

# Greater Trail

## Transit Service Review



August 2016

## **Acknowledgements**

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BC Transit would like to thank the Regional District of Kootenay Boundary, City of Trail, City of Rossland, Village of Fruitvale, Village of Montrose, Village of Warfield, Trail Transit Services and West Kootenay stakeholders and community members who provided input into this review.

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# 1.0 INTRODUCTION

In partnership with the West Kootenay Transit Committee, the Regional District of Kootenay Boundary (RDKB), City of Trail, City of Rossland, Village of Fruitvale, Village of Montrose, Village of Warfield and Trail Transit Service, BC Transit has undertaken a Transit Service Review of the transit service provided in the Greater Trail area.

As set out in the mutually agreed-upon Terms of Reference, the objectives of the Service Review are to:

- Analyze and report on the performance of the existing transit system within Greater Trail, including how it compares to its peers, its current strengths, and opportunities for improvement
- Examine future transit requirements based on official community plans, demographic trends, proposed land development and road network changes, and citizen priorities expressed through consultation
- Build awareness of and support for the transit system in Greater Trail through public participation and communication strategies
- Outline and recommend service options over the short- and longer-term periods, for consideration by the RDKB Board, to improve transit system performance and effectiveness
- Make recommendations on supporting strategies, and outline the process towards implementation of potential service changes

This Service Review is an analysis of all transit routes operating within Greater Trail, including the services operating within the City of Trail, and services operating to Fruitvale, Montrose, Rossland, Warfield, and Castlegar. The impetus for the review stems from the length of time since the last review was completed. Subsequent changes in demographics (such as population size, average age and the other socio-economic indicators), as well as in employment patterns, community programs and new land use and development, may have influenced the needs of transit users, and thus how the transit system as a whole can best serve the needs of existing and potential riders.

The primary focus of this Service Review is on conventional (fixed-route) transit within Greater Trail, but the performance of the custom (handyDART) portion of the system will also be considered. Recommendations from this Service Review also include proposed improvements to infrastructure and marketing strategies that may also contribute to an improved transit system for the customers.

## **1.1 Service Review Process**

The following steps were undertaken by BC Transit staff as part of this Service Review:

- Traveled several times to the area to better understand the local transit dynamics, met with local operations manager, transit staff, customers, general public and stakeholders, local partners and elected officials;
- Researched current and future demographic and economic trends, reviewed planning documents to determine current and future land use and growth areas, and examined existing transportation options;
- Conducted a full review of the transit system, including both system and route-by-route overviews, and conducted an analysis of ridership, existing system infrastructure, and operational considerations;
- Organized and held public engagement events and activities, including open houses, stakeholder meetings, and online surveys, and obtained and summarized feedback from these activities in engagement reports, and;
- Proposed detailed service and infrastructure change options and immediate-, short-, and medium-to-long-term recommendations.

This work was collaborative and included BC Transit, the West Kootenay Transit Committee, the Regional District of Kootenay Boundary, the City of Trail, the City of Rossland, the Village of Montrose, the Village of Fruitvale, the Village of Warfield and the staff of Trail Transit Services (which operates the transit system), transit passengers, and representatives from a wide array of community organizations. This Review and requisite analysis took place between September 2015 and July 2016.

## 2.0 COMMUNITY OVERVIEW

### 2.1 Demographics

Greater Trail consists of five communities – Trail, Montrose, Fruitvale, Warfield and Rossland, and two Regional Districts – Kootenay Boundary Electoral Area “A” and Area “B”. Each of these communities has its own unique “personality”, history, micro-climate and demographics.

The 2011 Census reported Greater Trail's population at 15,940. The table below summarizes the population distribution throughout the area:

**Table 1: 2011 Greater Trail Population Figures**

Area	2006	2011	% Change 2006 → 2011
City of Trail	7,240	7,680	6.1%
City of Rossland	3,270	3,545	8.4%
Village of Fruitvale	1,955	2,000	2.3%
Village of Montrose	1,025	1,025	0.0%
Village of Warfield	1,740	1,690	-2.9%
<b>Overall Total</b>	<b>15,230</b>	<b>15,940</b>	<b>4.7%</b>

Source: Statistics Canada - 2011 Census

The population of the City of Trail and its surrounding areas all showed increases between 2006 and 2011, with the exception of the Village of Warfield, which showed a slight decrease. The most recent P.E.O.P.L.E.<sup>1</sup> computer model projections (September 2014) estimate a minimal population increase up until the year 2041 of 0.6% within the Trail Local Health Area.

Table 2 shows Greater Trail's population trends by age group with a comparison to the BC average.

**Table 2: 2011 Greater Trail Population Figures by Age Group and Comparison to BC Average**

Age Group	Greater Trail		BC Average	
	2011 %	% Change 2006 → 2011	2011 %	% Change 2006 → 2011
Children (0-9 years)	10.0%	16.5%	10.0%	3.8%
Youth (10-19 years)	11.3%	-8.8%	11.7%	-3.1%
Adults (20-64 years)	58.9%	6.6%	62.7%	7.7%
Younger Seniors (65-74 years)	9.5%	7.0%	8.4%	18.6%
Older Seniors (75+)	10.3%	-1.5%	7.2%	10.7%
<b>Total</b>		<b>4.7%</b>		<b>7.0%</b>

Source: Statistics Canada - 2011 Census

<sup>1</sup> Population Extrapolation for Organizational Planning with Less Error

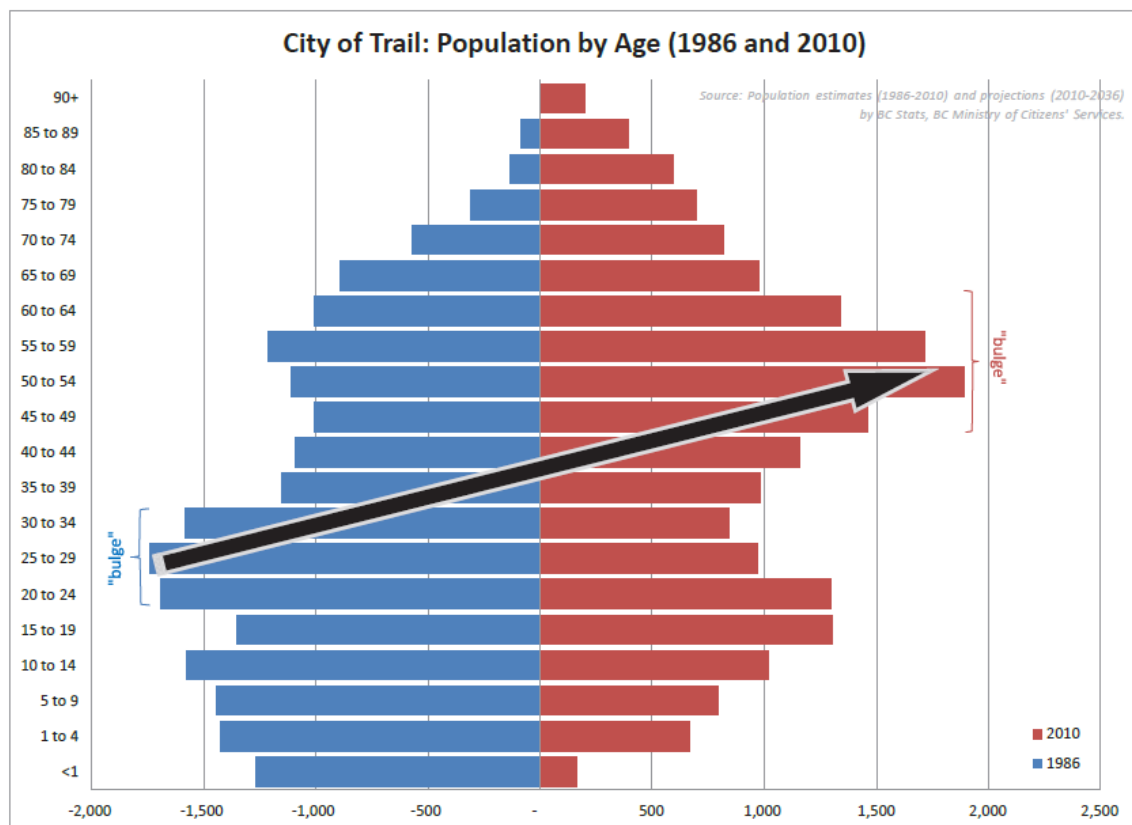
These figures indicate the following:

- Overall, Greater Trail's population is still increasing, but at a slower rate than the BC average (4.7% compare to 7.0%)
- While the "children" and "youth" age group populations in Greater Trail were directly proportional to the BC average, the proportion of "adults" was slightly lower, and the proportion of younger and older seniors combined was significantly higher.

Seniors, youth, and lower-income families tend to be major users of public transit. In the 2011 census, 20% of the population of Greater Trail were seniors aged 65 or older, significantly higher than the provincial average of 15%.

Between the 2006 and 2011 censuses, Greater Trail's younger seniors' (65-74 years) population increased by 7%, a far slower growth rate compared to the BC average of 19%; however, overall area population of younger seniors remained higher than the provincial average (9.5% versus 8.4%). The most recent P.E.O.P.L.E. projections indicate an overall seniors' population increase of 42% by 2041, featuring an increase of older seniors by more than 80%. Figure 1 below shows this trend more clearly, with the population "bulge" moving from the 20-34 age bracket to the 45-64 bracket between 1986 and 2010, and set to migrate to the 65-84 age bracket over the next twenty years. Older seniors (those aged 75+) in particular tend to rely increasingly heavily on transit for transportation, and as the current younger seniors move into the older seniors' age bracket, demand for transit among the Greater Trail's seniors' population will very likely increase.

**Figure 1: City of Trail Population by Age Comparisons (1986 & 2010)**



Source: [http://www.trail.ca/en/work/resources/2012-05-07\\_TrailDowntownPlan.pdf](http://www.trail.ca/en/work/resources/2012-05-07_TrailDowntownPlan.pdf)



At the other end of the age spectrum, the youth (10-19 years) population in Greater Trail has declined since the 2006 census by nearly 9%, exceeding the average provincial decline of 3%. This age group tends to be a heavy user of transit within urban areas, and downward population trends can have a major negative impact on total transit ridership far beyond what might seem proportionate at first glance. It should be noted that the area's population of children (0-9 years) has increased since the 2006 census by nearly 17%, significantly beyond the provincial average of nearly 4%.

13.4% of the population within Greater Trail was classified as low income in the 2011 National Household Survey, compared to a BC average of 16.4%. However, this area total obscures significant low-income levels within the City of Trail itself (18.7%), and the Village of Fruitvale (15.7%). Ensuring that transit serves higher-density areas and places where families access daily needs, and that fares are kept to reasonable levels, is key to serving this segment of the population.

Greater Trail's adult population (ages 20-64) increased by nearly 7% since the 2006 census. Adults commuting to work can be one of the most difficult markets to attract to transit, and usually requires considerable investment in system peak-time frequency. In order to be a competitive alternative to the automobile, transit routes need to be direct in order to minimize travel time. Greater Trail's existing peak-level weekday service provides a good starting point to attract adults who may be motivated to take transit for environmental or health reasons. However, making substantial gains in this market would require investment in further peak service, as well as streamlining of routes, and potentially changes to parking and land use policies. Adults who are not commuters tend to have similar travel patterns to those of seniors, and similarly require a viable base level of service during the day in order to be able to use transit.

## ***2.2 Employment and Economy***

Almost three out of every four of those working in Trail work for either Teck or Interior Health Authority – the two major employers in the area employing approximately 2,500 workers in the area. The Teck smelter has been in operation in Trail for well over a hundred years while the Kootenay Boundary Regional Hospital has been serving the region since the 1950s.

Among those working in Trail, approximately 40% are employed either in the retail or the manufacturing sectors. The city's retail support for the region is clear, as Trail is the largest community in Greater Trail area and the Kootenay Boundary Regional District. Both Downtown Trail and Waneta Plaza are major shopping destinations for both local and regional residents.

Both Teck operations and the Interior Health Authority are located between 1.5 to 2.0 km from Downtown Trail, distances that are generally considered beyond walking distance.

## ***2.3 Governance and Planning***

Transit in the Greater Trail area is overseen locally by the Regional District of Kootenay Boundary (RDKB) and the West Kootenay Transit Committee. Service is provided through a partnership between BC Transit, the RDKB, the Regional District of Central Kootenay (RDCK) (for interregional services between Trail and Castlegar), and the local operating company, Trail Transit Services Inc. This partnership is formalized through a series of agreements, including a Master Operating Agreement, and an Annual Operating Agreement which is renewed on an annual basis.

The British Columbia Transit Act and the British Columbia Transit Regulation set out the regulations and formula for sharing the costs of transit between BC Transit, the RDKB, and the RDCK. Cost sharing levels are shown in *Table 3* below.

**Table 3: Greater Trail Transit Funding Shares**

Conventional Transit			Custom Transit		
BC Transit	46.69%		BC Transit	66.69%	
Local Share	53.31%		Local Share	33.31%	
of which:	RDKB	RDCK	of which:	RDKB	RDCK
	76.37%	23.63%		64.00%	36.00%

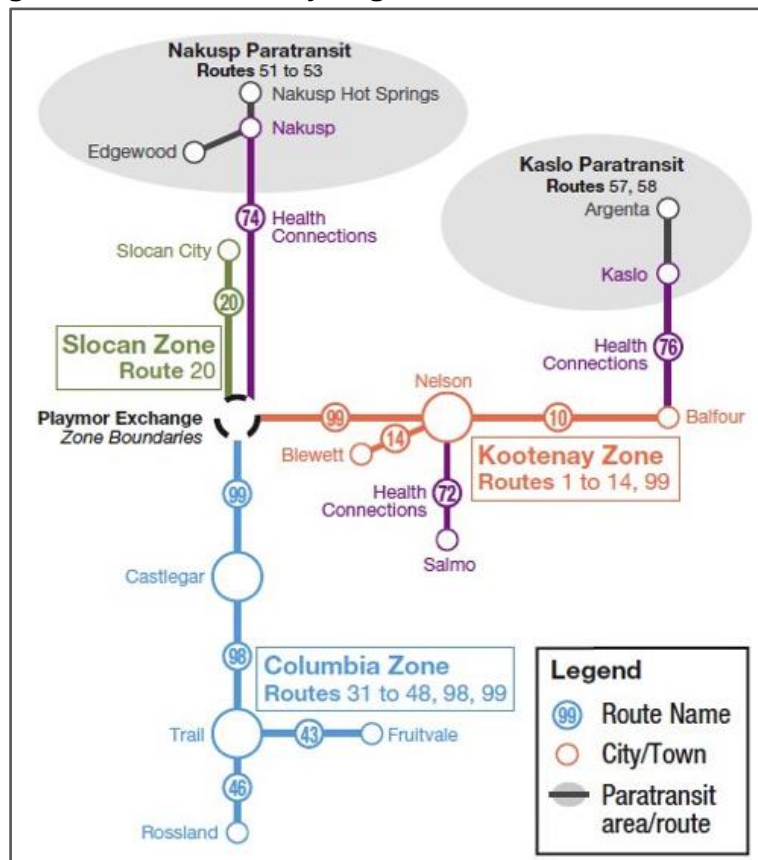
Service levels and budgets are approved each year by the RDKB, who also set fares and local property taxes to pay their contribution of transit costs.

The West Kootenay region previously consisted of nine different transit systems that vary in service type (conventional, paratransit, custom) and size (single/multiple routes). They comprised:

- Castlegar
- Kootenay Boundary custom
- Kootenay Lake West
- Kootenay Boundary
- Nelson & Area custom
- Nakusp
- Nelson
- Kaslo
- Slocan Valley

In 2010 it was proposed that the nine existing transit systems in the West Kootenay Region be integrated to improve the customer experience, to better serve the public and to provide an ability to realize efficiencies of shared resources. This included an integrated fare structure, a single Rider's Guide and a unified marketing strategy as outlined in Figures 2-4 below.

**Figure 2: West Kootenay Regional Model – Route Structure**



An additional level of integration was achieved by regrouping these nine systems into three “umbrella” systems, as follows:

### Kootenay Boundary:

- Castlegar conventional
- Greater Trail conventional
- Greater Trail custom (handyDART)

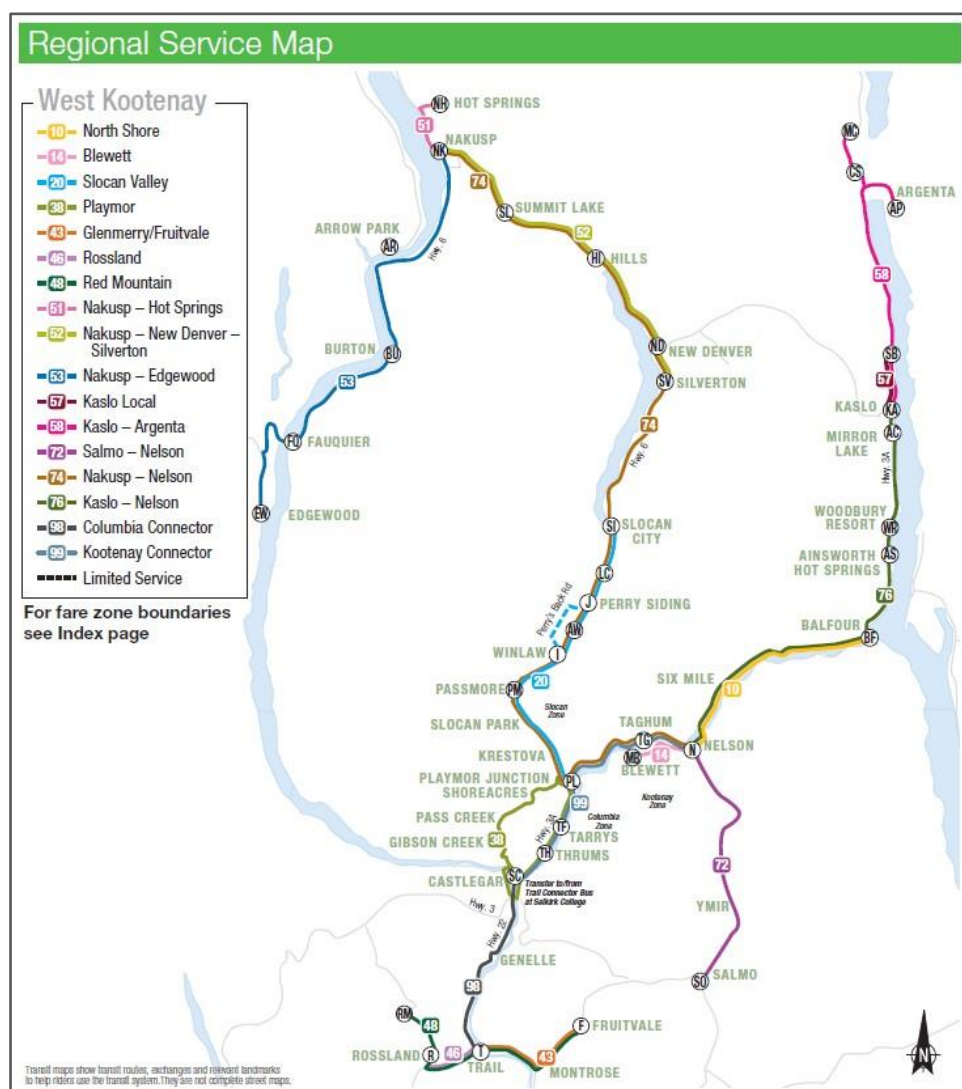
**Nelson:**

- Nelson conventional

### Kootenay Lake West:

- Kaslo
- Kootenay Lake West
- Nakusp
- Nelson & Area custom (handyDART)
- Slokan Valley

**Figure 3: West Kootenay Regional Model – Riders Guide Map**



**Figure 4: West Kootenay Regional Model: Integrated Fare Structure in Riders Guide**

<b>Fares</b> <small>subject to change</small>			
	<b>Slocan Zone</b>	<b>Columbia/Kootenay Zones</b>	<b>Multi-Zone</b>
<b>Cash</b>			
Adult	\$ 2.00	\$ 2.00	\$ 3.50
Student/Senior	2.00	2.00	3.50
Child, 4 or under	free	free	free
<b>Tickets (10)</b>			
Adult	18.00	18.00	31.50
Student/Senior*	15.75	15.75	27.50
<b>Monthly Pass</b>			
Adult	—	50.00	90.00
Student/Senior*	—	35.00	78.75
<b>Semester Pass</b>			
Student**	—	125.00	225.00
<small>* Reduced fare with valid I.D. for persons 65 or over and students in full-time attendance to Grade 12 and post-secondary students.  ** Available with valid I.D. to students in full-time attendance to Grade 12 and post-secondary students.</small>			
Fares for Routes 51-58 (Nakusp and Kaslo Local Paratransit) listed on schedule page.			
<b>Health Connections</b>			
Nakusp and Kaslo			\$ 4.00
Salmo			3.50



As part of this change, the governance structure in the region established the West Kootenay Transit Committee in 2012 by bylaw under the Community Charter (Section 141). The mandate of this committee is to make recommendations to the City of Nelson Council, the Regional District of Central Kootenay Board and the Regional District of Kootenay Boundary Board regarding transit matters involving the following:

- service changes
- service expansion priorities
- fare integration and adjustments
- promotion of transit in the region
- adopting and updating a long-term plan for the region
- long-term funding coordination.

Recommendations from the Committee are sent to the Council and Boards for their final decision. The Committee consists of seven elected members: one member each from the cities of Nelson, Castlegar and Trail; and two members each from the regional district boards of the Central Kootenay (RDCK) and Kootenay Boundary (RDKB). As required, staff of local governments, BC Transit, operating companies, Selkirk College, school districts and the Interior Health Association also participate in these meetings as non-voting members. Meetings are held on a rotating basis between the three responsible parties (the City of Nelson, RDCK and RDKB), and while the Committee is regional in scope, the three parties to the Committee are responsible for their own local operations.

Cost sharing is based on revenue hours as specified in the Schedule B's of the individual Annual Operating Agreements and revenue splits are calculated based on the revenue yield by route.

There are three operating companies that deliver transit services in the West Kootenay region, namely the City of Nelson, Trail Transit and Arrow & Slocan Lakes Community Services. All of the services in the West Kootenay operate with an integrated fare structure and all service is summarized in a single Rider's Guide.

## 2.4 Land Use

Just as population shapes the demand for transit, the geography, built form, and land use patterns within a community influence how efficiently and effectively transit can serve it.

The City of Trail, the City of Rossland, the Village of Fruitvale and the Village of Montrose all have Official Community Plans; the City of Rossland also has a Strategic Sustainability Plan, and the Village of Montrose has an Integrated Community Sustainability Plan.

The City of Trail's Official Community Plan (OCP) was adopted in 2001. The City lies in a river valley and is constrained topographically, the main habitable areas stretching linearly in a narrow ribbon approximately 10km east to west along the Columbia River. As a result, the OCP's future vision encourages infill and higher-density development that has direct access to vehicular, public transit and pedestrian transportation linkages, and thus is generally supportive of sustainable transportation and transit. The OCP's stated public transit policies are as follows:

- a) Support existing public transit services at present levels or, if possible, enhanced;
- b) Work with BC Transit to make public transit service within the City of Trail more efficient. Specific consideration should be given to increasing bus services on the weekends; and
- c) Work with the Greater Trail Community Health Council and BC Transit to make public transit more accessible to the physically challenged.

The City's linear shape, the locations of and road networks to some of its major facilities (for example, Kootenay Boundary Regional Hospital and J.L. Crowe Secondary School), and the spread-out nature of the area as a whole present certain challenges in providing efficient, effective transit service.

The City of Rossland's OCP and Strategic Sustainability Plan (SSP) were adopted in 2008. The OCP's growth management and residential policies are generally supportive of transit, including policies to consider higher-density developments in the context of proximity to transit routes, and proximity to major collectors or arterial roads to reduce traffic impacts on local roads and facilitate transit service. The main focus of its transportation policies in terms of transit is to encourage the development of additional public transit within Rossland that is linked to resort areas. Rossland's SSP highlights the limited nature of transit service in and around Rossland, while also acknowledging that Rossland's small population size limits transit usage, and, in turn, service provision. It nevertheless lists "collaboration with transit providers to increase public transit service between Rossland and Trail" as a strategic action. Its "end-state goals for 2030" include the following:

- "Public transit within and around Rossland is affordable, accessible, reliable, frequent, safe, comfortable and "green". A high-quality connection links downtown with the resorts. Private vehicle dependence is minimized."



The Village of Fruitvale's OCP (2011) includes public transit under its environmental sustainability framework, undertaking to provide a variety of attractive and safe transportation choices including infrastructure for walking, cycling, transit, and driving. Its land use and community planning strategy includes encouraging alternative forms of transportation, including transit, walking, and cycling. One of its key guiding principles for transportation and infrastructure is to enhance public transit service connections to Trail and surrounding communities, with a policy to work with BC Transit to develop and maintain high-quality and frequent bus service between Fruitvale, Trail, and other communities within the Beaver Valley.

The Village of Montrose's OCP, adopted in 2008, has a Council policy that existing bus routes will be reviewed by Council occasionally in order to achieve a reasonable balance between operating efficiency, costs, service levels, and localized land use impacts, and that recommendations will be made to BC Transit where required. One of the strategic directions of its Integrated Community Sustainability Plan, adopted in 2015, is to lobby for and support improvements to the public transportation system.

In terms of planning specifically for transit, areas with high residential or mixed-use density or that contain key trip generators, such as major grocery or "big box" stores, are key markets for public transit as they tend to generate high ridership and can increase the productivity of a transit system. In order for transit to be able to serve such destinations without a drop in productivity or efficiency, they need to be located within the current transit service area, preferably as infill development along, or within 400 metres of, an existing transit route, and the road network needs to be transit-supportive<sup>2</sup>. 400 metres is the maximum recommended walk distance to a bus stop for an area to be conducive to transit usage.

When new development projects arise, Trail, Rossland, Fruitvale, Montrose, Warfield, and the Regional District may find it helpful to use BC Transit's Development Referral Program, which enables local governments to send larger-scale development or rezoning applications to BC Transit for comment. As part of this referral process, BC Transit reviews the proposal and provides local government with comments on how the proposed development fits with the existing transit network, the outlook for future transit service to the development area, and comments on pedestrian links or transit amenities that would make the development more transit-friendly. (See also Section 3.5.3 BC Transit Development Referral Program and Section 6.5.1 Development Referral Program.)

Development referrals can be sent to [developmentreferrals@bctransit.com](mailto:developmentreferrals@bctransit.com). *Appendix A* shows a sample BC Transit development referral response.

## 2.5 Transportation Options

Greater Trail is well connected both regionally and inter-regionally in terms of transportation links.

The City of Trail is bisected by Highway 3B, connecting it with Warfield (5 km west of downtown Trail) and Rossland (9 km southwest), and Montrose (10 km southeast) and Fruitvale (15 km east). Highway 22 North links the area to Castlegar (25 minutes north) and, via Highway 3A, to Nelson (50 minutes northeast). Highway 3B links with Highway 3 to Creston (1 ½ hours east)

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<sup>2</sup> An overview of transit-supportive road networks is available from BC Transit's Planning Department.

and Cranbrook (2 ½ hours east) and to Osoyoos (3 hours west). Highway 22 South links to US highways to Spokane (2 ½ hours south).

Trail airport, located 11 km southeast of Trail, is served by Pacific Coastal Airlines and provides direct flights to/from Vancouver twice daily. West Kootenay Regional Airport, 5 km southeast of Castlegar, is served by Air Canada and provides three daily direct flights to/from Vancouver and one daily direct flight to/from Calgary.

Greyhound Canada has service through Trail to Vancouver, via Kelowna, and to Calgary via Cranbrook, one daily trip each.

In terms of local transportation options, Trail Taxi took over Champion Cabs in November 2014 and is currently approved to have two vehicles operating in Trail.

### 3.0 EXISTING TRANSIT IN TRAIL

The transit system in Greater Trail is currently operated by Trail Transit Services Inc. The system offers a mixture of services: conventional fixed-route, fixed-schedule service, and custom door-to-door service for persons with disabilities (handyDART). This section outlines the Greater Trail Transit System's history, existing transit system routes, frequency, ridership, fares, as well as the proposed Service Standards and Performance Guidelines for the West Kootenay Transit System, including the Greater Trail Transit System.

#### 3.1 Greater Trail's Transit History

The **conventional transit system**, known as the Kootenay Boundary Transit System, began operations in 1977. By 1993, service was offered Monday through Saturday on eight routes: Route 50 Tadanac (Downtown to Cominco – weekdays only), Route 51 Binns, Route 52 Topping, Route 53 Glenmerry, Route 54 Sunningdale, Route 55 Waneta/Fruitvale, Route 56 Schofield Highway, and Route 57 Genelle (weekdays only). Various service adjustments have been made over time to match changing and evolving economic conditions and passenger demands. Key changes that have influenced its operation and/or ridership include:

- **September 2005:** Route 9 Castlegar was introduced, providing weekday service to Castlegar's Selkirk College campus and airport
- **March 2012:** Friday evening service was introduced
- **July 2013:** The Kootenay Boundary Transit System was amalgamated and integrated with the transit systems operating within the Regional District of Central Kootenay (the Nelson Transit System, the Castlegar Transit System, and rural paratransit and Health Connections services) to form the new West Kootenay Transit System. As part of this system integration, commuter trips were added to Route 9 Castlegar, renamed the Route 98 Columbia Connector, enabling connections in Castlegar via the new Route 99 Kootenay Connector to downtown Nelson and Selkirk College's Silver King campus.
- **March 2015:** Saturday service was introduced on the Route 98 Columbia Connector, providing connections in Castlegar via the Route 99 Kootenay Connector to Nelson

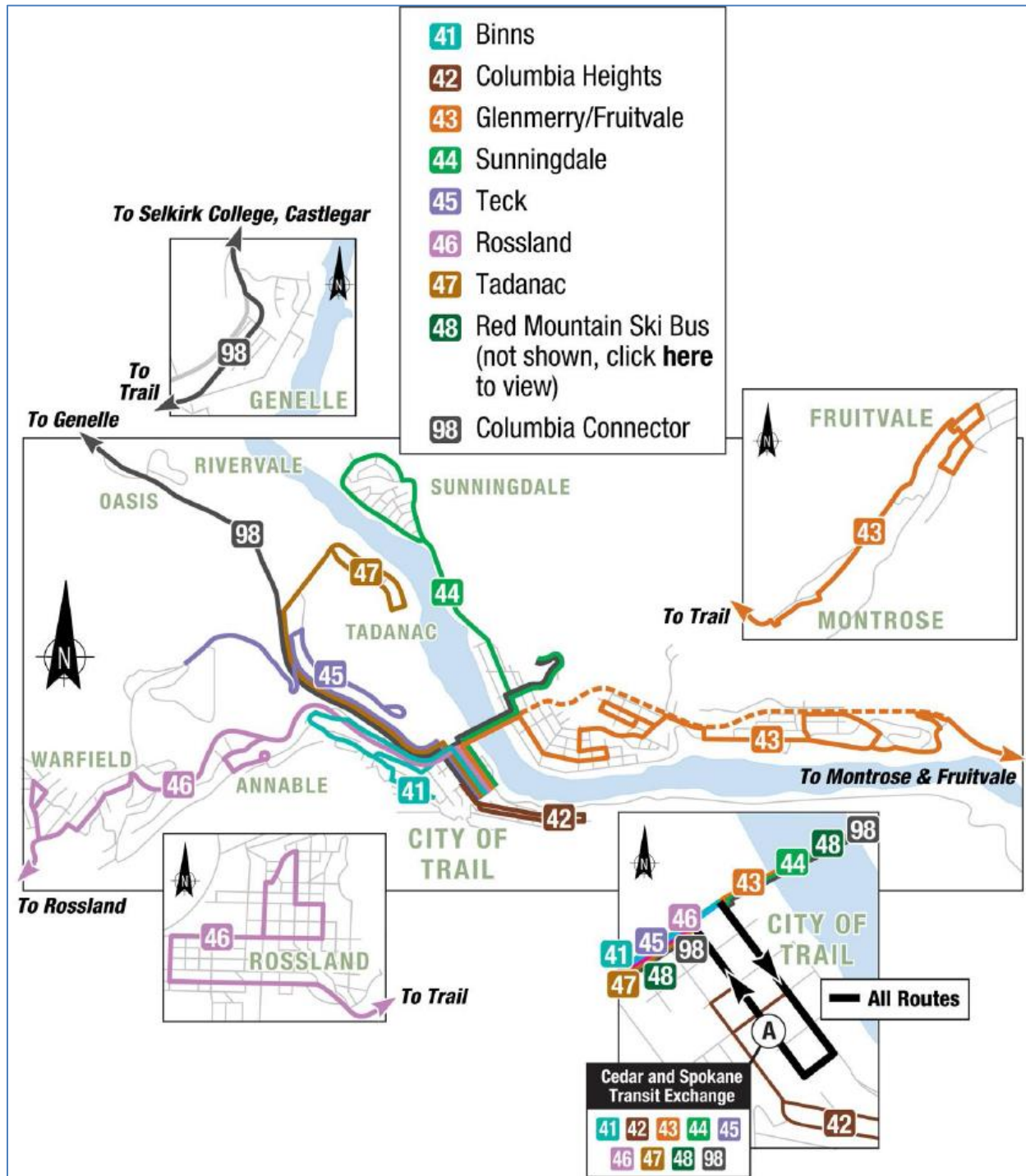
The **custom (handyDART) system** started in November 1989 with two vehicles and 2,270 annual service hours. By 1996, hours had increased to 2,900 per year, but these decreased again to 2,500 by 1999 and have remained flat since this time.

#### 3.2 Greater Trail's Transit System Today

The conventional service comprises eight local routes and one regional connector. All routes begin and end at the transit exchange, located on Cedar Ave at Spokane St in downtown Trail, with the exception of some trips on the Route 98 Columbia Connector which route via the exchange to end at Kootenay Boundary Regional Hospital. Six vehicles operate during the morning and afternoon peaks. The schedule is "interlined", meaning that on arriving back at the exchange, vehicles for the most part become a different route, which often allows for simplified connections for people travelling across town. All routes serve the Trail Memorial Centre, Greyhound bus depot, Seniors' Centre, and Selkirk College.



Figure 5: Existing Transit Service in Greater Trail



- **Route 41 Binns** – This route covers the western section of the historic hillside neighbourhood of West Trail. The route operates as a “loop”, travelling west along Old Rossland Ave. and east along Binns St., with a bus turnaround point at Nelson Ave. and Birch Ave.
- **Route 42 Columbia Heights** – This loop route covers the eastern part of the West Trail neighbourhood, travelling east along Topping St. and west along Daniel St.
- **Route 43 Glenmerry/Fruitvale** – This route covers the eastern section of the neighbourhood of East Trail and the residential neighbourhood of Shavers Bench, as well as the neighbourhoods of Glenmerry, Waneta Plaza/Rock Island, Waneta Junction, and further east past city limits out to the villages of Montrose and Fruitvale. Major destinations served by this route include the Trail Aquatic & Leisure Centre, Trail Middle School, Glenmerry Elementary School, Waneta Plaza Mall, and Walmart and Canadian Tire.
- **Route 44 Sunningdale** – This route covers the western part of East Trail, serving Kootenay Boundary Regional Hospital, through to the residential neighbourhood of Sunningdale. At school start and end times, this route also serves St. Michael’s Catholic School and JL Crowe Secondary School.
- **Route 45 Teck** – This “targeted transit” route operates at shift start and end times serving the Teck plant north-west of downtown, as well as Teck’s Warfield plant.
- **Route 46 Rossland** – This route serves Annable and Warfield en route to Rossland, where it routes via City Hall, the Prestige Hotel, and Rossland Summit School.
- **Route 47 Tadanac** – This route operates twice daily at school bell times as targeted transit service for St Michael’s Catholic School and JL Crowe Secondary School.
- **Route 48 Red Mountain** – This route operates during ski season, on weekends plus weekdays when schools are not in session, serving the Red Mountain Resort.
- **Route 98 Columbia Connector** – This route is the regional connector linking Trail with Castlegar via Rivervale, Genelle, Fairview and Blueberry. Onward connections to Nelson are available in Castlegar via the Route 99 Kootenay Connector. Depending on the time of day, some trips provide service directly to or from Kootenay Boundary Regional Hospital (no transfer required).

Service levels are shown in *Table 4* and *Table 5* below.

The most heavily-used ridership corridor is between downtown Trail and Waneta Plaza/Walmart along Highway 3B. Passenger volumes along this stretch can negatively impact schedule reliability and on-time performance for all routes due the system being interlined.

Each route operates Monday through Saturday, with the following exceptions:

- 45 Teck: Monday through Friday
- 47 Tadanac: Monday through Friday
- 48 Red Mountain Ski Bus: During ski season only, weekends plus weekdays when schools are not in session.

There is no service on Sundays or statutory holidays.

**Table 4: Greater Trail Conventional Service Frequency (Average)**

Route #	Route Name	Average* Service Frequency	
		Weekday	Saturday
41	Binns	every 2 hours	every 3 hours
42	Columbia Heights	every 2 ½ hours	every 3 hours
43	Glenmerry/Fruitvale	every hour	every 1 ¾ hours
44	Sunningdale	every 1 ¼ hours	every 1 ¼ hours
45	Teck	3 morning trips, 1 afternoon trip	--
46	Rossland	every 1 ¼ hours	every 1 ¾ hours
47	Tadanac	1 trip in the morning & afternoon	--
48	Red Mountain^	--	1 trip in the morning & afternoon
98	Columbia Connector	every 2 ¼ hours	1 trip in the morning, midday, & evening

\* These averages do not reflect frequency's high variability between peak and non-peak service periods

^ Operates during ski season on weekends and school non-instructional days

**Table 5: Greater Trail Conventional Service Span**

Route #	Route Name	Service Span		
		Mondays-Thursdays	Fridays	Saturdays
41	Binns	7:35 a.m. to 6:00 p.m.	7:35 a.m. to 7:30 p.m.	8:50 a.m. to 3:55 p.m.
42	Columbia Heights	8:30 a.m. to 5:00 p.m.	8:30 a.m. to 8:00 p.m.	9:05 a.m. to 4:00 p.m.
43	Glenmerry/Fruitvale	5:40 a.m. to 8:10 p.m.	5:40 a.m. to 10:05 p.m.	7:50 a.m. to 7:45 p.m.
44	Sunningdale	7:05 a.m. to 6:30 p.m.	7:05 a.m. to 8:05 p.m.	8:20 a.m. to 5:05 p.m.
45	Teck	6:00-7:00 a.m.   3:20-3:35 p.m.	--	--
46	Rossland	6:00 a.m. to 7:40 p.m.	6:00 a.m. to 10:20 p.m.	7:45 a.m. to 7:30 p.m.
47	Tadanac	7:35-7:55 a.m.   2:55-3:10 p.m.	--	--
48	Red Mountain^	--	--	7:55-8:45 a.m.   3:45-4:35 p.m.
98	Columbia Connector	6:05 a.m. to 6:35 p.m.	6:05 a.m. to 7:50 p.m.	8:50 a.m. to 6:35 p.m.

^ Operates during ski season on weekends and school non-instructional days

The handyDART system in Trail (Custom Transit) currently operates from Monday to Friday from 7:00-3:30. The service area boundaries for the handyDART system are Fruitvale, Beaver Falls, Montrose, Trail, Warfield, Rossland, Casino, Rivervale, Oasis and Genelle.

### 3.3 Greater Trail Transit System Ridership

It should be noted that although ridership for Castlegar and Greater Trail was recorded separately up until July 2013, following amalgamation of these systems into the West Kootenay Transit System these are now recorded as a combined total of reported revenue, which obscures individual system performance trends. However, electronic farebox (GFI) transaction data, available between 2013-14 and 2015-16 for Greater Trail separately, indicates that Greater Trail's ridership is continuing to grow year on year.

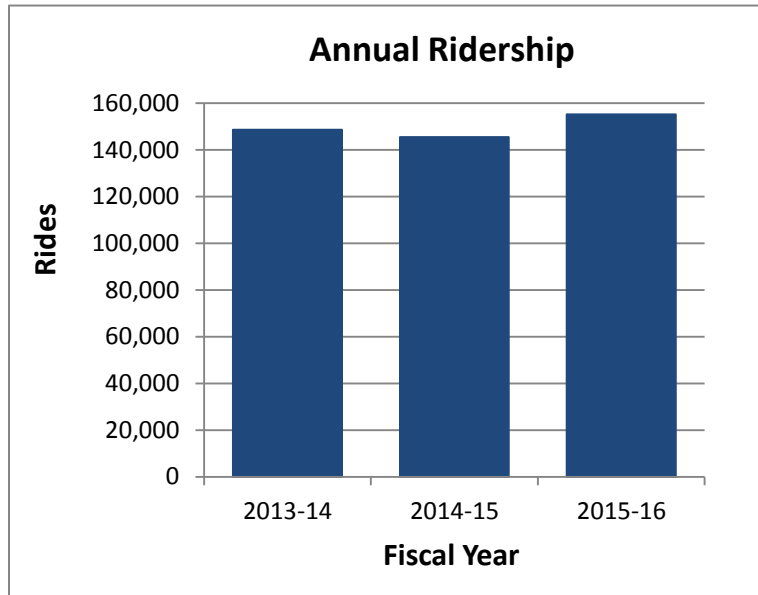
#### 3.3.1 ANNUAL RIDERSHIP

Greater Trail's transit ridership performs robustly and, based on GFI data, has shown a 4.5% increase since 2013-14 (*Figure 6* below) when Greater Trail's transit system was amalgamated into the regional West Kootenays Transit System.

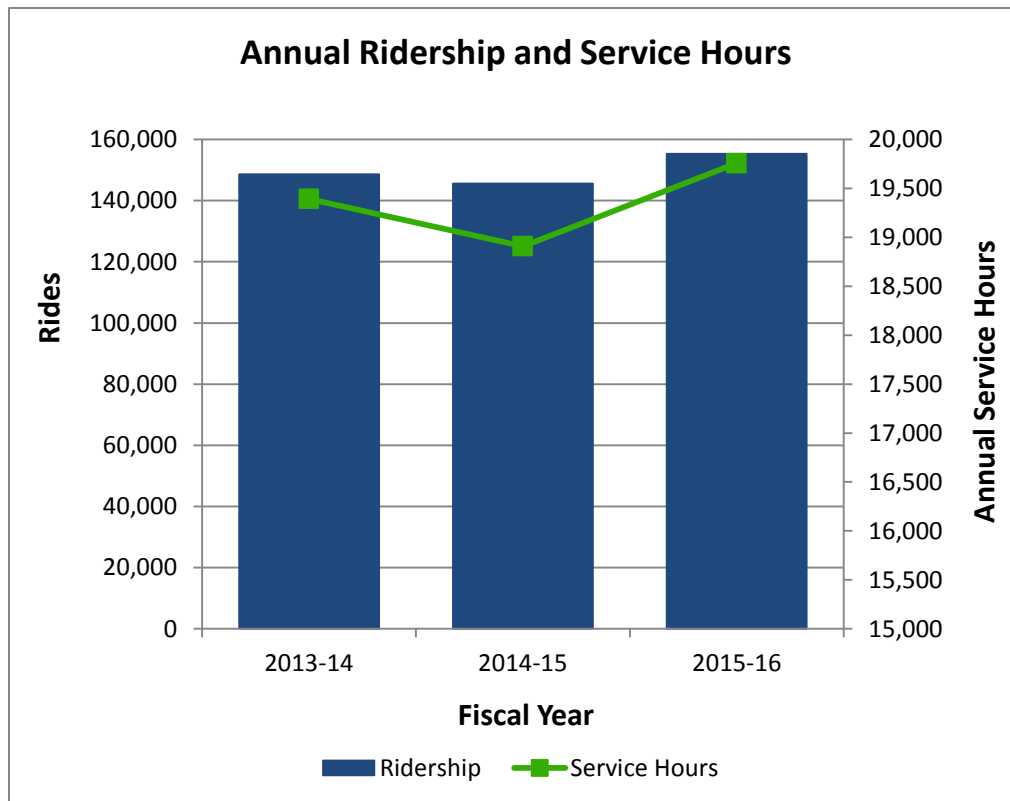
The slight dip in ridership recorded for 2014-15 is attributable to a slight decrease in service hours operated that year (*Figure 7* below) as the first full year of service following system integration. Service hours and ridership saw an increase again in 2015-16, after Saturday

service (including the Route 98 Columbia Connector) was introduced in mid-March 2015, along with several minor post-integration schedule adjustments, in Castlegar.

**Figure 6: Greater Trail Annual Ridership (2013-14 through 2015-16)**



**Figure 7: Greater Trail Annual Ridership and Kootenay Boundary\* Service Hours (2013-14 through 2015-16)**

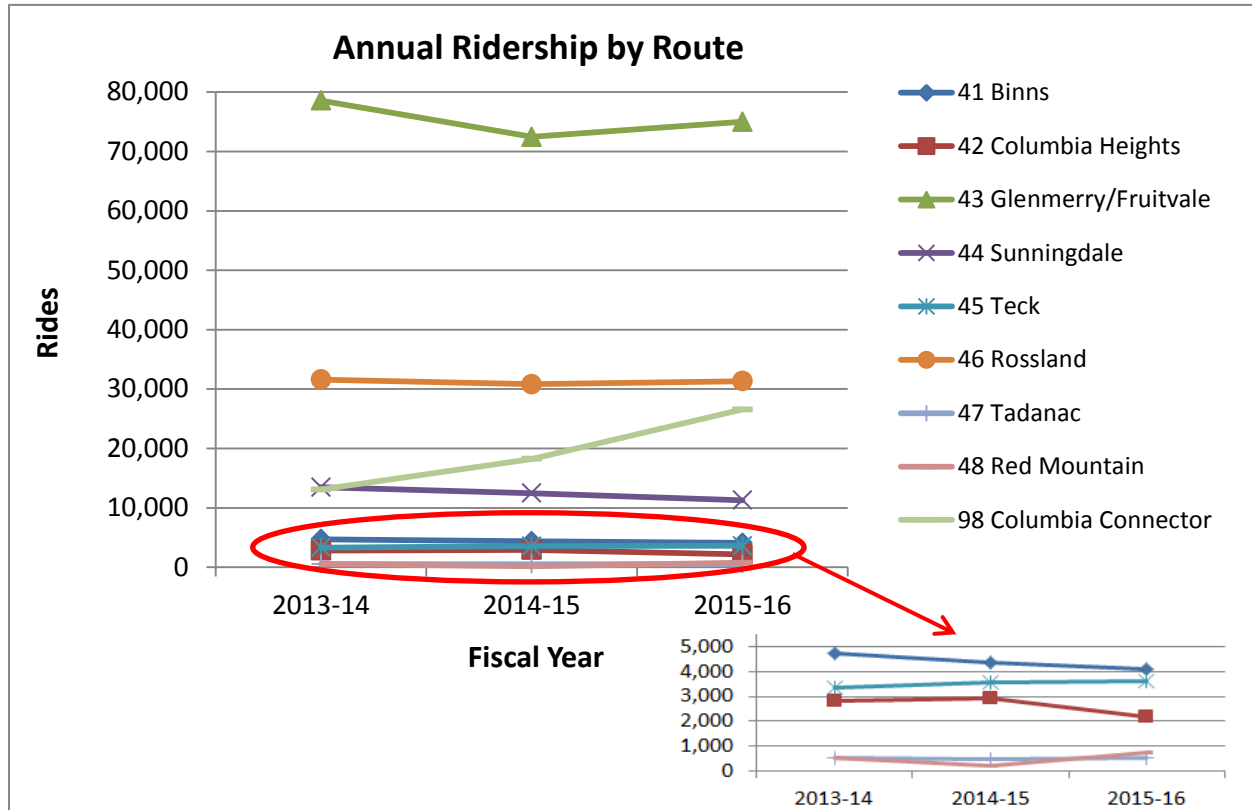


\* Greater Trail transit system plus Castlegar & Area transit system

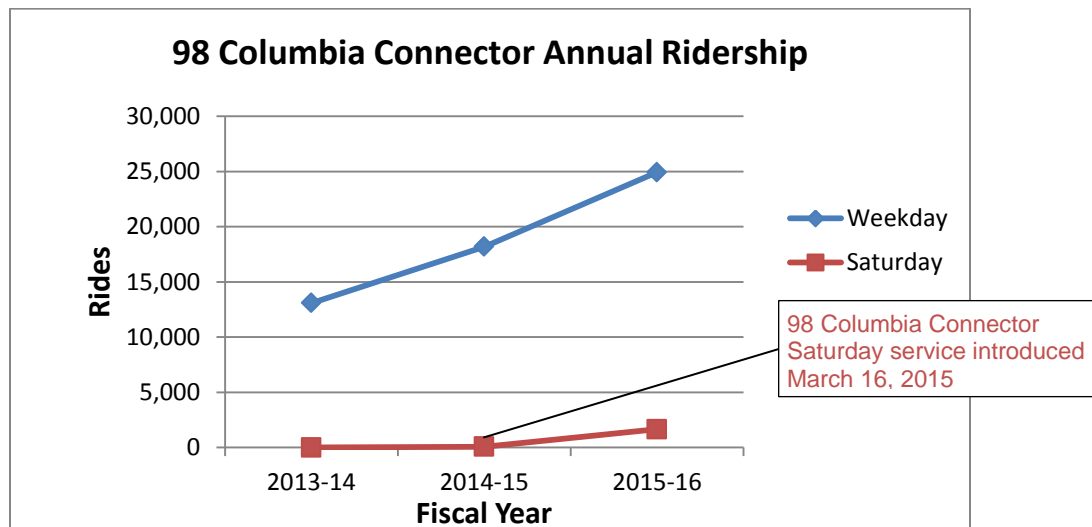
### 3.3.2 ROUTE RIDERSHIP – ANNUAL

The 4.5% ridership increase between 2013-14 and 2015-16 has been driven almost entirely by an increase in ridership on the Route 98 Columbia Connector, which more than doubled between 2013-14 and 2015-16 (see *Figure 8* and *Figure 9* below) and can be regarded as the “backbone” of Greater Trail’s transit system.

**Figure 8: Greater Trail Annual Ridership by Route (2013-14 through 2015-16)**



**Figure 9: Route 98 Columbia Connector Annual Ridership (2013-14 through 2015-16)**

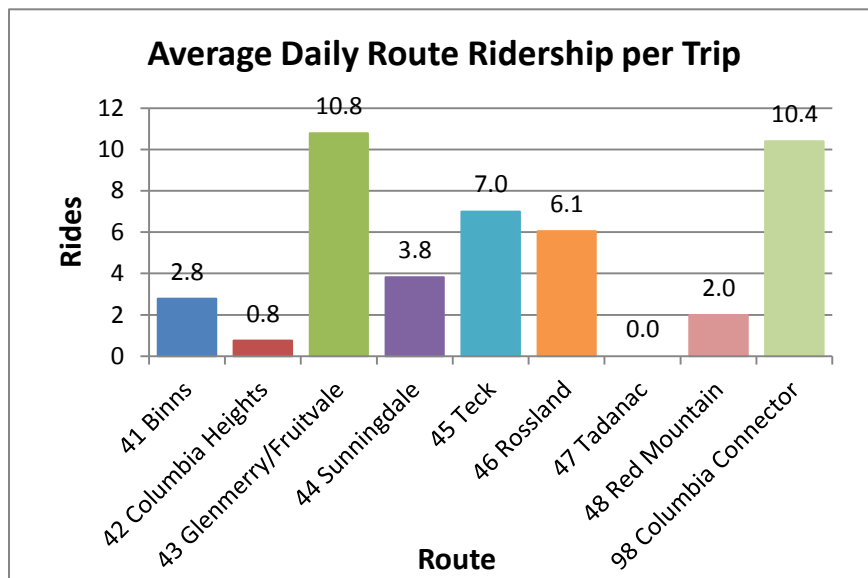


### 3.3.3 ROUTE RIDERSHIP – PER TRIP

Figure 10 below shows average daily ridership per trip on Greater Trail's transit routes, from fall 2015 manual passenger counts conducted once on every trip on each route. Although these counts are "spot checks" on a particular day only, findings are similar to the above-mentioned GFI annual route ridership results, with the following exceptions:

- Due to the relatively low number of daily trips on Route 98 Columbia Connector (six trips Monday through Thursday, seven trips Fridays, three trips Saturdays), the average daily ridership per trip on this route exceeds that of Route 46 Rossland, which operates 11 trips weekdays and five trips Saturdays.
- For the same reason, the average daily ridership per trip on Route 45 Teck (four daily trips weekdays only) also exceeds Route 46 Rossland's.
- It should be noted that 70% of Route 44 Sunningdale's ridership is generated between downtown and Kootenay Boundary Regional Hospital, with only 30% occurring in the Sunningdale neighbourhood loop.
- Route 47 Tadanac's trips are interlined with portions of Route 41 Binns and Route 45 Teck. As opposed to the annual route ridership shown in Figure 8 above, ridership shown below excludes these trip portions, showing average daily ridership per trip for Route 47 Tadanac only.

**Figure 10: Greater Trail Average Daily Ridership per Trip by Route**

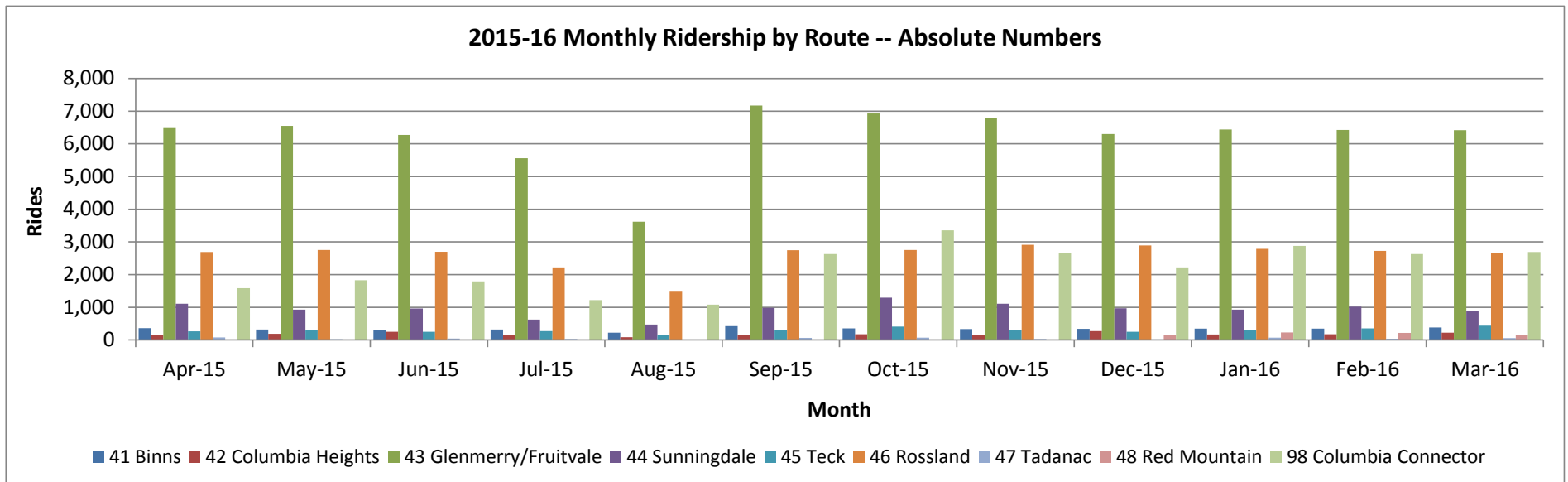
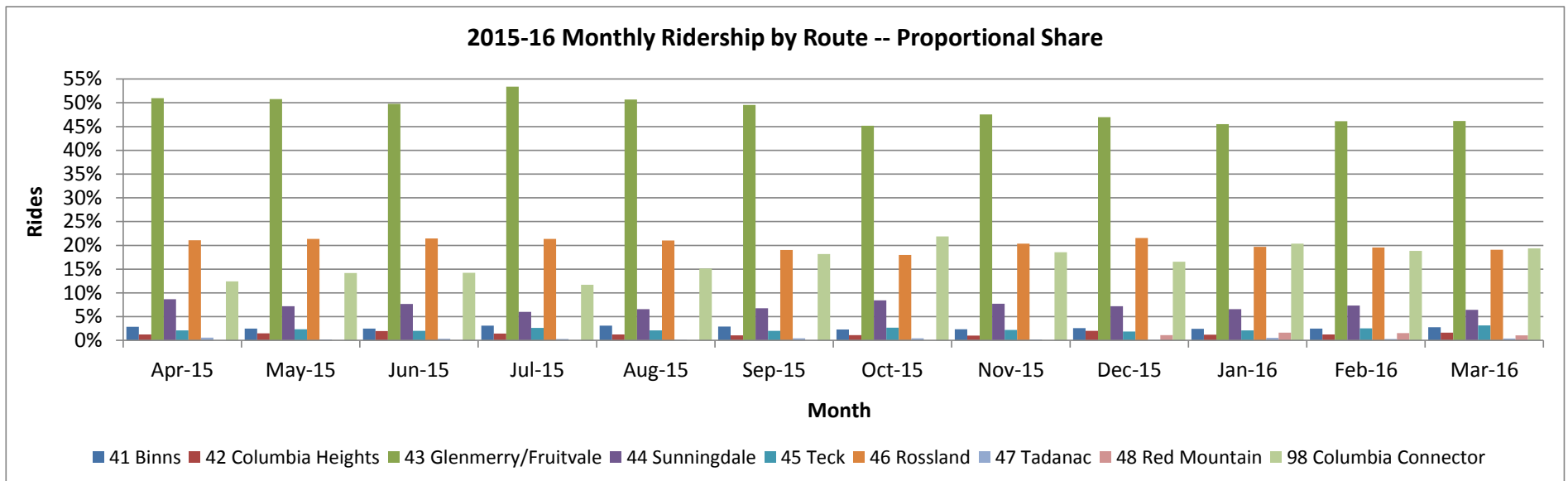


### 3.3.4 ROUTE RIDERSHIP – PER MONTH

Figure 11 and Figure 12 illustrate Greater Trail's 2015-16 ridership by route and month, based on electronic farebox transaction details, shown firstly as absolute numbers and secondly as proportional share of total ridership.

These charts indicate the following:

- Route 43 Glenmerry/Fruitvale carries by far the greatest number of passengers, accounting for up to 53% of total ridership;
- Other higher-performing routes are Route 46 Rossland, averaging 20% of total ridership, and Route 98 Columbia Connector, averaging 17% of total ridership;

**Figure 11: Greater Trail 2015-16 Monthly Ridership by Route – Absolute Numbers****Figure 12: Greater Trail 2015-16 Monthly Ridership by Route – Proportional Share**

- Route 47 Tadanac carries by far the fewest number of passengers, constituting between 0.1%-0.6% of total ridership;
- Other lower-performing routes are 48 Red Mountain, averaging 1.3% of total ridership during ski season, Route 42 Columbia Heights, which averages 1.4% of total ridership, Route 45 Teck (2.3%), Route 41 Binns (2.7%), and Route 44 Sunningdale (7.2%).

### 3.3.5 PEER TRANSIT SYSTEM COMPARISONS

Table 6 below illustrates how Kootenay Boundary's transit system, including both its constituent Greater Trail and Castlegar & Area systems, compares to other transit systems in B.C. sharing similar characteristics (e.g. system type, service hours provided) as Kootenay Boundary's, and to the average of all conventional (fixed-route) transit systems serving B.C. communities with populations below 25,000 people.

**Table 6: 2015-16 Kootenay Boundary\* System-Level Performance Comparisons**

Metric	Kootenay Boundary	Cranbrook	Nelson	Port Alberni	Powell River	Squamish	Peer Average	Tier 3 Average
Operating cost per hour	\$120.40	\$95.40	\$111.33	\$127.97	\$104.20	\$118.21	\$111.42	\$109.83
Passenger trips per hour	18.4	17.5	26.0	22.7	19.3	21.3	21.4	18.7
Operating cost per passenger trip	\$6.53	\$5.45	\$4.28	\$5.64	\$5.41	\$5.55	\$5.27	\$5.88
Operating cost recovery	16.5%	20.2%	29.7%	19.5%	24.6%	16.7%	22.1%	20.7%
Passenger trips per capita	14.0	11.3	18.6	16.0	18.8	17.7	16.1	14.6

\* Results are for the Greater Trail and Castlegar & Area transit systems combined

\*\*\* "Tier 3 Average" is the average of all BC fixed-route transit systems serving populations of fewer than 25,000 people. Although the Kootenay Boundary system, now comprising Castlegar & Area's as well as Greater Trail's, has a combined 2015-16 population of 32,200, based on convention it is still classed as a Tier 3 transit system, pending reclassification.

It can be seen from the table above that Kootenay Boundary's transit system performs below both the average of its peer systems and the average of all fixed-route transit systems within its tier, i.e. with population of 25,000 or lower. However, it should be noted that two of the peer transit systems above (three within Tier 3) are municipally run, which results in relatively low operating costs through the ability to share facilities, equipment, and staff. The results also highlight Greater Trail's, and to a certain extent Castlegar & Area's, linear layout stretching along Highway 3B, Highway 22, Highway 3A, and Highway 3, and the resulting challenges of providing efficient, cost-effective transit service over large areas that have relatively low population densities.

The results in Table 6 above indicate downward trends in costs per hour and per trip, and upward trends in trips per hour and cost recovery. This Service Review features service change options that will assist with further optimizing the efficiency and cost-effectiveness of Greater Trail's transit system going forward.



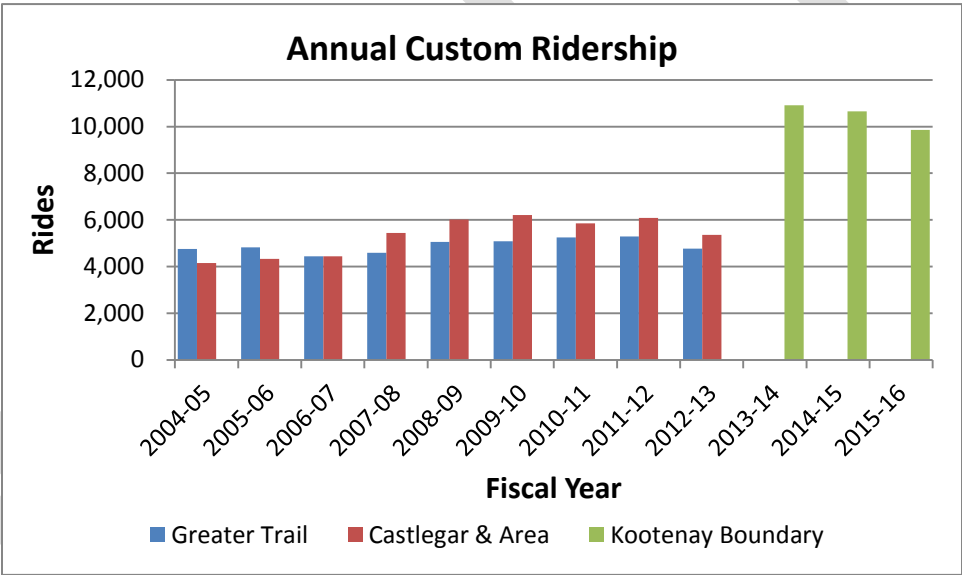
### 3.3.6 RIDERSHIP – CUSTOM TRANSIT SYSTEM

As is the case for conventional (fixed-route) ridership, it should be noted that although custom ridership for Castlegar and Greater Trail was recorded separately up until July 2013, following amalgamation of these systems into the West Kootenay Transit System these are now recorded as a combined total of reported ridership, which obscures individual system performance trends.

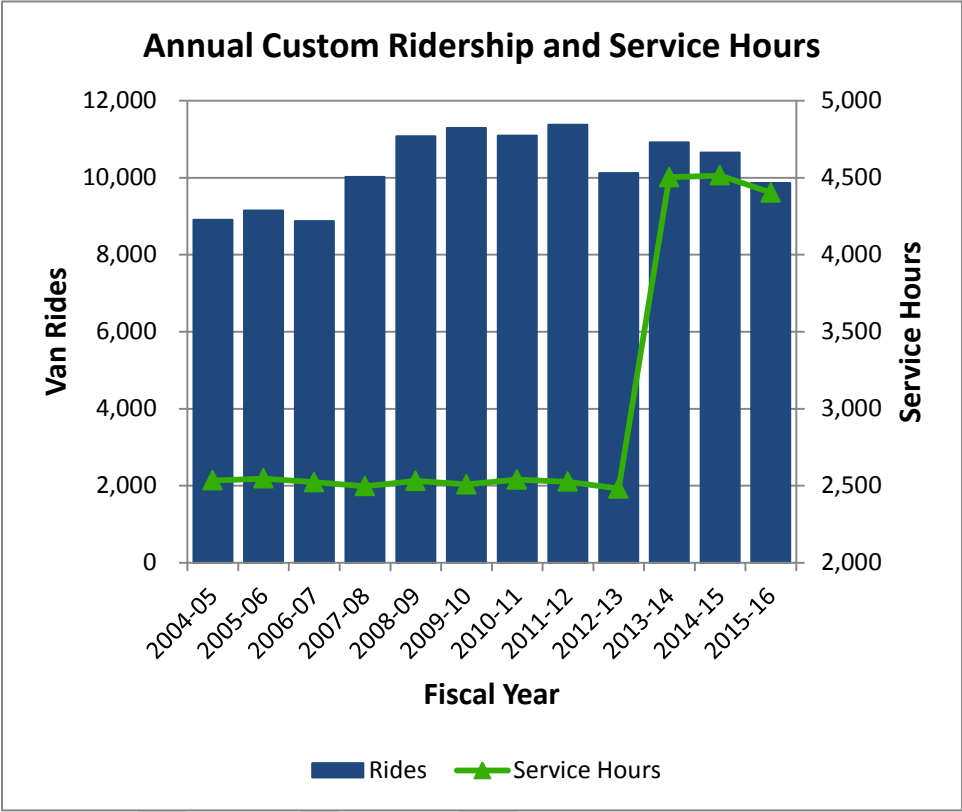
#### Annual Ridership

Figure 13 below shows custom ridership for the Greater Trail and Castlegar & Area transit systems from 2004-05 through 2012-13, and combined Kootenay Boundary custom ridership from 2013-14 through 2015-16. Figures indicate that ridership on the Castlegar & Area custom system outstripped that of Greater Trail's beginning in 2006-07, and that combined Greater Trail ridership, though still substantial, saw a gradual decline between 2013-14 and 2015-16. Figure 14 following shows that these ridership trends closely correspond to the amount of service hour provision.

**Figure 13: Greater Trail, Castlegar & Area, and Kootenay Boundary Custom Transit Ridership 2004-05 through 2015-16**



**Figure 14: Kootenay Boundary Custom Transit Ridership and Service Hours 2004-05 through 2015-16**



**Peer Transit System Comparisons**

Table 7 below illustrates how Kootenay Boundary’s custom transit system compares to other BC Transit custom systems with similar characteristics as Kootenay Boundary’s, and to the average of all custom transit systems serving B.C. communities of a similar size.

As with conventional system performance, the Kootenay Boundary custom system performs below the average of its peers as well as the average of custom systems within similar-sized B.C. communities, again indicating the linear layout of the communities within Kootenay Boundary and the challenges of providing transit service in an efficient manner.

**Table 7: 2015-16 Kootenay Boundary\* Custom System-Level Performance Comparisons**

Metric	Kootenay Boundary	Alberni - Clayoquot	Cranbrook	Powell River	Squamish	Peer Average	Tier 3 Average
Operating cost per hour	\$85.69	\$81.74	\$74.18	\$53.99	\$123.92	\$83.46	\$74.15
Passenger trips per hour	2.2	3.3	2.5	2.9	2.5	2.8	2.6
Operating cost per passenger trip	\$38.27	\$24.56	\$30.01	\$18.54	\$49.23	\$30.59	\$28.48
Operating cost recovery	4.1%	7.8%	9.2%	8.1%	3.6%	7.2%	6.4%
Passenger trips per capita	0.3	0.9	0.4	1.0	0.3	0.6	0.6

### 3.4 Greater Trail Transit Fares

Current transit fares are as follows:

	Columbia Zone	Multi-Zone
<b>Cash</b>		
Adult/Student/Senior	\$2.00	\$3.50
<b>Tickets (10)</b>		
Adult	\$18.00	\$31.50
Student/Senior	\$15.75	\$27.50
<b>Monthly Pass</b>		
Adult	\$50.00	\$90.00
Student/Senior	\$35.00	\$78.75
<b>Semester Pass</b>		
Student	\$125.00	\$225.00

Multi-Zone fares allow for connecting travel between the Columbia Zone, and the Slocan Zone (on Route 20 Slocan Valley) and Kootenay Zone, on the following routes:

- Route 1 Uphill
- Route 2 Fairview
- Route 3 Rosemont
- Route 10 North Shore
- Route 14 Blewett
- Route 99 Kootenay Connector

A separate *Fare Review* for the West Kootenay Transit System is appended to this report.

### 3.5 Service Design Standards and Performance Guidelines

Draft Service Design Standards and Performance Guidelines for the overall West Kootenay Transit System were produced in February 2016 and are appended to this report.

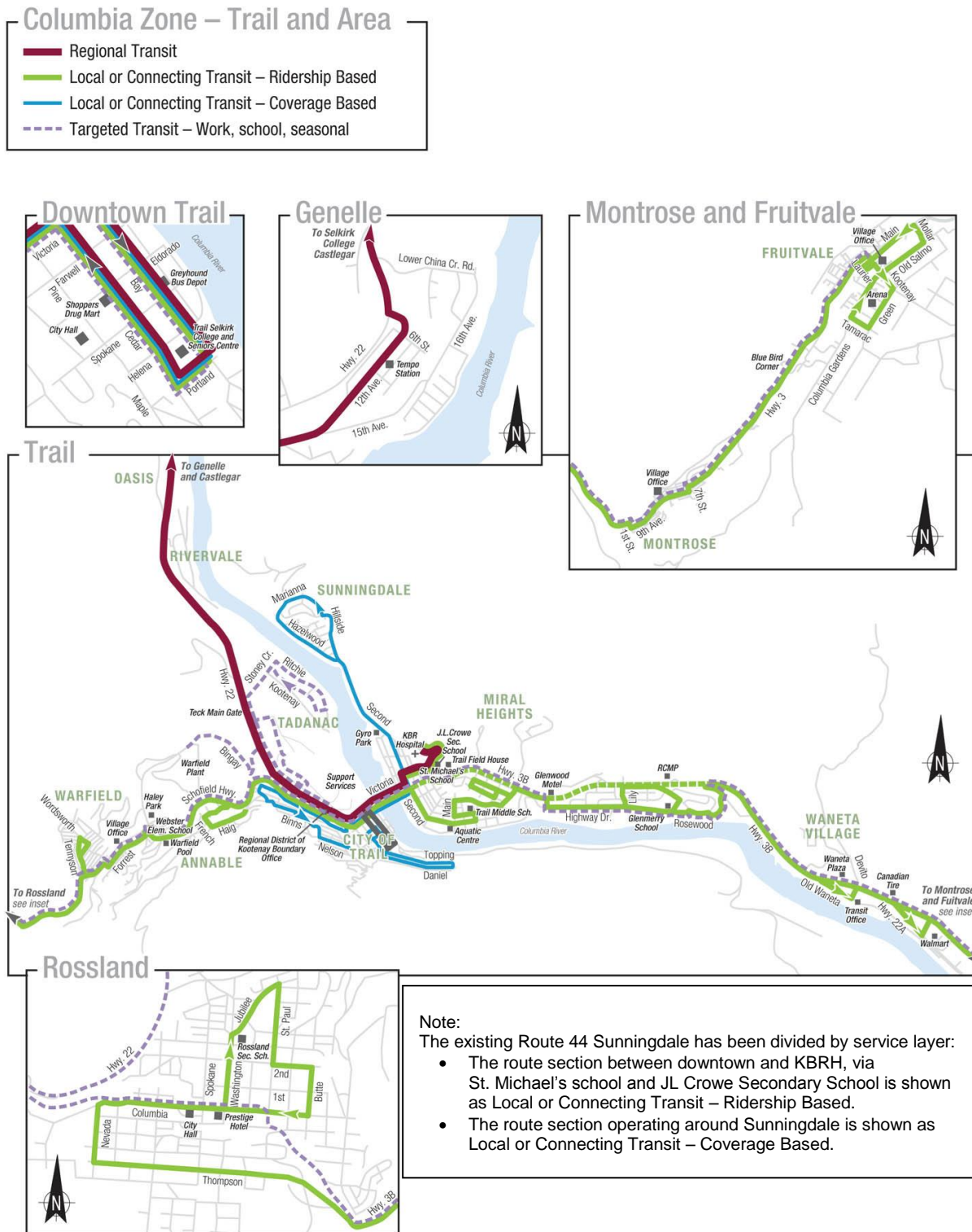
Service design standards and performance guidelines are developed as tools to facilitate future service planning decisions, whether making adjustments to existing service or planning additional service, and measure how the transit system is progressing towards achieving its goals. Service Standards and Performance Guidelines are defined as follows:

- **Service Design Standards** define minimum service levels, the service area, and when new service should be introduced to an area.
- **Performance Guidelines** measure service effectiveness, monitor how well the transit system is progressing towards achieving its goals, and determine whether change is required.

These measures are meant to ensure resources are used effectively and an acceptable level of service quality is provided to the customer.

In order to create these service design standards and performance guidelines, West Kootenay Transit's routes were classified into service layers according to their characteristics: regional transit, local or connecting transit – either ridership based or coverage based – and targeted transit (special trips for work shifts, school bell times, or seasonal activities). Greater Trail's route classifications are shown in *Figure 15* below.

**Figure 15: Service Layer Map: Columbia Zone – Greater Trail**



### 3.5.1 SYSTEM-LEVEL TARGETS

Table 8 and Table 9 below show the five-year system-level performance targets developed for the Kootenay Boundary conventional and custom systems. These targets reflect the 2014-15 peer transit system averages for each of the four measures listed (trips per hour, cost per trip, cost recovery, and trips per capita). These tables also show the 2014-15 and 2015-16 performance for the conventional and custom systems, as well as the year-on-year change for each measure, and whether the result of each change is a positive or negative indicator for the system.

Given the conventional system's year-on year performance between 2014-15 and 2015-16 (Table 8), its five-year targets appear achievable within the next two to three years. While the custom system's year-on-year efficiency (trips per hour) decrease will need to be monitored, the decrease in cost per trip and the concomitant increase in cost recovery are positive indicators (Table 9).

**Table 8: System-Level Targets & Performance – Conventional**

Metric	5-Year Target	2014-15 Performance	2015-16 Performance	Year-on-Year Change	Indicator (positive = ✓, negative = ✕)
Passenger trips per hour	20.4	18.1	18.4	1.7%	✓
Operating cost per passenger trip	\$5.62	\$6.94	\$6.53	-5.9%	✓
Operating cost recovery	19.0%	15.6%	16.5%	5.8%	✓
Passenger trips per capita	15.7	17.4	18.6	6.9%	✓

**Table 9: System-Level Targets & Performance – Custom**

Metric	5-Year Target	2014-15 Performance	2015-16 Performance	Year-on-Year Change	Indicator (positive = ✓, negative = ✕)
Passenger trips per hour	3.0	2.4	2.2	-8.3%	✕
Operating cost per passenger trip	\$25.27	\$40.47	\$38.27	-5.4%	✓
Operating cost recovery	7.9%	3.9%	4.1%	5.1%	✓
Passenger trips per capita	0.7	0.3	0.3	0.0%	(flat)

### 3.5.2 ROUTE-LEVEL TARGETS

The route-level performance targets in Table 10 below indicate the five-year productivity (rides-per-hour) targets envisioned for each transit service layer operating within Greater Trail. These are informed by existing performance levels as well as by expectations particular to each service layer type. Table 11 shows each route's 2014-15 performance as well as corresponding five-year target by service layer.

**Table 10: Route-Level Weekday Performance Targets (5-Year) by Service Layer**

Service Layer	Target boardings per hour
Regional Transit	20
Local or Connecting Transit – Ridership-Based	18
Local or Connecting Transit – Coverage-Based	13
Targeted Transit – Work, school, seasonal	20
Custom Transit	3

**Table 11: 2014-15 Greater Trail 2014-15 Route Performance and Proposed 5-Year Targets**

Service Layer	Route #	Route Name	Average Daily Boardings per Hour*
<b>Target:</b>			<b>20.0</b>
Regional Transit	98	Columbia Connector	15.3
<b>Target:</b>			<b>18.0</b>
Local or Connecting Transit - Ridership Based	43	Glenmerry/Fruitvale	14.9
	44	Sunningdale	12.9
	46	Rossland	12.3
<b>Target:</b>			<b>13.0</b>
Local or Connecting Transit - Coverage Based	41	Binns	11.0
	42	Columbia Heights	14.9
<b>Target:</b>			<b>20.0</b>
Targeted Transit - Work, school, seasonal	45	Teck	10.9
	47	Tadanac	3.7
	48	Red Mountain	3.5
<b>Target:</b>			<b>3.0</b>
Custom Transit	--	Greater Trail & Area handyDART	2.4

\* These metrics express an average of non-peak as well as peak travel periods, and include school and college non-instructional days. Performance may thus appear lower than expected.

### 3.5.3 BC TRANSIT DEVELOPMENT REFERRAL PROGRAM

One critical aspect of Service Design Standards is the integration of land use with transportation planning principles, as transit-supportive land use is critical for the success of a transit system. One way in which local governments can encourage this integration is through taking advantage of BC Transit's Development Referral Program, which enables BC Transit's local government partners to send development or rezoning applications to BC Transit for review and comment from a local transportation perspective (see also Section 2.4, Section 6.3.1, and Appendix A).

### 3.6 Fleet

The Trail transit system shares its fleet with the Castlegar transit system. This combined fleet consists of 13 conventional transit vehicles and four custom transit vehicles. They include the following:

- Two 40' heavy duty New Flyers
- Two 35' medium duty Dennis Darts
- Nine 30' medium duty Dennis Darts
- Two light duty Chevrolet Arbocs (Castlegar handyDART service)
- Two light duty Mercedes Sprinters (Trail handyDART service)

For the conventional fleet, the key specifications are summarized in *Table 12* below:

**Table 12: Existing Vehicle Specifications**

Vehicle Type	Total/Seated Passengers	Wheelchair Seats
40' New Flyer	70/38	1 front / 1 rear
35' Dennis Dart	57/31	1 front / 1 rear
30' Dennis Dart	49/29	2 rear

Of the 13 buses, as many as nine are in service on a typical weekday. The buses that are not in service are used as spare vehicles. All of the maintenance for these buses occurs at the Trail Transit centre located at 8170 Old Waneta Road, Trail. The vehicles that are deployed in Castlegar are stored at Columbia Truck and Tire at 2205 14<sup>th</sup> Avenue.

Future fleet changes are discussed later in this document.

### 3.7 Bus Stops

There are currently 377 bus stops in the transit system. *Table 13* below summarizes the number of bus stops in each community and also the number of shelters.

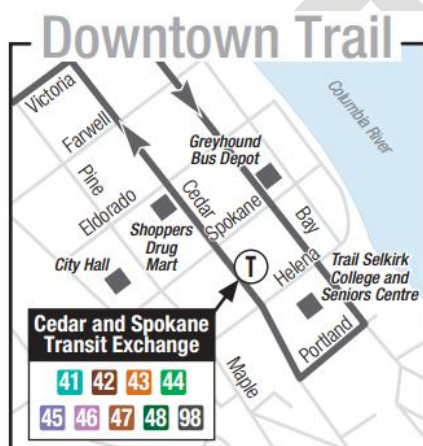
**Table 13: Existing Bus Stops**

Location	Number of Bus Stops	Number of Shelters
Trail	114	15
Fruitvale	16	3
Montrose	11	3
Rossland	24	4
Warfield	15	2



### 3.8 Main Bus Exchange

The exchange in Downtown Trail plays a critical role in the transit system as it acts as the hub for all of the transit routes in the system. Therefore, all customers that transfer from one route to another are usually doing so at the downtown exchange. The exchange is located on Cedar Avenue in downtown Trail and abuts an on-street parallel parking area (is a continuation of the parking lane) and can accommodate up to three parallel-parked buses at one time. The exchange accommodates approximately 500 customers per day. There is currently no adequate shelter; therefore, the waiting area is exposed to the elements, including high temperatures during the summer months. The exchange is also connected to an abandoned building, which results in ongoing safety concerns from the passengers due to a lack of any other activity in the area. Schedule information and signage is also limited and difficult to find.



Downtown Trail Transit Exchange

Given the poor existing conditions of the downtown exchange, opportunities for improvement have been identified as part of the Service Review process. Potential improvements are discussed at a high level later in this document.

## 4.0 PUBLIC ENGAGEMENT

Public engagement was conducted for the Columbia Zone (Trail and Area) Transit Service Review in two phases; Phase 1, *The Listening Phase*, and Phase 2, *Reporting Back*, to ensure that the final review reflects the needs and priorities of the community. Designed to be inclusive, reaching riders and non-riders alike, the process was led by BC Transit with strong support from the local government partners, Trail Transit and local community members.

A range of tools was used to maximize opportunities for public and stakeholder input. Engagement techniques included:

- **Greater Trail Transit webpage hosted at [bctransit.com](http://bctransit.com)** - a dedicated web page was established for this Service Review, hosting schedules, maps, information on materials that have been developed throughout the Service Review, as well as updates on opportunities to get involved.
- **Online/paper surveys** – stakeholders and the public (including transit passengers and visitors to the Island) were encouraged to complete online or paper surveys during each phase of public engagement.
- **Key Stakeholder Workshops** – One Key Stakeholder Workshop was held during the first phase.
- **Open House Events** – Four open house events were held in the second phase of public engagement. The events took place in Fruitvale, Trail and Rossland.

### 4.1 Phase 1 Public Engagement

The first phase of the public engagement took place in November 2015 and consisted of an online customer survey, an onboard customer survey, and Operator survey, and a Key Stakeholder Workshop. In total, 580 people participated in the surveys and workshop.

The table below details the most commonly heard themes relating to public transit. Note that the priorities are listed in order of prevalence, with the most frequently heard comments at the top of each category.



Phase One Key Stakeholder Workshop

Table 14: Key Themes heard in Phase 1 Public Engagement

Service and Marketing	Infrastructure and Vehicles
<b>Service</b> <ul style="list-style-type: none"> <li>• Improve service frequency on popular routes</li> <li>• Improve connection access between major routes</li> <li>• Optimize under-performing service and reallocate resources to higher performing services</li> <li>• Expand service to areas currently not served by transit</li> <li>• Ensure schedules continue to meet key times, e.g. school bell times</li> </ul> <b>Marketing / Customer Information</b> <ul style="list-style-type: none"> <li>• Improve bus stop signage and wayfinding</li> <li>• Explore implementing Google Transit</li> <li>• Improve communication to groups that primarily use transit (seniors, youth etc.)</li> <li>• Marketing outreach, new ideas for transit promotion<sup>3</sup></li> </ul>	<b>Infrastructure</b> <ul style="list-style-type: none"> <li>• Address the Downtown Exchange situation</li> <li>• Address the issues of people smoking at bus stops</li> <li>• Improve bus stop amenities such as benches and shelters, and maintenance of these (e.g. snow clearing)</li> <li>• Ensure good pedestrian access to bus stops</li> </ul> <b>Vehicles</b> <ul style="list-style-type: none"> <li>• Right-size the vehicles so the size matches demand</li> </ul>

A summary of Phase 1 Public Engagement is found in Appendix B.

BC Transit used this feedback and an analysis of the existing transit system to develop options for service and infrastructure improvements. These options were collaboratively refined with the local staff at meetings held in January and February 2016 and were then presented to the public for feedback in Phase 2.

<sup>3</sup> This theme, including specific marketing outreach strategies and an action plan timeline, is encapsulated by the [West Kootenay Transit Marketing Plan](#).

## 4.2 Phase 2 Public Engagement

The second phase of Public Engagement was held from May - June 2016. The service and infrastructure options were refined into more specific options in immediate-, short, and medium- to long-term implementation categories and were shared for feedback. The options presented to the public included proposals for service optimization, service enhancements and infrastructure changes. The public consultation included four different open house events throughout the region and an online survey.

The options that were presented to the public included:

- Options for the Downtown Trail Transit Exchange
- Route 43 service enhancements
- Options for improving service in Fruitvale
- Options for improving service on the Route 98 Columbia Connector
- Proposals for service optimization projects, including reducing service to Sunningdale on the Route 44, revising the Route 44 Teck schedule times and discontinuing service on the Route 47 Tadanac, Route 48 Red Mountain Ski Bus and Friday Night Service on Routes 41, 42, 43, 44, and 46 from 7pm-10pm
- Options for extending regular service to the Red Mountain neighbourhood in Rossland



Public open house at the Downtown Transit Exchange

Overall, the public was supportive of the proposed service changes to improve the efficiency and optimization of the transit system. This included proposals to reduce service levels on lower performing routes and reinvesting them to higher performing routes. The information collected in both phases of the consultation was used to develop the proposed service options presented in the next section. A summary of Phase 2 Public Engagement is found in Appendix B.

DRAFT



## 5.0 SERVICE OPTIONS

Based on the analysis of existing and future community demographics and land use, existing transit service and feedback from the public engagement process, the following options are presented to optimize existing resources and to guide further investment in the system to continue to improve its effectiveness and community benefit. Refinement of the service options has been informed by the results of Phase 2 Public Engagement process, including ongoing collaboration with the local operator, the RDKB and the local partners.

These refined options are divided into three time horizons for implementation; immediate (options which have already been or can be implemented immediately), short-term (1-5 years), and longer-term for future consideration. Options are presented for implementation / priority based on feedback from the stakeholders and the public. Any transit system improvements proposed beyond the immediate term can be considered in ongoing and future system reviews.

The ultimate order of implementation (including the opportunity to combine multiple options into a single option) will be confirmed in collaboration with the RDKB and the local partners as part of the three-year budget process, which occurs annually. This is to say that options are not prescriptive and do not necessarily require linear implementation. However, it is worth noting that the implementation of some options is dependent upon the implementation of other options, since some implementations can only be realized by adding a new bus.

Costs for options are based on 2015/16 Annual Operating Agreement budget figures. Actual costs may vary depending on confirmed budget figures and finalization of operating details at the time of implementation. The tables below provide a summary of the options.

### Proposed Service Changes

#	Proposed Service Change Option	Proposed Implementation Timeline	Resource Implications
1	Continue to improve on-time performance for the entire transit system	Immediate-Term (within 12 months)	No additional resources required. Improvements will be achieved through service optimization.
2	Improve the effectiveness of the Route 43 Glenmerry/Fruitvale	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.
3	On the Route 44 Sunningdale, discontinue service extended to Sunningdale neighbourhood on certain trips.	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.
4	Discontinue service on Route 47 Tadanac.	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.
5	Discontinue Route 48 Red Mountain Ski Bus Service on Saturdays (maintain Sunday and holiday service)	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.
6	Reduce service levels on Friday nights	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.

#	Proposed Service Change Option	Proposed Implementation Timeline	Resource Implications
7	Reschedule service on the Route 45 Teck to better connect with Teck start and finish times	Immediate-Term (within 12 months)	No additional resources required. Any resources saved from this change will be reinvested back into the transit system.
8	Continue to analyze the impacts of changes to the school bus system in Trail	Immediate-Term (within 12 months)	No additional resources required.
9	Improve the schedule efficiency of the Route 98 Columbia Connector and Route 33 Selkirk in Castlegar	Immediate-Term (within 12 months)	No additional resources required. Improvements will be achieved through service optimization.
10	Introduce a pilot service to Mountain Side Village to build demand (service could eventually be phased into regular conventional service)	Immediate-Term (within 12 months)	No additional resources required. Improvements will be achieved through service optimization.
11	Introduce 98 Columbia Connector service on Sundays and holidays	Short-Term (1-5 years)	Yes. Expansion resources are required.
12	Introduce new weekday midday service on the Route 43 Glenmerry/Fruitvale	Short-Term (1-5 years)	Yes. Expansion resources are required.
13	Expand service on Custom Transit (handyDART)	Short-Term (1-5 years)	Yes. Expansion resources are required.
14	Introduce more comprehensive service between Rossland and the Red Mountain neighbourhood	Short-Term (1-5 years)	Yes. Expansion resources are required.
15	Consider introducing new service to the Trail Regional Airport	Short-Term (1-5 years)	Yes. Expansion resources are required.
16	Continue to expand service on the core transit routes, particularly during off-peak periods	Future Consideration (6-15 years)	Yes. Expansion resources required.
17	Extend service from Fruitvale to Salmo	Future Consideration (6-15 years)	Yes. Expansion resources required.

### Proposed Infrastructure Changes

#	Proposed Option	Proposed Implementation Timeline	Resource Implications
1	Improve the amenities at the existing Downtown Trail Transit Exchange	Immediate-Term (within 12 months)	Additional capital funding required.
2	Improve infrastructure at major bus stops	Immediate-Term (within 12 months)	Additional capital funding required.
4	Consider opportunities to relocate the transit exchange in Downtown Trail	Future Considerations (1-10 years)	Additional capital funding required.
5	Consider opportunities to introduce new Park & Ride infrastructure	Future Considerations (1-10 years)	Additional capital funding required.
6	Consider opportunities to improve transit infrastructure at Trail Airport	Future Considerations (1-10 years)	Additional capital funding required.

## 5.1 Immediate Service Options for Implementation within the next one year

The following section outlines the proposed service changes that should be implemented within the next one year. These proposed service changes do not require any additional resources, and are intended to make the existing transit more effective for the transit riders and use the resources more efficiently.

### 1. Continue to Improve On-Time Performance

The on-time performance of transit service plays a key role in the success of the overall system. To customers, unreliable service affects their perception of service quality, transit utility compared to other modes and value for money. To transit agencies, this can translate to loss of ridership and revenue.

For transit in Greater Trail, the most common causes of service reliability issues are inclement weather and/or road conditions, traffic congestions, long boarding and alighting times due to high peak passenger loads and insufficient scheduled running times.

Since some of these factors cannot be controlled, the best strategy to deal with on-time performance issues is to schedule running times that are reflective of actual operating conditions. This means that schedules should be built in consideration of known delays, and with sufficient recovery time.



Recovery time is a planned time allowance between the arrival time of a just-completed trip and the departure time of the next trip in order to allow the route to return to schedule if the preceding trip has arrived late. Recovery time is a concept that is included in all transit scheduling and, on average, best practice is to include approximately 10-15% recovery time across a whole transit system, varying based on congestion and ridership.

Based on the detailed analysis undertaken as part of the Service Review, the following transit routes should regularly be monitored to ensure that on-time performance is being maintained:

- Route 43 Glenmerry/Fruitvale
- Route 46 Rossland
- Route 98 Columbia Connector

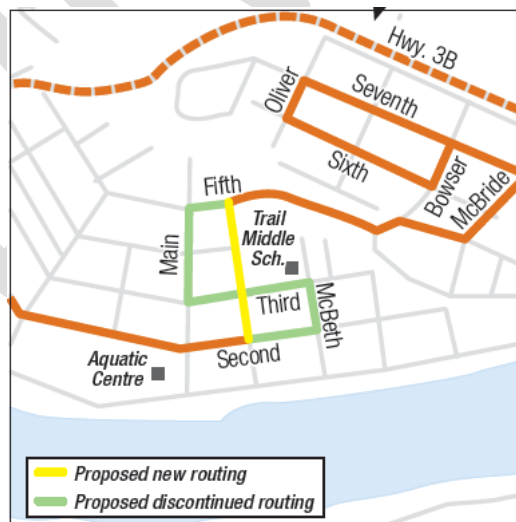
Any additional resources required to improve the on-time performance may come from other service optimization projects.

## **2. Improve the Effectiveness of the Route 43 Glenmerry/Fruitvale**

The Route 43 Glenmerry/Fruitvale is the highest performing transit route in the system. Acting as the 'spine of the system', the route connects Downtown Trail with key neighborhoods and activity centres such as Glenmerry, Walmart, Waneta Village, Montrose and Fruitvale. The route also provides key connections with some of the major routes in the transit system including the Route 98 Connector.

The following list of proposed options is intended to make the Route 43 more efficient and effective:

- Streamline the transit routing in the Glenmerry area to provide improved efficiency.** The existing routing in and around Glenmerry is very circuitous, which can lead to service reliability issues. The proposed routing would operate via McLean Street in both directions as opposed to deviating to Main Street and McBeth Street where there is currently very low ridership. The map below summarizes the service change with the yellow line representing the proposed new routing, and the green line representing the section of routing that would be discontinued.



- b. **Improve connections with other transit routes, particularly the Route 46 and 98.** Based on customer feedback, one of the highest priorities for service enhancements is to improve the connections between the Route 43 and other key routes in the system. A high percentage of transit customers transfer between the Route 43 and another route, therefore it is critical that the scheduled times allow for an efficient and reliable connection.
- c. **Revise the schedule design of the Route 43 in the Rider's Guide to improve customer clarity and wayfinding.** The Route 43 currently has several different route variations in the schedule. This is because the route serves many different neighborhoods at different times of the day. Based on customer feedback, many customers expressed concerns over the difficulty of understanding the schedule, particularly with the different routing variations. Below is how the schedule appears in the Rider's Guide.

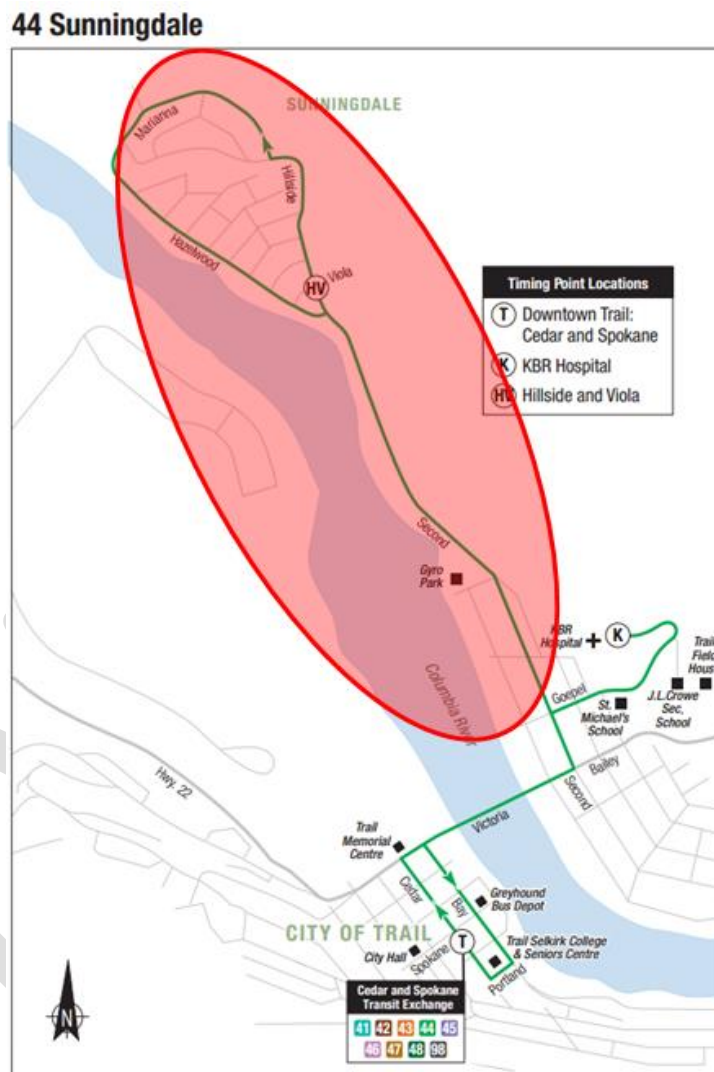
43 Glenmerry/Fruitvale To Fruitvale										
Monday to Friday										
(T)	(MQ)	(DA)	(RC)	(WP)	(WM)	(M)	(F)	(TC)	(F)	
Downtown Trail, Cedar and Spokane	2nd Ave and McQuarrie	Carnation and Daisy	Rosewood and Carnation	Waneta Plaza	Walmart	Montrose: 9th Ave and 5th St	Fruitvale: Main and Kootenay	Fruitvale: Tamarac and Columbia Gdns	Fruitvale: Main and Kootenay	
—	—	—	—	—	—	—	5:55	6:01	6:08	
—	—	—	—	—	—	—	—	—	—	
6:30	—	—	—	—	—	—	6:50	6:56	7:03	
7:05	—	—	—	7:17	7:20	7:25	7:33	7:39	7:46	
7:35	7:39	7:50	7:51	7:57	8:00	—	—	—	—	
8:22	—	—	—	8:32	8:35	8:40	8:48	8:54	9:01	
8:50	8:54	—	9:05	9:11	9:14	—	—	—	—	
10:03	10:07	10:19	10:20	10:26	10:29	10:34	10:42	10:48	10:55	
11:15	11:19	—	11:30	11:36	11:39	—	—	—	—	
12:13	12:17	12:28	12:29	12:35	12:38	12:43	12:51	12:57	1:04	
1:35	1:39	—	1:50	1:56	1:59	2:04	2:12	2:18	2:25	
S 3:00	3:10	3:21	3:22	3:28	3:31	3:36	3:44	3:50	3:57	
3:35	3:39	—	3:50	3:56	3:59	4:04	4:12	4:18	4:25	
5:10	5:14	—	5:25	5:31	5:34	5:39	5:47	5:53	6:00	
6:35	6:39	6:50	6:51	6:57	7:00	7:05	7:13	7:19	7:26	
F 8:10	8:14	8:25	8:26	8:32	8:35	8:40	8:48	8:54	9:01	
F 9:15	9:19	9:30	9:31	9:37	9:40	9:45	9:53	—	—	
Saturday										
—	—	—	—	—	—	7:51	7:57	8:04	—	
8:50	8:54	9:06	9:07	9:13	9:16	9:21	9:29	9:35	9:42	
10:56	11:00	11:12	11:13	11:19	11:22	11:27	11:35	11:41	11:48	
1:04	1:08	1:20	1:21	1:27	1:30	—	—	—	—	
2:03	2:07	2:19	2:20	2:26	2:29	2:34	2:42	2:48	2:55	
3:43	3:47	3:59	4:00	4:06	4:09	4:14	4:22	4:28	4:35	
5:10	5:14	5:26	5:27	5:33	5:36	5:41	5:49	5:55	6:02	
6:40	6:44	6:56	6:57	7:03	7:06	7:11	7:19	7:25	7:32	
S Trip routes via JL Crowe and St. Michael's only when schools are in session.										
F Trip operates Friday only.										

43 Glenmerry/Fruitvale To Trail										
Monday to Friday										
(F)	(M)	(PC)	(WM)	(WP)	(RC)	(DA)	(MQ)	(T)		
Fruitvale: Main and Kootenay	Montrose: 9th Ave and 5th St	Montrose: Pas Gas (Hwy Only)	Walmart	Waneta Plaza	Rosewood and Carnation	Carnation and Daisy	2nd Ave and McQuarrie	Downtown Trail, Cedar and Spokane		
T44	—	—	—	—	5:38	5:39	5:49	6:00		
T 6:08	6:16	—	6:21	6:24	—	—	—	6:32		
—	—	—	—	—	6:38	6:39	6:50	6:55		
—	—	—	7:06	7:09	7:13	7:14	7:25	7:30		
7:03	7:11	—	7:16	7:19	—	—	—	7:30		
S 7:46	7:54	—	7:59	8:02	—	—	—	8:15		
S 8:00	8:03	8:07	8:08	8:19	8:27	—	—	8:27		
9:01	9:09	—	9:14	9:17	—	—	—	9:28		
—	—	—	9:14	9:17	9:21	—	9:32	9:37		
10:59	11:07	—	11:12	11:15	11:19	11:20	11:32	11:37		
—	—	—	11:39	11:42	11:46	—	11:57	12:02		
1:09	1:17	—	1:22	1:25	1:29	1:30	1:41	1:46		
2:28	2:36	—	2:41	2:44	2:48	—	2:59	3:04		
4:02	4:10	—	4:15	4:18	4:22	4:23	4:34	4:39		
4:30	4:38	—	4:43	4:46	—	—	—	4:57		
6:00	6:08	—	6:13	6:16	6:20	—	6:31	6:36		
7:31	7:39	—	7:44	7:47	7:51	7:52	8:03	8:08		
F 9:06	9:14	—	9:19	9:22	9:26	9:27	9:38	9:43		
F 9:53	—	10:00	—	10:04	—	—	—	—		
Saturday										
8:07	8:15	—	8:20	8:23	8:27	8:28	8:40	8:45		
9:47	9:55	—	10:00	10:03	10:07	10:08	10:20	10:25		
11:52	12:00	—	12:05	12:08	12:12	12:13	12:25	12:30		
—	—	—	1:30	1:33	1:37	1:38	1:50	1:55		
3:00	3:08	—	3:13	3:16	3:20	3:21	3:33	3:38		
4:39	4:47	—	4:52	4:55	—	—	—	5:06		
6:07	6:15	—	6:20	6:23	—	—	—	6:34		
7:32	—	7:39	—	7:43	—	—	—	—		
T44 Trip continues to Teck via 44 Sunningdale.										
T Trip continues to Teck.										
S Trip routes via JL Crowe and St. Michael's only when schools are in session.										
F Trip operates Friday only.										

To address this issue, it is proposed that the schedule be redesigned to improve the clarity for the customers. The redesign should attempt to reduce the number of variations to help improve clarity for existing customers and to also help attract new transit riders. Specific solutions include introducing a new timing point at Highway Drive and adding new trip notes. As part of this exercise, the bus destination signs should also be reviewed to improve the information clarity.

### **3. On the Route 44 Sunningdale, discontinue service extended to the Sunningdale neighbourhood on certain trips.**

Based on analysis and stakeholder consultation, the majority of ridership on the Route 44 occurs between Downtown Trail and the KBR Hospital, with several trips having very limited ridership within the Sunningdale neighbourhood (identified in the map below in the red oval).



Based on this information, it is proposed that the two trips identified in the schedule below in red no longer extend to the Sunningdale neighbourhood. Therefore, these trips would only operate to the Hospital and then return to Downtown Trail.

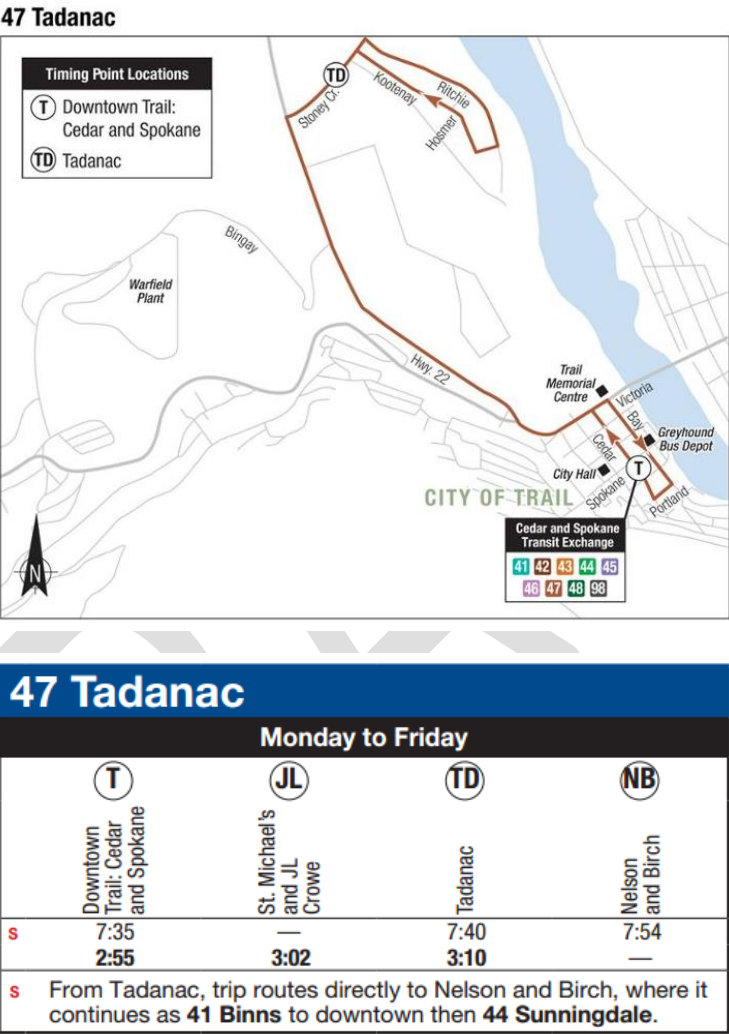
44 Sunningdale						
Monday to Friday						
T	JL	K	HV	JL	K	T
Downtown Trail: Cedar and Spokane	St. Michael's and J.L. Crowe	KBR Hospital	Hillside and Viola	St. Michael's and J.L. Crowe	KBR Hospital	Downtown Trail: Cedar and Spokane
T	—	—	5:52	—	—	6:00
7:05	—	7:11	7:15	—	7:24	7:30
8:00	8:07	8:08	8:12	8:20	8:21	8:27
9:38	—	9:44	9:48	—	9:57	10:03
11:40	—	11:46	11:50	—	11:59	12:05
1:50	—	1:56	2:00	—	2:09	2:15
3:05	3:12	3:13	3:17	3:25	3:26	3:32
4:40	—	4:46	4:50	—	4:59	5:05
5:15	—	5:21	5:25	—	5:34	5:40
6:05	—	6:11	6:15	—	6:24	6:30
F 6:55	—	7:01	7:05	—	7:14	7:20
F 7:40	—	7:46	7:50	—	7:59	8:05
Saturday						
8:22	—	8:28	8:32	—	8:41	8:47
10:19	—	10:25	10:29	—	10:38	10:44
11:54	—	12:00	12:04	—	12:13	12:19
3:12	—	3:18	3:22	—	3:31	3:37
4:41	—	4:47	4:51	—	5:00	5:06
T Trip continues to Teck.						
F Trip operates Friday only.						

Any resources saved from this service optimization would be re-invested into improving the on-time performance of the other transit routes.

Also in coordination with this service change, the Route 98 trips that currently extend to the Hospital will instead be designated as Route 44 in the Rider's Guide to improve clarity for customers.

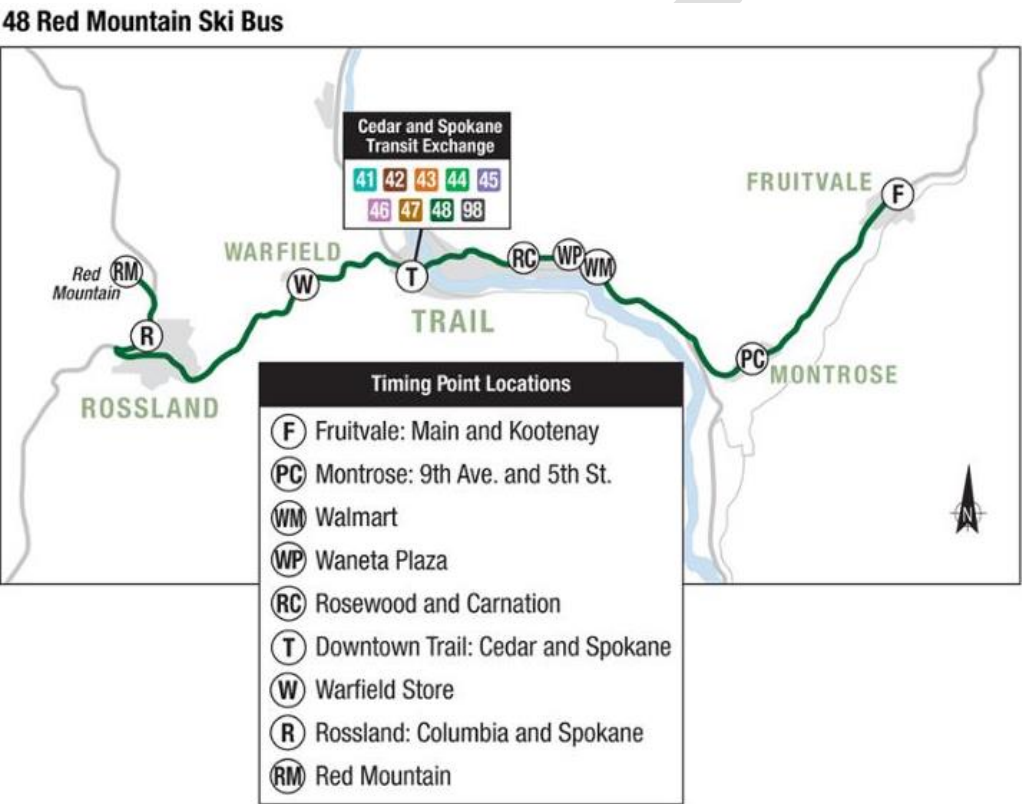
#### 4. Discontinue service on Route 47 Tadanac

Based on detailed ridecheck data and from discussions with the key stakeholders, ridership is extremely low on the two Route 47 Tadanac trips. Therefore, it is proposed that this route be discontinued and the resources saved be reinvested elsewhere in the transit system. This proposal was presented at the second phase of public consultation and everyone was in agreement



**5. Discontinue Route 48 Red Mountain Ski Bus Service on Saturdays (Maintain Sunday and holiday service)**

Based on ridecheck analysis and discussions with the key stakeholders, ridership is extremely low on the Route 48, which operates one trip on Saturday and Sundays seasonally from December to March. Customers who currently use this service on Saturdays alternatively have the option of using the Route 43, Route 46 and the local shuttle in Rossland. It is proposed that Sunday and holiday service be maintained as there is no Route 43 or Route 46 service currently on Sundays and holidays.



48 Red Mountain Ski Bus To Red Mtn										
Winter Only										
Saturday and Sunday, December-March ONLY										
F	PC	WM	WP	RC	T	W	R	AL	RM	
Fruitvale: Main and Kootenay	Montrose: Fas Gas (Hwy Only)	Walmart	Waneta Plaza	Rosewood and Carnation	Downtown Trail: Cedar and Spokane	Trail: Best Western Hotel	Benedict's Restaurant	Warfield Store	Rossland: Columbia and Spokane	Casa Alpina Lodge
7:53	8:00	8:03	8:06	8:10	8:20	8:22	8:25	8:28	8:36	8:44
H Highway only. No Upper Warfield or Forrest Dr. The 48 Red Mountain operates Saturday, Sunday and when school is not in session from December 1 to March 31, depending upon snow conditions and operations on the mountain.										

48 Red Mountain Ski Bus To Fruitvale										
Winter Only										
Saturday and Sunday, December-March ONLY										
RM	AL	R	W	RL	VT	T	RC	WP	WM	PC
Red Mountain	Casa Alpina Lodge	Rossland: Columbia and Spokane	Warfield Store	RayLyn Motel	Trail: Victoria and Tamarac	Downtown Trail: Cedar and Spokane	Rosewood and Carnation	Waneta Plaza	Walmart	Montrose: Fas Gas (Hwy Only)
3:45	3:50	3:53	4:00	4:03	4:05	4:08	4:16	4:22	4:25	4:29
H Highway only. No Upper Warfield or Forrest Dr. The 48 Red Mountain operates Saturday, Sunday and when school is not in session from December 1 to March 31, depending upon snow conditions and operations on the mountain.										



## **6. Reduce Service Levels on Friday Nights**

On Friday nights only, there is currently additional service that operates on the key routes until 10:30pm. This additional service is provided by two buses. Based on detailed ridership analysis and stakeholder consultation, this service has very low ridership. As a result of the low ridership, it is proposed that the Friday night service be reduced to only have one bus in operation. The proposed new schedule for that Friday night service is below would be developed in collaboration with the operating company.

Any resources saved from this service optimization should be reinvested elsewhere in the transit system.

## **7. Reschedule service on the Route 45 Teck to better connect with Teck start and finish times.**

Based on detailed analysis and discussions with key stakeholders, ridership has been declining on the Route 45 Teck over time. Some of this decrease in ridership may be due to changing shift structures and shift start times at the Teck plant over time, with no corresponding transit schedule alteration to the Teck plant. Regarding changes to shift structure, a high percentage of Teck employees work on a rotating shift structure (4 days on and 3 or 4 days off), which makes it hard to attract and retain ridership.

45 Teck						
Monday to Friday						
T	TM	TS	TW	TS	TM	T
Downtown Trail: Cedar and Spokane	Teck: Main Gate	Teck "D" Lot	Teck: Warfield Plant	Teck "D" Lot	Teck: Main Gate	Downtown Trail: Cedar and Spokane
6:01	6:06	6:10	6:19	—	—	6:25
—	6:35	6:39	6:48	—	—	6:54
6:32	6:37	6:41	6:50	—	—	6:56
—	—	—	3:18	3:26	3:30	3:35

It is proposed that BC Transit and the operating company continue to work with Teck to help design the schedule to best meet the needs of the employees. However, if the ridership continues to decline, and an agreeable schedule cannot be found, then consideration should be given to discontinue the service and reinvest the resources elsewhere in the transit system.

## **8. Continue to analyze the impacts of changes to the school bus system in Trail**

Over the past several months, there have been several changes to the School District No. 20 student transportation system. This has included the introduction then removal of service fees as well as a recently announced provincial funding contribution. As a result of these changes, it is expected that there will be some impacts to the local public transit system as many of the trips are designed to specifically service students.

It is recommended that the schedule and ridership of the transit system be monitored closely in the fall 2016 to summarize any impacts these changes may have had. As a result of this information, there may be other service change proposals for 2017 to help make the service more efficient for the customers.

### **9. Improve the schedule efficiency of the Route 98 Columbia Connector and Route 33 Selkirk (Castlegar)**

A scheduling issue that was raised by many of the key stakeholders is the relationship between the Route 98 and Route 33. In the afternoon, when the Route 98 departs Selkirk College on route to Trail, the route first does an interline to serve the Castlegar Community Complex as a Route 33. This is problematic because due to capacity restraints, many of the customers who want to travel all the way to Trail are not able to because the bus fills up with people only destined to the Community Complex.

To address this, it is proposed that the trip departing as a Route 33/98 combination leave just after the trip that leaves as a Route 33 only. This will ensure that the Route 33/98 combo is occupied primarily with people destined for Trail, ensuring that nobody gets left behind. The schedule below highlights these two trips that need to be readjusted (the 4:07 trip is the Route 33/98 combo, whereas the 4:11 trip is the Route 33 only).

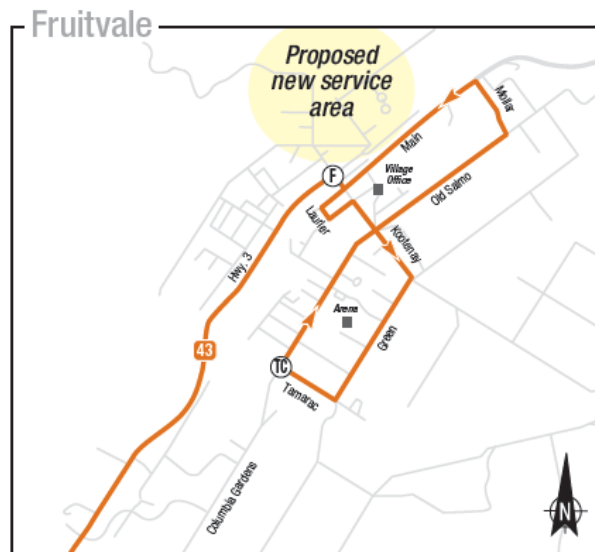
<b>33 Selkirk</b>				
<b>Monday to Friday</b>				
<b>CC</b> Castlegar Community Complex	<b>CA</b> Castlegar Airport/ Casino	<b>SC</b> Selkirk College: Castlegar Campus	<b>SC</b> Selkirk College: Castlegar Campus	<b>CC</b> Castlegar Community Complex
6:32	6:38	6:42	6:49	6:58
7:25	7:31	7:35	7:40	7:49
7:26	7:32	7:36	—	—
8:25	8:31	8:35	8:35	8:44
8:52	8:58	9:02	9:02	9:11
10:14	10:20	10:24	10:30	10:39
11:17	11:23	11:27	11:27	11:36
<b>12:38</b>	<b>12:44</b>	<b>12:48</b>	<b>12:54</b>	<b>1:03</b>
2:06	2:12	2:16	2:16	2:25
3:28	3:34	3:38	<b>4:07</b>	4:16
3:46	3:52	3:56	<b>4:11</b>	4:20
4:28	4:34	4:38	4:38	4:47
5:36	5:42	5:46	5:56	6:05
<b>F</b> 6:57	7:03	7:07	7:10	7:19
<b>Saturday</b>				
9:17	9:23	9:27	9:36	9:45
11:12	11:18	11:22	11:22	11:31
<b>1:01</b>	<b>1:07</b>	<b>1:11</b>	<b>1:20</b>	<b>1:29</b>
2:37	2:43	2:47	2:47	2:56
3:56	4:02	4:06	4:06	4:15
5:37	5:43	5:47	5:56	6:05
<b>F</b> Trip operates Friday only.				

In addition to this change to the Route 33, another change to the Castlegar transit system should include changing the Route 31 North Castlegar to better align with bell times at Stanley Humphries Secondary School.



## **10. Introduce a pilot service to Mountain Side Village**

An ongoing request that was heard during the public consultation phases was to introduce new regular transit service to the Mountain Side Village in Fruitvale. The map below identifies where this location is in relation to the existing service.



The options that were presented to the public for consideration included:

1. Extending some Route 43 trips to the neighbourhood (additional local funding required)
2. On some Route 43, discontinue the Old Salmo/Mollar/Main Loop and reallocate resources to north of Highway 3
3. Improve handyDART subscription to the area (additional local funding required)

Based on the public consultation, there was a lot of interest in Option 2, which would see the reduction of service in the existing service area to serve the new area. Before that option is pursued further, it is important to confirm that actual transit demand to the Mountain Side Village area exists.

Therefore, a possible phased approach is to work with the operating company to see if there is any opportunity to introduce a regularly scheduled pilot trip to this area to meet any existing customer demand. This regularly scheduled trip could operate 1-2 times per week and route the customers, who are primarily senior citizens, to and from popular activity centres and ridership would be monitored closely.

If demand on these subscription trips continues to grow, then either pursuing this reallocation on the Route 43 trips or considering investing expansion resources into this area may be considered as an option for the next 1-5 years.

## 5.2 Short-Term Service Options (1-5 years)

The following section outlines the proposed service changes that should be considered over the next one to five years. These proposed service changes require additional resources; however, some of them may also be achieved through the service optimization proposals outlined in the previous section.

### **11. Introduce 98 Columbia Connector service on Sundays and holidays**

It is important to continue to invest in the transit system to attract new ridership and accommodate increasing demand. Based on the detailed analysis of the transit system, stakeholder consultation and forecasted growth, it is proposed that Route 98 Columbia Connector service be introduced on Sundays and holidays, as there is currently no service available. The table below summarizes the costs of introducing two new round trips between Trail and Castlegar.

#### **Initial High Level Estimate – Additional Annual Impacts**

##### **Option 11: Introduce two round trips on Sunday and holidays on the Route 98**

Service Hours:	250	Passenger Revenue:	\$2,300
Annual Ridership:	2,600	Total Cost*:	\$27,100
Vehicles Required:	0	Net Local Share of Costs:	\$12,200
		Provincial Share of Costs*:	\$12,600

*\* Costs shown do not include Provincial contribution to Lease fees.*

In collaboration with this project, it should also be considered that the Route 99 Kootenay Connector also be introduced on Sundays and holidays to allow for complete regional connections.

### **12. Introduce new weekday midday service on the Route 43 Glenmerry/Fruitvale**

Based on public consultation and ridership analysis, it was identified that there is an existing gap in service on the Route 43 during the weekday middays. Therefore, it is proposed that one additional weekday round trip between Fruitvale and Downtown Trail. The new trip would depart eastbound between 1:30-3:00 and westbound between 2:30-4:00. The table below summarizes the costs of introducing one new round trip on the Route 43.

#### **Initial High Level Estimate – Additional Annual Impacts**

##### **Option 12: Introduce new weekday Route 43 trip during the midday**

Service Hours:	630	Passenger Revenue:	\$5,800
Annual Ridership:	6,600	Total Cost*:	\$68,200
Vehicles Required:	0	Net Local Share of Costs:	\$30,600
		Provincial Share of Costs*:	\$31,800

*\* Costs shown do not include Provincial contribution to Lease fees.*

### **13. Expand Custom Transit (handyDART) service**

In support of a projected increase in ridership demand an aging population, it is proposed that additional resources be invested into the Custom Transit system to improve service for existing customers, and to attract customers to the system. The priority areas for any service expansion include expanded evening service and the introduction of expanded service on the busiest days which are Tuesday and Thursday.

The table below summarizes the costs of extending service by one hour (to 4:30) in the evening on weekdays.

#### **Initial High Level Estimate – Additional Annual Impacts**

##### **Option 13a: Extending handyDART service on weekdays until 4:30pm**

Service Hours:	380	Passenger Revenue:	\$800
Annual Ridership:	500	Total Cost*:	\$28,600
Vehicles Required:	0	Net Local Share of Costs:	\$8,700
		Provincial Share of Costs*:	\$19,100

*\* Costs shown do not include Provincial contribution to Lease fees.*

#### **Initial High Level Estimate – Additional Annual Impacts**

##### **Option 13b: Introduce expanded handyDART service on Tuesday and Thursday**

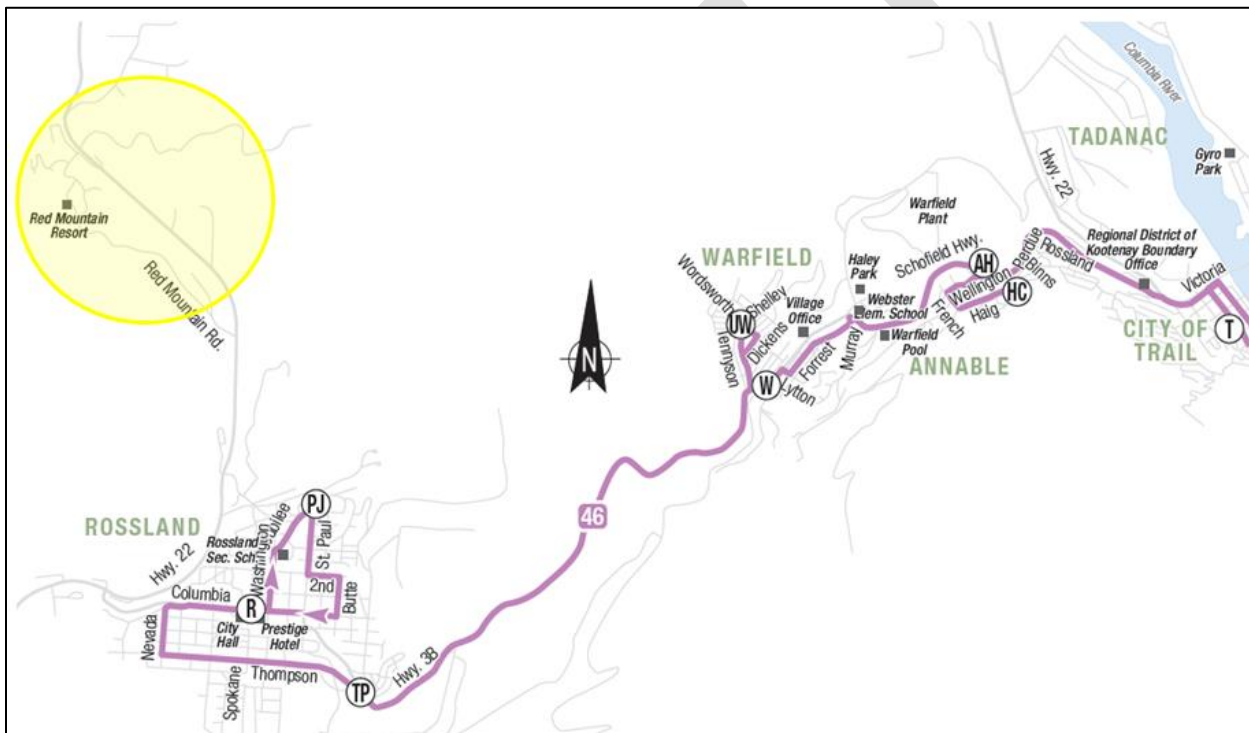
Service Hours:	1,800	Passenger Revenue:	\$4,100
Annual Ridership:	2,500	Total Cost*:	\$154,300
Vehicles Required:	1	Net Local Share of Costs:	\$58,500
		Provincial Share of Costs*:	\$91,700

*\* Costs shown do not include Provincial contribution to Lease fees.*

#### **14. Introduce more comprehensive service between Rossland and the Red Mountain Neighbourhood**

An ongoing request that was heard during the public consultation phases was to introduce new regular service to the Red Mountain Neighbourhood. The options that were presented to the public for consideration were as follows:

1. Introduce regular BC Transit community bus service between Red Mountain and Rossland (additional local funding required)
2. Extend some Route 46 trips to Red Mountain (additional local funding required)
3. Continue to operate the existing community funded shuttle and align schedule with the Route 46 (no additional funding required)



Based on public consultation, the preferred option was the first, which was to introduce regular BC Transit community bus service between Red Mountain and Rossland.

In 2013, a separate study was undertaken to investigate the cost and opportunities to provide expanded BC Transit to the Red Mountain neighbourhood. As part of this analysis, one of the options that was presented was to introduce expanded service between Rossland and Red Mountain with service expansion. This expanded service would require additional resources and the purchase of an additional vehicle (community bus) seating up to 20 passengers. It would:

- build on existing conventional service between Rossland and Trail;
- operate seven days a week including holidays during the months of December through March;

- provide service throughout the day, offering three morning trips, two early afternoon trips, and three late afternoon trips. Schedule times would need to be determined in consultation with stakeholders.

**Key Benefits:** Significantly improves frequency of service to the resort serving both visitors and employees and leverages efficiencies through connection with existing conventional service. It also improves overall service in the Trail to Rossland corridor for existing transit users.

**Disadvantages:** Additional annual operating costs as well as additional maintenance costs since this option presumes that the existing Kootenay Boundary fleet will serve as a spare for the system, meaning that the existing fleet will be impacted when this other vehicle requires scheduled and unplanned maintenance. From a capital perspective, this seasonal option is expensive since it requires paying for a full year of lease fees for a vehicle that is only used four months per year.

The estimated resources required to achieve this option are below:

**Initial High Level Estimate – Additional Annual Impacts**

**Option 14: Service Expansion with Community Bus**

Service Hours: 790	Passenger Revenue: \$8,100
Annual Ridership: 8,000	Total Cost: \$121,000
Vehicles Required: 1	Net Local Share of Costs: \$56,900
	Provincial Share of Costs: \$56,000

\* Assumes 10 rides per service hour at an average fare of \$1.02 (from 12/13 budget).

If Rossland is interested in pursuing this option in more detail, then the next steps are as follows:

- Provide BC Transit confirmation from the RDKB and WKTC that this request is a priority. Following this, the request for expansion hours through the Transit Improvement Program will be made in lieu of other priorities identified in an effort to secure provincial funding.
- Providing the hours are prioritized through the Transit Improvement Program among all the requests throughout the province, the procurement of a vehicle will be required and an Implementation Plan drafted.

For further information about 2013 report, see Appendix D.

## **15. Consider introducing new service to the Trail Regional Airport**

Earlier this year, the Provincial Government announced \$1.18 million in B.C. Air Access Program funding in support of infrastructure improvements at Trail Regional Airport. Using these funds, Trail Regional Airport will be building a new airport terminal building. The new terminal will provide passengers with modern and efficient facilities and create a safe interchange with Highway 22A by separating passenger related traffic from other airport users. Additional parking spaces will also be created for improved access to the terminal for passengers. The City of Trail, which owns the airport, will provide the remainder of the funding for the \$2.36 million project.



Alternate transportation to and from the airport (and other destinations in proximity to the Airport) is currently a challenge. Given the proposed growth of the airport, and the existing transit challenges, it is not surprising that introducing regular transit service to the Airport was a frequent request from the consultation.

While providing a regular transit service to the airport seems like the logical solution, the reality is that it has operational challenges. It is hard to serve airports with transit in general terms since transit buses cannot wait for late flights, less ability to shift schedules to meet changes to scheduled airline arrival and departure times, less ability for Airport staff schedules (very early start times and very late finish times) and less onboard capacity for luggage.

Nevertheless, as the airport continues to grow in Trail, some consideration should be given on opportunities to serve it with public transit. The ideal route to serve the airport is the Route 43 as it already routes via Montrose (which is just north of the airport). Select trips could possibly be rerouted to serve the airport and connect people into Downtown Trail. Note that any extension of a trip would require additional resources.

### ***5.3 Future Considerations (6-15 years)***

The following section outlines the proposed service changes that should be considered over the next six to fifteen years. These proposed service changes require additional resources; however, some of them may also be achieved through the service optimization proposals outlined in the previous section.

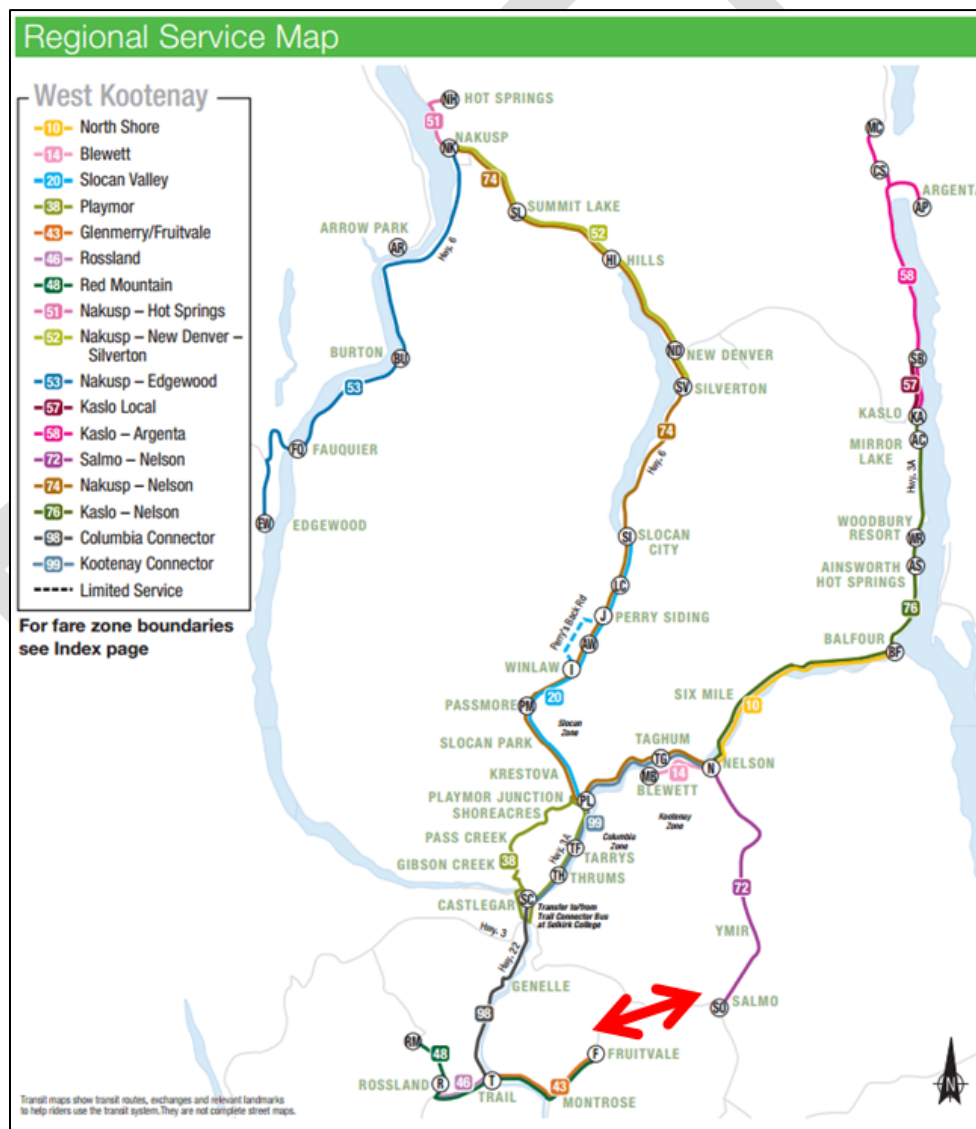


## 16. Continue to expand the core transit routes

Along with Route 98, Routes 43 and 46 have the highest ridership in the Greater Trail transit system. However, unlike Route 98, routes 43 and 46 don't currently have capacity issues. That being said, given their ridership, they would be the next routes likely to receive additional transit frequency. Based on feedback from the public, the priorities for investment should be during the off-peak periods including weekends and evenings.

## 17. Extend service from Fruitvale to Salmo

There were several community members who brought up the service gap between Fruitvale and Salmo during the second phase public consultation. Currently, for residents within the Greater Trail region to reach Salmo, they need to take at least three buses, with a total travel time of 4 hours (or 3 hours for Salmo residents to reach destinations within the Greater Trail region); additionally, there is no way to make a return trip on the same day.



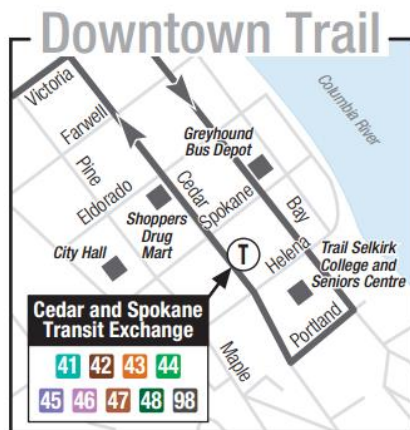
If direct transit service were provided between Fruitvale and Salmo, it would take approximately 25 minutes to travel in each direction. With two round trips per day, that would allow residents of both communities to travel to and from these communities within the same day, with substantially lower overall travel time. Additionally, if the schedules were designed properly to align with Route 72 Salmo-Nelson, it could also provide another regional connection to Nelson, with a shorter travel time for Fruitvale residents than using the Route 98 and 99 connectors.

## 5.4 Short-Term Infrastructure Actions

### Immediate Infrastructure Priorities (within the next 12 months):

#### 1. Improve the Downtown Trail Transit Exchange

This exchange is located on Cedar Avenue in downtown Trail abuts an on-street parallel parking area (is a continuation of the parking lane) and can accommodate up to three parallel-parked buses at one time. The exchange accommodates approximately 500 customers per day. There is currently no adequate shelter; therefore, the waiting area is exposed to the elements, including high temperatures during the summer months. The exchange is also connected to an abandoned building, which results in ongoing safety concerns from the passengers due to a lack of any other activity in the area. Schedule information and signage is also limited and difficult to find.



The transit exchange in Downtown Trail plays a pivotal role for the success of the transit system. Every single transit route in the Greater Trail Transit System currently connects to the downtown Trail Exchange making it the hub for the local and regional transit service. Given its prominent role in the transit system, it is important that this exchange provide a safe and comfortable experience for the customers as many of them have to spend time at the exchange to transfer from one route to another.

Based on the public consultation, there was overwhelming feedback that the existing transit exchange in Downtown Trail is inadequate and does not currently provide customers with a safe and comfortable



experience and discourages people from using public transit in Trail. The reasons for this are as follows:

- The exchange does not provide any shelter from the elements, which can include high heat during the summer and rain/snow in the winter
- The exchange has limited seating opportunities and provides limited options for accessibility
- The exchange is adjacent to an abandoned building and therefore has a tendency to attract loitering people who make the regular transit customers feel uncomfortable
- There is very limited in wayfinding or signage for anyone who is not already familiar with the transit system

As outlined in the Trail Downtown Plan from 2012, “an attractive downtown is complemented by a transportation infrastructure that balances the elements of mobility, safety and access for all users.” A transit exchange should be designed into the fabric of the downtown community and provide an inviting place to encourage active transportation. The photos below are examples of other transit exchanges around the province that achieve this.



Kelowna, BC



Vernon, BC

For the reasons outlined above, a two-phased approach is proposed to help address the downtown exchange issue.

- **Phase 1:** Immediately invest resources to address critical issues at the existing exchange location. This includes installing a new shelter or awning to protect customers from the elements, installing new benches to improve customer accessibility and installing new wayfinding and signage.
- **Phase 2:** Initiate a more comprehensive downtown transit exchange analysis in coordination with other City of Trail plans to identify opportunities to relocate the exchange to another location. A relocation of the exchange could have the following potential benefits:
  - Relocating the transit exchange to a location closer to the Highway may yield some resource savings as bus routes would no longer need to travel as deep into downtown Trail
  - Relocating the transit exchange to a location that has better existing commercial activity would provide customers with improved safety and may yield additional transit ridership.

Based on discussions with stakeholder and operations, candidates for a future transit exchange may include (but not limited to) the following:

- Farwell Street (somewhere between Pine Avenue and Bay Avenue)
- Bay Avenue (adjacent to the new public library)

With the new Columbia River Skywalk Bridge and public library set to open soon, this is an opportune time to consider a transit exchange relocation which would make downtown Trail more attractive and inviting for all.

## **2. Improve infrastructure at major bus stops**

Based on customer and operational feedback, there are a few key bus stops that should be improved for better accessibility on key corridors:

- a. Waneta Plaza: the existing bus stop location becomes problematic for anyone in a mobility device or with a stroller. Given that this bus stop is one of the busiest in the transit system, improvements should be made to ensure that everyone can safely use it. Improvements could include extended curbs and an elongated shelter.



**Bus stop at Waneta Plaza**

- b. Walmart: As one of the busiest stops in the transit system, opportunities should be explored at this location to improve accessibility and the overall customer experience.
- c. Improving the bus stop infrastructure adjacent to the RCMP building in Trail (on Highway 3 at Laburnum)
- d. Route 98 Columbia Connector: the bus stops at Rivervale, Fairview and Blueberry have been identified as locations that require infrastructure improvements. BC Transit will collaborate with the Ministry of Transportation with regards to these stops.

In addition to the improvements outlined above, another regular request from customers to improve the enforcement of the no-smoking policy at bus stops.

### **Future Considerations for Infrastructure (1-10 years):**

The following section outlines infrastructure opportunities that should be considered in the future as the community continues to grow.

- **Park & Ride** – As development occurs, look for an opportunity to establish a Park & Ride sites. Downtown Trail may be an ideal site, especially for customers commuting on the Route 98 connector

- **Airport transit access** – With the significant improvements planned for the Trail Airport, it is important to design any new parking lot, entrance and egress to allow for public transit. This includes assigning a space for a bus stop location that is easily accessible to and from the airport terminal.

## 5.5 Priority Vehicle Actions

The following section outlines the planned and proposed vehicle changes in the Greater Trail transit system over the next several years.

1. **Standardized Lease Fees (April 2017)** – Starting in April 2017, BC Transit will be introducing a Standardized Lease Fee (SLF) which will mitigate cost volatility and increase predictability. A SLF was recommended as part of the Crown Agency Review to simplify matters for BC Transit and to provide more certainty to local government partners. The SLF is based on three elements: term; capital investment of bus and its major components within five vehicle categories; and a risk protection fund.

It should be noted that Kootenay-Boundary transit is expected to find efficiencies over the next three years.

2. **Consider Right-Sizing Opportunities (2017/18)** – Once all of the immediate-term proposed service adjustments have been implemented to address some of the key operational issues, a more detailed review of the existing capacity and demand of the transit vehicles should be undertaken to explore if there are any opportunities for vehicle right-sizing vehicles to provide further efficiencies. One possible change in particular would see the two 40' heavy duty vehicles replaced by two 35' medium sized vehicles. This conversion would allow for reduced operational costs and a more homogenous transit fleet. In order for this conversion to be achieved, it first needs to be confirmed that the medium-sized buses could adequately handle the capacity demand, particularly for trips on the Route 98 from Selkirk College.
3. **Continue to Evolve Vehicle Amenities, Maintenance Resources, and Fleet Mix (6-15 years)** – As the system, its road network and vehicle technologies evolve, Trail Transit should continue to look for opportunities to improve onboard amenities and capacity for passengers. One example of BC Transit's commitment to developing new technologies is the use of *Smart Bus* technology. *Smart Bus* gathers information to assist transit agencies, and shares information outwardly to allow for improved communication and customer service. *Smart Bus* technology provides an integrated Intelligent Transportation System (ITS) on buses.

## 6.0 SUPPORTING ACTIONS

The following priority actions support the service improvements outlined in Section 5, and are based on the key themes from Public Engagement and an outlook on their ability to be implemented. **It is recommended that on an annual basis, the RDKB, WKTC and BC Transit work together to outline which of these supporting actions should be undertaken in each particular year.**

### 6.1 Priority Fare-related Actions

BC Transit is currently undertaking a detailed fare review of the entire West Kootenay transit system. This fare review is expected to be completed in the fall 2016 and any recommendations could potentially be implemented in 2017 in collaboration with the other service changes proposed in this document.

### 6.2 Priority Marketing / Passenger Information Actions

4. **Implement an Online Trip Planner** – the West Kootenays has been identified as one of the priority transit systems for implementation of an online trip planner, due in part to its high tourist/new-passenger ridership. Exact date is in the process of being confirmed but would likely be within the next three years.
5. **Expand Schedule Availability at Major Stops** – Work with RDKB and the system's operator to implement and manage schedule and routing information at key stops.
6. **Transit Ambassador Program** – Cost-shared through a small increase to the system's existing marketing budget, this program would provide funding towards a position to work with the RDKB and BC Transit to promote the transit system at key events and look for opportunities to improve links to visitor information.

There may also be value in expanding the RDKB's marketing and promotional efforts with an eye to attracting new riders.

### 6.3 Integrated Planning Actions

#### 6.3.1 Development Referral Program

Given that shifting transportation modes to active and alternative options such as transit is a priority of the RDKB, integrated land use and transportation planning is critical in the region. BC Transit encourages local governments and other stakeholders to involve it in land use planning exercises to offer a multimodal transportation lens. When new development projects arise, the RDKB and the local government partners can rely on BC Transit's Development Referral program, which enables local governments to send development or rezoning applications to BC Transit for transportation-focused review and comment. As part of this referral process, BC Transit reviews the proposal and provides local government with comments on how the proposed development fits within the existing transit network, the outlook for future transit service to the development area, and comments on pedestrian links or transit amenities that would make the development more transit-friendly.

Development referrals can be sent to [developmentreferrals@bctransit.com](mailto:developmentreferrals@bctransit.com). An example of a development referral can be found in Appendix A.

### ***6.3.2 Continued Collaboration***

BC Transit and the RDKB (via West Kootenay Transit Committee) should continue to work together not only on transit matters but also on general transportation planning, land use planning, and engineering exercises, with an eye to maximizing efficiency and passenger experience on the Greater Trail transit system.

### ***6.3.4 Monitoring & Evaluation***

BC Transit and Trail Transit should continue to collect ridership and other data as needed. On an ongoing basis, BC Transit will analyze key performance indicators such as ridership, on-time performance, vehicle maintenance quality, safety and customer satisfaction, and will report and analyze this through purpose-built analysis as well as its Annual Performance Summary process.

### ***6.3.5 New Technologies***

Continue to explore opportunities that may be available with any future introduction of new technologies or ride-sharing services. The Provincial Government is currently undertaking a review of these services. Once this review is complete, BC Transit and the local partners will work in collaboration to leverage any new opportunities that may improve mobility options for the customers.



## 7.0 CONCLUSIONS

### 7.1 Implementation Plan

Gradually and eventually implementing and evaluating the options presented in this Service Review will be advantageous to Greater Trail and its transit system. These options have been presented in consideration of iterative and ongoing collaboration with stakeholders, the public, the WKTC, the RDKB, and the local operator. This collaboration will continue in the implementation and evaluation of these options, as well as the general operation of the system.

As previously noted, these options are not intended to be prescriptive and do not necessarily need to be implemented linearly. Subsequent monitoring, evaluation, three-year budget planning, and five-year service planning will reflect on the outcomes of this Service Review and will help the partners continue to serve Greater Trail's transit needs successfully. The options presented in the medium- to long-term implementation horizon should be revisited in the next Service Review cycle.

It is also recognized that service needs and the RDKB's & BC Transit's capacity to fund transit improvements may change over time. Therefore, options for implementation which require expansion to service hours or vehicles will need to be confirmed on an annual basis for the subsequent year as part of the local budget approval. The implementation of any option requiring expansion is dependent on BC Transit's fiscal year budget, total provincial funding, and the allocation of available provincial transit expansion funding between transit systems as determined through BC Transit's Transit Improvement Program (TIP).

Once the RDKB has approved a service option or combinations of options for implementation – and local and provincial funding have been approved – an Implementation Agreement Memorandum of Understanding (MOU) will be developed for signature by the CRD and BC Transit. This MOU outlines the exact service changes to be developed for implementation and the roles and timeline for implementation.

With regards to the infrastructure projects, the RDKB should identify which projects are a priority and work with BC Transit to identify capital funding opportunities that may exist.

### 7.2 Moving Forward

BC Transit will continue to work with the Greater Trail partners to begin to take the steps the transform this plan from a vision to a reality. These efforts will only be successful if done in partnership with continuous dialogue between all partners and maintain strong links between:

- Land use planning and transit planning
- Provincial and Regional transportation and transit planning
- Transportation policy and funding availability

#### ***How will BC Transit and the Great Trail partners use this plan?***

- As a tool to communicate the vision for transit to partners, stakeholders, and the public
- To identify where and in what order key transit investments will occur
- To strategically move projects through the capital planning process

- To work with partners on integrating transit plans and investments with other major infrastructure plans and projects
- To respond to planning and development proposals

***What actions does BC Transit need from our local government partners for success?***

- Update local plans and integrate future transit plans with land use plans and transportation plans
- Integrate and consider the transit network when developing sustainable transportation infrastructure plans and projects
  - Example, a pedestrian and cycling infrastructure project on a transit corridor could improve access to transit by providing or improving sidewalks
- Integrate and consider the transit network when developing local corridor plans or any road infrastructure projects. For example, incorporating transit priority measures with an intersection upgrade project
- Ensure that local and major development proposals and projects are received and reviewed by BC Transit and support the transit network
- Implement travel demand management strategies that encourage shifting automobile trips to transit such as implementing high occupancy vehicle lanes, transit priority measures, marketing, restructuring parking fares, and reducing parking availability/requirements in areas well served by transit
- Support and encourage transit-oriented development and work with BC Transit to explore incentives to attract high density and mixed-use development to areas well served by transit

### ***7.3 Recommendations***

It is recommended that the Regional District of Kootenay Boundary:

- **Receive this report for review and comment prior to BC Transit's finalization of the report and subsequent submission to the Regional District of Kootenay Boundary;**
- **Receive the Appendices of this report as information.**



# APPENDIX A - DEVELOPMENT REFERRAL EXAMPLE

## Development Referral Response

August 30, 2016

Project No. SO62 (Subdivision 580049)

### Development Location:

*Lots 2 & 3, District Lot 211, Plan EPP21848, Lillooet Land District*

Located at 1835 Highway 99

**Local Government:** Village of Pemberton

**Transit System:** Pemberton Valley Transit

### Overall Transit Impact

The proposed site:

- Lies approximately 1 km from Portage Road, on which two Pemberton Valley Transit routes regularly operate (Route 99 Commuter between Pemberton and Whistler, and Route 100 Pemberton Local). While there is an existing bus stop located on Portage Road directly adjacent to the access road (Pemberton Farm Road East) for this development, under the current situation, public transit is likely beyond walking distance for the majority of new transit customers from the development.
- The Hillside development area was included in the Sea to Sky Transit Future Plan as an area for consideration for local transit expansion in the medium- to long-term future.

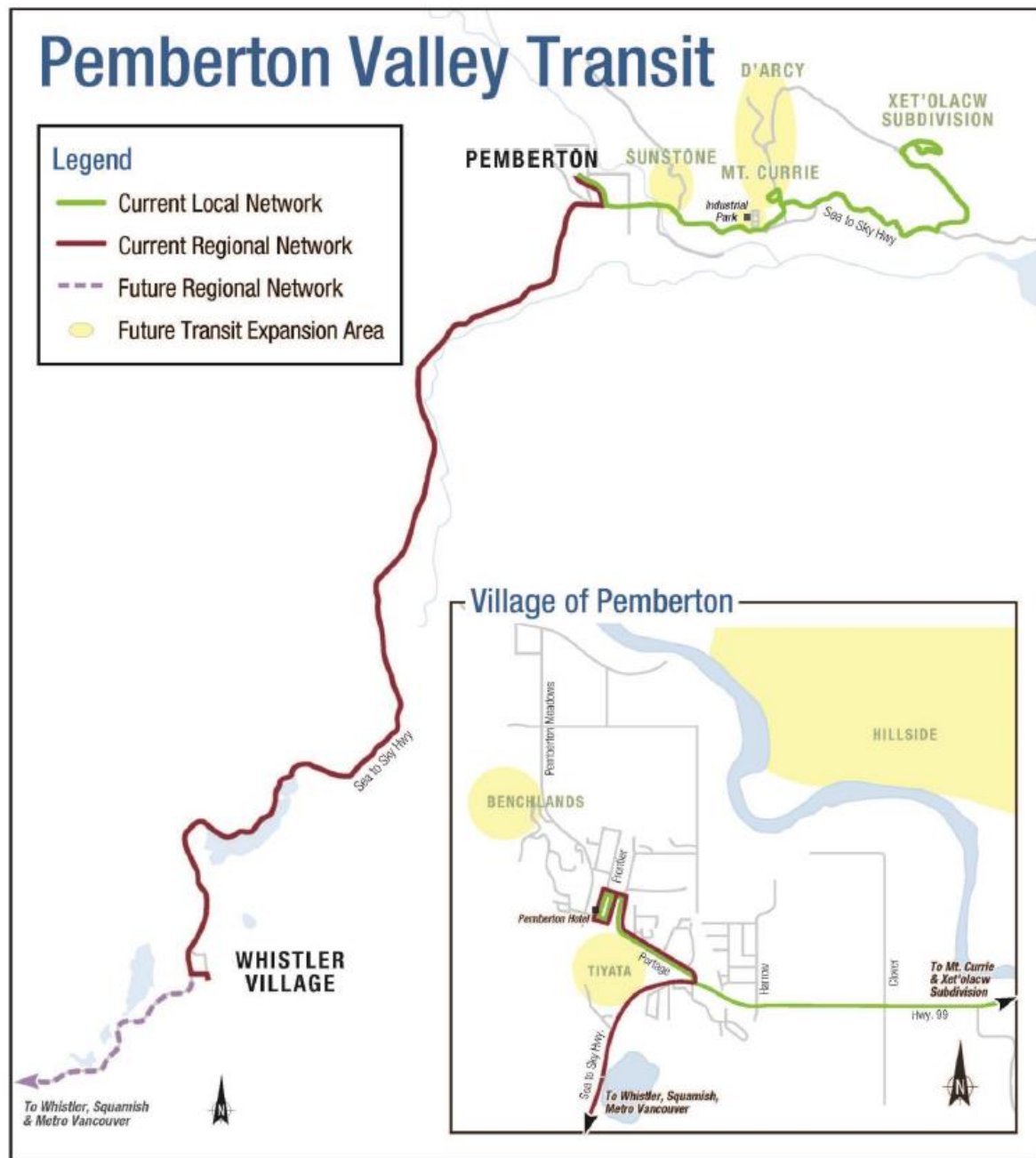
### Land Use

- This development is a phased approach. The Phase One subdivision under application comprises a 44-single-family lot Bare Land Strata with one additional common property lot for community park purposes.

### Bus Stops and Stations

- This proposed development has the potential to be a trip generator. To accommodate this, BC Transit recommends that adequate pedestrian infrastructure be installed in the new development to allow customers to easily walk between their homes and the bus stops located on Portage Road.
- If the Village of Pemberton would like to see this area directly served by transit at some point in the future (as outlined in the Sea to Sky Transit Future Plan), it is important that the road configurations be designed to allow for a bus to safely maneuver in the development and also to consider the location of bus stops. This is identified in the map on the following page.

**Map:** Pemberton Valley Transit System from the Sea to Sky Transit Future Plan. The Hillside development is identified as a possible area for transit expansion at some point in the future.




### **BC Transit Level of Support**

BC Transit has no objection to the proposed development. From a transit perspective, the key things that should be considered to encourage transit ridership in this neighbourhood are as follows:


- 1. Consider introducing sidewalk infrastructure in the new development to ensure pedestrians can safely travel between Portage Road and their homes.**
- 2. If the Village of Pemberton would like to see this area directly served by transit at some point in the future (as outlined in the Sea to Sky Transit Future Plan), it is important that the road configurations be designed to allow for a bus to safely maneuver in the development and also to consider the location of bus stops.**

## APPENDIX B - TRAIL SERVICE REVIEW SURVEY RESULTS OCT 2015


### DID YOU KNOW THAT TRAIL HAS A PUBLIC TRANSIT SERVICE BEFORE TAKING THIS SURVEY?

Response	Chart	Percentage	Count
Yes		98.0%	534
No		2.0%	11
<b>Total Responses</b>			<b>545</b>

### DID YOU KNOW THAT THERE ARE REGIONAL TRANSIT CONNECTIONS BETWEEN THE GREATER TRAIL REGION, CASTLEGAR, AND NELSON BEFORE TAKING THIS SURVEY?

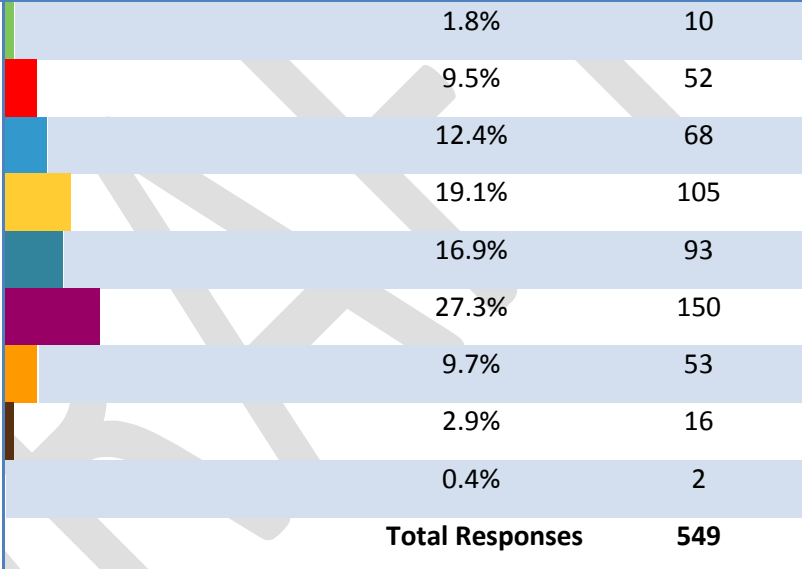
Response	Chart	Percentage	Count
Yes		91.2%	500
No		8.8%	48
<b>Total Responses</b>			<b>548</b>

### WHICH GENERAL AREA DO YOU LIVE IN?

Response	Chart	Percentage	Count
Trail		25.4%	140
Fruitvale		8.2%	45
Montrose		4.4%	24
Rossland		35.9%	198
Warfield		6.0%	33
Glenmerry		4.0%	22
Sunningdale		2.7%	15

Waneta	1.8%	10
Oasis	0.7%	4
Genelle	0.5%	3
Other	10.3%	57
<b>Total Responses</b>		<b>551</b>

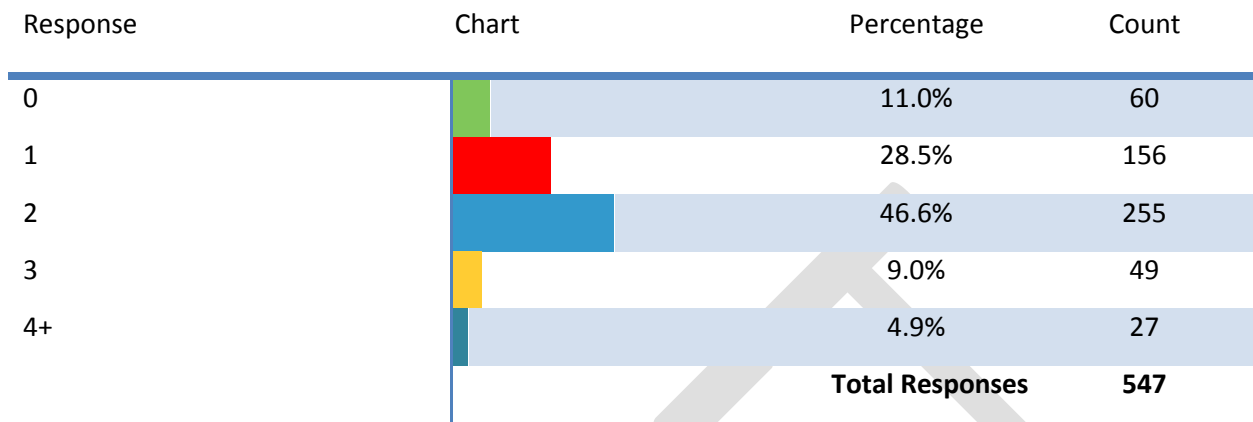
## WHICH OF THE FOLLOWING AGE CATEGORIES DO YOU FALL INTO?

Response	Chart	Percentage	Count
under 15		1.8%	10
15 - 24		9.5%	52
25 - 34		12.4%	68
35 - 44		19.1%	105
45 - 54		16.9%	93
55 - 64		27.3%	150
65 - 74		9.7%	53
75+		2.9%	16
Prefer not to answer.		0.4%	2
<b>Total Responses</b>			<b>549</b>

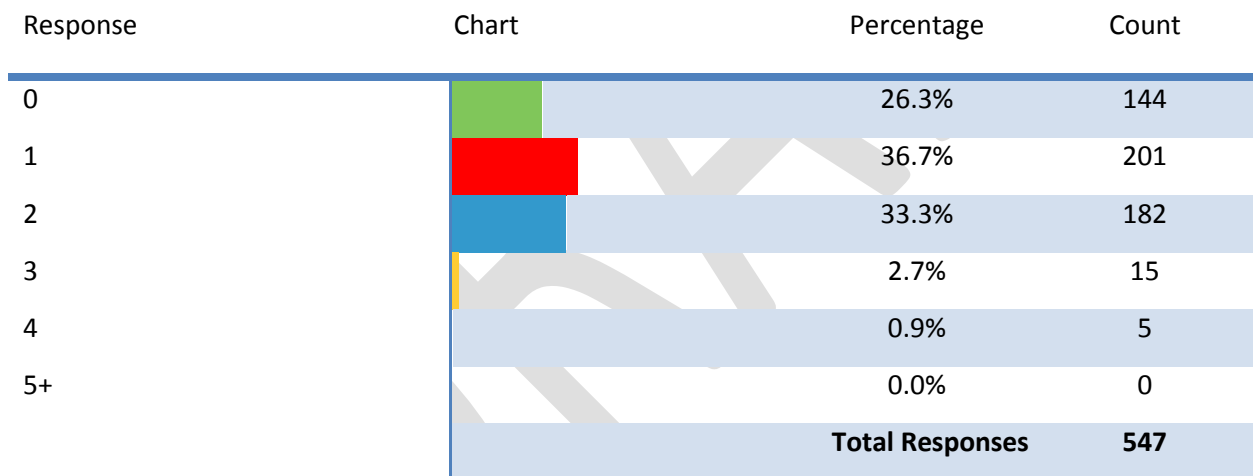
## HOW MANY PEOPLE IN YOUR HOUSEHOLD ARE...

	0	1	2	3	4	5+	Total Responses
...age 16 years or older?	24 (4.5%)	98 (18.4%)	304 (56.9%)	74 (13.9%)	21 (3.9%)	13 (2.4%)	534
...under the age of 16 years?	174 (50.7%)	72 (21.0%)	73 (21.3%)	16 (4.7%)	8 (2.3%)	0 (0.0%)	343

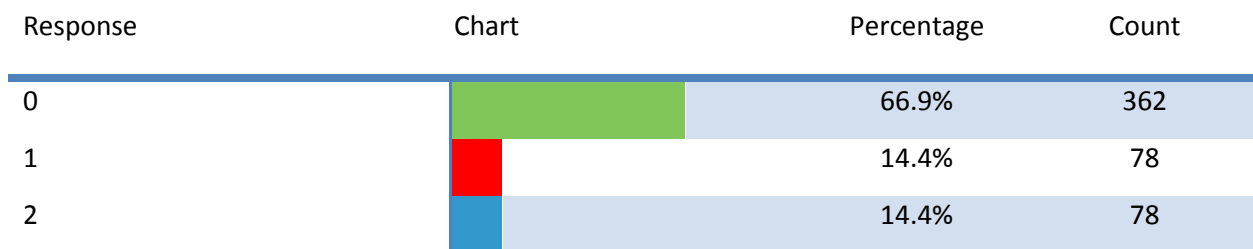
## HOW MANY REGISTERED, LICENSED VEHICLES DOES YOUR HOUSEHOLD HAVE?



## HOW MANY PEOPLE IN YOUR HOUSEHOLD WORK FULL-TIME OUTSIDE THE HOME?



## HOW MANY PEOPLE IN YOUR HOUSEHOLD ATTEND SCHOOL (INCLUDING POST SECONDARY) FULL-TIME?



3		4.1%	22
4		0.2%	1
5+		0.0%	0
<b>Total Responses</b>			<b>541</b>

## WHERE IS THE GENERAL WORKPLACE AREA FOR THOSE WHO WORK FULL-TIME OUTSIDE THE HOME?

Response	Chart	Percentage	Count
Downtown Trail		30.9%	125
Teck		35.1%	142
Warfield		4.5%	18
Waneta Junction		6.2%	25
Rossland		25.0%	101
Montrose		2.0%	8
Fruitvale		5.4%	22
Other, please specify...		29.5%	119
<b>Total Responses</b>			<b>404</b>

## FOR THE PEOPLE IN YOUR HOUSEHOLD WORKING FULL-TIME OUTSIDE THE HOME, HOW DO THEY USUALLY GET TO WORK?


Response	Chart	Percentage	Count
Vehicle (Driver)		83.6%	337
Vehicle (Passenger)		12.7%	51
Public Transit		19.1%	77
Bicycle		7.2%	29
Walk		15.1%	61
Taxi		0.0%	0




Other, please specify...

3.7%	15
<b>Total Responses</b>	<b>403</b>

## DOES THE PERSON IN YOUR HOUSEHOLD WHO WORKS AT TECK TAKE THE BUS TO GET TO WORK?


Response	Chart	Percentage	Count
Yes		17.8%	13
No		82.2%	60
		<b>Total Responses</b>	<b>73</b>




## DOES THE SCHEDULE FOR THE 45 TECK BUS MATCH WITH THIS PERSON'S WORK SCHEDULE?

Response	Chart	Percentage	Count
Yes		23.9%	17
No		76.1%	54
		<b>Total Responses</b>	<b>71</b>










## HOW COULD WE CHANGE THE 45 TECK BUS SCHEDULE OR ROUTING TO MAKE IT WORK FOR YOU?

The 54 response(s) to this question can be found in the appendix.






Response	Chart	Percentages	Count
Castlegar to Teck Service		8%	6
Change Bus Stops		1%	1
Earlier Afternoon Service		4%	3
Earlier Morning Service		31%	21
Fruitvale / Glenmerry Related		4%	3
Later Afternoon / Evening Service		25%	17
Later Morning Service		2%	2


Rossland Related		8%	6
Saturday / Sunday Service (for Shift Work)		2%	2
Warfield Plant Related		8%	6

## WHICH EDUCATIONAL INSTITUTION(S) DO YOUR HOUSEHOLD MEMBERS ATTEND FULL-TIME?

Response	Chart	Percentage	Count
JL Crowe Secondary		31.8%	57
St. Michaels Catholic School		4.5%	8
James Webster Elementary		8.9%	16
MacLean Elementary		1.1%	2
Rossland Summit School		20.1%	36
Glenmerry Elementary		8.4%	15
Selkirk College (Trail)		3.4%	6
Selkirk College (Castlegar)		10.1%	18
Other (please specify)		38.0%	68
<b>Total Responses</b>			<b>179</b>

## FOR THE PEOPLE IN YOUR HOUSEHOLD WHO ARE ATTENDING FULL-TIME SCHOOL OR COLLEGE, HOW DO THEY USUALLY GET THERE?




Response	Chart	Percentage	Count
Vehicle (Driver)		21.8%	39
Vehicle (Passenger)		27.4%	49
Public Transit		29.1%	52
Bicycle		5.0%	9
Walk		42.5%	76





Taxi		0.0%	0
Other (please specify)		17.9%	32
Total Responses			179

## ON AVERAGE, HOW OFTEN ARE THE FOLLOWING AREAS A DESTINATION FOR YOUR HOUSEHOLD FOR NON-WORK AND NON-SCHOOL TRIP PURPOSES?(SHOPPING, ENTERTAINMENT, RECREATION, HEALTH, SOCIALIZING ETC.)






	Every day	Several times per week	Several times per month	Almost Never	Never	Total Responses
Downtown Trail	77 (14.1%)	202 (36.9%)	179 (32.7%)	65 (11.9%)	25 (4.6%)	548
Waneta Plaza / Walmart	15 (2.7%)	146 (26.7%)	246 (45.0%)	92 (16.8%)	48 (8.8%)	547
Montrose / Fruitvale	32 (5.9%)	37 (6.8%)	108 (19.9%)	232 (42.6%)	135 (24.8%)	544
Warfield / Rossland	129 (23.8%)	75 (13.8%)	121 (22.3%)	128 (23.6%)	89 (16.4%)	542
Castlegar / Nelson	31 (5.7%)	31 (5.7%)	200 (36.7%)	203 (37.2%)	80 (14.7%)	545

## ON AVERAGE, HOW FREQUENTLY DO YOU RIDE THE BUS IN GREATER TRAIL?

Response	Chart	Percentage	Count
Every day		6.6%	36
Every week day		4.4%	24
Multiple times a week		8.8%	48







Multiple times a month		10.6%	58
Less than once a month		20.6%	113
I previously used transit in Greater Trail, but not anymore		21.0%	115
I have never used transit in Greater Trail		28.1%	154
		<b>Total Responses</b>	<b>548</b>

## HOW WOULD YOU RATE THE QUALITY OF TRAIL'S DOWNTOWN TRANSIT EXCHANGE?

Response	Chart	Percentage	Count
Very poor		14.2%	78
Poor		24.0%	132
Moderate		40.7%	224
Good		17.8%	98
Very good		3.4%	19
		<b>Total Responses</b>	<b>551</b>

## DO YOU HAVE ANY SPECIFIC RECOMMENDATIONS FOR IMPROVING TRAIL'S DOWNTOWN TRANSIT EXCHANGE?

The 284 response(s) to this question can be found in the appendix.

Response	Chart	Percentages	Count
Better Information / Signage at Exchange		8%	25
Better Lighting		3%	12
Change Location		9%	28
Cleaner		4%	14
Make More Visually Appealing		3%	11
More / Better Seating		3%	11



More Space	0%	3
Protection from Elements	49%	152
Public Washrooms	7%	24
Retain Current Location	1%	4
Safer (Security Cameras, Panic Button / Phone etc.)	2%	8
Smoking Related	4%	13

## WHAT ARE YOUR PRIMARY TRIP PURPOSES WHEN YOU TAKE TRANSIT IN GREATER TRAIL?

Response	Chart	Percentage	Count
Work		34.6%	93
School		9.7%	26
Shopping / Recreation / Social		71.0%	191
Health Trips		21.6%	58
		<b>Total Responses</b>	<b>269</b>


















## WHAT TRANSIT ROUTES DO YOU GENERALLY TAKE (SELECT ALL THAT APPLY)?

Response	Chart	Percentage	Count
41 Binns		6.7%	18
42 Columbia Heights		3.3%	9
43 Glenmerry/Fruitvale		43.7%	118
44 Sunningdale		13.3%	36
45 Teck		8.1%	22
46 Rossland		51.1%	138
47 Tadanac		1.5%	4
48 Red Mountain Ski Bus		18.5%	50

98 Columbia Connector (to Castlegar)		30.4%	82
Other (please specify)		8.5%	23
		<b>Total Responses</b>	<b>270</b>

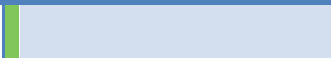
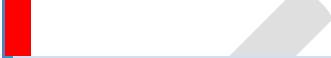
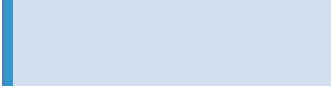



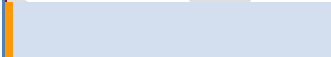

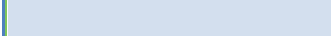

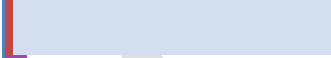

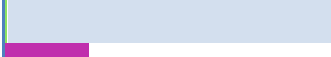
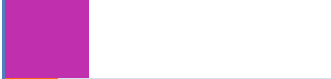
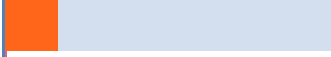



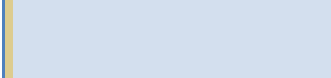
## HOW COULD WE IMPROVE GREATER TRAIL'S TRANSIT SYSTEM FOR YOU?

The 165 response(s) to this question can be found in the appendix.

Response	Chart	Percentages	Count
Better Information About Transit		2%	5
Better Transit Exchange and/or Bus Stop Amenities		5%	10
Better timed transfers between buses / better on time performance		4%	8
Better, more comfortable buses		4%	9
Bike Capacity Issues		4%	8
Change Bus Stops		2%	5
Cheaper Fares		1%	2
Different Routing		4%	8
Driver Issues		2%	4
Earlier service		3%	6
KBR Hospital Related		4%	8
Later Service		7%	14
More Saturday Service Frequency		8%	17
More service frequency and/or changed scheduling		26%	53
Red Mountain Related		11%	23
Sunday Service		7%	14
Teck Related		2%	4

# HOW COULD WE ENCOURAGE YOU TO USE TRANSIT IN GREATER TRAIL?

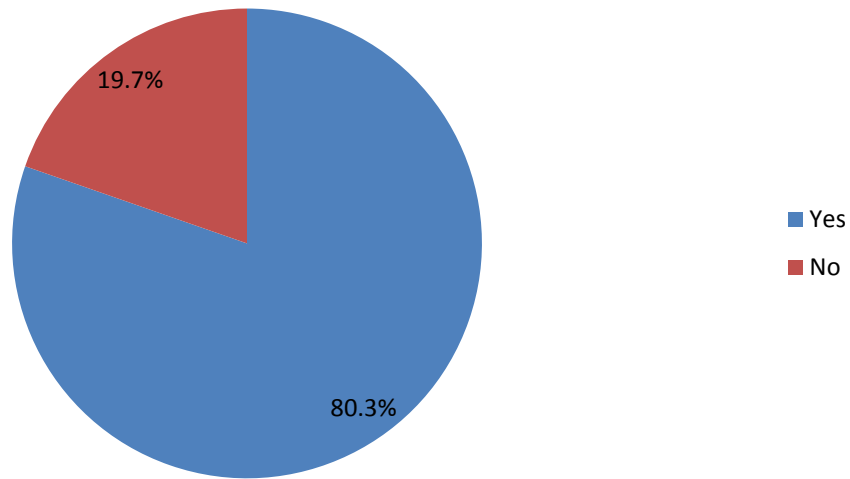
The 190 response(s) to this question can be found in the appendix.

Response	Chart	Percentages	Count
Better Access / Changed Bus Stop Locations		4%	8
Better Information About Transit		8%	16
Better Timed Transfers Between Buses / Better On Time Performance		2%	5
Better Transit Exchange and/or Bus Stop Amenities		1%	2
Better, More Comfortable Buses		1%	2
Bike Capacity Issues		0%	0
Cheaper Fares		2%	4
Different Routing		1%	3
Driver Issues		0%	0
Earlier Service		5%	9
KBR Hospital Related		1%	3
Later Service		7%	14
More Saturday Service Frequency		1%	2
More Service Frequency and/or Changed Scheduling		31%	56
Red Mountain Related		18%	34
Service to Trail Airport		0%	1
Sunday Service		1%	3
Teck Related		7%	13
Will Use When I Get Older and/or Can't Drive Anymore		2%	5

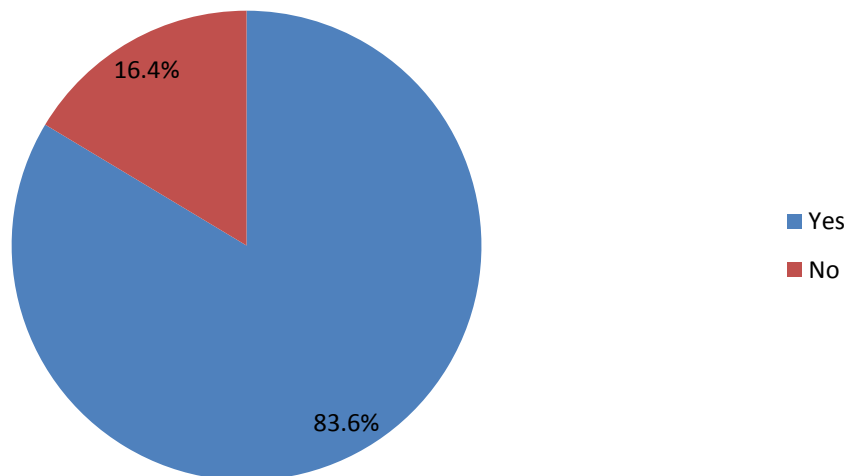


## APPENDIX C - PHASE 2 CONSULTATION RESULTS

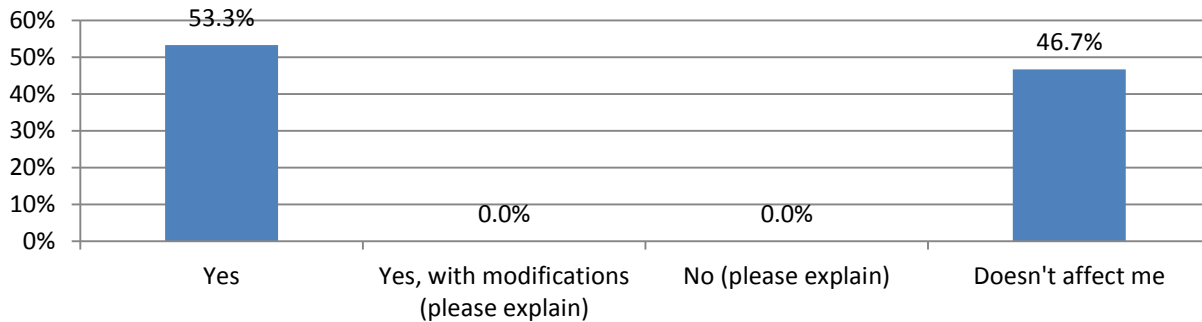
**Do you support the Phase 1 proposal for the Downtown Trail Transit Exchange?**



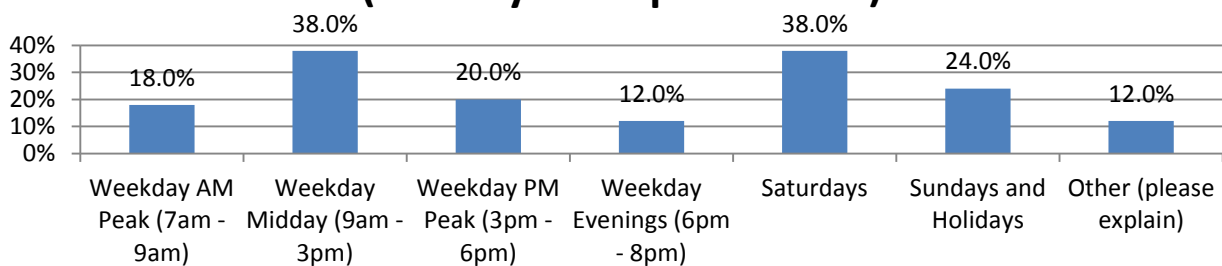
**Do you support the Phase 2 proposal for the Downtown Trail Transit Exchange?**



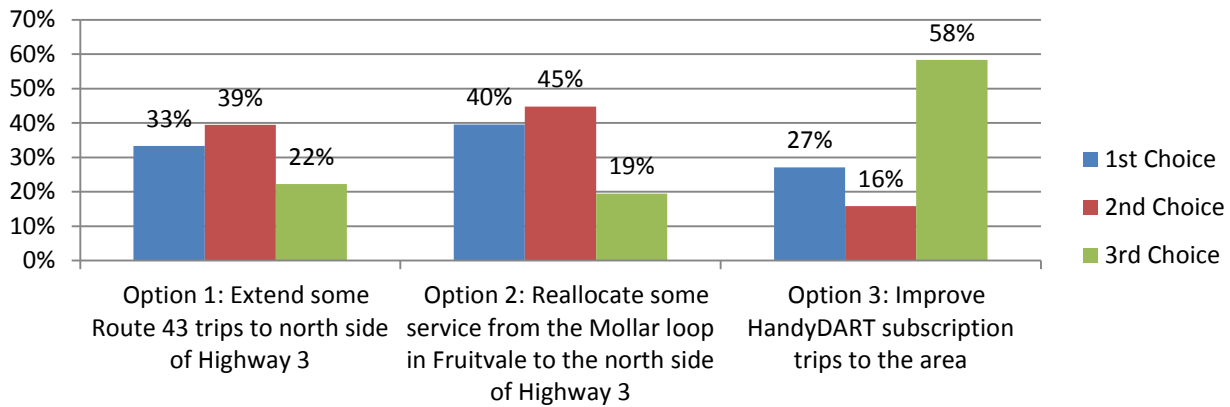
## Do you support the proposal to streamline the 43 Glenmerry / Fruitvale routing through East Trail?



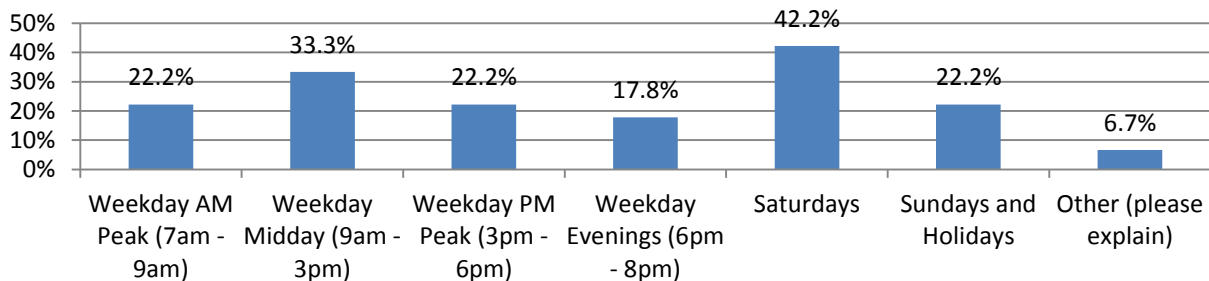
## If we are able to add trips to Route 43 Glenmerry/Fruitvale in the future through resource reallocation, when would you want it? (Select your top 2 choices)



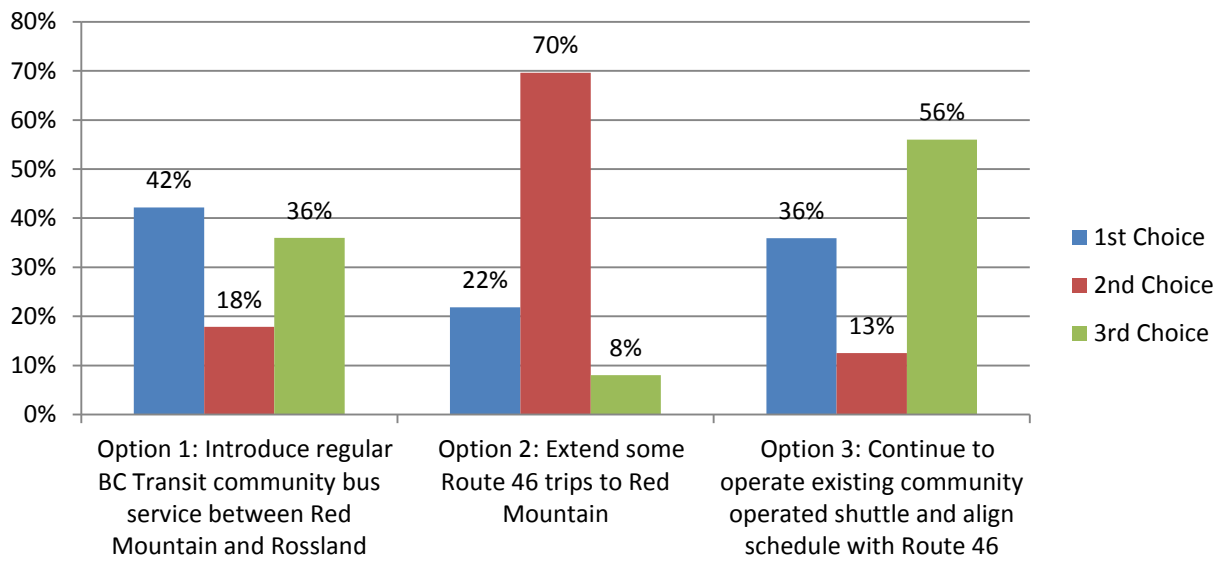
## Service Option Preference for Fruitvale above Hwy 3



## If we are able to add trips to Route 98 Columbia Connector in the future through resource reallocation, when would you want it? (Select your top 2 choices)

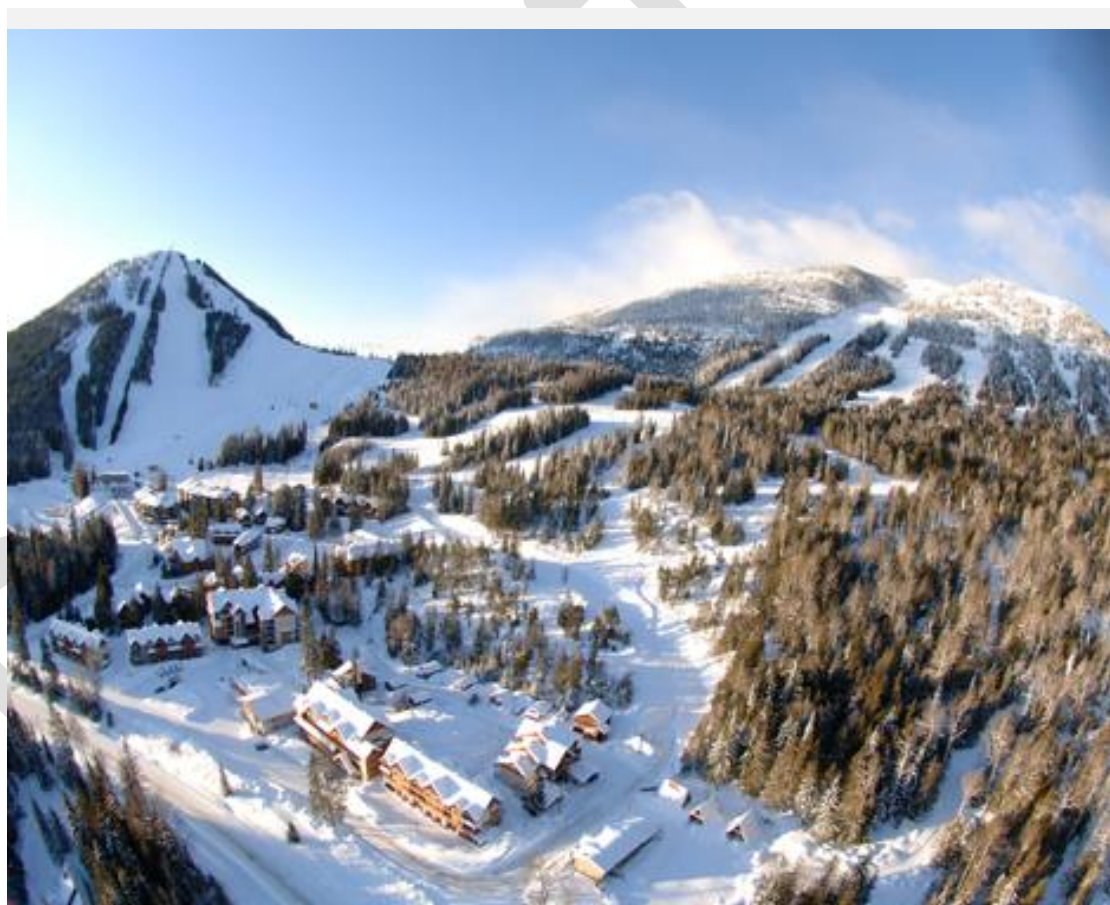


## Service Option Preference for Red Mountain Neighbourhood



## Appendix D

# West Kootenay Transit System Service Options for Red Mountain Resort



*January 14, 2013*

West Kootenay Transit Committee  
Regional District of Kootenay Boundary



## 1.0 Introduction

The Regional District of Kootenay Boundary has requested a high level summary for options to provide increased service to Red Mountain Resort (RMR) with cost estimates based on a cost per service hour supported by benefits and considerations. This report builds upon the 2008 Draft Service Proposal for service to RMR (provided in Appendix B) and aims to confirm the current validity of the option proposed along with consideration of other service options.

The service options for Red Mountain presented in the report are not intended to provide an offer for service implementation. Additionally, this report does not serve as a full service review and does not include consultation with stakeholders, riders and operators. Rather, this report suggests options for consideration by both the West Kootenay Transit Committee (WKTC) and stakeholders of the Kootenay Boundary Transit System.

The objectives for the service options presented are to:

- Improve the frequency of service to Red Mountain Resort;
- Accommodate employees and visitors of the resort;
- As much as possible, utilize existing resources and service hours.

As described further in the report, these objectives involve tradeoffs between incurring new costs and impacting existing system users.

The service options presented here are also subject to:

1. The scope of work as defined by the Memorandum of Understanding (MOU). Any changes to the scope would result in the need to re-initiate a new Memorandum of Understanding.
2. The prioritization of expansion funding requests and the subsequent confirmation of provincial funding.
3. Fleet availability where additional fleet are determined to be required.
4. Hours are only an estimate prior to actual scheduling being completed.
5. Any costs included are based on an estimated hourly cost and are intended to provide an understanding of the potential financial impacts of each option. The costs do not yet consider more accurately the impact on service hours and fleet requirements. Such impacts are reviewed in more depth in a full Service Plan which is outside of the scope of this MOU.

## 2.0 Background

### 2.1 Red Mountain Resort

Red Mountain Resort is one of the biggest ski areas in BC, offering diverse terrain, over 750cm of annual snowfall, and world renowned skiing. There are a number of amenities available at the resort including lodgings, shopping, fine dining and instruction. The resort has been receiving international recognition for its skiing and is continuing to expand the ski runs and activities offered.

Located 3.5 kilometres from the City of Rossland (population approximately 3,800), Red Mountain Resort offers year round outdoor activities. There is no staff accommodation at the resort, meaning that all employees must commute. Rossland is the nearest potential residential community with appropriate rental availability, followed by Warfield (10km away) and Trail (15 km distance).

The Resort's Ticket Office / Main Lodge operates from 8:15am to 3:30pm, with other functions (Ski schools, Kindercare, rentals, retail, food and beverage services, etc.) operating from 9:00am to 3:00pm. Therefore, the ideal arrive times at RMR would be 8:00am and 8:30am and the ideal leave time would be 3:45pm. However, these times also pose a challenge for providing service to RMR within the existing fleet since Kootenay Boundary Transit's service delivery peak is between 7:00am to 9:00am and 2:30pm to 4:00pm.

### 2.2 Existing Service to Red Mountain Resort

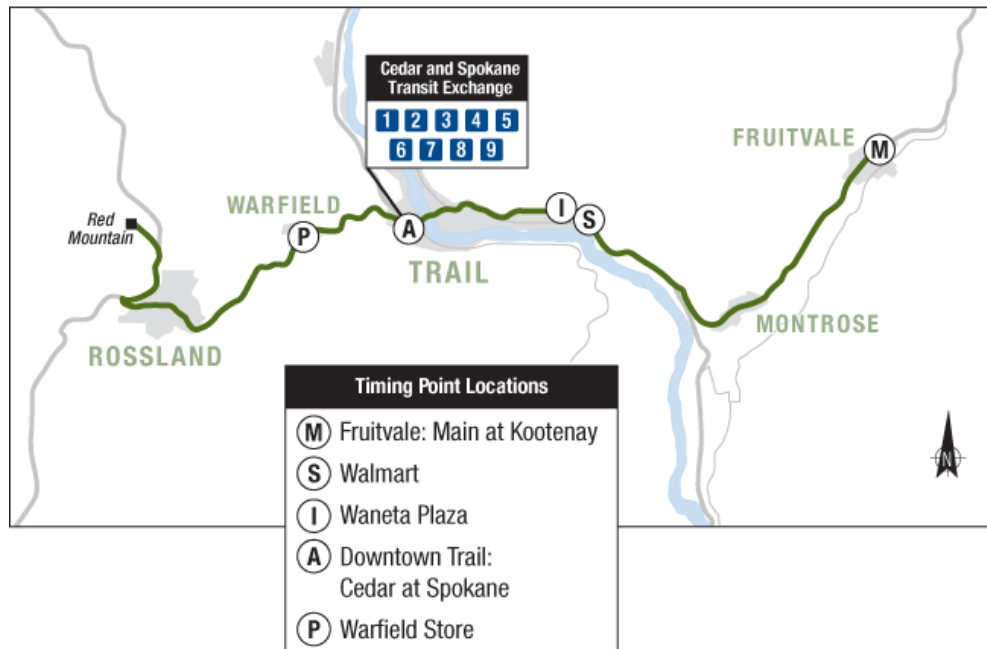
While there are shuttle services offered between Rossland and Red Mountain operated by private companies for a fee, the lack of regularly scheduled trips and infrequency of service appears to make these trips unreliable. For instance, the ski site PowderHounds.com notes that *"During peak periods an infrequent day time shuttle service sometimes operates, but this is a hit and miss affair. Not surprisingly there are usually hitchhikers standing on the side of the road begging for a lift."*<sup>4</sup> Taxis are another potential source of existing transportation to and from the resort but present cost limitations to some users.

The Kootenay Boundary Transit System currently provides service to RMR during the ski season on weekends, statutory and school holidays. The service provides two trips per day with one morning trip arriving at 8:30am and one late afternoon trip leaving at 3:45pm. The service is provided between Fruitvale and Red Mountain Resort as shown in the route map on the next page. This service can be accommodated within Kootenay Boundary Transit's existing fleet since it only operates on non-weekdays and therefore does not impact the days of the week where fleet usage is already at its highest.

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<sup>4</sup> <http://www.powderhounds.com/Canada/RedMountain/Getting-There.aspx>





In March 2008, the Kootenay Boundary Transit Service Strategy<sup>5</sup> was completed. Among the potential conventional service improvements identified in this report was service to RMR if there was expansion of the resort. A follow up request from the RDKB for regular service to Red Mountain during the ski season prompted a Red Mountain Transit Service Proposal<sup>6</sup> completed in December 2008. This January 2013 report revisits the option offered in the 2008 proposal. Additionally, it considers the service priorities adopted by the West Kootenay Transit Committee (WKTC) in the West Kootenay Concept Plan (updated August 2012)<sup>7</sup> on September 18<sup>th</sup>, 2012.

## 2.3 Existing Regional Priorities

In 2012, the City of Nelson, the Regional District of Central Kootenay, and the Regional District of Kootenay Boundary agreed to recognize and participate on the WKTC. As part of this regional cooperation, the committee adopted the West Kootenay Concept Plan as their guide for expansion hours secured from the Province. Therefore, any expansion hours required and/or a deviance from the priorities identified in the plan must first be reviewed and recommended by the Committee.

The West Kootenay Concept Plan calls for expansion hours to be prioritized first to regional service improvements (see Appendix A – Short Term Improvements) and providing consistency among the services provided within the region. Within the increased service proposed for Kootenay Boundary was enhanced service on the corridor of Fruitvale to Trail, Trail to Rossland and Trail to Castlegar. As RMR was not identified as a priority in the adopted plan, service to RMR would have to be provided within the existing service hours by

<sup>5</sup> <http://www.bctransit.com/regions/kob/news/bpl/pdf/kob-bpl1065.pdf>

<sup>6</sup> See Appendix B

<sup>7</sup> [http://www.bctransit.com/transitfuture/pdf/wkt\\_WKCP\\_Updated\\_Aug2012.pdf](http://www.bctransit.com/transitfuture/pdf/wkt_WKCP_Updated_Aug2012.pdf)

agreement of the Kootenay Boundary Transit stakeholders or be agreed to by the WKTC as a higher priority to the existing ones identified.

### 3.0 Discussion: Service Options

The review revisited the current validity of the option proposed in the December 2008 draft service proposal titled, Red Mountain Transit Service Proposal. Other options have been taken into consideration in proposing the following service options for review by the WKTC and the Kootenay Boundary Transit stakeholders.

Each option provides preliminary estimated annual impacts on costs, revenue and ridership. Options are based on preliminary 2013/14 Annual Operating Agreement budget figures. Actual costs may vary depending on date of implementation and finalization of operating details.

Each option also provides a sense of the necessary steps to be taken towards an implementation plan. Upon request, BC Transit, will present and discuss the service proposal with the WKTC and/or the Kootenay Boundary Transit stakeholders.

#### **Service Option 1: 2008 Service Proposal – Service Expansion with Community Bus**

Description: This option, originally introduced in the Draft Service Proposal presented in December 2008, focuses on expansion to supplement the existing service provided to the Resort and requires purchase of an additional vehicle (community bus) seating up to 20 passengers. It would:

- build on existing conventional service between Rossland and Trail;
- operate seven days a week including holidays during the months of December through March;
- provide service throughout the day, offering three morning trips, two early afternoon trips, and three late afternoon trips. Schedule times would need to be determined in consultation with stakeholders.

This option focuses on creating a reliable transportation option for resort employees and visitors.

Key Benefits: Significantly improves frequency of service to the resort serving both visitors and employees and leverages efficiencies through connection with existing conventional service. It also improves overall service in the Trail to Rossland corridor for existing transit users.

Disadvantages: Additional annual operating costs as well as additional maintenance costs since this option presumes that the existing Kootenay Boundary fleet will serve as a spare for the system, meaning that the existing fleet will be impacted when this other vehicle requires scheduled and unplanned maintenance. From a capital perspective, this seasonal option is expensive since it requires paying for a full year of lease fees for a vehicle that is only used four months per year.

It should also be noted that expansion funding is likely to be at a premium during the coming years and no guarantees can be made that priority will be given to a seasonal service over other priorities identified in the West Kootenay Concept Plan and other long range transit plans across the province.

**Initial High Level Estimate – Additional Annual Impacts****Option 1: Service Expansion with Community Bus**

Service Hours: 790	Passenger Revenue: \$8,100
Annual Ridership: 8,000	Total Cost: \$121,000
Vehicles Required: 1	Net Local Share of Costs: \$56,900
	Provincial Share of Costs: \$56,000

\* Assumes 10 rides per service hour at an average fare of \$1.02 (from 12/13 budget).

**Service Option 2: Reallocation of Existing Resources**

**Description:** This option focuses on what could be done to improve service to the Red Mountain Resort within the existing available fleet. It would:

- extend the route #6 Rossland from Rossland to RMR on weekdays four times a day during the ski season. Two trips would be provided in the morning to serve employees and skiers as well as two in the late afternoon.
- require the reallocation of hours and rescheduling of other routes for peak commute times during the ski season. This reallocation is necessary since the identified best times to serve the Resort are at times when the rest of service is operating at peak to serve existing passengers.

**Key Benefits:** No additional resources or funding required and serves both employees and users of the resort.

**Disadvantages:** Negatively impacts peak service to regular commuters, such as students, to provide a seasonal service for visitors and seasonal workers. For instance, one of the 6 Rossland afternoon trips (2:25pm) that would be most useful to extend to meet key resort times, is also the trip that currently serves Rossland Senior Secondary students and provides school and work commuter connections when it returns to Trail. Extending the trip to RMR, would mean delaying pick up at the school by 20 – 25 minutes and then delaying or cancelling connecting trips when it returns to Trail.

The other main disadvantage to implementing seasonal service through reallocation of existing service is that it creates inconsistency and therefore inefficiency in the rest of the schedule, particularly at commuter times. In order to build ridership by school and work commuters, it is paramount that the system offer consistent arrive and leave times at peak periods since commuters have less flexibility in their schedules and tend to ride the bus at the same times every day. By reallocating seasonal service at peak times, the system would be forced to choose between either changing commuter schedules during the year (which would cause confusion and ridership loss) or implementing gaps in the schedule during the rest of the year (which would have an operational cost on the rest of the system and may also impact the system's ability to attract and retain drivers).

**Initial High Level Estimate – Additional Annual Impacts****Option 2: Reallocation of Existing Resources**

Service Hours: 0	Passenger Revenue: \$2,250*
Annual Ridership: 1,500*	Total Cost: \$0**
Vehicles Required: 0	Net Local Share of Costs: (\$2,250)* **
	Provincial Share of Costs: \$0**

\* Based on 5 passengers per trip at an average fare of \$1.50. However, does not take into account potential loss of ridership or revenue due to disruption of

regular commute patterns. Ridership loss estimates would be confirmed based on detailed scheduling.

\*\* Depending on the methodology chosen, this option may have a cost or may require further cuts to existing service in order to retain its cost neutral nature. This is because the seasonal service will create gaps in the schedule when it is not operating which in turn impacts non-revenue vehicle and driver shift travel times for the rest of the year.

### **Service Option 3: No Additional Public Transit Service to Red Mountain Resort**

Description: This service option proposes RMR provide shuttle service between Rossland and the Resort, taking advantage of the existing thirteen conventional trips to Rossland. As there is already some shuttle service existing, it may only require a more formal arrangement between the resort and the private providers.

BC Transit could potentially adjust schedules to better accommodate employees and skiers allowing RMR to provide a shuttle which meets the public transit bus. This would also offer RMR the efficiency of not having to provide service all the way to and from Trail.

RMR could take advantage of the existing service to Rossland, and the future prioritization of this corridor service, to offer a shuttle service from Rossland to RMR that meets the public transit schedule. This would achieve all the objectives set out in this report without impacting existing system users. Depending on the outlook for service reliability, there may be an ability to show connecting shuttle trips in the transit system Rider's Guide or through a link on the transit website. Other shared marketing opportunities—as well as integrated fare options—may also be possible.

Key Benefits: Benefits from and aligns with established priorities for expansion of transit corridor service including Rossland. Requires no additional resources or funding for the current transit system and would not likely have negative impact on existing users while still serving employees and users of the resort. Leverages existing service frequency at lowest possible cost to local government and BC Transit funders.

Disadvantages: Requires co-operation with and investment by Red Mountain Resort to provide shuttle service either in-house or by contract which could lead to unreliable service.

#### **Initial High Level Estimate – Additional Annual Impacts**

##### **Option 3: Red Mountain Resorts Provides Shuttle Connection to Existing Service in Rossland**

Service Hours: 0

Annual Ridership: 5,720\*

Vehicles Required: 0

Passenger Revenue: \$8,580\*

Total Cost: \$0

Net Local Share of Costs: (\$8,580)\*

Provincial Share of Costs: \$0

\* Based on 5 passengers per trip at an average fare of \$1.50.

### 3.1 Service Options Conclusions

To best provide the desired service to RMR, Service Option 1 provides the greatest opportunity to grow seasonal ridership without impacting year round commuters or adding additional demand on an aging fleet in a difficult topography. However, this also comes at a significant price to the stakeholders and would require expansion hours that are not currently aligned with the priorities set for the region or provincial initiatives.

While on the surface Option 2 comes with little or no apparent financial implications, it will have an impact on service to a part of the region with less than ideal times or connections. Most likely impacted by this option are Kootenay Boundary Transit's student ridership, an important source of existing ridership and revenue for the system. Also, because this option will either create the need for seasonal schedules at commuter times or service gaps during the September – November and April – June periods, it will negatively impact the efficiency and productivity of the existing system and may require even further cuts to service in order to stay truly cost-neutral.

While BC Transit respects the priorities of our local government partners, BC Transit recommends that Service Option 3 be the priority option to be explored since it impacts existing stated regional priorities and transit system costs the least. This option enables RMR to take advantage of the existing service to Rossland, and the future prioritization of this corridor service, to offer a shuttle service from Rossland to RMR that meets the public transit schedule.

BC Transit would work to adjust schedules as much possible so that both skiers and employees could benefit from the schedule. This would achieve all the objectives set out in this report and still offer RMR the advantage of not having to provide service all the way to and from Trail. There may also be opportunity to co-promote services, share marketing and implement integrated fares or discounts for passengers using the services.

## 4.0 Next Steps

This report is provided for review by the Kootenay Boundary Transit stakeholders and the WKTC. Upon request, BC Transit is happy to present this report to either committee for further discussion on the options.

BC Transit will await direction from either of these committees to pursue potential next steps. The following provides an overview of what those next steps might look like depending on the option selected:

#### **Next Steps if Pursuing Service Option 3 (the recommended option):**

- Both committees receive the report and agree to the recommendation provided by BC Transit
- BC Transit and the RDKB will meet with the RMR to determine the level of interest in providing their own shuttle service
- Providing interest from the RMR, BC Transit will draft an MOU for an implementation committee that would meet to create a detailed implementation plan for the service, including confirming shuttle dates and times of operation, minor scheduling adjustments required for the Kootenay Boundary Transit System, and any proposed marketing or fare structure changes. This implementation plan would be presented to local decision makers for approval.

**Next Steps if Pursuing Service Option 1:**

- Provide BC Transit confirmation from the WKTC that this request is a priority. Following this, the request for expansion hours through the Transit Improvement Program will be made in lieu of other priorities identified in an effort to secure provincial funding.
- Providing the hours are prioritized through the Transit Improvement Program among all the requests throughout the province, the procurement of a vehicle will be required and an Implementation Plan drafted.

**Next Steps if Pursuing Service Option 2:**

- Receive confirmation from the Kootenay Boundary Transit stakeholders of this priority within local service hours.
- An MOU will be drafted confirming the request for more detail on costing and scheduling followed by an implementation plan.

## **5.0 Recommendations**

**It is recommended that the West Kootenay Transit Committee:**

- **Receive this report as information;**
- **Discuss the service options presented, approve the desired option, and direct staff to work with BC Transit toward implementation as outlined in Section 5.0 Next Steps;**
- **Direct staff to work with the Red Mountain Resort staff and BC Transit to further confirm transportation needs and develop supporting transportation demand management strategies.**

## APPENDIX A – SHORT TERM IMPROVEMENTS

West Kootenay Concept Plan, *August 2012* (Vision – Short term Improvements)

Regional Service Improvements:

- First Priority
  - 6 round trips per weekday between Castlegar and Nelson (up from 4 round trips per weekday).
  - 6 round trips per weekday between Trail and Castlegar (up from 5 round trips per weekday)
  - HandyDART improvements with the existing service hours. Where feasible, handyDART will be operated as a separate system, enabling better efficiency and higher vehicle utilization.
- Second Priority
  - 6 round trips per weekday between Slocan City and Slocan Junction (up from 4 round trips per weekday).
  - 2 round trips per weekday between Nelson, Salmo and Fruitvale (up from 1 round trips per week).
- Third Priority
  - 4 round trips per week between Edgewood and Nakusp and Nakusp Hot Springs (up from 1 round trips).
  - 6 round trips per week between Nakusp and Slocan City (2 round trips, 3 days per week).
  - 2 round trips per weekday between Balfour and Kaslo (up from 2 round trips per week).

Urban service improvements include the following:

- 30 minutes service on all 3 routes in Nelson from 6:30 am to 9:00 pm – includes eliminating the combined route 1/3.
- 20% more service in Trail on all routes.
- Daily local service in Kaslo and Nakusp – new routes to be developed.
- Consistency in evening and weekend services



# APPENDIX B – 2008 DRAFT SERVICE PROPOSAL



## Red Mountain Transit Service Proposal (Draft)

December 2008

### Introduction and Background

- BC Transit was requested by the Regional District of Kootenay Boundary and Red Mountain Ventures Ltd. to prepare a transit service proposal for potential expansion of transit service to the Resort for the annual ski season (December to March).
- Currently, a very limited level of service is provided to the Resort during this period. On weekends, statutory and school holidays only, two trips per day are provided as part of the Kootenay Boundary Transit System. In the morning, the first trip leaves from Fruitvale to downtown Trail and Rossland, arriving at Red Mountain at 8.30am. In the afternoon the return trip to Fruitvale leaves the Resort at 3.45pm.
- This memorandum identifies a concept service proposal to address the local and regional concerns for transit service improvement. It should be noted that a Service Review is currently underway in the Kootenay Boundary Regional District. The intent of the review is to develop a transit plan that identifies short, medium and longer term service options for the Kootenay Boundary area that would form the basis for motivating implementation requests over the next number of years. This service proposal needs to be reviewed in that light as it may require adjustment in terms of integration with other transit services and expansion plans, which may affect the projected annual implications.
- The service proposal focuses on three key service requirements:
  - Improving service frequency to the Red Mountain Resort.
  - Accommodating the needs of both employees and visitors to the Resort.
  - Recognizing the need for integration with existing regional transit services in the Kootenay Boundary area.

### Service Description

#### Proposal

- This proposal introduces the expansion of transit service to the Red Mountain Resort from downtown Trail during the annual ski season. It is proposed that this expansion supplements the service that is currently being provided to the Resort. In the short term, service is to be provided with a Community/handyDART minibus which can seat up to 20 passengers.
- During this four month period it is proposed that service is provided seven days a week, including holidays.
- It is proposed that three groups of trips are provided on a daily basis (see illustrative schedule below):
  - 3 morning trips,
  - 2 early afternoon trips, and;
  - 3 later afternoon trips.
- For each of these groups of trips, the intent is for service to start and terminate in Trail. Other trips would simply operate as a shuttle service between Rossland and the Resort.



### Key Markets Served

- Employees and visitors (both local and regional).

#### Key Benefits

- Improved frequency to the Resort.
- Providing a viable alternative transportation option.
- Improved ridership and transit awareness.

#### Illustrative Schedule

8 Red Mountain Ski Bus							
Daily Service (December 1 to March 31)							
Lv Downtown Trail	Ar Rossland	Lv Rossland	Ar Red Mountain	Lv. Red Mountain	Ar Rossland	Lv Rossland	Ar Downtown Trail
Morning Service							
710	725	730	740	745	755	-	-
-	-	815	825	830	840	-	-
-	-	900	910	915	925	930	950
Early Afternoon Service							
1200	1215	1220	1230	1235	1245	-	-
-	-	1300	1310	1315	1325	1330	1350
Late Afternoon Service							
1500	1515	1520	1530	1535	1545	-	-
-	-	1600	1610	1615	1625	-	-
-	-	1645	1655	1700	1710	1715	1735

## Annual Implications

<b>Red Mountain Ski Bus: Increased service frequency (December 1 to March 31)</b>	
<b>Service Impact</b>	
Additional Service Hours	790
Additional Vehicles Required*	1
Projected Additional Ridership**	7,900
<b>Financial Impact</b>	
Total Cost	\$64,100
Revenue***	\$11,800
Total Cost, less Revenue	\$52,300
<b>Traditional Funding Impact</b>	
Net Local Share****	\$22,400
Provincial Share	\$30,000
<b>Notes</b>	
*	Assuming a community bus to provide this service
**	Assuming 10 rides per hour
***	Based on an <b>average</b> fare of \$1.50
****	The Local Share of costs could be cost shared between the Regional District and Red Mountain Resort via a Community Transit Partnership Agreement (CTPA)