

# **Town of Cochrane**

## **Transit Feasibility Study Phase 2 – Implementation Plan**

January 05, 2011

**Calgary Transit**

## **1.0 Executive Summary**

Phase one of the Cochrane Transit Feasibility Study determined that the introduction of a regional transit service, “Intercity Express” and local transit service is feasible when operating and capital resources are available. Phase two of the Cochrane Transit Feasibility Study provides a detailed implementation plan for both transit services with estimates on transit operating revenues and costs, recommended service standards, operating models, fare strategy, transit vehicle selection and marketing strategies.

Service standards act as the contract between the transit service provider and users. Transit services in Cochrane should be frequent with a minimum 30 minute frequency, accessible with a 400 metre transit service coverage, served with low floor transit vehicles, reliable and comfortable for all users.

With the introduction of new transit services, it is expected that ridership will grow in an incremental manner. After one full year of revenue service it is anticipated that the Intercity Express and local transit service will meet their ridership targets of 48 passengers per round trip on the Intercity Express and 10 boarding passengers per operating hour on the local transit service. Integrated fares such as a combined Intercity Express and Calgary Transit fare and an integrated Intercity Express and local transit fare for seamless transferability for the customer are recommended. An overall cost recovery of 50% system wide is recommended.

The recommended service delivery model consists of the private sector operating all transit services with the Town of Cochrane providing a contract management and administration role. This service delivery model has an anticipated savings of 10 percent or more per service hour. This operating model has been proven for municipalities throughout Canada.

As noted in the phase one transit feasibility study, the recommended vehicle types for transit services include low floor double decker buses for the Intercity Express and low floor cutaway community shuttles for the local transit routes. Benefits of the low floor double decker buses include a higher seating capacity compared to a low floor articulated bus, shorter dwell times for loading wheelchairs and other mobility devices when compared to the highway coach as well as and regional marketing opportunities. Low floor cutaway community shuttles provide easy access for customers with mobility aids and have a lower cost than other smaller transit vehicles on the market.

Marketing and promotion of the new transit services will be integral to their success, where communications should start one year prior to service launch. Leading up to the service launch date, targeted marketing, promotions, and creation of publications as well

as a transit website will be required. After the service launch, maintenance of the materials, operational notifications, and regular communications with transit users will be required.

As noted in the phase one transit feasibility study, the level of public support in Cochrane for financing the operating cost of local public transit will determine the timing of its introduction.

## **2.0 Introduction**

The Town of Cochrane has identified a role for public transit in Cochrane's future in the Cochrane Sustainability Plan. Phase 1 of this transit feasibility study identified the need for public transit and a recommended approach to introducing service. Public transit would address social needs, support Cochrane's long-term environmental targets as well as support economic development. The level of public support in Cochrane for financing the operating cost of public transit will determine the timing of its introduction.

This phase 2 report identifies the critical items for the implementation of transit in Cochrane. These include:

- Service standards
- Operating costs
- Operating and maintenance plan
- Fare strategy
- Transit vehicle considerations
- Marketing and promotion
- Customer service
- Next steps

The timing of these items is identified in a timeline backdated from the start date for transit as currently envisioned based on Green TRIP capital funding approval.

### **3.0 Service Standards**

Service standards set guidelines for the delivery of transit services as well as act as a “service contract” between the Town of Cochrane, its service delivery contractor, and transit users. Considerations such as levels of service frequency and defined processes for evaluating changes to the transit service are components of transit service standards. Cochrane’s proposed transit service standards are listed below:

#### **Service Coverage**

Transit service coverage is a performance measure that gauges people’s access to transit service by means of walking distance. The transit industry standard for service coverage is 400 metres walking distance, which is roughly equivalent to a five minute walk. The proposed local transit service routing for Cochrane strives to maximize the number of residential dwellings located within a 400 metre service coverage. With Cochrane’s varied topography, some residential cells are located outside of a 400 metre service coverage such as portions of GlenEagles View and Sunterra. In the future, Cochrane should set a target for service coverage as part of other policy documents (e.g. updates to the Transportation Master Plan or Cochrane Sustainability Plan).

#### **Service Frequency**

All transit services (local and Intercity Express) services should provide a minimum 30 minute service frequency in all time periods. A 30 minute service frequency allows for flexibility in trips for the transit customer, provides a predictable schedule for users, and timed transfer opportunities between the Intercity Express and local transit services at the old town hall terminal. If 30 minute service is not feasible, less frequent service should be structured at 60 minute frequency (rather than 40 or 45 minutes) in order to maintain predictable schedules and timed transfer opportunities.

#### **Span of Service**

Introductory service should be provided in the weekday AM and PM peak periods to provide transit service to key markets such as commuters to/from Calgary and youth within Cochrane. Service expansion should be phased in the following order in later years subject to evaluation of needs and available operating funding: weekday midday, weekday early evening, Saturday, Sundays and holidays.

#### **Accessibility**

All transit services in Cochrane should be accessible for all residents. Cochrane should set targets for accessibility, including facilities (sidewalks to every bus zone, wheelchair

ramps at every corner adjacent to a bus zone), vehicles (100% low-floor accessible vehicles) and information (availability of information for different user groups).

In the long term, specialized transportation services (Handibus and accessible taxi) can then be provided for customers that may not always be able to use Cochrane's low-floor accessible transit services.

### **Timed Transfer**

All transit services in Cochrane should be oriented to serve the proposed transit hub at the old town hall site (or, in the future, the proposed Railway Avenue terminal). A timed transfer at the old town hall where all transit services are scheduled to converge at the same time eliminates waiting time for customers transferring between the Intercity Express to local transit services and may assist in reducing the amount of customer amenities (e.g. shelters, heaters, benches) needed at the transit terminal site.

### **Vehicle Loading**

Intercity Express – Service levels on the Intercity Express should ensure that all passengers have a seat to/from Calgary where this service operates in a highway environment. Alberta Transportation has granted intermunicipal transit services in the Edmonton region permits that allow for standees on conventional transit buses. These permits are issued on an annual basis and there is no guarantee that Alberta Transportation will grant permits for standees indefinitely.

Local Transit – Seating capacity on the recommended low-floor community shuttle fleet is 21 seats. During peak periods passengers could expect to be standing if the community shuttle has reached seating capacity which is dependent on the attractiveness of the service. Services should be designed such that in non-peak time periods all passengers have an opportunity to sit during at least part of their trip.

### **Comfort**

Amenities such as high back reclining seats and reading lights should be investigated for the Intercity Express to make the highway operating environment of the service more pleasurable for the customer experience.

### **Ridership Targets**

Ridership trends take between six months to one year to establish and stabilize. Ridership evaluation of both the Intercity Express and Local Transit should be done on a quarterly basis in the first year of service. If the service does not meet the minimum

ridership level for three consecutive months, then adjustments to the elements of the service should be reviewed.

Examples of ridership targets are shown below. These were established early in the transit feasibility study for the purpose of estimating capital and operating costs. These were established using information from the 2001 Calgary Regional Household Activity Survey updated to 2006 population/employment (a basis for the Regional Transportation Model maintained by Forecasting, Transportation Planning at The City of Calgary) and taking into account transit use in similar communities in Alberta and the rest of Canada:

- Intercity Express: 40 passengers per trip in the peak direction (AM peak – Calgary bound trips, PM peak – Cochrane bound trips); 8 passengers per trip in the reverse direction.
- Local Transit: 5 boarding passengers per operating hour in the first year of service, 10 boarding passengers per operating hour after one year of service.

Risks to be assessed in establishing ridership targets include economic factors such as changes in employment, location of major employers and competition such as park and ride fees and availability in Calgary as well as parallel private sector services. These conditions should be reviewed before establishing ridership targets.

### Summary of Service Standards

Recommended service standards for public transit in the Town of Cochrane are summarized in Table 1.

**Table 1. Service Standards**

<b>Service</b>	<b>Target/details</b>
Service coverage	Initial 10-year target: 50% of Cochrane population within 400m walking distance of public transit
Service frequency	30 minute frequency within a specified span of service
Span of service	Initial phase: Morning peak, afternoon peak on weekdays Future additions in this order: midday, evening, Saturday, Sunday and holidays
Accessibility	100% low-floor accessible vehicles. Two wheelchair positions per vehicle. Sidewalks and corner wheelchair ramps adjacent to bus zones.

Timed transfer	All transfers in transit terminal (minimize transfer time between buses)
Vehicle loading	Seated loads on ICE; Seated loads on Local Transit except occasional peak periods
Comfort	Amenities on transit vehicles such as reading lights and highback reclining seats should be investigated for the Intercity Express

## Considerations for Transit Routes in Cochrane Communities

### *Evaluation for New Service*

This transit feasibility study has identified a phased introduction of transit service to established communities in Cochrane. In the future, it is anticipated that the Town of Cochrane will receive requests for transit service to new residential communities.

As a guideline for The City of Calgary, Calgary Transit will only introduce peak period community shuttle service to developing subdivisions once the subdivisions have reached a minimum of 300-400 occupied dwelling units and suitable roadways assuming operating resources are available. It is recommended that the Town of Cochrane institute the same guideline for future transit services to new communities (which would only occur after transit service has been introduced in Cochrane's existing communities). To aid in the earlier introduction of transit service to developing communities, either the Town of Cochrane or the developer could enter into a developer-funded transit service agreement. Under a developer funded transit agreement an earlier introduction of transit service could be initiated with the developer contributing to the operating cost minus the fares collected.

All new transit services should be guaranteed for one year to allow for ridership to incrementally develop. A ridership review of the service should be done quarterly to ensure that ridership is developing over time. If the transit service is not meeting minimum ridership standards after one year of service, the service should be evaluated and possibly adjusted.

### *Bus Zone Placement*

Local Transit – Bus zones are to be placed approximately every 150-200 metres on the local transit services to promote access and to achieve a 400 metre transit service coverage within the community.

Intercity Express – Bus zones for the Intercity Express should be placed at transfer points with the local transit routes, major employment and commercial centres, potential park and ride locations and access points into the different subdivisions in the Gleneagles Community.

**Table 2. Bus Zone Considerations**

<b>Consideration</b>	<b>Description</b>
<b>Placement of Stop</b>	Convenient location to major land uses and pedestrian generators. Minimize impact on adjacent properties and driveways.
<b>Pedestrian Access</b>	Adequate connecting sidewalk infrastructure, wheelchair curb cuts at adjacent intersections, close proximity to crosswalks
<b>Visibility</b>	Drivers' sightlines are not obstructed by trees, shrubs, poles, buildings and/or street furniture. Buses should not obscure traffic signals. Bus stops should be well lit.
<b>Accessibility</b>	Bus zones require a minimum clear length of 2.5 metres and minimum clear width of 1.6 metres for ease of access for persons using mobility devices to board and alight from the transit bus.

**Table 3. Bus Zone Amenity Considerations**

<b>Consideration</b>	<b>Description</b>
<b>Shelters</b>	Bus shelters should be placed at high ridership stops, transfer points and adjacent to major land uses. Criteria for shelter requests should include space available for the provision of a shelter, demographic of the riders (e.g. seniors), proximity to major centers, frequency of transit service, exposure to weather, adjacent land uses and number of neighborhood requests.
<b>Benches</b>	Install when the provision of a shelter at the site is not possible. Avoid complete exposure to the elements if partial shelter is available. Ensure adequate clearance for mobility/accessibility by locating and orienting benches to ensure required circulation widths are provided and bus egress is possible.
<b>Garbage Containers</b>	Install at high volume stops, should be regularly maintained. Containers should be bolted down and vandal proof.
<b>Information Panels</b>	Information panels should be installed at the transit terminal. Information in the panel should include route maps, schedules, fares and the transit website and phone number. Information should also be made available at other Town facilities.
<b>Street Furniture</b>	Theme-specific street furniture could be installed at bus zones (e.g. decorative benches and light standards that fit the rest of a street's theme). These features should not impede bus door



	clearances and wheelchair accessibility. Maintenance requirements should be considered (e.g. using the same glass as other transit shelters).
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Further description of transit facility standards is provided in Appendix A – Transit Facility Standards at the end of this section.

### **Bus Zone Placement in Established Communities**

As noted above, bus zones are placed approximately every 150-200 metres to assist in obtaining a minimum 400 metre service coverage. In established communities within the Town of Cochrane, the most desirable locations for the establishment of bus zones will be boulevards on arterial roads that do not affect on-street parking for adjacent developments. In residential neighborhoods, ideally bus zones can be placed adjacent to parks, green spaces and side yards.

There will be instances throughout established communities in Cochrane where bus zones will be required to be placed adjacent to existing residential and commercial properties. This may impact the availability of on-street parking for residents. In these cases it is advisable that the Town of Cochrane communicate with the affected property owner to get permission to establish a bus zone adjacent to the property. A strategy to place bus zones in established communities will need to be developed during the implementation phase of the Intercity Express and local transit services.

### **Integrating Transit in Community Planning and Design**

It is advisable that the Town of Cochrane start incorporating transit facility planning into the land use planning on a go forward basis. This would include planning the placement of bus zones in new communities, transit routing and bus turnarounds/loop locations. The following is a list of considerations for the Town of Cochrane in the planning of transit services in new neighborhood plans and outline plans:

#### *Land Use Policy Considerations:*

- Does the area have an Area Structure Plan (ASP), Area Redevelopment Plan (ARP) or any other policy documents that discusses transit service?
- Is the density appropriate? (e.g. recommended guidelines for minimum density to support transit service are 17.3 units per gross hectare, 7 units per gross acre)
- Are the land uses appropriate for transit service?

*Planned Future Transit Service and Amenities:*

- What streets would transit service would be running on?
- Is transit service integrated into community design? (e.g. are the supportive land uses, like multi-family dwelling units, easy to serve with a bus route?)
- Are bus zones identified? Is the spacing adequate? (200-300 metres), and are the zones in appropriate locations?
- Are proposed bus zones sized appropriately? (25 metres for regular buses vs. 35 metres for articulated buses)
- Properties adjacent to bus zones require protective covenants to be registered on the title to prevent vehicle access across the bus loading zone area
- Are bus turnaround facilities required? (This is particularly important for interim routing as part of the phasing of a new community.)

*Distance from transit service:*

- Is at least 70% of the area population (dwelling units) located within 300 meters street walking distance to transit service?
- Is at least 95% of the area population (dwelling units) located within 400 meters street walking distance to transit service? (Up to 5% of the area population can be located beyond 400 meters street walking distance, depending on local circumstances.)

*Sidewalks:*

- Are sidewalks proposed? Are there sidewalks on both sides of roads where there is a bus route?
- Are sidewalks logically located to reduce walking distance / travel time to bus zones?
- Along non-transit roads, are sidewalks located on at least one side of the street?
- Are wheelchair curb cuts built at all corners of every intersection?

*Other Considerations:*

- Consider Crime Prevention Through Environmental Design – provide ample sightlines and lighting along access to bus zones and facilities and at the bus zones themselves.
- Identify Bus Only Crossings to give transit, pedestrians and cyclists a travel time advantage between communities, while reducing automobile shortcutting.
- Ensure traffic calming features are designed to accommodate the turning movements of transit buses. If traffic calming is absolutely necessary on a transit route, ensure speed cushions are used instead of speed humps/bumps/tables.
- Consider lot widths where bus zones are identified- Individual residential lots without back lanes need to have a minimum frontage width of 11 meters to minimize conflict between driveways and the adjacent bus zones

### **Phasing of Transit Services**

Phase one of the Transit Feasibility Study recommended the introduction of the Intercity Express and local transit service when operating and capital funding permits. The implementation of these services could be phased in with either the Intercity Express or local transit. Phasing of the transit service is necessary to bridge the gap between existing private sector service and the service standards outlined earlier in this report. Considerations for the phased introduction of service types are provided below:

#### **Intercity Express**

Presently Southland Transportation operates three commuter trips to/from Cochrane to Downtown Calgary every weekday. Southland's commuter service provides direct service within local communities within Cochrane to Downtown Calgary, without the need for a central transit terminal. In existing and projected market conditions for regional transit travel, there is only sufficient market for one service provider. A transition model from the neighborhood routing of the existing commuter services to the Intercity Express would need to be investigated between the Town of Cochrane and Southland Transportation. Outside a limited number of residents and employees within walking distance of the proposed Intercity Express route, it solely serves the market segment that has access to a vehicle to park and ride.

Under this phased approach with the initial introduction of the Intercity Express, and the absence of local transit service providing feeder service to the regional transit service, it is recommended that the Town of Cochrane investigate shared parking opportunities to

provide park and ride facilities for the Intercity Express. Shared parking for a transit park and ride is common in some municipalities where arrangements exist for the use of obtainable park and ride lots at churches, community centres and recreational facilities along major transit routes. Shared parking works well at locations where the peak demand for the transit park and ride (weekdays) and the existing use such as churches have a peak demand during evenings and weekends. Traditionally, shared parking agreements consist that the property owner permits transit users to park onsite from approximately 6am to 6pm on weekdays. In return the municipality contributes to the overall maintenance and snow removal in the parking lot. As an alternative to shared parking, the Town of Cochrane could construct a transit park and ride lot if capital funding permits on a suitable site located along the proposed Intercity Express routing. Based on recent transit park and ride projects in Calgary, the average cost per stall is \$6,000.

### Local Transit

The Town of Cochrane could opt for the initial introduction of local transit with the implementation of the Intercity Express at a later date. The introduction of local transit would serve markets such as youth and seniors in Cochrane. Schedules for the local transit could be designed to connect with the Southland commuter service as a feeder service. A transit terminal facility could be still utilized for transfers between the local transit routes. As noted in phase one of the transit feasibility study, local transit services yield much lower operating cost recovery compared to regional transit services. Based on the Canadian average, local transit systems operating in communities under 50,000 residents have an approximate cost recovery of 35%.

## 4.0 Operating Costs

Shown below is a summary of the operating and capital costs anticipated as part of implementing transit service in Cochrane. Release of this information is subject to confidentiality at the direction of the Town of Cochrane.

### Cost per Service Hour

The unit price for the delivery of transit services is based on the cost per scheduled service hour.

The following are inputs for the cost per service hour:

#### *Direct Costs*

- Hourly operating and maintenance costs
- Materials

- Salaries and Wages
- Diesel Fuel

*Indirect Costs*

- Administrative Overhead
- Materials
- Salaries and Wages

**Annual Operating Cost - Intercity Express**

For the Intercity Express Service, 17.25 revenue service hours are required per service day to provide a 30 minute AM and PM peak period service. An additional 6 non-revenue service hours are required for deadheading (driving time required before and after revenue service) in Cochrane to/from the transit storage facility to old town hall terminal site, 20 minutes for report time and vehicle checks prior to the transit bus entering service as well as time for interior and exterior cleaning and fuelling.

Intercity Express Service Annual Operating Cost – 5,860 service hours - \$574,000 (2010)

Estimated full year revenue for the Intercity Express is \$477,000. In the first year of revenue service, it is anticipated that ridership will grow incrementally towards the ridership target of 40 passengers in the peak direction per trip and 8 passengers in the reverse flow per trip. Below is the estimated revenue estimate based on incremental ridership growth:

<b>Ridership</b>	<b>Estimated Revenue</b>
1 <sup>st</sup> Quarter (25% of ridership target)	\$29,800
2 <sup>nd</sup> Quarter (50% of ridership target)	\$59,600
3 <sup>rd</sup> Quarter (75% of ridership target)	\$89,000
4 <sup>th</sup> Quarter (100% of ridership target)	\$119,000
1 <sup>st</sup> year of service estimated revenue	\$296,000
Net operating cost (1 <sup>st</sup> year of service)	\$278,000

The proposed Intercity Express schedule is provided in Appendix B – Proposed Transit Schedules.

### Annual Operating Cost – Local Transit

For the local transit service, 27.5 revenue service hours are required per service to provide a 30 minute AM and PM peak period service. Additional service hours are allocated to the local transit service to provide service to the commuter market (transfers to/from the Intercity Express), basic peak period transit service within Cochrane and to provide supplementary service for the youth market to/from Cochrane High School. As with the Intercity Express, an additional 6 non-revenue service hours are required for deadheading in Cochrane to/from the transit storage facility to old town hall terminal site, 20 minutes for report time and vehicle checks prior to the transit bus entering service as well as time for interior and exterior cleaning and fuelling.

Local Transit Annual Operating Cost – 8,440 service hours - \$528,000 (2010)

Estimated full year revenue for the local transit service is \$160,000. In the first year of revenue service, it is anticipated that ridership will grow incrementally towards the ridership target of 8 boarding passengers per operating hour. Below is the estimated revenue estimate based on incremental ridership growth:

<b>Ridership</b>	<b>Estimated Revenue</b>
1 <sup>st</sup> Quarter (25% of ridership target)	\$10,000
2 <sup>nd</sup> Quarter (50% of ridership target)	\$20,000
3 <sup>rd</sup> Quarter (75% of ridership target)	\$30,000
4 <sup>th</sup> Quarter (100% of ridership target)	\$40,000
1 <sup>st</sup> year of service estimated revenue	\$100,000
Net operating cost (1 <sup>st</sup> year of service)	\$428,000

The proposed local transit schedules for the phase 1 transit routes is provided in Appendix B - Proposed Transit Schedules.

NOTE: Annual service hour operating costs do not include the operating costs of the transit maintenance / storage facilities and the transit terminal.

### Brief description of facility operating costs

Stantec Consulting Ltd. was retained by the Calgary Regional Partnership to provide an order of magnitude of operating and capital costs for a shared town shop combined with

a transit storage and maintenance facility that could be constructed in Cochrane and/or other regional communities. Operating cost inputs for a transit storage and maintenance facility include considerations such as utility servicing (e.g. water, sewer, telecommunications), heating fuel, daily cleaning of facilities used by staff and/or customers (e.g. garbage, parking lots, operator staff/washrooms), regular maintenance and repair of buildings, yards and landscaping.

Total operating costs of the transit storage and maintenance facility range between \$242,000 to \$451,000 annually.

Capital costs for the scoped shared town shop and transit facility range between \$11,300,000 to \$17,100,000 excluding land costs.

Further details on the operating and capital cost estimates for the transit storage and maintenance facility is available in Appendix E – Town of Cochrane Public Works Yard and Transit Facility Capital and Annual Operating Cost Estimates.

### Transit Terminal Operating Costs

Based on figures from both Calgary Transit and Edmonton Transit, below is a summary of the estimated annual operating cost for an off-street transit terminal with a park and ride facility:

Consideration	Estimated Monthly Cost	Estimated Annual Cost
Custodial (buildings, washrooms)	\$1,500	\$18,000
Power	\$250	\$3,000
Water	\$25	\$300
Sewer	\$20	\$240
Natural Gas	\$325	\$3,900
Phones	\$100	\$1,200
Building Maintenance	\$250	\$3,000
Snow Removal – Sidewalks (average 57 occurrences a winter)	\$100 an occurrence	\$5,700
Snow Removal – Parking Lot	\$325 an occurrence	\$18,525
Landscaping and Irrigation		\$14,000

The estimated annual operating cost for an off street transit terminal is approximately \$70,000.

## **5.0 Operating and Maintenance Plan**

Transit agencies throughout North America have developed a wide range of approaches to service delivery. Many municipalities with fewer than 100,000 residents provide public transit through contracted service delivery. A variety of contracted transit service delivery models exist, each with different contracted components. Two service delivery models have been considered for the operations of public transit services in Cochrane. The first contracted service model consists of the municipality administering the transit service with a private sector contractor operating and maintaining the transit vehicles (with the municipality owning the bus and facilities). The second contracted service model consists of having an adjacent public sector service provider operating and maintaining the transit vehicles (with either the municipality or the provider owning the buses and facilities). A “hybrid” of these two models is also possible, with a variety of overlap between the private sector and public sector. A detailed description of these service delivery models is included below.

### **5.1 Contracted Service Delivery Model #1 (Transit service administered by municipality, operated by private contractor),**

In discussions with the Town of Cochrane Transit Steering Committee, the recommended operating model consists of the Town of Cochrane contracting the operations of the transit service to a private sector service provider while maintaining an administrative role.

In this service delivery model, municipalities take an administrative role while a private sector provider takes an operational role in the delivery of transit services. The municipality defines service specifications for a multi-year contract through a Request for Proposal (RFP) to be bid on by potential service operators. The service specifications generally include hours of service, routes and schedules, maintenance schedules and performance measures. Proponents are requested to submit a proposal highlighting their abilities to meet the service specifications, financial breakdown of their cost per service hour to operate the service and experience with providing public transit services. Municipalities tend to be responsible for part or all of financial administration / reporting, transit planning and setting policy. Private sector contractors are responsible for all operations of the transit service such as providing transit operators, dispatching, maintaining and storing the transit fleet.

Table 4 below highlights the breakdown of roles and responsibilities of the municipality and the service provider. A detailed explanation of the roles is explained at the end of the figure.



**Table 4. Operating Roles and Responsibilities (Courtesy – TransLink)**

<b>Role</b>	<b>Responsibilities</b>	<b>Town of Cochrane</b>	<b>Service Provider</b>
Management	A) Management of trained licensed operators, mechanics and operations staff		X
	B) Public relations and passenger training for staff		X
	C) Fare Collection (collecting cash fares, issuing transfers)		X
	D) Accounting controls and reporting	X	X
	E) Ridership Monitoring	X	X
	F) Attend periodic meetings to discuss performance	X	X
Operations	A) Inspection of on-street facilities (bus zones, terminals)	X	X
	B) Compliance with service specifications as determined by municipality		X
	C) Conduct performance checks (operator's, schedule adherence)	X	X
	D) Maintain a transit telephone number for customer service, complaints and information	X	X
	E) Document customer feedback		X
	F) Maintain a lost and found		X
	G) Authorize / Install interior and exterior advertising	X	
	H) Comply with the National Safety Code, Provincial Permits, Commercial Vehicle Inspection Program		X
	I) Maintain buses (maintenance, fuel, cleaning)		X

	J) Install bus zone signage and amenities	X	
	K) Notify service provider/municipalities upcoming service disruptions	X	X
	L) Conduct on-street supervision and communications systems		X
Vehicles	A) Provide transit fleet	X	
	B) Provide fare collection equipment (fareboxes and vaults)	X	
	C) Conduct maintenance inspections	X	X
	D) Insure transit vehicles		X
	E) Indoor vehicle storage		X
Finances	A) Sets Fares and Tariffs	X	
	B) Approve Transit annual operating and capital budgets	X	
	C) Review and update budgets	X	X
	D) Prepare quarterly budget forecasts and analysis of operating budget and performance statistics	X	
Marketing	A) Prepare and provide marketing plans	X	
	B) Execute marketing campaigns	X	X
	C) Provide transit information products (maps, pocket schedules, website)	X	

Planning	A) Provide bus zones and amenities	X	
	B) Determine routes and schedules	X	
	C) Set transit policy (transfer policy)	X	
	D) Review and approve amendments to service specifications	X	

Responsibilities for are outlined below that are divided between the Town of Cochrane and the service provider. Certain components could either be provided by the Town of Cochrane or the service provider depending on the capacity of the organization and suitability for service delivery (e.g. indoor bus storage) or provided in collaboration with each other (e.g. transit information line).

### 5.1.2 Management Role Under Model #1

#### *Municipal Responsibility:*

- Development of the Request for Proposal (RFP) with detailed service specifications (e.g. transit operator training, routes and schedules) for the operation of transit services
- Creating the “terms of vehicle leases” for the municipal owned transit fleet
- Outlining performance measures for contractor such as customer satisfaction and schedule adherence
- Scheduling regular performance meetings with the contractor
- Obtaining provincial documentation such as an Operating Authority Certificate

#### *Service Provider Responsibility:*

- Providing transit operators, mechanics and operations staff
- Delivering training programs for staff (e.g. route familiarization and first aid for transit operators)
- Obtaining and maintaining provincial certifications for the Commercial Vehicle Inspection Program (CVIP) for the transit fleet, tooling and shops
- Collecting daily ridership and schedule adherence information during the service day

*Dual Responsibility:*

- Accounting controls and reporting on a monthly basis

**5.1.3 Operations Role Under Model #1**

*Municipal Responsibility*

- Inspection of on-street facilities, ensuring bus zones and terminals are well kept, installing and maintaining bus zone signage
- Conducting performance checks
- Notifying the service provider of pending service disruptions (e.g. planned road closures)

*Service Provider Responsibility:*

- Compliance with the service specifications (e.g. hours of service)
- Development of an operations plan and protocols for service disruptions
- Maintenance of the transit vehicles, including preventative maintenance, servicing at regularly scheduled intervals, following manufacturers maintenance parameters
- Cleaning of transit vehicles

*Partial / Full Responsibility by Both / Either*

- Providing a transit information number for general information, complaints, commendations and requests

**5.1.4 Vehicles Role Under Model #1**

*Municipal Responsibility*

- Procure and provide the transit fleet to the service provider
- Provide maintenance servicing and vehicle cleaning specifications
- Conduct periodic inspections of vehicle maintenance practices and facilities

*Service Provider Responsibility*

- Insure transit vehicles
- Maintain transit vehicles and maintenance records
- Adhere to all terms to the Transit Fleet Lease

*Partial / Full Responsibility by Both / Either*

- Providing fare collection equipment
- Providing indoor storage and maintenance facilities

**5.1.5 Finances Role Under Model #1**

*Municipal Responsibility*

- Setting transit fares
- Setting up transit fare vendors
- Determining annual operating and capital budgets
- Regular financial reporting (e.g. reporting budget variances quarterly)

*Service Provider Responsibility*

- Regular financial reporting and invoicing the municipality for the delivery of transit service on a monthly basis
- Provide a breakdown of fixed costs (e.g. scheduled revenue hours), variable hourly costs (e.g. fuelling), maintenance costs and other costs
- Collected cash fares and fare media on board transit vehicles

**5.1.6 Marketing Role Under Model #1**

*Municipality Responsibility*

- Development and execution of marketing campaigns and plans
- Development and maintenance of information materials (e.g. rider's guide, website)
- Creation of service advisories for disruptions
- Administration of the transit advertising contract

*Dual Responsibility*

- Execution of marketing campaigns on board transit vehicles

**5.1.7 Planning Role Under Model #1**

*Municipality Responsibility*

- Determining routes and schedules for the transit services based on ridership outcomes, markets served and available operating budget
- Provide bus zones and amenities such as benches and shelters
- Setting transit policies (e.g. transfer policy)
- Annually review and amend service specifications

#### *Service Provider Responsibility*

- Provide operational feedback on ridership, routes and schedules

#### *Partial / Full Responsibility by Both / Either*

- Maintenance and cleaning of transit shelters

### **5.1.8 Cost Under Model #1**

On average, municipalities who opt for this service delivery model have an average cost of \$98 per service hour for service similar to the proposed Intercity Express. This cost per service per hour is approximately 10-20% lower than if the municipality opted to own and operate the Intercity Express, based on the experience of other agencies. The cost per service hour for the local transit service is estimated at \$62.50 per service hour. This is approximately 10% lower than if the municipality opted to own and operate the local transit service.

### **5.1.9 Benefits Under Model #1**

The primary benefit for this service delivery model is that the private sector operations of the Intercity Express and local transit service result in an anticipated savings of 10 percent per service hour or more. In the Calgary region there are a number of private sector companies that could be the contracted service provider. This operating model is proven for municipalities throughout the country such as York Region Ontario, Milton Ontario and a number of BC Transit municipal systems.

### **5.2 Contracted Service Delivery Model #2 (Transit service administered by municipality, operated by adjacent public transit service provider),**

A second contracted service delivery model exists (in the Edmonton region, for example) where some of the regional municipalities have opted to contract an adjacent public sector entity, Edmonton Transit System (ETS) as the service provider for intermunicipal transit service to/from Edmonton (the equivalent of the Intercity Express). The primary differences between a public sector contracted service delivery model and a private sector delivery model are as follows:

- Fare policy/agreements – Both the subscribing municipality and ETS determine fares specific to the municipality with considerations on ridership attraction, fare recovery and transferability with conventional ETS services.
- Operations – The service provider (ETS for example) is responsible for all operations of the intermunicipal services include providing transit operators and maintenance of the transit buses.
- Fleet – existing public transit bus fleets can be leveraged (for example, ETS provides the intermunicipal transit services to the subscribing municipalities with the standard ETS fleet with an additional capitalized cost).

Within the Edmonton region, transit services to the municipalities of Spruce Grove, Leduc, Fort Saskatchewan and the Edmonton Garrison are contracted to ETS by the respective municipalities. This operating model places the subscribing municipalities with a primarily administrative role with entering a transit service agreement with ETS to provide the regional transit service. As a service provider, ETS is responsible for all operational roles as well as providing transit buses to operate the service. A description of the service delivery model is below.

#### *Municipality Responsibility*

In this contracted service delivery model, the municipalities have a much more limited role as compared to Contracted Service Delivery Model #1. Municipalities are responsible for setting service specifications particularity to levels of service provided to the community from ETS. The municipality enters into a specific fare strategy with ETS where some municipalities, such as the City of Leduc, have opted to not have transferability to ETS, where a separate fare is required to access connecting ETS services (bus and LRT) at Century Park Station. The City of Fort Saskatchewan provides a variety of fare products that either restricts or allows prepaid transfer to conventional ETS services, dependant on the specific user's travel need once they are in the City of Edmonton. Both the municipality and ETS set fares for the regional service. On a monthly basis, both ETS and the municipalities review the operating budget and revenue collected, where ETS invoices the municipality the number of service hours provided minus fares collected.

#### *Service Provider's Responsibility*

With the above mentioned municipalities, ETS is responsible for the full operations of the transit service. This includes providing trained transit operators, transit buses, operations supervision and maintaining the transit buses at ETS' existing maintenance/operating garages. Transit buses used for these regional services are standard ETS New Flyer 40 foot Low Floor Buses, the mainstay of the ETS fleet. These buses are in standard ETS livery and all marketing materials for the regional services such as pocket schedules are in ETS' creative package. Customer information for the regional services

is provided on the ETS website and customers can call the ETS information phone number for commendations, complaints and inquiries.

### **5.2.1 Cost Under Model #2**

For the purposes of comparison with the contracted service delivery model, in terms of cost per service hour, ETS charges the subscribing municipalities \$115.11 per service hour. This includes \$80 per hour for the operating component of the service (eg. operator's wages, fuelling) and \$8 per hour for service administration (e.g. service development staff time, bus zone signage). The remainder of charges that compose the cost per service hour include capitalization of the transit fleet required to operate the transit service as well as a daily rate for maintaining the Commercial Vehicle Inspection Program (CVIP) certifications on the required transit fleet.

### **5.2.2 Benefits Under Model #2**

The primary benefit to this service delivery model is the potential synergy with the adjacent public sector provider's transit operators, transit maintenance facilities and transit fleet. The experience of the public sector transit operator could aid in the integration of transit services. Contract periods can be on an annual basis allowing for flexibility in adjusting service hours and the transit service agreement annually.

### **Recommended Approach**

Contracted Service Delivery Model #1 with transit services operated by the private sector is recommended by the Town of Cochrane Transit Steering Committee for cost efficiencies and its proven ability for service delivery for other transit properties in Canada.

A hybrid approach could be considered that incorporates elements of Model #1 and Model #2. The City of Calgary could be contracted for part of the "municipality responsibilities", with service delivery contracted in whole or in part to the private sector as described under Model #1.



## 6.0 Fare Strategy

### Fare Level and Structure

The objectives of a fare strategy for Cochrane include the following:

- Recovery of costs – to the extent reasonable when benchmarked with other similar-sized agencies, the costs of delivering transit service should be recovered at a consistent revenue-cost ratio. Based on the experience of similar-sized agencies with regional and local transit service elsewhere in Alberta and Canada, a revenue-cost recovery of 25-30% should be established (one-quarter to one-third of the cost of service is covered by fares; two-thirds to three-quarters is subsidized by The Town of Cochrane).

This is dependent on the success of the services (local and ICE) in attracting riders. Other agencies who have this benchmark based on 2008 data include:

- Strathcona County Transit, fare recovery of 31%
- Kelowna Regional Transit, fare recovery of 31%
- St. Albert Transit, fare recovery of 37%

(These agencies are larger than Cochrane and have an established transit system; however, the benchmarks serve to indicate typical target revenue-cost ratios.)

- Develop and maintain ridership – fares will be initially established to develop ridership and can be reviewed periodically to maintain ridership under changing conditions. Economic conditions, customer decisions, and competing services are all considerations in establishing fares that support ridership goals. Ridership goals are closely tied to recovery of costs. Economic/Social/Environmental (triple-bottom line) goals are also related to ridership. Fares might be set so as to support these other goals. Economic development, for example, might drive the introduction of service with limited consideration given to ridership as an outcome; environmental goals would drive the desire to see strong ridership.
- Equity/affordability – other considerations arise in establishing a fare structure, such as discounts for youth and low-income assistance. (New fare media might allow these discounts to be tied to activities rather than to individual riders.)
- Customer-focused payment – whatever the fare level, the structure of discounts and the payment methods must be simple, clear, easy to communicate, and targeted to the intended markets. For example, students who have already paid for a Calgary Transit monthly pass through their post-secondary institution “U-Pass” (e.g. University of Calgary) will not respond well to being charged again for the same service. Often referred to as “integrated fares”, a customer-focused strategy will include considerations such as simplicity/clarity, minimizing the

number of fare media required, ease of payment, flexibility in payment options and connections to Calgary Transit.

Options for fare payment include:

- Cash
  - Tickets
  - Monthly Pass
  - Yearly Pass – familiar to people using existing commuter coach, but rarely used due to high value and risk of loss/theft/fraud
  - Smart Card (Electronic Fare Collection)
- Operational impacts – Cochrane and the operator of the service will have objectives concerning fare evasion, cost of delivery of fare options and media, ease of fare collection, and ability to audit revenue stream. Operational impacts may preclude the introduction of strategies that address other objectives. Operational impacts are closely tied to recovery of costs. The impact of fare structures, payment methods, and “behind the scenes” fare collection need to be taken into account. The impacts often compete with customer-focused payment goals (e.g. cost, complexity and impact on passenger boarding speed to introduce credit card payment).

A fare strategy depends on the relative importance of the above objectives. Considerations associated with each objective *specific to Cochrane* are identified in the table below. These considerations affect the relative importance of each objective in setting fares.

Objective	Considerations in Cochrane
Recovery of costs	<p>Higher cost recovery will be possible on the Intercity Express (as long as there is no competition for the service and City of Calgary park &amp; ride fees remain in place). However, transit ridership is also an important goal tied to other objectives.</p> <p>An overall cost-recovery ratio of 25-30% for transit service in Cochrane is recommended.</p>
Develop/maintain ridership	<p>Ridership on the intercity express and local service is important to the success of the service (whether economic, social and environmental).</p> <p>Elasticity of fares is higher for shorter trips (local service) than for longer trips (intercity express), so the impact on ridership of future fare increases will be higher for trips within Cochrane.</p> <p>There are no parking charges in Cochrane.</p>
Equity/affordability	<p>Fares should take into consideration the affordability of trips and alternatives (cost of driving, taxi, etc.) for a variety of user groups. While low fares are desirable when offering service, a zero fare, on the other hand, can result in abuse of the service and unnecessary use.</p>

Customer-focused payment	<p>Some elements of customer service are desirable (e.g. not requiring prepaid fare, allowing cash) and others have too high of operational impacts (giving change, credit card on bus).</p> <p>Fare structure should be clear, simple and easy for dispute resolution by operators/customers (e.g. flat fare versus zone fare, in the absence of supporting technology).</p> <p>Education and clear information are important.</p> <p>Consideration should be given to the opportunities Calgary Transit's future Electronic Fare Collection system might offer.</p>
Operational impacts	<p>Fare collection should not disrupt the flow of passengers significantly.</p> <p>Bus drivers should have limited need to enforce or dispute payments.</p> <p>Fraud avoidance techniques are required.</p> <p>Flows should be simple and clear for auditing and performance monitoring.</p> <p>Electronic Fare Collection has costs (capital and operating).</p>

**Recommended Fare Level and Structure**

Taking into account the above objectives and relative importance, the following is a recommended fare strategy for Cochrane's future transit service (in 2010 dollars). These are subject to a review of the actual costs of delivering service and the level of comparables and competition closer to opening date.

**Table 5. Fare Level and Structure**

	Intercity Express Only	Intercity Express + Calgary Transit	Intercity Express + Calgary Transit + Local	Intercity Express + Local	Local Only
<b>Comments</b>	Recommend offering as option for Calgary Transit UPass holders	“Integrated Fare”	Fully integrated local, ICE and Calgary Transit transferability. Reduced fare on local bus as incentive.	Would be used by people travelling to Crowfoot only, or from Calgary to Cochrane.	Typical trips within Cochrane on local buses.
<b>Existing service comparables</b>	n/a	Cochrane Commuter \$5.50-\$6.00 per trip using monthly pass	Cochrane Commuter \$5.50-\$6.00 per trip using monthly pass	n/a	n/a
<b>CT Park and Ride comparables</b>	Free parking/reserved parking fee (CT fare is prepaid by UPass holders)	Free parking/reserved parking fee + auto costs(1) + \$2.75	Free parking/reserved parking fee + auto costs(1) + \$2.75	n/a	n/a
<b>Other considerations</b>	Goal to maximize cost recovery, which hinges on competition and comparables. Establishing ridership is important initially. Fares can be adjusted to market conditions. Parking in downtown Calgary is approximately \$20 per day. Parking charges are also a consideration at many post-secondary institutions and hospitals.			Limited market. No parking charges in Cochrane.	Goal of local transit is offering mobility within Cochrane.
<b>Recommended Fare</b>	<b>\$5.00</b>	<b>\$7.00</b>	<b>\$7.00</b>	<b>\$5.00</b>	<b>\$3.00</b>
	<b><u>Discounts to be applied to all categories for Tickets/Monthly passes</u></b>				
<b>Recommended Payment Options – Short Term</b>	Cash, Ticket, Monthly Pass (either as a Student Discount off of the Integrated Fare or as “ICE only”)	Cash, Ticket, Monthly Pass Transferable to CT and Local Service		“ICE and Local Only” Cash, Ticket, Monthly pass, Transferable to Local Service	Cash, Monthly pass, Transfer
<b>Payment Options – Longer Term</b>	Cash, Electronic Fare Collection (Smart Card)				

(1) Some costs associated with automobile use are taken into account by drivers more than others. Parking and fuel costs, for example, are often considered prior to making the choice

between driving and other alternatives, while insurance, maintenance, tire wear and other costs are often not considered or treated as “sunk costs” when making the choice. The Town should avoid setting fares that are too high, hoping automobile users will account for these costs.

The resulting cost recovery ratio based on current ridership assumptions is shown below. It is important to note that ridership depends on the fare, and adjustments will need to be made in response to changing conditions. Ridership levels used as assumptions will not be met in the first year of service based on the experience of other agencies.

**Table 6. Estimated Cost Recovery Associated with Recommended Fares**

	Ridership Assumptions	Cost Recovery
ICE	48 passengers per trip, 10 trips per weekday ( <i>no competing commuter service, Calgary park and ride fees remain</i> )	75%
Local service	Average of 5 to 10 riders per service hour (7.5 riders per service hour)	30%
Overall		50%

**Future Implementation Considerations**

Several additional considerations related to fares are listed below.

**Discounts**

Discount programs will likely be desired based on the experience of other agencies. Some suggested discounts for consideration closer to the date of service include the following groups:

- Child under six years of age (not student)
- Student
- Low income pass (similar to Cochrane’s current taxi subsidy)

Discounts will typically be offered based on bulk purchase of trips through a book of tickets or monthly passes. (Yearly passes are not recommended due to the limited market, the cost if lost, and the cost of potential fraud.) Typical discounts are shown below:

**Table 7. Sample Bulk Discounts**

Fare	Discounted Price based on Calgary Transit discount levels
Single trip cash fare	\$3.00

Prepaid Book of tickets	\$2.62x10 tickets= \$26.00
Prepaid monthly pass	\$2.20x 21 days x 2 trips = \$92.40

### **Production of Tickets/Passes/Transfers**

Ticket and monthly pass production will need to be coordinated with Calgary Transit in order to ensure enforcement officials recognize the transferability of integrated fares. The lead time for development of formats for tickets/passes, approvals and production is typically six months.

### **Enforcement**

Protocols for enforcement and penalties for fare evasion will need to be set and approved by Council in advance of operation, typically through a bylaw. These will also need to be coordinated with Calgary Transit for integrated fares.

Time limits on transferability (e.g. within 90 minutes of starting a trip) will need to be established and agreed upon by both Cochrane and Calgary Transit.

### **Equipment on Buses**




Farebox procurement, installation and collection methods will need to be established as part of the contract for service delivery. The ability of Cochrane and Calgary to audit the collection of fares and distribution of revenues will be an important role in the administration of the contract with the service provider.





Electronic fare collection should be considered worth the investment in capital and operating costs (to be determined in 2011 based on the selection of service delivery for Calgary Transit’s system). It would be easy to host local trips within Cochrane on the ICE route within Cochrane if electronic fare collection equipment was installed on the buses, for instance, through distance-based fares (users would be required to tap on and tap off using a Smart Card.) There is a limited market for these types of trips in the short term.

The benefits of Electronic Fare Collection need to be carefully weighed against the costs prior to committing to implementation. Regional electronic fare payment implementation could allow for more flexible zone-based fares and fewer restrictions on boarding/alighting/transfers.

## Advertising Opportunities and Impact on Revenue

There are several opportunities for an advertising contract that would provide revenue to The Town of Cochrane. These are shown and illustrated below.

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<p>Bus panels and wraps</p>		
<p>Bike rack panels</p>		
<p>Bus interior advertisements and decals (photo courtesy Pattison Outdoor)</p>		

As discussed in the section on responsibilities, it will be necessary for The Town of Cochrane to establish policies for what form of advertisements are acceptable to the public.

The anticipated revenue can be expected to amount to one to two percent of overall revenues based on the experience of other transit agencies. However, it is worth noting that advertising in general is in transition due to the impact of new electronic media, and revenues from traditional sources (e.g. bus bench advertisements, bus panels) are not anticipated to be as high as in the past.



## **7.0 Transit Vehicle Considerations**

Vehicle selection for the Intercity Express and local transit service has been analyzed in the Calgary Regional Transit Plan, Alberta Transportation Intermunicipal Bus Service Review (IBSR) and in the Phase 1- Town of Cochrane Transit Feasibility Study. With direction received from the transit steering committee and the Town of Cochrane Council, it is recommended that the Intercity Express service be operated with low-floor double decker buses and the local transit service be operated with low-floor cutaway style community shuttle buses.

Specifically with the Intercity Express service, a review of all vehicle types and implications on service delivery was analyzed as a part of the Alberta Transportation ISBR. Appendix C – Bus Matrix for the Intercity Express provides a technical summary of the all vehicle types with service delivery implications specifically for the Town of Cochrane.

### Benefits of the recommended vehicle types

As noted above, the low-floor double decker bus is recommended the Intercity Express Service. Primary considerations for the selection of the low-floor double decker bus are identified below:

- Higher seating capacity compared to other vehicle types (up to 86 seats)
- Low-Floor wheelchair accessible for easy access for mobility devices and strollers
- Three axles
- Strong marketing opportunities with the deployment of a new “regional” vehicle type

Low-floor cut-away shuttle vehicles are recommended for the service delivery of the local transit service within the Town of Cochrane. Primary considerations for the recommended of low-floor cut-away shuttle vehicles are identified below:

- Low-floor accessibility for easy access for mobility devices and strollers
- Lower cost than other smaller size transit vehicles
- Proven ability for serving community style routes

### **Other Vehicle Types for the Intercity Express**

Three other vehicle types were analyzed for the Intercity Express Service (low floor articulated bus, tandem axle low floor bus and lift equipped highway coach). Main considerations for these vehicle types are identified below:

#### Low Floor Articulated Bus

- Familiarity within the region, used extensively for bus rapid transit services in Calgary
- High capacity low floor bus, added length required for maintenance facilities and bus zones
- Exceeds axle weights as specified by Alberta Transportation for intermunicipal operations

#### Tandem Axle Low Floor Bus

- Not common in North America, presently no North American supplier
- Cost not known
- Unknown if axle weight meets Alberta Transportation standards

#### Highway Coach

- Presently used in private sector commuter services
- Accessible models feature a lift, takes six minutes for the boarding or alighting of an passenger with a mobility device
- Can be viable for point to point routes

Full analysis for all vehicle types reviewed for the operations of the Intercity Express is available in Appendix C – Bus Matrix for the Intercity Express.

#### **Regulations**

Prior to the implementation of the deployment of low-floor double decker buses for the Intercity Express Service, the following regulatory parameters must be met:

#### **Operating Authority Certificate**

Alberta Transportation requires that new passenger transportation providers obtain an Operating Authority Certificate to have the operating right to provide service along a determined route. The Operating Authority Certificate submission requires the proposed service description / timetable, Commercial Vehicle Inspection Certificate for all vehicles operating the service, insurance verification forms and minimum of four shippers support forms. Operating Authority Applications are posted publicly for review and opportunity for objections. If an objection is filed on the application, a hearing is called where the application is presented to the Registrar of Carrier Services for a review and decision. Alberta Transportation has informed intermunicipal transit system operators in the Intermunicipal Bus Service Review that the Province may grant recognized regional authorities the right to grant and reject operating authority applications.

## **Commercial Vehicle Inspection Program (CVIP)**

Transit buses used for intermunicipal services must comply with the Commercial Vehicle Inspection Program (CVIP). Registered owners of commercial vehicles which include buses that carry more than ten passengers must have their vehicles inspected by a CVIP certified technician in a CVIP certified facility semi-annually.

## **Permits**

When it initiated a double decker bus trial in August 2010, Strathcona County was required by Alberta Transportation to obtain an overweight permit and an annual dimension permit. An overweight permit would be required for the exemption of the rear axle from Section 9 of the Commercial Vehicle Dimension and Weight regulation pertaining to axle weights. An annual “dimension permit” was required for the movement of a double decker bus to a maximum height of 4.3 metres.

Prior to the launch of the Intercity Express, it will be the responsibility of the project manager to be well-versed in vehicle regulations for intermunicipal bus services, which are subject to change.

## **Other Considerations**

There is presently one known low-floor accessible double decker bus supplier in North America (Alexander Dennis). A second double decker supplier, Van Hool, offers a double-decker motorcoach with an accessible rear folding ramp, but limited access to the boarding/fare collection area. Suppliers informed the project team that their low-floor double decker products are overweight as per Alberta Transportation regulations. Alexander Dennis low-floor double decker products are currently operated by BC Transit in Victoria, OC Transpo in Ottawa, and GO Transit in Toronto. Alexander Dennis is presently redesigning their low floor double decker bus product line to feature an updated exterior and to be able to equip their buses with the 2010 Emissions Standards engine. The new product line is expected to be launched in early 2012 with deliveries in Q2/Q3 of 2012. Van Hool presently supplies operators such as Coach Canada, an intercity coach provider in Central Canada. Van Hool presently has a production backorder to September 2011.

## **Joint Procurement**

It is advisable that the Town of Cochrane investigate opportunities for joint procurement of the low-floor double decker on future orders from existing or new operators of low floor double decker buses. For joint procurement opportunities, similar specifications for the transit vehicle and delivery timelines would be required. Parts and supplies agreements could be pursued with joint procurement as well.

## **Route Testing**

A full height clearance check for all potential height clearance issues which include trees, structures and powerlines must be completed on all revenue and deadhead routings in Cochrane, Rockyview County and the City of Calgary. Alternate routing and service disruption procedures should be developed in collaboration with Rockyview County and the City of Calgary. It is anticipated that from time to time to the double decker bus fleet could be used for alternate services such as charters and trips to contracted maintenance services, where routings for all these trips will require route testing as well.

## **8.0 Marketing and Promotion**

Marketing and communicating the launch of the new Intercity Express and local transit services is vital prior to the introduction of service. Marketing and communications planning/design should start one year prior to the launch date. Leading up to the service launch date, targeted marketing, promotions, and creation of publications and transit website will be required. After the service launch, maintenance of the materials, operational notifications, and regular communications with transit users will be required. As noted in previously, marketing and communications is a role primarily provided by the municipality. Prior to the establishment of marketing promotions, communications and materials, a transit branding strategy consisting of transit-specific creative for materials and livery design for transit vehicles will need to be completed. It is recommended that in the creation of a branding strategy, considerations from the Calgary Regional Partnership and Calgary Transit would be taken into consideration such as regional branding and transit system integration. There are two goals to a CRP strategy: differentiation of the Intercity Express from Cochrane's local service, and consistency in branding among all regional Intercity Express services.

### **Market/Route Specific Marketing**

As noted in the market analysis of the Phase 1 transit feasibility study, key markets for the Intercity Express consist of commuters to/from Calgary, post secondary students and users of facilities and services that are not available in Town of Cochrane such as health services. Key markets for the local transit service include youth and seniors looking for mobility options within the Town of Cochrane. Components of a market specific strategy are listed below:

**Table 8. Intercity Express-Market Specific Promotions and Marketing**

<b>Market Segment</b>	<b>Promotion Description</b>	<b>Promotion Timeline</b>
Commuters (Peak Direction) – Cochrane Residents	Ads in the local newspapers (Cochrane Eagle and Cochrane Times)	One month prior to launch (weekly), maintain till after launch week
	Bold Signs within the Town of Cochrane	Two weeks prior to launch, maintain till after launch week
	Banners on Overpasses along Crowchild Trail	One month prior to launch, maintain till two weeks after launch
	Rider's Guide mailout to all residents	Two weeks prior to launch
Commuters (Peak and Reverse Flow) – Calgary Residents	Exterior ads on Calgary Transit buses and LRT vehicles Interior ads on Calgary LRT vehicles Exterior ads in Crowfoot LRT station and park and ride lots	Three weeks prior to launch, maintain to three months after launch
Post Secondary Students	Ads in post secondary publications (e.g. student newspapers), participation in student orientation events in early September, send Rider's Guide and promotional materials to on campus fare vendors and on-campus information centres	September – of launch year (orientation), ongoing
Medical Facilities	Send Cochrane Rider's Guide and promotional materials to medical service facilities information desks (e.g. Foothills Hospital)	Three weeks prior to launch, ongoing
Calgary Transit	Send Rider's Guide, promotional materials and fare media to Calgary Transit customer service centre. Post information on Calgary Transit website.	One month prior to launch, ongoing
All users	Create online advertisements through popular media (Facebook, online news sites, etc.)	Three weeks prior to launch, ongoing

**Table 9. Local Transit-Market Specific Promotions and Marketing**

<b>Market Segment</b>	<b>Promotion Description</b>	<b>Promotion Timeline</b>
All Local Transit User Markets	Ads in the local newspapers (Cochrane Eagle and Cochrane Times)	One month prior to launch (weekly), maintain till after launch week
	Bold Signs within the Town of Cochrane	Two weeks prior to launch, maintain till after launch week
	Rider's Guide mailout to all residents, community service groups	Two weeks prior to launch
Youth	Send Rider's Guide, promotional materials to local Junior High and High Schools. Info sessions at the local schools during orientation at the beginning of the school year. Info session at Spray Lakes Recreation Centre prior to launch	Three weeks prior to launch, info sessions at the beginning of the school year
Seniors	Send Rider's Guide, promotional materials to local assistive living facilities. Info sessions at local assistive living centres prior to launch.	Three weeks prior to launch (info sessions)
Fare Vendors	Send Cochrane Rider's Guide, promotional materials and fare media to fare vendors	Three weeks prior to launch, ongoing

### **Marketing Materials: Pre and Post service launch**

The primary materials required for the service launch and on an ongoing basis are a transit Rider's Guide and transit website. Topic specific brochures can be created on an as-needed basis (e.g. bike racks on buses). Electronic mediums such as email alerts and social media (e.g. twitter) could be used for operational messaging such as service disruptions. A detailed description of each type of marketing materials is listed below:

#### **Rider's Guide**

It is recommended that the Town of Cochrane develop a transit Rider's Guide for all transit services. A rider's guide is a printed magazine that typically ranges in 8-12 pages in length. Basic transit information such as routes / schedules and fares are provided in the rider's guide as well as information on policies (e.g. transfer policy between transit vehicles). The following content is recommended for the Cochrane Rider's Guide:

- Routes and Schedules (including a summary on how to read schedules)
- Terminal diagrams
- Fare structures and locations of fare vendors
- Accessibility - Accessible features on the Intercity Express and Local Transit, information on specialized transportation provider(s)
- Transit Policies (e.g. transfer policy, stroller policy)
- Integration with Calgary Transit
- Contact information

It is recommended that the Rider's Guide be mailed to each residential dwelling in Cochrane, community service groups, schools, assistant living facilities, key locations in Calgary (e.g. Calgary Transit customer service office), civic facilities and fare vendors three weeks prior to service launch. The estimated cost for the production and mailing of the Cochrane Rider's Guide is \$6,000, excluding staff time. Updating of the Rider's Guide is required at least once annually or prior to a major service change (e.g. routing changes, schedule adjustments). The residential mail drop is recommended prior to the launch of transit service, updated rider's guide would be needed to distributed to the above listed locations.

### **Website**

The Town-administered website will be a key point of information for current and potential users of the transit system. Basic transit information such as routes / schedules and fares would be posted on the website. The key feature of the website would be to inform transit users of service disruptions (e.g. planned route detours), new initiatives and more detailed information than what is provided in the printed transit Rider's Guide. Electronic-only features such as trip planning could be provided on the transit website. The transit website could be created in Cochrane's web creative on the Town website as is the case with most small municipal transit system websites.

### **Other Electronic Media**

Transit systems across Canada are moving towards more instant communication with transit users specifically for service updates (e.g. delays) and upcoming marketing promotions. In some cases, transit users can subscribe to an email alert system and receive updates to their personal email addresses. Email alerts are presently being used by the Toronto Transit Commission and are administered by operations staff. (In the case of Cochrane's recommended operating model, the contractor would be required to provide this service if specified in the service specifications.) Twitter is also utilized as a service disruption notification service by Calgary Transit and TransLink in Vancouver, among others.

For market specific marketing, it is recommended that the Town of Cochrane investigate the use of Facebook, especially in marketing transit services to youth markets. Social media websites such as Facebook could also be utilized for promotional uses as well.

### **Pre-Launch Strategies**

Prior to service launch, it is recommended that the Town of Cochrane host info sessions and/or focus groups on the new service and investigate the possibility of providing a free demo week during the first week of service. Up to two months prior to service launch, info sessions could be held at key transit destinations such as Spray Lakes Recreation Centre and Crowfoot LRT Station to inform potential users about the service (e.g. provide information on services provided) and to show the transit vehicles to give future customers a firsthand feel for the new services. A free demo week would permit users to try out the system and collect feedback on the components of the new services. Operating cost implications exist with the offering with a free demo week where no operating revenues will be collected. However, for a community like Cochrane with no existing transit service, the benefits in familiarization likely outweigh the costs.

### **Administrative Implications**

Marketing and communications of the Intercity Express and Local Transit services pre and post launch require different levels of the resources. The creation of a Cochrane Transit branding strategy and creative design and production could be done internally by Town of Cochrane communications staff or in collaboration with a contracted creative consultant. The maintenance of transit marketing and communications materials can be completed internally as a responsibility of the Transit Coordinator.

## **9.0 Customer Service**

Under the recommended service delivery approach, customer service will be primarily a responsibility of the Town of Cochrane. As noted previously, the Town of Cochrane will be responsible for the maintenance of marketing campaigns and information sources (print and electronic). Specifically, the upkeep of these materials would be the responsibility of Cochrane staff (e.g. a Transit Coordinator). Day to day interactions from customers, such as answering inquiries regarding routes, schedules and fares, can be handled by an administrative assistant or municipal call centre (if applicable). For a month before and after the launch of the Intercity Express and Local Transit services, it is anticipated that a high volume of calls will be received by the Town of Cochrane. It is advisable that one administrative assistant be able to specifically receive and follow up on transit informational requests during this time. Any customer requests that are out of



the realm of information for routes, schedules and fares should be handled by the Transit Coordinator for follow up and response.

It is advisable that the Town of Cochrane conduct an annual customer satisfaction survey of transit users (on-board) and non users (by telephone and online).

Components of the transit satisfaction survey should include:

- Origin and Destination questions to understand the transit user's travel patterns
- Fare media and frequency of travel
- Understanding of customer and non-customer behavior (e.g. why do you or do not use transit?)
- Perceptions and feedback on service provided and future service options
- Perceptions and feedback on transit amenities (terminals, park and ride, vehicles)

Surveys can also be conducted after any major service change to monitor change in travel patterns and behaviors before and after service changes. These surveys are typically conducted onboard. A standard on board transit survey is provided in Appendix D – Sample Transit Survey.

## **10.0 Next Steps**

### **Green TRIP Application**

Town of Cochrane plans to apply to Alberta Transportation for project funding under the Green TRIP program. A project application is currently underway.

If capital funds are available through the Green TRIP program, an announcement is likely to be made by Alberta Transportation in early 2011. The lead time to procure buses varies from as little as six months to as much as two years, depending on the time taken to develop a procurement document and the specifications of the vehicle. A lead time of 18 months is anticipated to be required for production and delivery of new double-decker buses. At least two years are likely required for design and construction of the transit maintenance facility. This makes 2013 a potential target date for introducing public transit in Cochrane.

### **After Project Funding Approval**

A Project Manager will be required to develop and initiate the necessary contracts and to keep Cochrane's senior leadership team apprised of progress. The Project Manager would monitor progress, partner with Calgary Transit and other Town departments, and identify/procure consultants familiar with negotiations and contracts with private sector.

The Project Manager would be responsible for developing a Request for Proposals and draft contract for delivery of service, and would procure long lead items (garage, buses) in 2011. The Town of Cochrane should consider the reporting structure for a Public Transit Project Manager as early as possible. Job descriptions from similar agencies elsewhere in Canada are provided under separate cover.

The Project Manager (2011-2013) and future Transit Coordinator (2012 onward) will be able to use this document as a checklist for the many activities necessary in the implementation of public transit in Cochrane.

**Appendices:**

**Appendix A – Transit Facility Standards**

**Appendix B – Proposed Transit Schedules**

**Appendix C – Bus Matrix for the Intercity Express**

**Appendix D – Sample Transit Survey**

**Appendix E – Town of Cochrane Public Works Yard and Transit Facility Capital and Annual Operating Cost Estimates**

## Appendix A - Transit Facility Standards

There are advantages to Cochrane to adopt the same bus zone standards as The City of Calgary. It will be easier for customers and operators to orient themselves at bus stops if they are configured the same throughout the Calgary Region.

Calgary Transit utilizes three bus zone standards (farside, mid-block and nearside) for the placement of bus zones. Most bus zones in Calgary are located farside of the intersection primarily for traffic safety reasons (passengers cross the street behind the transit bus) and for the optimal use of transit signal priority. All bus zone standards below are designed for buses 40 feet in length and below. Explanations for the three bus zone standards with advantages and disadvantages are provided below:

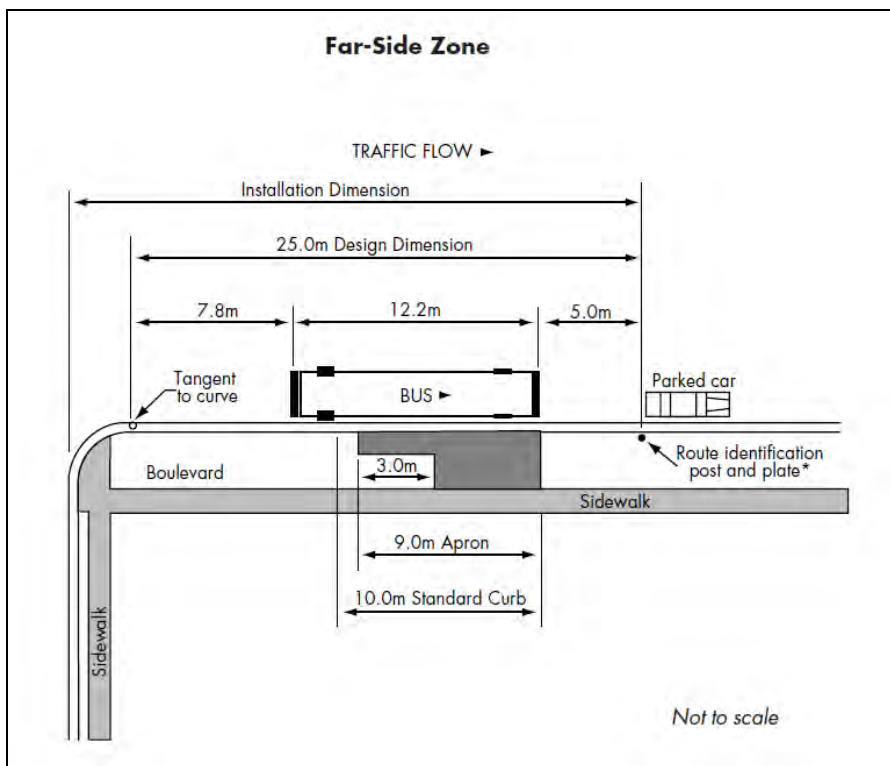
### Farside Zones

#### Advantages

- Minimizes conflict between right turning vehicles and buses
- Encourages pedestrians to cross behind the bus
- Transit Signal Priority

#### Disadvantages

- Could result in traffic queued into the intersection when a bus is stopped in the travel lane



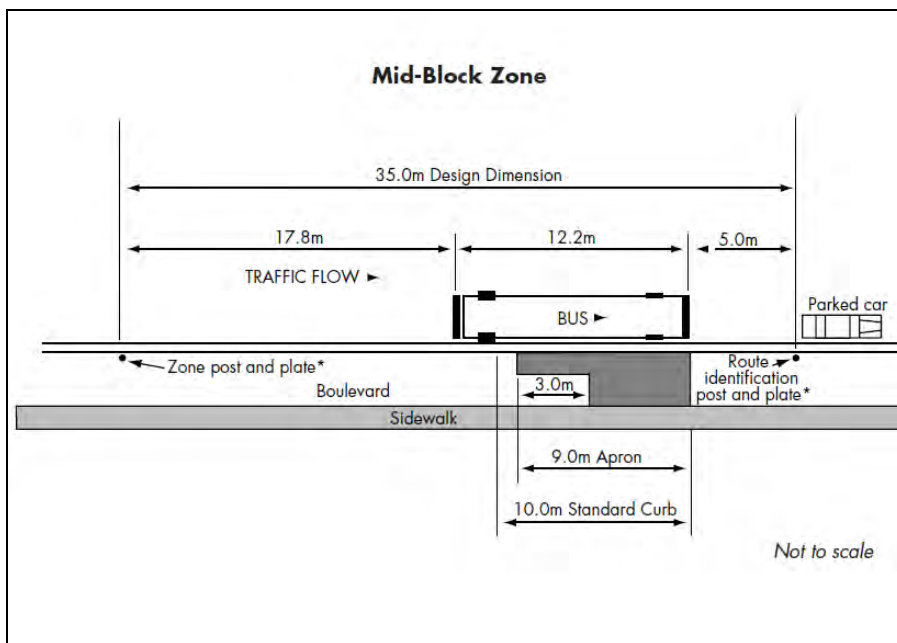
### Midblock Zone

#### Advantages

- May result in passenger waiting areas experiencing less pedestrian congestion

#### Disadvantages

- Requires additional distance for no-parking restrictions
- Encourages patrons to cross the street mid-block (jaywalking)



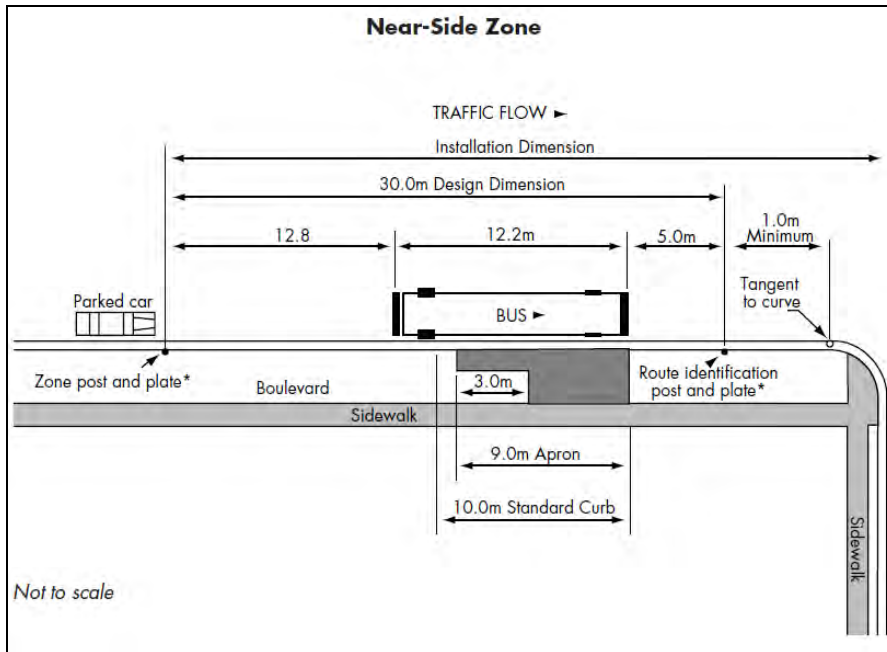
## Nearside Zone

### Advantages

- Eliminates the potential of double stopping
- Allows passengers to board and alight while the bus is stopped at a red light
- Suitable for queue jumps

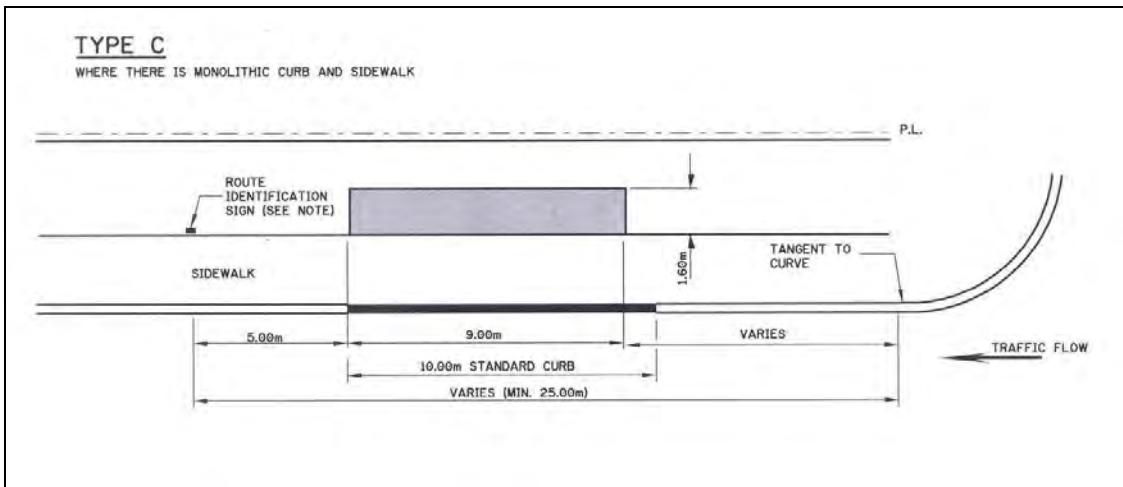
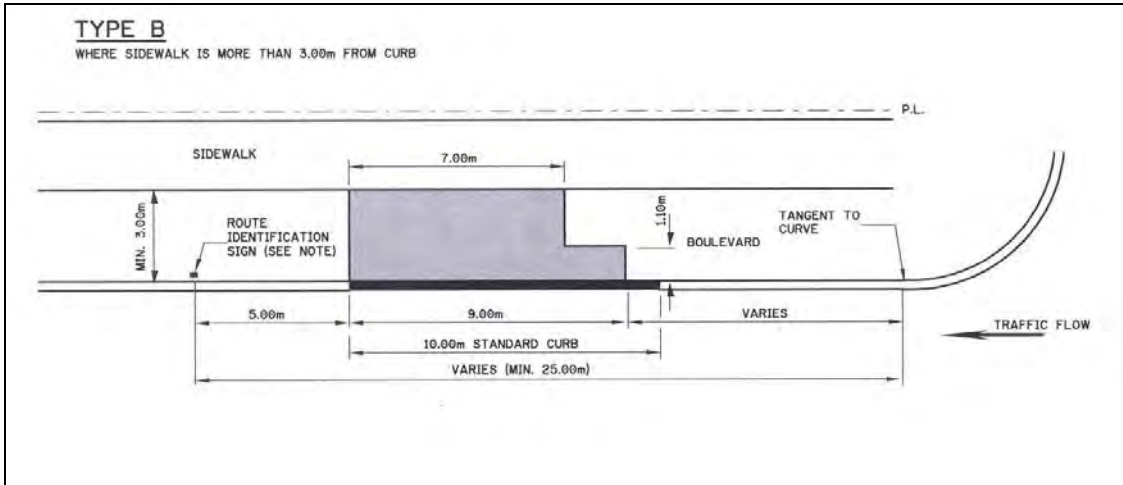
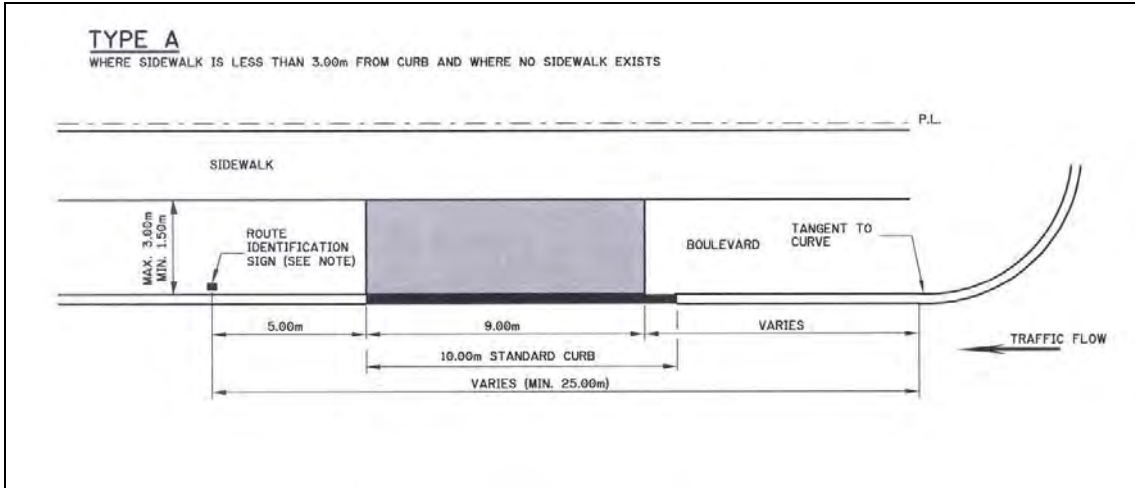
### Disadvantages

- Increases conflicts with right turning vehicles



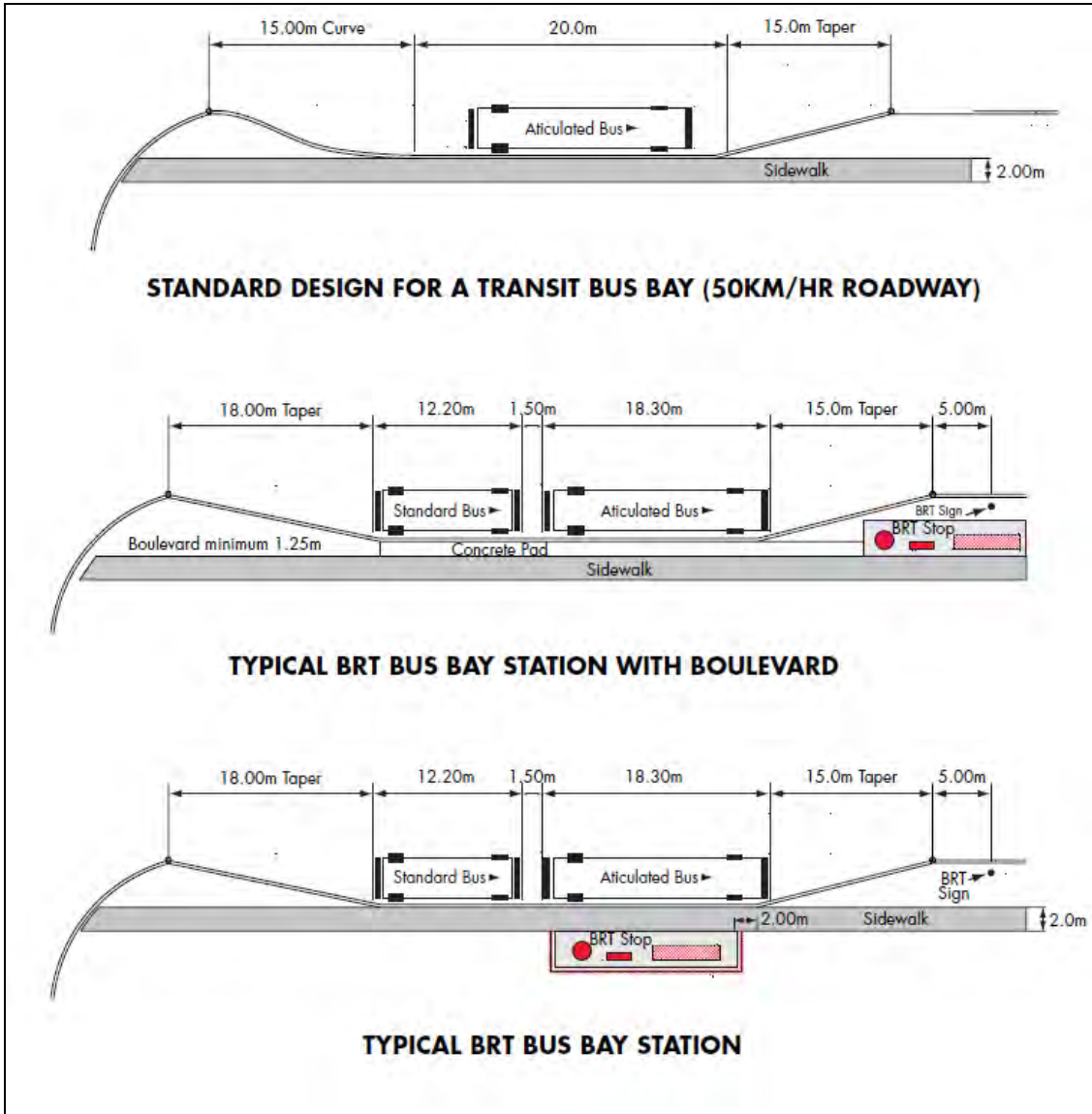
## Residential Suburban Style Bus Zone Aprons

Calgary Transit utilizes three types of bus zone aprons in suburban residential communities. Brief descriptions/illustrations of each bus zone apron type are provided below. For all bus zone sites, protective covenants are required to prohibit on-street parking within the bus zone.



## Bus Bays

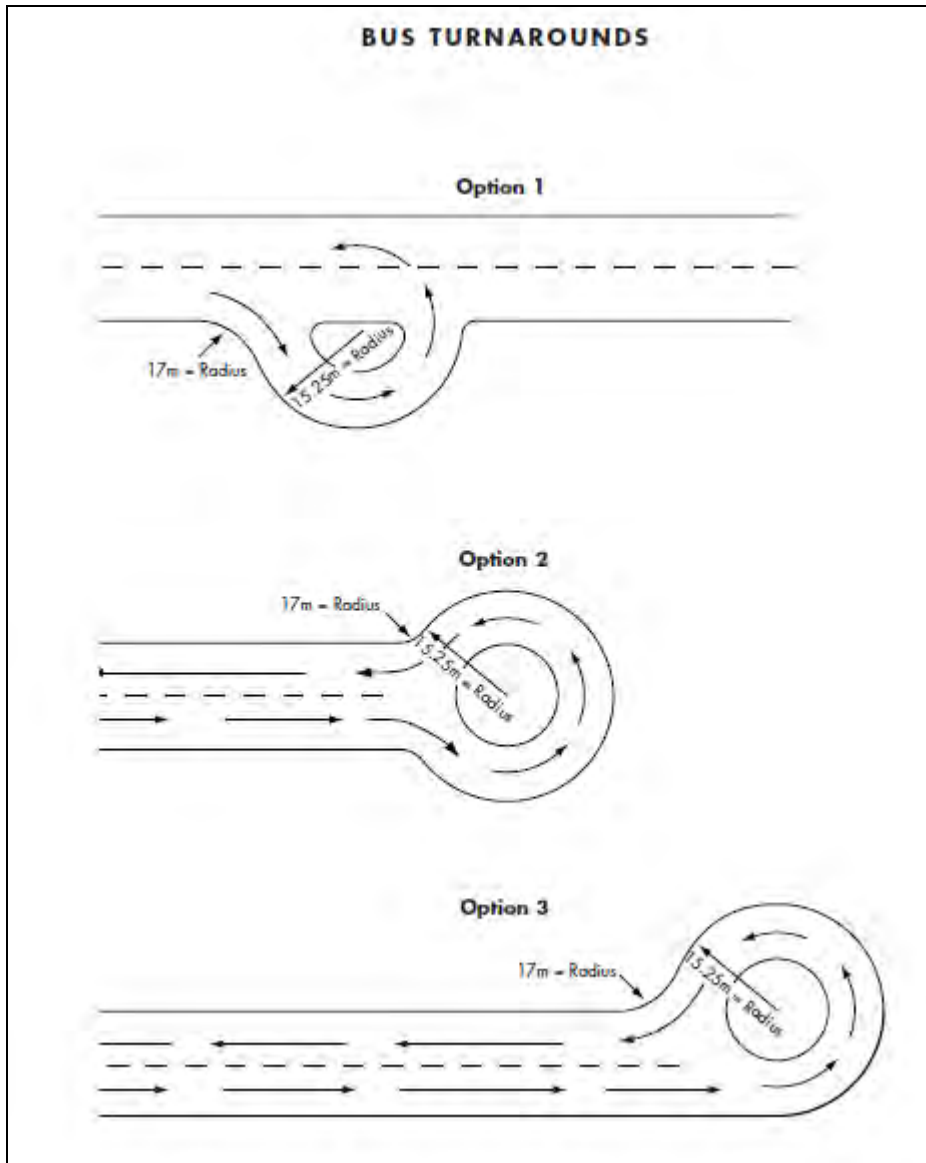
It is recommended that bus bays are placed primarily at key transit transfer points and scheduled time points. Other locations bus bays could be utilized include locations along major highways, sites with inadequate sight distances, and where bus parking in the curb lane is prohibited. For the proposed phase 1 and 2 transit routes, bus bays are recommended at the Railway Avenue transit terminal site and along the 5th Avenue commercial corridor between the CP tracks and Griffin Road.





## Transit Turnarounds

Transit turnarounds are primarily required at the terminus of a route within a residential community. Calgary Transit commonly utilizes transit turnarounds in multi-phased developing residential subdivisions for the incremental development of the interim transit routing in the community.



**Appendix B – Proposed Transit Schedules**

950 Crowfoot LRT Station - Cochrane			INTERCITY EXPRESS Weekday								
SB Old Town Hall Terminal	WB Griffin Road at River Avenue	Arrive NB Old Town Hall	Depart NB Old Town Hall	EB Gleneagles Dr at Gleneagles BV	EB Gleneagles Drive at Glen Summit Close	Arrive Crowfoot LRT Station	Depart Crowfoot LRT Station	SB Gleneagles Drive at Glenvista Key	WB Gleneagles Drive at Gleneagles BV	Arrive Old Town Terminal	Key Number
			5:42	5:52	5:55	6:15	6:25	6:45	6:48	6:58	950-3
			6:12	6:22	6:25	6:45	6:55	7:15	7:18	7:28	950-1
			6:42	6:52	6:55	7:15	7:25	7:45	7:48	7:58	950-2
6:58	7:01	7:07	7:12	7:22	7:25	7:45	7:55	8:15	8:18	8:28	950-3
7:28	7:31	7:37	7:42	7:52	7:55	8:15	8:25	8:45	8:48	8:58	950-1
7:58	8:01	8:07	8:12	8:22	8:25	8:45	8:55	9:15	9:18	9:28	950-2
8:28	8:31	8:37									950-3
8:58	9:01	9:07									950-1
9:28	9:31	9:37									950-2
15:25	15:28	15:34	15:39	15:49	15:52	16:12	16:22	16:42	16:45	16:55	950-61
15:55	15:58	16:04	16:09	16:19	16:22	16:42	16:52	17:12	17:15	17:25	950-62
16:25	16:28	16:34	16:39	16:49	16:52	17:12	17:22	17:42	17:45	17:55	950-63
16:55	16:58	17:04	17:09	17:19	17:22	17:42	17:52	18:12	18:15	18:25	950-61
17:25	17:28	17:34	17:39	17:49	17:52	18:12	18:22	18:42	18:45	18:55	950-62
17:55	17:58	18:04									950-63
18:25	18:28	18:34									950-61
18:55	18:58	19:04									950-62

1 West Terrace - Bow Ridge LOCAL						WEEKDAY				
Depart Old Town Hall	WB Glenbow Drive at Glenpatrick Drive	EB Quigley Drive at West Terrace Road	EB Glenpatrick Drive at West Terrace Road	Arrive Old Town Hall	Depart Old Town Hall	WB George Fox Trail at Highway 22	NB Bowridge Road at Highway 22	EB George Fox Trail at George Fox Trail	Arrive Old Town Hall	Key Number - do not post in public schedules
					5:23	5:26	5:33	5:40		911-1
	5:22	5:28	5:34	5:40	5:45	5:53	5:56	6:03	6:10	911-2
5:45	5:52	5:58	6:04	6:10	6:15	6:23	6:26	6:33	6:40	911-1
6:15	6:22	6:28	6:34	6:40	6:45	6:53	6:56	7:03	7:10	911-2
6:45	6:52	6:58	7:04	7:10	7:15	7:23	7:26	7:33	7:40	911-1
7:15	7:22	7:28	7:34	7:40	7:45	7:53	7:56	8:03	8:10	911-2
7:45	7:52	7:58	8:04	8:10	8:15	8:23	8:26	8:33	8:40	911-1
8:15	8:22	8:28	8:34	8:40	8:45	8:53	8:56	9:03	9:10	911-2
8:45	8:52	8:58	9:04	9:10						911-1
					15:30	15:38	15:41	15:48	15:55	911-61
15:30	15:37	15:43	15:49	15:55	16:00	16:08	16:11	16:18	16:25	911-62
16:00	16:07	16:13	16:19	16:25	16:30	16:38	16:41	16:48	16:55	911-61
16:30	16:37	16:43	16:49	16:55	17:00	17:08	17:11	17:18	17:25	911-62
17:00	17:07	17:13	17:19	17:25	17:30	17:38	17:41	17:48	17:55	911-61
17:30	17:37	17:43	17:49	17:55	18:00	18:08	18:11	18:18	18:25	911-62
18:00	18:07	18:13	18:19	18:25	18:30	18:38	18:41	18:48	18:55	911-61
18:30	18:37	18:43	18:49	18:55	19:00	19:08	19:11	19:18	19:25	911-62
19:00	19:07	19:13	19:19	19:25	19:30					911-61





**Red** – timed transfer with Intercity Express

**2 Cochrane Heights - Spray Lakes Rec Centre LOCAL WEEKDAY**

<i>Depart NB Old Town Hall Terminal</i>	<i>WB Contiki Dr at 4 Avenue</i>	<i>SB Old Town Hall Terminal</i>	<i>EB Griffin Road at River Avenue</i>	<i>Spray Lakes Rec Centre</i>	<i>NB River Avenue at Griffin Road</i>	<i>Arrive NB Old Town Hall Terminal</i>	<i>Key Number</i>
5:31	5:34	5:40	5:43	5:47	5:53	5:56	912-1
6:01	6:04	6:10	6:13	6:17	6:23	6:26	912-1
6:31	6:34	6:40	6:43	6:47	6:53	6:56	912-1
7:01	7:04	7:10	7:13	7:17	7:23	7:26	912-1
7:31	7:34	7:40	7:43	7:47	7:53	7:56	912-1
8:01	8:04	8:10	8:13	8:17	8:23	8:26	912-1
8:31	8:34	8:40	8:43	8:47	8:53	8:56	912-1
15:30	15:38	15:42	15:45	15:49	15:55	15:58	912-61
16:00	16:03	16:09	16:12	16:16	16:22	16:25	912-61
16:30	16:33	16:39	16:42	16:46	16:52	16:55	912-61
17:00	17:03	17:09	17:12	17:16	17:22	17:25	912-61
17:30	17:33	17:39	17:42	17:46	17:52	17:55	912-61
18:00	18:03	18:09	18:12	18:16	18:22	18:25	912-61
18:30	18:33	18:39	18:42	18:46	18:52	18:55	912-61
19:00	19:03	19:09	19:12	19:16	19:22	19:25	912-61

**Red** – timed transfer with Intercity Express

**Appendix C – Bus Matrix for Intercity Express**

	Low-floor accessible articulated bus	Low-floor accessible bus – tandem axle (suggested by Alberta Transportation)	Low-floor accessible double-decker bus (suggested by Province of Alberta)	Lift-equipped commuter coach
Photo				
Seats (based on model shown)	57 2 wheelchair positions	50 2 wheelchair positions	73-83 3 wheelchair positions	57 1 wheelchair position (via lift)
Cost	\$750,000	Unknown – no North American manufacturer/supplier	\$900,000	\$600,000, more depending on options
Height/weight	3.1m 19,150 kg	3.2m 23,900 kg	4.3m 23,100 kg	3.48m 22,700 kg
Benefits relative to recommended articulated bus	Great load capacity, relatively good fuel efficiency	Dual rear axle (distributed weight resulting in less pavement damage)	Dual rear axle, higher seated loads.	Dual rear axle. Passengers have higher comfort level once on the bus.
Cons relative to recommended articulated bus		No North American supplier for vehicles, parts or tooling. Issues with procurement, parts availability and maintenance. Higher operating/maintenance costs than articulated bus.	Height conflicts with trees, overhead wires, some bridges. Routing would be restricted in most jurisdictions. Detour routings would be restricted. Maintenance facility access issues. Limited opportunities	Loading is difficult due to steps and having a single door. Not recommended for multiple-stop transit service. Wheelchair lift adds significantly to loading time (up to 6 minutes). Limited opportunities for joint procurement. Higher

			for joint procurement. Higher operating/maintenance costs than articulated bus (offset by higher seated loads).	operating/maintenance costs than articulated bus.
Cost of maintenance and maintaining parts inventory	Low to moderate considering the number already in use	High due to low number in use in NA	Moderate due to scarcity of use in North American, but very durable bus indicated by Victoria maintenance staff	Moderate considering the number already in use
Flexibility in fuel type	Can use diesel, hybrid diesel-electric, and CNG	Can use diesel and hybrid diesel-electric	Can use diesel and have prototype in hybrid diesel-electric	Diesel
Overall customer convenience and comfort-ride and seating	Moderate level of comfort and convenience for the seated customers, but very low level of comfort for customers standing on higher speed roads Higher likelihood of customers having to stand	Moderate level of comfort and convenience for the seated customers, but low level of comfort for customers standing on higher speed roads. Higher likelihood of customers having to stand	Higher level of comfort and convenience for the customers given high number of seats, especially upstairs where there are good views -"best liked bus by customers in Victoria."	Highest level of comfort and convenience can be provided for seated customer-high back chairs with overhead lighting, TV's, baggage storage, etc. Very low level of comfort for standing passengers
Suitability for Calgary winters	Moderate	Not known	Not as well known - only used to date in Victoria and Toronto in Canada, but few problems in Victoria	Moderate
Ease of customer loading/unloading	Can use front and back doors for loading and unloading of passengers, including wheelchair passengers, but requires some form of fare system at back doors if boarding is to occur through all doors. This could occur through validation of fares on board or proof of payment systems	Can use front and back doors for loading and unloading of passengers, including wheelchair passengers, but requires some form of fare system at back doors if boarding is to occur through all doors. This could occur through validation of fares on board or proof of payment systems	Can use front and back doors for loading and unloading of passengers, including wheelchair passengers, but requires some form of fare system at back door if boarding is to occur through all doors. This could occur through validation of fares on board or proof of payment systems	Limited through one door. Loadin/unloading relatively difficult due to high floor

Storage flexibility in depots	Could create problems for storage due to their length	Could create problems for storage due to their length	Could create problems for storage due to height	Relatively easy to store in standard bus storage facilities
Susceptibility to accidents in winter	Very high in Calgary and Ottawa.	No experience in NA	Experience in Canada is limited to Toronto and Victoria, but indications suggest that it handles very well in Victoria; the front axle is only used for loading	Lower risk than articulated bus
Ease in private sector provision	Not used by private sector and would require their purchase or use of public sector vehicles in contract out situation	Not used by private sector and would require their purchase or use of public sector vehicles in contract out situation	Not used by private sector and would require their purchase or use of public sector vehicles in contract out situation	Commonly used by the private sector
Flexibility in seating/layouts	Not as much flexibility can be accommodated in layouts as commuter coaches. Can, however, create more space for disabled persons or for strollers	Not as much flexibility can be accommodated in layouts as commuter coaches. Can, however, create more space for disabled persons or for strollers	Not as much flexibility can be accommodated in layouts as commuter coaches Does offer more space in upstairs compartment.	Can accomodate quite a lot of flexibility in arrangment of seats and provision of tables etc.
Alberta Transportation Intermunicipal Bus Regulations	Exemption from regulation required from Alberta Transportation.	Might meet Alberta Transportation regulations. Suggested by Province in IBSR review.	Might meet Alberta Transportation regulations. Suggested by Province in recent discussions.	Meets Alberta Transportation regulations.
Recommendation-change	Recommended for relatively short routes with multiple stops, if double-decker buses cannot be used.	Offer to review with Province for potential applications in the longer-term. Do not consider in short term as difficult to procure and not tested in NA.	Recommended for shorter routes with multiple stops.	Not recommended for communities practically abutting Calgary (Airdrie, Chestermere) due to the shorter travel times. Viable for point-to-point longer highway routes if Alberta Transportation insists on dual axle. May not be recommended if a particular route has a high number of wheelchair passengers on a regular basis due to difficulty in loading and limited space onboard.

<p>Implication for Cochrane Intercity Express</p>	<p>Could be utilized by either public or private sector provider in the Calgary Region. Province indicated it is not supporting single-rear-axle vehicles as part of Green TRIP program.</p>	<p>Eliminate from consideration.</p>	<p>Could be utilized by either public or private sector provider. New bus storage and maintenance facilities required for either public or private sector service provider.</p>	<p>Use of wheelchair lifts on highway coaches will result in schedule adherence issues on the Intercity Express. Many non-wheelchair users have difficulty climbing stairs and will not use the service.</p>
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Courtesy: Calgary Transit, Stantec



## Appendix D – Sample Transit Survey

### TOWN OF COCHRANE TRANSIT SURVEY

The Town of Cochrane is interested in obtaining information about how you use the transit service within Cochrane and to/from Calgary. Please fill out this survey and place it in the box at the front of the bus. **If you have already completed this survey earlier today, you do not need to complete another one. THANK YOU FOR YOUR TIME.**

1. In a typical week, which includes all 7 days, how many times do you use Cochrane Transit? (Travel to and from a destination would be count as two times.)

**No. of times** \_\_\_\_\_

2. Where do you start your trip? (Please specify the bus stop teleride number or cross streets where you board)

Bus stop # \_\_\_\_\_

**or** Cross Streets \_\_\_\_\_

3. On what route do you start your trip?

Route No. \_\_\_\_\_

4. What time do you normally board this bus?

To your destination \_\_\_\_\_ AM \_\_\_\_\_ PM \_\_\_\_\_ N/A

Return trip home \_\_\_\_\_ AM \_\_\_\_\_ PM \_\_\_\_\_ N/A

5. A) Please check the primary purpose of this trip.

<b>FROM</b>		<b>TO</b>	
<input type="checkbox"/>	Home	<input type="checkbox"/>	Home
<input type="checkbox"/>	Work	<input type="checkbox"/>	Work
<input type="checkbox"/>	School (K-12)	<input type="checkbox"/>	School (K-12)
<input type="checkbox"/>	Post Secondary	<input type="checkbox"/>	Post Secondary
<input type="checkbox"/>	Shopping	<input type="checkbox"/>	Shopping
<input type="checkbox"/>	Social/Recreational	<input type="checkbox"/>	Social/Recreational
<input type="checkbox"/>	Other (please specify)	<input type="checkbox"/>	Other (please specify)

- B) Please specify the destination, nearest intersection or address.

Destination/Address/Nearest Intersection

\_\_\_\_\_ (Circle: **NE SE NW SW** for Calgary Destinations)

6. A) Do you transfer to one of the following?

- I do not transfer
- Bus (please specify route) \_\_\_\_\_, \_\_\_\_\_
- Calgary Transit (please specify route) \_\_\_\_\_

7. Please state why you choose to travel by Cochrane Transit (check the appropriate boxes)

	Convenient/safe service		Less expensive
	Faster travel time		Reliable service/On time
	Avoid parking		Avoid traffic
	Environmental reasons		Don't drive
	No vehicle available		

Other (please specify) \_\_\_\_\_

8. Please list the things you like about Cochrane Transit service in your area. (check the appropriate boxes)

	Frequent service		Faster travel time
	Convenient/safe service		Friendly/courteous/helpful drivers
	Reliable service/On time		Reasonable fare
	Easy access bus stop		Adequate "Park and Ride" parking
	Bus stop amenities		Ease of transfer

Other (please specify) \_\_\_\_\_

9. Please list the **most** important thing(s) Cochrane Transit should do to improve its service for you.

\_\_\_\_\_

\_\_\_\_\_

10. Do you have any other comments?

\_\_\_\_\_

\_\_\_\_\_

11. Please check the appropriate gender and age group.

Male                       Female

	6 to 14 years		20 – 24 years		45-64 years
	15 – 19 years		25 – 44 years		65 and over