

Park and Ride in Calgary

Review of Parking Management Options

Calgary Transit
2011 January

Summary

Calgary Transit provides a total of 14,588 parking spaces for Calgary Transit customers at 18 CTrain stations and 12 lots along major bus routes. As well, there are six privately operated lots available for Calgary Transit customer use. Since the 1980s, park and ride lots have been developed in accordance with Council policy. However, this service is available to less than 10 % of daily transit customers who value the convenience of being able to access transit service by using their private vehicle. About 8 to 10 % of park and ride customers live outside of the city.

Park and ride lots occupy approximately 150 acres and because of their location have considerable real estate value. While the lots have served to attract customers to transit, there is also direction in the Calgary Municipal Development Plan to examine the potential for Transit Oriented Development (TOD) in the areas surrounding many CTrain stations and major bus stops. TOD has the potential to allow The City to realize a return on the investment in this land and to realize a much greater level of ridership from TOD and other benefits than currently experienced from these sites. Park and ride can continue to be provided, perhaps in a different form and scale within the context of TOD.

Prior to introducing a \$3 daily charge for parking in 2009, many park and ride lots were filled to and beyond capacity with these lots filling up early on weekday mornings. This resulted in many frustrated people who spent considerable time hunting for a space and either abandoning their transit trip or parking illegally in the lot, in adjacent communities or in private lots belonging to nearby businesses. Prior to 2009, Calgary Transit received frequent requests to expand the parking lots; however, additional funds and land was not available for parking. In 2002, in response to customer requests, 220 reserved parking spaces were offered at Fish Creek Lacombe station for a monthly fee of \$50. This program was fully subscribed before the daily charge was implemented and it continues to be popular even when the monthly reserved fee was raised to \$90.

In 2009 March, a \$3 daily parking fee was implemented over the course of four months at all Calgary Transit park and ride lots. The purpose of the fee was to fund an increased level of security, cleaning and maintenance in the lots and stations. The need for park and ride improvements was highlighted in a safety audit and via concerns expressed by Council and transit customers. In response to Council direction, in 2009 March, Calgary Transit removed the parking charge for evenings and weekends and in 2009 December, the charge for parking in bus oriented lots was discontinued.

When the parking charge was first implemented, park and ride use declined significantly to about 55 % in CTrain lots. Parking revenue in 2009 was \$3.14 million versus a total park and ride operating cost of \$4.4 million. Operating costs were increased to cover improved security, cleaning and maintenance in comparison to the \$1 million spent on park and ride maintenance in 2008. During 2010 there was increasing parking lot use (65% in 2010 October¹) with annual revenues for 2010 of \$4.96 million and a total park and ride operating cost (including these additional services) of \$4.5 million.

¹ Table 2, Appendix, Source Calgary Parking Authority revenue data.

Reaction by transit customers and others to the charge for parking has been mixed. There continues to be a negative feeling about paying for a service that was previously provided free of charge. The impression among some is that transit use is being discouraged and there is an inconvenience experienced by those who pay on a daily basis. However, other customers are appreciative of the reduced auto crime in parking lots, ability to reliably get a place to park, and the improved level of cleaning (e.g. litter and snow removal).

In 2010 September a city-wide survey found that more Calgarians (41%) support charging a fee to parking lot users versus having parking costs paid by tax payers (23%) or general transit fares (23%). In response to Council direction, Calgary Transit conducted a customer survey in early 2011 January to obtain feedback regarding park and ride. The findings from this survey are summarized on page 9 and the information has been used to address six issues on which Council requested information.

- Is the fee a barrier to usage?
- Impacts to spill over parking
- Adjusting costs to respond to markets
- Shuttle buses
- Impacts to no fee
- Reserved parking and other innovative approaches

Information on these issues is provided in the body of the report on page 11.

In summary, park and ride offers a very convenient means for a limited number of people to access transit service in some areas of the city. Charging a reasonable fee for the use of park and ride accomplishes several key goals:

- Recognizes the added convenience of parking near transit service.
- Generates revenue to offset the cost of operating and maintaining the lots as an added value service.
- Manages the demand and public expectations with regard to access to limited resources.
- Encourages transit users to use alternate modes – bus, walk, cycle and drop off to access LRT.

Policies related to the supply of park and ride reflect the need to strike a balance between supply and demand while considering the implications of having large parking lots next to communities, stations, and bus routes. In recent years, the ability to satisfy the high demand for free parking and provide adequate levels of maintenance and security has been difficult.

Calgary Transit concludes that elimination of the \$3 daily parking fee in favour of a flexible reserved monthly parking program that is based on market demand, with a limit on the percentage of spaces that can be reserved, will continue to achieve the above objectives while providing transit customers with choices based on what they value. A reserved parking program would provide added customer convenience for payment via on-line or telephone reservations and the ability to reserve a space for one or multiple months.

Calgary Transit recommends that a reserved parking program can be implemented on 2011 April 4 following termination of the daily fee on April 1. Depending on demand, the proposed reserved parking program can be implemented over a two month period with the following recommended stages:

- a) terminal stations on each LRT line plus the lots with the highest initial demand for reserved parking;
- b) remaining highest demand lots (currently over 75% useage);
- c) remainder of LRT parking lots based on customer demand;

The program could be expanded to bus oriented lots at a later date and in response to customer demand.

Park and Ride in Calgary

Review of Parking Management Options

Background

Calgary Transit operates and maintains 14,588 parking stalls located at 18 CTrain stations and in 12 lots (20% of spaces) located along major bus routes. As well, there are six park and ride lots provided by private operators for transit customer use. Then City owned facilities occupy approximately 150 acres of prime real estate adjacent to key transit access points.

Park and ride facilities offer an added value service by providing transit access for people wishing to travel by transit but who need or value the convenience of a car for some portion of their trip. As well, park and ride is available for customers who are not able to use feeder bus services or who live out of town. Early in the development of LRT and bus services, park and ride has been attractive to many users who may have otherwise not used transit.

The determination of park and ride requirements almost since its inception has been based on consistent application of Council approved CTrain access guidelines which specify that park and ride facilities will be provided at CTrain stations. The policy calls for parking facilities to accommodate approximately 15 to 20 % of expected peak period transit ridership from the area served by a station.² As well, park and ride lots have been established along several major bus routes and most of these lots will serve future CTrain stations.

By design and policy, park and ride lots are generally located beyond five kilometres from downtown and they are intended to intercept auto commuters at the earliest opportunity to encourage continuation of their trip by transit. In essence, park and ride facilities perform an important role as a substitute for those who might otherwise drive to their destination (primarily downtown), as a tool for reducing roadway congestion, and to help to preserve the environment of established inner city communities.

² OD86-47 Re: Park'N'Ride Travel, SPC On Operations and Development, 1986 June 9



Brentwood Station



Fish Creek Lacombe Station

The challenge with park and ride is to determine an appropriate balance of these facilities relative to other transit access modes. Park and ride is only one segment of transit service and it must be planned in concert with the other transit access modes (i.e. feeder bus, walking, cycling, and passenger drop off). Since Calgary's sustainable development goals are focused on minimizing auto travel, priority should be given to providing service and facilities that favour access to the CTrain by feeder bus, walking and cycling.

Too much parking can detract from the general goal of reducing auto use and it directly influences the level of ridership on feeder bus services. Without ridership support, service levels on feeder bus routes, that also serve local community destinations such as schools, shopping and recreation facilities, may be reduced due to low ridership and threaten their viability. Too little parking may restrict the transit market in the corridor (particularly during initial stages of service introduction) and can result in overspill parking pressures in adjacent communities and businesses. Park and ride is also the only means that people from outside of Calgary can access transit service. Achieving the appropriate balance of park and ride relative to other access modes is important in maximizing overall system efficiency.

Finally, park and ride lots require a significant investment to construct and sufficient operating funds to properly operate and maintain. Land near CTrain stations and major bus stops is valuable. The recently approved Municipal Development Plan calls for more intensive land development at key LRT stations and bus terminals. The amount of land devoted to parking limits opportunities for Transit Oriented Development (TOD) and this style of development has been shown to generate far more transit trips than park and ride.

Calgary Park and Ride Experience

Numerous customer surveys have determined that most park and ride users are traveling to the downtown area for work. Therefore, park and ride offers a significant savings over the much higher cost of downtown parking. As well, about 8 to 10% of park and ride customers live in outlying areas.

With just 14,588 stalls, park and ride is available to less than 10 % of all weekday transit customers (LRT parking is available to about 8 % of CTrain customers). Prior to 2009 and the introduction of a charge for LRT parking, most LRT parking lots were operating at and beyond capacity with lots filling up by 7:30 am. There was significant dissatisfaction expressed by transit customers who arrived at a lot expecting to park only to find that the lot was full. This resulted in cars parked illegally within the lot and spill-over parking into adjacent communities and business parking lots was a problem. This experience did not allow these customers to use transit with certainty. There were frequent calls from customers demanding that Calgary Transit provide more parking, parking structures, etc. Customers were also frustrated with the lack of snow clearing, lack of regular cleaning, concerns with security, and poor maintenance in the lots. As well, there was often a shortage of short term parking for those wishing to make short duration trips during the mid day.

License plate scans conducted in 2007 showed that about 8 to 10 % of park and ride spaces were being utilized by residents from outlying municipalities. While park and ride was effectively intercepting these cars before they contributed to congestion on Calgary roadways, there was concern expressed by Calgary Transit customers that these people were using parking spaces paid for by Calgary tax dollars.

Although crimes against persons in park and ride lots were comparatively low, auto crime - theft, break-ins and vandalism - was a concern. Cars in park and ride lots are generally parked for extended periods of time. Following the morning rush hour, there is little activity for many hours and the lack of natural surveillance at a number of locations produces a situation that is conducive to auto crime.

In 2002, a pilot program was introduced at the Fish Creek Lacombe CTrain station where up to 220 stalls (20% of the lot capacity) could be reserved for a monthly fee of \$50. This was a popular option (fully subscribed) since it guaranteed that a parking space would always be available. CTrain customers could travel outside of the crowded morning peak period and with the reinvestment of revenues, the reserved portion of the lot was maintained at a higher standard - i.e. snow clearing, sweeping, line painting and enforcement patrols. The purchase of reserved parking in this lot is still offered and about 60 stalls continue to be reserved on a monthly basis following the introduction of the daily parking fee.

Cost of Park and Ride

The following information provides a general overview of the costs associated with providing and maintaining parking lots. The capital and land costs are based on recent experience with construction of two park and ride lots for Route 302 - Southeast BRT

and the parking structure being built at 69 Street SW for West LRT. Operating costs are based on Calgary Transit expenditures, a shopping mall parking lot and Calgary Parking Authority experience with parking structures.

Parking Lot Capital & Annual Operating Costs

	Surface Lot Per Stall	Parking Structure Per Stall
Land	\$5,000	\$1,700 (3 level)
Construction	\$6,000	\$40,000
Annual Operating*	\$100 to \$200	\$500 to \$700

*Annual operating costs include security patrols, snow removal, electricity (lighting and plug-ins), litter and garbage collection, line painting, sweeping, landscape upkeep and life cycle maintenance.

Prior to the implementation of a charge for parking, Calgary Transit operating cost for park and ride lots (maintenance, sweeping, line painting, minimal snow clearing, and electrical) was in the order of \$1 million or approximately \$70 per stall per year. In 2009, with the introduction of the \$3 daily fee, an enhanced level of security (additional Peace Officers) cleaning (additional station cleaners) and more frequent snow clearing was implemented bringing the total operating cost to about \$4.5 million. It is acknowledged that some of these costs were for security and cleaning services provided within the station and on the CTrains

Charge for Parking Implementation

In 2009 March, Calgary Transit began the roll out of a daily \$3 charge for parking in all park and ride lots. The fee for LRT lots was fully in force by 2009 June. The charge was implemented to fund additional services noted above in response to concerns expressed by transit customers, an LRT safety audit and City Council direction for higher levels of attention to these issues at CTrain stations and park and ride lots.

In partnership with the Calgary Parking Authority (CPA), parking payment machines (ParkPlus) were installed in all CTrain park and ride lots and lots that served major bus routes. The CPA's ParkPlus payment technology is based on parking lot users registering their vehicle license plate number with each payment. This is an extension of the system used for on-street parking payment in downtown Calgary. A monthly parking pass and payment by cell phone account was also offered. Calgary Transit pays CPA 2.1% of parking revenue to provide the following services:

- manage the collection and processing of park and ride revenues,
- provide customer service related to parking payment,
- facilitate the sale of monthly parking passes and payment by cell phone accounts,
- provide enforcement patrols of the lots with license plate scanning equipment,
- provide staff and vehicles to provide weekday parking lot security patrols,

The initial implementation of the parking charge was staged over a four month period that was dictated by the time required to install the ParkPlus equipment. During this introductory period, parking lot use was very low in lots where the charge was in effect since there still remained free parking options. However, when the requirement for payment had been fully implemented, lot usage rose to an average of approximately 56% by 2009 September at LRT stations (see Appendix Table 2).

In 2009 March, Calgary Transit was directed to eliminate the charge for parking on weekday evenings and weekends with the resulting hours when payment was required being limited to 2 am to 6 pm on weekdays. In 2009 December, Calgary Transit removed the parking charge for bus oriented lots as directed by Council.

For the 2009 to 2011 operating budget, Calgary Transit's budget included revenues of \$7.35 million to permit implementation of additional security, maintenance and cleaning in LRT lots and stations. In 2010, LRT parking lots experienced increasing use, annual revenue of \$4.96 million with operating costs of \$4.5 million for the additional services.

In October, the average LRT park and ride lot use was 65 % with 8 lots exceeding 75 % occupancy and four of these lots operating at or above 90 capacity (see Appendix Table 2). During 2010 November, on numerous days, several lots were full along the South and Northwest lines.

Privately Operated Park and Ride Lots

In 2009, a charge for parking was also introduced at McMahon Stadium (Banff Trail Station), the Calgary Zoo and the Grace Baptist Church (adjacent to Franklin Station). These private lots offer a total of about 1,400 parking stalls designated for use by Calgary Transit LRT customers. These lots are currently about 50% full on most weekdays. Parking charges were introduced by these private operators to off-set costs related to parking lot maintenance and to manage demand. The fees charged at these private lots are comparable to the \$3 daily park and ride fee.

Provision of park and ride by private lot owners is highly desirable since the dual utilization of land and facilities in the vicinity of CTrain stations provides a service while reducing the land devoted to parking. As well, private park and ride lots attract additional CTrain users without costs being incurred by Calgary Transit.

It should be noted that free parking at CTrain park and ride lots continues to be provided at the Marlborough and Sunridge shopping centres on the Northeast LRT line. These lots are provided in accordance with development agreements and the owners do not wish to have a fee charged for parking.

Parking fees at private lots outside of the downtown are also common at post secondary schools, hospitals, and a number of churches.

Calgary Transit Ridership Trends

In 2009, Calgary Transit ridership dropped by 1% (a loss of about one million rides). This was the first loss in annual ridership since a transit strike in 2001 which was followed by many years of significant growth. Various indicators suggest that the main reason for decreased transit ridership in 2009 was a significant decline in employment, particularly in the downtown. This conclusion is based on the following:

- In 2009 spring, the unemployment rate in Calgary reached 7.1%, almost double the 3.6% from the previous year representing an increase of approximately 27,000 unemployed workers (many in the downtown). Ridership losses corresponded to unemployment trends.
- In 2009 the downtown office space vacancy rate reached 15.7% - up significantly from 0.5% in 2007. Nearly 50% of downtown employees are transit riders.
- A reduction of 1.8 million adult rides – mostly related to lower sales of adult monthly passes. The main transit trip purpose by adult customers is travel to work (76%).
- A significant decrease in the price of gasoline in 2009 from the high fuel prices in early 2008 when a spike in transit ridership occurred.
- Ridership increases by post secondary students (UPass) and low income pass customers offset some of the lost adult ridership.
- In 2010, transit ridership increased slightly over 2009 levels. In early 2010 ridership continued to decline but there was a marked turn around with increases in ridership after 2010 April as economic conditions began to improve.
- In concert with the recovery of transit ridership in 2010 unemployment has declined and there have been increases reported in the leasing of downtown office space

Counts done at nine CTrain stations before and after the implementation of the parking charges found a 22% increase in weekday bus ridership – about 1,850 daily trips - accessing these stations immediately after the charge for parking. Ridership has continued to increase on these routes in 2010.

CTrain passenger counts at the three locations where CTrains enter the downtown do not show evidence of a ridership decline in 2009. In fact there has been a modest increase in CTrain ridership on all lines between spring 2008 and fall 2010.

Customer Feedback

Customer feedback since the introduction of pay for parking in 2009 has been mixed. To be expected, the initial reaction by customers was very negative and this was seen in phone calls, emails and media reports. Park and ride users felt that they had no choice but to pay the added charge which increased their cost of using transit by about 80 %. It was certainly a significant increase to absorb overnight.

As well, there was a general perception among these customers that Calgary Transit did not want to encourage their use of the system. There were initial reliability problems with the ParkPlus pay machines and customers who paid were unhappy when they

were ticketed for backing into parking spaces. While monthly parking passes and cell phone accounts are available to make payment more convenient the use of these options is relatively low. Paying on a daily basis to park is an irritant to many customers.

Customer surveys conducted in 2009 fall and 2010 spring & fall have also found mixed reactions to the concept of the charge for parking:

- A city-wide survey in 2010 September found that 41% of Calgarians support charging for LRT parking and of the remainder, most of the remainder feel that parking costs should be supported by either tax payers (23%) or transit fares (23%)³
- Calgary Transit customer ratings for safety and security and cleanliness have increased,⁴
- Frequent calls from LRT customers who are frustrated about being unable to find a parking space have all but ceased,

A transit customer survey on park and ride was conducted between 2011 January 10 to 21. Customers were invited to complete an on-line survey that focused on learning about park and ride use, the impact of the parking fee on their travel habits and potential interest in reserved parking. A total of 2,301 customers participated in the survey with responses received from customers using all Calgary Transit park and ride lots. A summary of findings is provided below:

- Most customers who stopped using LRT park and ride following the charge for parking continued to access transit via bus, walking, cycling and passenger drop off.
- There was a net increase of parking in areas adjacent to the stations (spill over parking). However, some customers who were parking near the stations prior to the charge for parking reported that they are now using park and ride.
- The majority of survey respondents indicated that transit convenience and their ability to use transit had either remained the same or improved.
- Most park and ride users are satisfied with improved safety and security in the lots although some respondents comments indicate a wish to see more visible security.
- Park and ride users place considerable value on being able to get a parking space, having a clean and well maintained lot.
- Nearly a quarter (23%) of current and former park and ride users would pay approximately \$70 per month to reserve a space. There is interest in reserving spaces in all Calgary Transit park and ride lots, but, the main interest lies with the lots that are currently operating near capacity.
- Comments regarding the current fee are mixed with 27% who made comments requesting that the parking fee be retained while 33% want it eliminated.

³ Leger Marketing conducted a web survey with 506 randomly selected Calgary residents aged 18 years and older, from September 13 to 16, 2010.

⁴ 2009 Calgary Transit Customer Satisfaction Survey, Hargroup Management Consultants, March 2010.

Council Direction

In response to Council direction, Calgary Transit has provided information in this report following consultation with park and ride users (survey results are summarized in the Appendix) to address the following issues:

- Is the fee a barrier to usage?
- Impacts to spill over parking
- Adjusting costs to respond to markets
- Shuttle buses
- Impacts to no fee
- Reserved parking and other innovative approaches

Is the fee a barrier to usage?

- Ridership counts conducted immediately before and after the implementation of the parking fee show significant increases in feeder bus use to access LRT and this has continued to grow in 2010 (see Table 2 in Appendix). There was no discernable decrease in LRT ridership to and from downtown Calgary measured following the introduction of the parking fee. LRT ridership has increased in 2010.
- Survey responses show that most former park and ride customers now use bus, walking, cycling or they are dropped off to access the LRT stations. Only 1% of the survey respondents were former park and ride users who no longer use transit.

Impacts to spill over parking

- Survey responses indicate that after the charge for parking there was an 11% net increase in transit users who report parking in areas around CTrain stations. There appears to be a higher incidence of this in northeast Calgary. The survey showed that 23% of former park and ride users changed to parking outside of the lots while 12% moved from parking outside the lots into the park and ride lots because space was available. Avoiding the parking fee and not being able to find a parking space are the reasons given for not parking in a park and ride lot.

Adjusting costs to respond to markets

- Other parking lot operators in suburban areas of Calgary charge a daily fee for parking including: McMahon Stadium - \$3, Calgary Zoo - \$5, Grace Baptist Church - \$2, University of Calgary - \$5, SAIT - \$10, Ambrose University College - \$6, Mount Royal University - \$10. This information and the fact nearly half of the LRT park and ride lots were experiencing over 75% occupancy indicates the \$3 fee for park and ride was priced appropriately.

Shuttle buses

- Ridership counts conducted immediately before and after the implementation of the parking fee show significant increases in feeder bus use to access LRT and this has continued to grow in 2010 (see Table 3).

- The park and ride survey conducted in early 2010 January shows that about 28% of former park and ride users switched to using buses to access CTrain stations.

Impacts to no fee

- Elimination of the parking fee will likely result in a return to the previous condition with most lots filling up early - to and beyond capacity.
- Many of those who changed to using feeder buses, walking and cycling have stated an intention to return to park and ride use. As well, there will likely be continued spill over parking in adjacent communities and businesses.
- For 2011, Calgary Transit's operating budget includes the cost of additional LRT station cleaning and additional peace officers that were previously offset by park and ride revenues. If there is no parking fee beyond 2011 March, the cost of additional snow cleaning and extra CPA security patrols will also need to be absorbed in Calgary Transit's annual operating budget. In future years, the lost revenue from parking will mean a higher contribution from either property taxes, transit revenues or a lower growth in transit service to address park and ride operating costs which will challenge Calgary Transit's ability to meet its 55% revenue / cost ratio obligation.

Reserved parking and other innovative approaches

- Many transit customers place a high value on the certainty of getting a parking space. A reserved parking program would offer an attractive alternative to a universal daily fee since it allows customers a choice as to whether to pay for the convenience and certainty of a guaranteed space. Reserved parking would only offer guaranteed parking in a specified area of the lot not a particular space.
- Reserved parking on this basis has been popular at the Fish Creek Lacombe station since 2002 when it was requested by customers in order to eliminate the uncertainty getting a space. This program has been continued with about 60 monthly reserve parking passes being purchased at \$90 per month versus \$60 per month for non-reserved parking.
- In 2010 January, Edmonton Transit launched a reserved parking program in their LRT park and ride lots and it is fully subscribed.
- The recent park and ride survey found that there is reasonable interest (23%) from current and former park and ride users for monthly reserved parking in all Calgary Transit park and ride lots. The greatest interest is for reserved parking at LRT lots currently operating above 75% occupancy. Those interested in reserved parking are willing to pay approximately \$70 per month.
- Reserved parking allows customers to travel outside of the busiest peak times thereby reducing some LRT crowding.
- A monthly reserved parking program combined with an opportunity for free parking is a more customer focused and innovative approach to managing the demand for park and ride while addressing the costs associated with providing these lots. Those who wish to enjoy the convenience of a guaranteed space can choose to pay while those who do not require this convenience will have an opportunity for parking as well.

- A reserved parking program will eliminate the need for daily payment and reservations will be available on-line or via telephone using the reservation system currently in effect for the Fish Creek Lacombe reserved parking. This program will be less expensive to administer than the currently daily parking program.
- There are a number of additional options possible within the scope of a reserved parking program and these are discussed below. It is suggested, however, that these options be examined as possible enhancements once the reserved parking program is established.
 - Setting a maximum number of spaces that can be reserved in each parking lot – 50% of the lot is suggested – the remainder would be free on a first come first served basis. This would give customers equal access to either reserved parking or the free scrambled parking in each lot. However, based on current patterns, in some lots the demand will be much greater while in some it will be less.
 - Instead of a reserved maximum per lot, there could be a maximum for each LRT line allowing a higher percentage of reserved stalls in one lot and less in another. This concept could be administered based on demand.
 - Reserved parking could be released for scramble parking after the morning rush hour – the suggested time would be 10 a.m. This would provide for utilization of spaces not used on a daily basis by reserved parking customers and provide parking for those seeking shorter term parking. The San Francisco BART system offers this option. However, this option reduce the value of a reserved parking space for those who need to travel later in the day.
 - Monthly reserved parking permits can be sold on-line or at the Calgary Transit Customer Service Centre, in combination with monthly pass sales. Extended reservations of up to a year can be offered based on customer demand.
 - The reserved parking program could be expanded at a later date to bus (BRT) lots depending upon customer demand.

Other Benefits of Parking Revenue

- Parking lot revenue has enabled Calgary Transit to do a much better job of cleaning (mainly snow and ice), maintenance, and providing security patrols of the LRT parking lots. Some revenue from parking charges was used to increase security and cleaning in the LRT stations and on CTrains.
- Without parking revenue, Calgary Transit will face challenges to continue providing this level of parking services while striving to achieve a 55% revenue / cost ratio. This erodes the ability to fund transit service growth and maintain reasonable fares.
- There has been a 65% drop in auto related crime in park and ride lots which is attributed to increased security patrols by CPA, CPS and Calgary Transit.

- The availability of parking space has attracted new park and ride customers. Fifteen percent of survey respondents did not use park and ride prior to the introduction of the parking fee. Space is now available for additional transit customers, particularly those who only use transit occasionally or wish to travel during the mid day. These trips can now be made with confidence that a parking space is available.
- Significantly more transit customers are using buses to access LRT. Some LRT feeder bus routes were under performing which resulted (or could have resulted) in service reductions. Feeder buses also serve other destinations within the community – schools, shopping, and recreation.
- Charging for parking has a positive environmental benefit since it encourages car pooling, auto drop off, walking and cycling to LRT. The survey results confirm that increases in these modes has occurred.
- Park and ride use along Northeast LRT is much lower than the other lines. Some of this trend is related to a much more efficient and attractive bus service to most northeast stations and the availability of free or cheaper parking at privately owned lots adjacent to some stations. As well, some northeast customers are parking adjacent to the stations but not in park and ride lots.

In summary, park and ride offers a very convenient means for a limited number of people to access transit service in some areas of the city. Charging a reasonable fee for a reserved park and ride space accomplishes several key goals:

- Recognizes the added convenience of parking near transit service.
- Generates revenue to offset the cost of operating and maintaining the lots as an added value service.
- Manages the demand and public expectations with regard to access to limited resources.
- Encourages transit users to use alternate modes – bus, walk, cycle and drop off to access LRT.

Policies related to the supply of park and ride reflect the need to strike a balance between supply and demand while considering the implications of having large parking lots next to communities, stations, and bus routes. In recent years, the ability to satisfy the high demand for free parking and provide adequate levels of maintenance and security has been difficult.

Calgary Transit concludes that elimination of the \$3 daily parking fee in favour of a reserved monthly parking program that is based on market demand, with a limit on the percentage of spaces that can be reserved, will continue to achieve the above objectives while providing transit customers with choices based on what they value. A reserved parking program can be administered at a lower cost and provide customers with increased convenience of paying for one or multiple months.

Calgary Parking Authority

The Calgary Parking Authority (CPA) has provided a proposal to continue with parking security patrols and enforce a possible reserved parking program similar to the model established at Fish Creek Lacombe station. CPA will assist Calgary Transit with the start-up and transition to the reserved parking program.

When the \$3 daily fee for park and ride is eliminated, Calgary Transit will sell the ParkPlus pay machines back to the Calgary Parking Authority at a depreciated value based the original purchase price. CPA will be able to use these machines in future installations.

Conclusion

Park and ride is a valuable and convenient service for the development of ridership and attracting customers to transit who would otherwise drive their car mainly for downtown trips. Park and ride policies have been successful in establishing the amount and location of park and ride at most LRT stations and along major bus routes. Park and ride is planned for most new LRT stations and along BRT routes as these lines and routes are extended to keep pace with the city's growth.

However, given the high demand for this limited service, providing free parking is not sustainable. Calgary Transit is not able to increase the amount of parking currently provided at existing stations without considerable cost (construction, land & operating), community traffic impacts and reduced opportunities for transit oriented development.

Charging for parking has proven to be a useful tool for balancing the demand for parking since it places a value on this added level of service and has proven to influence a shift to other modes of access. Revenues from parking have permitted a higher level of cleaning, maintenance and security that has resulted in improved customer ratings and a significant decrease in auto crime.

Initially, there may have been some portion of the 2009 transit ridership decline related to the charge for parking, however, in 2010 system-wide ridership has increased and LRT ridership to the downtown has shown modest growth. Charging for parking has resulted in only 65% parking lot use which means that many of the lots are under utilized. While it is beneficial to have some vacant spaces in the lots to provide for short term parking or parking by occasional users, significant vacancies are not desirable. The parking fee has resulted in a shift towards use of bus, walking, cycling and passenger drop off to access LRT.

When the daily \$3 fee is eliminated in 2011 April, it is highly likely that most lots will once again fill to capacity. Revenue from parking will be reduced or eliminated depending upon Council's direction regarding a proposed reserved parking program. Most costs for parking maintenance, security and cleaning costs have been accounted for in Calgary Transit's 2011 operating budget.

A reserved monthly parking program, similar to the successful operation of reserved parking in a portion of the Fish Creek Lacombe park and ride lot could be the foundation for satisfying the needs of many customers while retaining some portion of the lots for free scramble parking. This would also ensure that the lots are fully utilized and that

revenue is generated to cover the cost of maintaining the lots freeing up funds for other transit service improvements. A flexible program based on offering customers a choice to either pay for a higher level of convenience or provide an opportunity for free parking will be the key to the success of the proposal.

Appendix

Table 1

Calgary Transit Park and Ride Lots

NORTH WEST	# of stalls	Plug-ins *
LRT		
Crowfoot	1,345	Yes
Dalhousie	740	Yes
Brentwood	980	Yes
McMahon - private	700	
Bus		
14 St & Northmount Dr NW	15	-
34 St & Parkdale Blvd NW	25	-
Centre St & 36 Avenue N	50	-
Centre St & 78 Avenue N	130	-
Cornell Rd & 14 St NW	20	-
North Pointe	900	-
Sandstone Dr & Berkshire Blvd NW	240	-

SOUTH WEST	# of stalls	Plug-ins *
LRT	-	
39 Avenue	229	Yes
Anderson	1750	Yes
Canyon Meadows	260	Yes
Chinook	320	Yes
Fish Creek	1130	Yes
Heritage	557	Yes
Shawnessy	206	Yes
Somerset-Bridlewood	913	Yes
Southland	650	Yes
Bus		
Bow Trail & 45 St SW	45	Yes
Richmond Road - private	40	-
Sirocco Drive	446	Yes
69 St SW	Under construction	

NORTH EAST	# of stalls	Plug-ins *
LRT		
Calgary Zoo - private	500	
Barlow / Maxwell	50	-
Franklin - North & South Lots	570	Yes
Grace Baptist Church (Franklin) - private	175	
Marlborough (Canadian Tire Mall)	335	Yes
Marlborough (Sears Mall) - private	150	-
McKnight-Westwinds	949	Yes
Rundle - private	350	Yes
Whitehorn	824	Yes

SOUTH EAST	# of stalls	Plug-ins *
Bus		
Douglas Glen	519	-
McKenzie Towne	530	-

Table 2
LRT Park & Ride Lot Use
September 2009 vs October 2010

Station	P&R Stalls	September 2009	October 2010
Crowfoot	1,345	80%	91%
Dalhousie	740	57%	84%
Brentwood	980	52%	86%
Northwest Total	3,065	66%	88%
McKnight WW	949	46%	40%
Whitehorn	824	19%	17%
Marlborough	335	21%	21%
Franklin	570	53%	61%
Barlow / Max Bell	50	81%	100%
Northeast Total	2,588	36%	36%
Somerset Bridlewood	913	97%	90%
Shawnessy	206	95%	88%
Fish Creek	1,130	53%	53%
Canyon Meadows	260	61%	70%
Anderson	1,750	32%	44%
Southland	650	61%	80%
Heritage	557	58%	65%
Chinook	320	92%	94%
39 Ave	229	84%	86%
South Total	6,015	60%	66%
LRT System Totals	11,668	56%	65%

Table 3
Bus Ridership Counts for Feeder Bus Routes
At LRT Stations - Total Daily Trips

Station	Park and Ride		Feeder Bus Ridership		
	Parking Stalls	Oct '10 Use	Before PFP	After PFP	Difference
Brentwood	980	86%	780	1,300	520
Marlborough	335	21%	2,350	2,240	-110
Whitehorn	824	17%	950	1,860	910
Anderson	1,750	44%	730	880	150
Chinook	320	94%	1,000	1,190	190
Fish Creek	1,130	53%	130	200	70
Heritage	557	65%	1,470	1,370	-100
Shawnessy	206	88%	160	270	110
Southland	650	80%	860	970	110
	6,752	65%	8,430	10,280	1,850

Before counts conducted 2009 March, After counts conducted 2009 May.