25 for a local fare but record the purchase of a \$11.25 day pass and the passenger could ride as many times as they wish for the remainder of the day. Alternatively the system could be designed to work on a 28 day basis and keep track of the number of cash trips taken. If the targeted number of trips (for example 24) was taken within 28 consecutive days the passenger would receive a pass allowing unlimited free rides until 28 days from the first trip taken.

9. Final Recommendations & Implementation

1. Implementation Recommendation

The elasticity model created for this project was based on 2013 ridership and revenue, and was designed to forecast fare changes for 2015 implementation. There was a significant delay in completing the project and as a result the first phase of implementation has now been pushed back to begin in February 2016 with minor increases in the commuter monthly passes. Several new products are implemented later in 2016 and all of the remaining changes are implemented in 2017 except the changes to the senior fares. The senior pass changes are now proposed to be phased in beginning in February 2018. The proposed fares and revised implementation schedule are shown in It is recommended that four changes also be incorporated as a result of the stakeholder consultation process. These changes include:

- Changing the Adult Day Pass to a Family Pass for one adult and up to four children under 13
- Allowing Mobility Bus users to bring one Personal Care Attendant free of charge when riding fixed route buses
- Extending the Event Pass to include up to four children and defining the age of children as under 13 years old
- Delaying the implementation of the higher cost commuter senior monthly pass for one year.

It is recommended that fares be adjusted annually as needed in order to maintain the revenue cost ratio at 31 percent, which is based on the initial consultation with Council.

It should be noted that there is no single best practice for setting the level of cost recovery. Every transit system and its local community and financial resources are unique. However, fare levels and fare policy are not the only factor that determines recovery rates. The cost of operations including the level of service, the length of trips, the urban form or land use patterns and the cost of inputs such as labor and fuel all impact the cost recovery. To balance the local transportation, social and environmental needs and costs to provide services, the community decides what level of municipal subsidy is most appreciate to support the required level of service. If required, a higher cost recovery can be achieved through higher fares, lower level of service, and more efficient operations.

Although the recommendations include a single person event pass it may be desirable to forego this product in order to simplify the overall fare schedule. A single person without an event pass can make a round trip for two cash fares or one regular day pass and avoid the extra restrictions of the special event pass while still being less expensive than parking. The purpose of the regular special event pass was to create a product competitive with parking and suitable for multiple adults or a family attending a major event.

In addition to the recommendations outlined above some additional advisory recommendations are provided for consideration if and when a new regional fare collection system is adopted. These advisory recommendations include:

- Replacing tickets with stored value and implementing a bonus to encourage balances in the accounts
- Eliminating transfers except when a fare is purchased with stored value
- Implementing rolling passes based on a 24 hours a day and 28 day rather than a calendar month
- Introducing new shorter period passes for either 7 days or 14 days
- Consider the use of capping or best value to automatically provide passengers with the least expensive fare

It is recommended that a formal agreement or memorandum of understanding be put into place with StAT to formalize the acceptance of each systems fare products on the other system.

It is recommended that in 2018 Mobility Bus fares match the Commuter and Local fixed route fares excluding Everybody Rides products. This does include cash, tickets and pass products. It is recommended the change be delayed to 2018 to allow time for Mobility Bus to acquire additional vehicles and train new operators. Allowing Mobility Bus users to ride fixed route should be implemented in February 2016.

Figure 11. The fares shown would be rounded to the nearest \$0.05 for cash and farebox purchases. It would be possible to stop full implementation of the senior pass prices in 2020 when senior passes are planned to be 55 percent of the adult pass price if there is strong opposition or a new direction from Council.

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vehicles and train new operators. Allowing Mobility Bus users to ride fixed route should be implemented in February 2016.

Figure 11 - Forecast Fares Prices by Type 2015 to 2020

		Feb-15	Feb-16	Feb-17	Feb-18	Feb-19	Feb-20
Commuter & Mobility Bus to Edmonton~#	Adult Cash	\$ 6.00	\$ 6.00	\$ 4.50	\$ 4.60	\$ 4.75	\$ 4.90
	Adult Monthly	\$ 103.00	\$ 105.00	\$ 108.00	\$ 110.40	\$ 114.00	\$ 117.60
	Adult Ticket*	\$ 4.20	\$ 4.20	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Student Cash	\$ 6.00	\$ 6.00	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Student Ticket*	\$ 4.20	\$ 4.20	\$ 2.53	\$ 2.59	\$ 2.67	\$ 2.76
	Student Monthly	\$ 93.00	\$ 93.00	\$ 81.00	\$ 82.80	\$ 85.50	\$ 88.20
	Senior Cash	\$ 5.00	\$ 5.00	\$ 3.38	\$ 3.45	\$ 3.56	\$ 3.68
	Senior Ticket*	\$ 4.20	\$ 4.20	\$ 2.53	\$ 2.59	\$ 2.67	\$ 2.76
	Senior Monthly	\$ 28.00	\$ 30.00	\$ 32.00	\$ 38.64	\$ 51.30	\$ 64.68
Commuter	Senior annual	\$ 332.25	\$ 332.25	\$ 332.25	N/A	N/A	N/A
	Senior Low Income Annual	\$ 155.00	\$ 155.00	\$ 155.00	N/A	N/A	N/A
	Family Day Pass@	N/A	N/A	\$ 11.25	\$ 11.50	\$ 11.88	\$ 12.25
	Everybody Rides Monthly	\$ 24.00	\$ 26.00	\$ 27.00	\$ 27.60	\$ 28.50	\$ 29.40
Local & Sherwood Park Mobility Bus~#	Adult Cash	\$ 3.25	\$ 3.25	\$ 2.33	\$ 2.33	\$ 2.38	\$ 2.45
	Adult Monthly	\$ 56.00	\$ 56.00	\$ 56.00	\$ 56.00	\$ 57.00	\$ 58.80
	Adult Ticket*	\$ 2.20	\$ 2.20	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Student Cash	N/A	\$ 3.25	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Student Ticket*	N/A	\$ 3.25	\$ 1.31	\$ 1.31	\$ 1.34	\$ 1.38
	Youth Monthly	\$ 54.00	\$ 54.00	\$ 42.00	\$ 42.00	\$ 42.75	\$ 44.10
	Senior Cash	N/A	\$ 3.25	\$ 1.75	\$ 1.75	\$ 1.78	\$ 1.84
	Senior Ticket*	N/A	\$ 3.25	\$ 1.31	\$ 1.31	\$ 1.34	\$ 1.38
	Senior Monthly	N/A	N/A	N/A	\$ 19.60	\$ 25.65	\$ 32.34
	Senior Free Off Peak	\$ -	\$ -	\$ -	N/A	N/A	N/A
Local	Everybody Rides Monthly	N/A	N/A	\$ 14.00	\$ 14.00	\$ 14.25	\$ 14.70
Special Products for Local or Commuter	Event Pass Family+	N/A	N/A	\$ 11.25	\$ 11.50	\$ 11.88	\$ 12.25
	Event Pass Single	N/A	N/A	\$ 6.75	\$ 6.90	\$ 7.13	\$ 7.35
	Employer Commuter Pass	N/A	N/A	\$ 81.00	\$ 82.80	\$ 85.50	\$ 88.20
	Employer Local Pass	N/A	N/A	\$ 42.00	\$ 42.00	\$ 42.75	\$ 44.10
	Super Off Peak Youth Local	N/A	\$ 20.00	\$ 21.00	\$ 21.00	\$ 21.38	\$ 22.05
	Rec Program Pass Weekly	N/A	N/A	\$ 11.20	\$ 11.20	\$ 11.40	\$ 11.76
	Classroom Tripper Local/Student	N/A	N/A	\$ 1.17	\$ 1.17	\$ 1.19	\$ 1.23
	Classroom Tripper Commuter/student	N/A	N/A	\$ 2.25	\$ 2.30	\$ 2.38	\$ 2.45
	Student Local Summer	N/A	\$ 32.00	\$ 33.60	\$ 33.60	\$ 34.20	\$ 35.28
Mobility Free			\$ -	\$ -	\$ -	\$ -	\$ -
Mobility Bus~	Within Sherwood Park Cash	\$ 5.00	\$ 5.00	\$ 5.00	Same as Commuter Adult, Student & Senior Fares for cash, tickets and passes. Everybody Rides Not Accepted		
	Within Sherwood Park Tickets*	\$ 4.50	\$ 4.50	\$ 4.50			
	Sherwood Pk - Edmonton Cash	\$ 7.75	\$ 7.75	\$ 7.75			
	Sherwood Pk - Edmonton Tickets*	\$ 7.00	\$ 7.00	\$ 7.00	Same as Local Adult, Student & Senior Fares for cash, tickets and passes. Everybody Rides Not Accepted		
	Rural - Sherwood Park Cash^*	\$ 7.25	\$ 7.25	\$ 7.25			
	Rural - Sherwood Park Tickets^*	\$ 6.50	\$ 6.50	\$ 6.50			

* Tickets sold in books of 10

^ Mobility Bus Rural to Edmonton fare is Rural to Sherwood Pk fare plus applicable Sherwood Pk to Edmonton Fare

~Personal Care Attendant rides free between same origin and destination on fixed route

@ Day Pass valid for up to 1 adult and 4 children under 13

+Event Pass Family valid for up to 4 adults or 1 adult and 4 children under 13

N/A Not available

Mobility Bus fares effective in 2018

2. Five Year Outlook to 2020

A second Elasticity Model was developed to look at the likely fare increases that may be required in order to maintain a 31 percent cost recovery ratio for the fixed route service from 2016 to 2020. Strathcona County Transit is assuming that ridership will increase at 3 percent per year from 2016 to 2020, excluding U-Pass holders, operating hours will increase 2 percent per year after 2016, and inflation will increase 2.5 percent from 2016 to 2020.

In order to maintain the current cost recovery of about 31 percent, the base fare in 2017 would need to be \$4.50 per adult commuter trip. This would also result in increases to all other fares. Strathcona County Transit will enter into U-Pass agreement negotiations for 2018 and assumes the growth in usage would be similar to the historical rate of increase in post-secondary enrollment at about 1.8 percent per year. The result is that further fare increases of \$0.10 to the base fare are required in 2018 and a \$0.15 increase is required in 2019 and 2020 in order to maintain the 31 percent cost recovery target in face of rising costs and the reduced growth in U-Pass revenue. These additional increases in the base fare ripple through the entire fare structure. The projections assume external factors such as gasoline prices and parking prices are stable and do not affect ridership.

Figure 12 - Five Year Cost Recovery Projections shows that with a base commuter cash fare of \$4.50 in 2017 and the other price adjustments in 2018, 2019 and 2020 the cost recovery can remain at 31 percent. The annual ridership grows from about 1.6 million in 2016 to about 1.8 million by 2020. Revenue grows from about \$5.1 million in 2016 to about \$5.8 million in 2020. Cost recovery remains stable at 31 percent from 2017 to 2020. In the future, if a higher cost recovery is deemed more appropriate for Strathcona County, fares could be increased to help achieve that. However, other factors, especially the required level of service also need to be considered to balance the community's transit needs and the level of municipal subsidy.

Figure 12 - Five Year Cost Recovery Projections

	2016	2017	2018	2019	2020
Base Fare Assumption	\$6.00	\$4.50	\$4.60	\$4.75	\$4.90
Projected Ridership	1,617,000	1,726,000	1,752,000	1,794,000	1,835,000
Actual Forecast Change in Ridership	3.0%	6.7%	1.5%	2.4%	2.3%
Projected Revenue	\$ 5,091,000	\$ 5,145,000	\$ 5,345,000	\$ 5,591,000	\$ 5,832,000
Projected Operating Cost	\$ 15,970,000	\$ 16,697,000	\$ 17,457,000	\$ 18,251,000	\$ 19,081,000
Projected Cost Recovery Rate	32%	31%	31%	31%	31%