

Kimberley Transit System (KTS)

Service Review – Report



City of Kimberley



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EXECUTIVE SUMMARY

The City of Kimberley asked BC Transit to review the Kimberley Transit System prior to implementing up to 1,100 hours of service to Cranbrook. The goal of this review was to determine how those hours would best be utilized in addition to concluding if the system is operating efficiently in its current form.

Through an extensive process, including feedback from public surveys, the transit operating company, the City of Kimberley as well as other stakeholders, it was determined that the current local door-to-door service was effectively delivering service and meeting the needs of its riders.

Key themes heard throughout the consultation process included the following:

- Drivers are friendly and welcoming
- The current system works reasonably well
- High demand for service to Cranbrook
- Demand for local fixed-route service
- Some demand for local evening and weekend service

Service to Cranbrook, including commuter service, came out on top with twice the demand of the second most popular request, which was for local fixed-route service.

This report recommends that the City of Kimberley approve one of the following two options:

Wednesday Service to Cranbrook - Option 1A

- 350 annual hours
- Estimated additional ridership of 1,300
- Annual local net cost of \$4,000

Providing an additional day of service on Wednesday would provide a more robust service to Cranbrook without large costs being associated with it. The feedback received suggests this day would be well utilized and would integrate well between the current Tuesday and Thursday trips.

Weekday Commuter Service to Cranbrook – Option 2

- 1,100 annual hours
- Estimated additional ridership of 4,600
- Annual local net cost of \$12,000

This option would satisfy the most popular service change option, which was for additional service to Cranbrook. This would meet the needs of commuters by providing service five days a week at times suitable for typical work schedules, as well as providing casual riders with the flexibility to ride any day of the week. Commuter service comes with the highest price tag – however, it meets the needs of many of those surveyed. *It should be noted in order for this option to function as intended, BC Transit will need to work with IHA to adjust the timing and scheduling of the current trips.*

BC Transit looks forward to working with the City of Kimberley to discuss these options and is keen to implement the expansion option that best suits the needs of its community.

1.0 INTRODUCTION

In collaboration with the City of Kimberley, BC Transit has undertaken this report to examine the existing Kimberley Transit System service and markets, and outlines potential service change options for consideration.

Through BC Transit's Transit Improvement Program (TIP), which allocates available provincial transit expansion funding between transit systems, the Kimberley Transit System has been allocated up to 1,100 expansion hours for implementation in the 2012-13 fiscal year. This means that depending on the availability of local government funding to contribute to the local share portion of costs, up to 1,100 hours of extra service may be implemented, with the proviso that service changes are put into effect by March 31, 2013.

Therefore, the main objective of this report has been to investigate service change options where additional hours might be utilized most effectively. Included in this report are approximate cost estimates for each service change option provided.

The proposed service change options are based on discussions held with the following:

- The City of Kimberley
- Interior Health Authority staff
- Community groups:
 - Summit Community Services – Seniors' Program
 - Kimberley Chamber of Commerce
 - College of the Rockies – Cranbrook campus
- Kimberley Community Transportation (operating company) staff

The proposals also reference the City of Kimberley's Official Community Plan (July 2005) and data collected from:

- a resident survey (July-August 2012)
- operating company ride booking records
- operating company monthly ridership counts

Summaries of this data are presented in the body of the report, with full results included in the appendices.

The report focuses on the Kimberley Transit System's local service as well as the Health Connections service to Cranbrook, as the City of Kimberley has indicated that the extra service hours available for allocation are to be considered for one or other of these services, or both. The report does not extend to examining the winter ski shuttle service.

2.0 BACKGROUND TO PRESENT SERVICE

2.1 Implementation History

2.1.1 Local Service

The local service of the Kimberley Transit System (KTS) was implemented in January 1982 and is operated by Kimberley Community Transportation. It offers door-to-door, on-request service within Kimberley and Marysville using two 20-passenger minibuses. Passengers are required to call the dispatch office (located at the Kimberley Health Centre) 24 hours in advance to book a trip. The service operates between 8:00 a.m. and 4:30 p.m. Monday through Friday, although the 8:00-9:00 a.m. period is

funded by the school district and is used for transporting special-needs students only to school. One vehicle operates 8:00 a.m. to 3:30 p.m., and the second vehicle operates 9:00 a.m. to 4:30 p.m. The vehicles are lift-equipped to accommodate wheelchair passengers.

2.1.2 Health Connections Service to Cranbrook

A feasibility study was completed in November 2004 investigating the viability of connector transit service between Kimberley and Cranbrook. The feasibility study report proposed three options:

1. Moderate: Three service days per week, two round trips per day
2. Moderately Enhanced: Six service days per week, two round trips per day
3. Significantly Enhanced: Option A: Six service days per week, three round trips per day
Option B: Six service days per week, four round trips per day

Following this study, the Interior Health Authority and BC Transit implemented a Health Connections service to Cranbrook, also operated by Kimberley Community Transportation, as part of the Ministry of Health Services' Rural Medical Access Program. As an equivalent to Option 1. above, the service operates three round trips per day, two days per week (Tuesdays and Thursdays), using one 20-passenger minibus that is lift-equipped to accommodate wheelchair passengers. Appendix B shows the trip schedule.

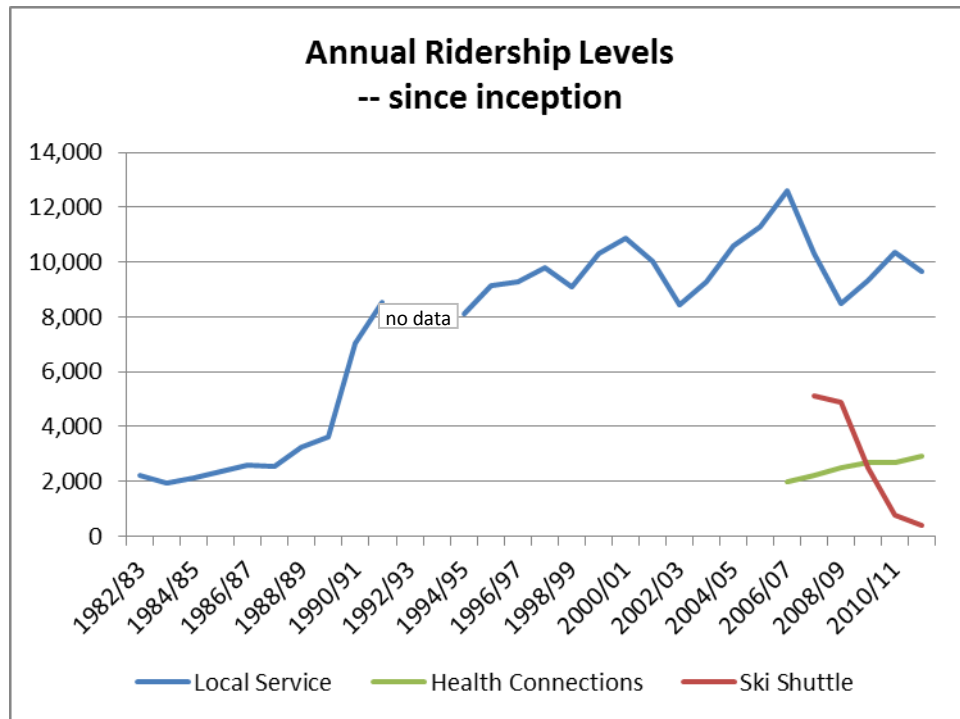
The service is funded 100% by the Interior Health Authority, by way of a Community Transit Partnership Agreement with the Kootenay East Regional Hospital District. Passengers are required to call 24 hours in advance to book a trip. Priority is given to passengers travelling for medical appointments, but anyone is eligible to use the service if space is available.

2.1.3 Ski Shuttle Service

A ski shuttle service was in operation for several years prior to 2007, operated by Kimberley's Chamber of Commerce. As of the 2007 winter season, BC Transit began supporting it, in the form of allowing its vehicles operating the local service to also service the ski hill. The ski shuttle operates currently as an informal partnership between the City of Kimberley and various local businesses with an interest in the tourism trade, including accommodation providers, and other local service providers such as retail shops and food & beverage businesses. Its main funding sources are the City of Kimberley, Tourism Kimberley and The Resorts of the Canadian Rockies (ski resort owner/operator).

2.2 Historical Ridership Data

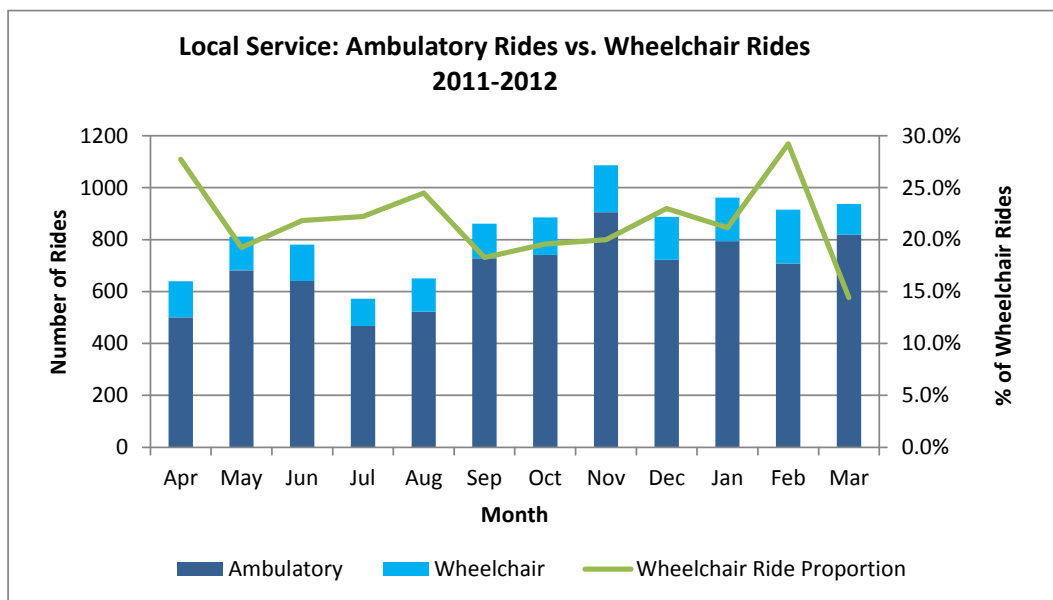
Appendix A shows the KTS's annual ridership levels since inception for the local service and the Health Connections service, as well as for the ski shuttle service. The chart below and the analysis following summarize the data:



- Local service:
 - Between inception and the 2011/2012 fiscal year, ridership grew by 336% overall.
 - Between 2007/2008 and 2011/2012, ridership dipped quite noticeably, although 2010/2011 ridership showed a recovery to 2007/2008 levels.
 - Ridership in 2011/2012 showed a slight (7%) decrease compared to that of the previous year.
 - It should be noted that current partial-year rides data, not included in the chart above, shows ridership for the first six months of 2012/2013 as 18% higher than that for the first six months of 2011/2012.
- Health Connections service to Cranbrook:
 - Health Connections ridership showed incremental increases between inception in 2006/2007 and 2011/2012.
 - These increases were relatively slight, compared to ridership increases on the local service, but steady.
 - 2011/12 ridership showed a 47% increase over 2006/2007's.
 - Health Connections ridership in 2011/12 comprised approximately one third of the local service's ridership in the same year.
 - Current partial-year rides data shows first- and second-quarter ridership as 3% down from the same period in 2011/2012.
- Ski shuttle service:
 - Ski Shuttle ridership showed a slight decrease between 2007/2008 and 2008/2009.
 - This decrease became pronounced in the three following years up to 2011/2012. Ridership decreased by
 - 49% between 2008/2009 and 2009/2010,
 - 70% between 2009/2010 and 2010/2011, and
 - 50% between 2010/2011 and 2011/2012.
 - Between 2007/2008 and 2011/2012, ridership decreased by 93% overall.

Operating company staff attribute this downturn in ridership to a decline in ski tourism in the area. Another factor could be the large amount of recent property development on the ski hill, resulting in the majority of visitors staying in vacation properties on the ski hill itself rather than in town, and thus remaining on the ski hill for the duration of their stay.

One other factor of note regarding ridership on Kimberley’s local service is the proportion of wheelchair users relative to ambulatory passengers, expressed for 2011-12 ridership figures in the following chart:



As the chart shows, the proportion of wheelchair rides accounted for up to 29% of total rides in 2011-2012, which is representative of other ridership years. This factor needs to be borne in mind when considering potential service changes to the KTS.

2.3 Other Performance Indicators

2.3.1 Local Service

The table below shows performance indicators for the local service portion of the Kimberley Transit System (KTS) and other similar systems based on service type, i.e. demand-responsive, or “custom”, service.

2011/12 Information and Performance Summary

Transit System	Annual Statistics					Annual Financials				Annual Performance				
	Licensed Vehicles ¹	Scheduled Revenue Hours ²	Extra Revenue Hours ²	Total Revenue Hours ²	Total Passengers	Total Revenue (\$) ³	Total Oper Costs (\$)	Local Contri Op Costs (\$)	Total Costs (\$)	Rides /Hour	Cost Recovery	Total Cost/ Ride	Total Cost/ Hour	Operating Costs/ Hour
Tier 3 - Custom: Average	3	3,562	23	3,584	10,249	21,346	251,645	85,543	316,291	2.8	5.4%	\$33.90	\$90.80	\$72.23
Fort St. John *	4	6,099	23	6,121	22,582	45,471	376,525	132,951	487,562	3.7	9.3%	\$21.59	\$79.65	\$61.51
Prince Rupert	1	1,764	0	1,764	6,778	7,289	96,847	32,260	143,981	3.6	5.1%	\$21.24	\$80.87	\$54.15
Terrace Regional *	2	1,832	0	1,832	7,242	13,988	146,694	48,864	191,472	3.6	7.3%	\$26.44	\$101.13	\$76.68
Alberni - Clayoquot	4	5,366	3	5,369	18,972	37,444	422,135	140,613	511,049	3.5	7.3%	\$26.94	\$94.69	\$78.13
Kimberley	2.5**	3,528	0	3,528	9,991	29,973	192,473	73,737	229,567	2.8	13.1%	\$22.98	\$65.07	\$54.56
Squamish *	2	1,856	178	2,034	5,160	8,551	236,109	78,690	296,290	2.5	2.9%	\$57.42	\$145.24	\$115.65
Sunshine Coast * ▲	4	3,325	18	3,343	8,149	16,463	260,658	86,825	331,546	2.4	5.0%	\$40.69	\$99.17	\$77.97
Kootenay Boundary *	2	2,439	0	2,439	5,286	10,999	207,276	69,044	207,496	2.1	5.3%	\$39.25	\$84.33	\$84.24
Cowichan Valley	4	5,742	5	5,747	11,651	25,110	373,531	124,423	499,429	2.0	5.0%	\$42.87	\$86.91	\$65.00
Cranbrook	3	3,669	0	3,669	6,679	18,177	204,204	68,020	264,515	1.6	6.9%	\$39.60	\$70.90	\$54.46

* Custom portion only of systems that also have conventional transit.

▲ Municipally-run transit system. Information above only reflects those costs included in the Annual Operating Agreement.

** Includes 0.5 of a spare, shared between Kimberley local service and the Health Connections service to Cranbrook

¹ Includes in-service and spare vehicles

² Excludes deadhead hours

³ Includes advertising revenue

Comparing the KTS's above performance indicators for its local service with those of similar-type systems, the KTS performs fairly well:

- The KTS's scheduled and total revenue hours are about average within its comparison group.
- Its total number of passengers carried is about average within the comparison group.
- Its total revenue is higher than average and is the third highest within the comparison group.
- Its total operating costs, local contribution towards operating costs, and total costs are lower than average.
- Its rides-per-hour ratio, 2.8 rides per hour, is the average value for the group.
- Its cost recovery, at 13.1%, is more than double the average, and is the highest cost recovery within the comparison group.
- Its total cost per ride, total cost per hour, and operating cost per hour are all approximately two-thirds of the average. Its total cost per ride and operating cost per hour are the third lowest within the comparison group, and its total cost per hour is the lowest.
- In summary, the information and performance summary indicates that the KTS carries a similar number of passengers, at a similar productivity rate, as the comparison group systems, yet with a lower cost, higher revenue, and a far higher cost recovery.

2.3.2 Health Connections Service to Cranbrook

While comparison of the KTS's Health Connections service to Cranbrook with other systems' Health Connections services would be invalid, due to wide variations in the number of communities served and distances travelled by individual Health Connections services, the following tables provide a snapshot of the KTS's Health Connections service. Data was gathered for 28 service days, i.e. two 7-week periods: one in November–December 2011, and the second in March–April 2012. The tables include the following:

- average daily rides (number of passengers) by trip time
- rides distribution (percentage of passengers) by trip time

Overall statistics are given, followed by a breakdown showing statistics for trips to Cranbrook separately from those for trips to Kimberley.

Health Connections Ridership Data: November - December 2011 and March - April 2012

Overall

Average daily rides

	Daily avg.	Avg. Daily Rides by Trip Time		
		0830 & 1000	1100 & 1300	1415 & 1500
Nov-Dec 2011	32	9.5	13.2	9.5
Mar-Apr 2012	28	7.4	12.1	8.5
Overall	30	8.4	12.6	9.0

	Daily avg.	Rides Distribution by Trip Time		
		0830 & 1000	1100 & 1300	1415 & 1500
Nov-Dec 2011	32	30%	41%	29%
Mar-Apr 2012	28	26%	43%	30%
Overall	30	28%	42%	30%

To Cranbrook

Average daily rides

	Daily avg.	Avg. Daily Rides by Trip Time		
		0830	1100	1415
Nov-Dec 2011	17	7.6	7.1	2.4
Mar-Apr 2012	15	5.3	6.5	2.8
Overall	16	6.4	6.8	2.6

	Daily avg.	Rides Distribution by Trip Time		
		0830	1100	1415
Nov-Dec 2011	17	45%	41%	14%
Mar-Apr 2012	15	37%	44%	19%
Overall	16	41%	43%	17%

To Kimberley

Average daily rides

	Daily avg.	Avg. Daily Rides by Trip Time		
		1000	1300	1500
Nov-Dec 2011	15	1.9	6.1	7.1
Mar-Apr 2012	13	2.1	5.7	5.7
Overall	14	2.0	5.9	6.4

	Daily avg.	Rides Distribution by Trip Time		
		1000	1300	1500
Nov-Dec 2011	15	13%	40%	47%
Mar-Apr 2012	13	15%	42%	43%
Overall	14	14%	41%	45%

The above data, while only providing a 28-day “snapshot” of the service, shows the following:

- The average ridership on this service was reasonable, at around 30 rides, i.e. 15 round-trip passengers, per day.
- The most popular trips were the 11:00 a.m. departure to Cranbrook and the 1:00 p.m. return to Kimberley, with ridership on the earlier morning and later afternoon trips averaging to be about even with each other. In general, ridership was spread relatively evenly across all trips.
- Of the trips to Cranbrook, the 8:30 a.m. and 11:00 a.m. trips were the most popular, and of the trips to Kimberley, the 1:00 p.m. and 3:00 p.m. trips were the most popular. This reflects the fact that the service is based, and originates, in Kimberley and is used mainly by Kimberley and Marysville residents.
- While relatively low, there was travel flow on the first trip of the morning from Cranbrook to Kimberley and on the last trip of the afternoon in the reverse direction, indicating travel to Kimberley by Cranbrook residents. The operator has reported that some of this demand comprises people travelling to Kimberley for medical appointments: newcomer residents in Cranbrook, unable to register with doctors there due to lack of availability, have registered instead with doctors in Kimberley where there is capacity.

2.4 Background to Present Service: Conclusions

- KTS local service:
 - Ridership has increased very significantly since service was implemented, and despite recent dips is currently experiencing another upturn. The KTS performs fairly well against peer systems: while its ridership is about average, the KTS is more cost-effective and generates more revenue.
- KTS Health Connections service to Cranbrook:

- Health Connections ridership has experienced gradual growth since the system was first implemented, although current indicators suggest that this growth may be temporarily halted or slightly reversing. The majority of passengers reside in Kimberley and Marysville but there is a small market for Cranbrook residents as well.
- KTS ski shuttle service:
 - Ridership has fallen drastically during the past five years, likely due to a combination of a decrease in ski tourism, and an increase in development creating a large supply of vacation properties on and close to the ski hill.

3.0 PRESENT SERVICE: MARKET ANALYSIS

From anecdotal information gathered from the operating company, as well as from observations during a May 2012 site visit, it appears that the overwhelming majority of the KTS's ridership comprises seniors, as well as people with disabilities. Area maps illustrating sampled passenger origin and destination data and ridership summaries are shown in Appendix C.

3.1 Local Service

Ridership data was gathered over two 2-week periods (i.e. 20 service days), one period in December 2011 and one period in April 2012. The data was collated and is illustrated in a passenger origin/destination data map and ridership summary charts in Appendix C.

To briefly summarize the results, during the sample periods The Pines special care home, Kimbrook and Kimbrook Manor, the swimming pool, Kimberley Health Centre, and Garden View Village retirement home were the top five trip generators. Ridership was 16% higher during the December sample period as compared to the April sample period, reflecting historical seasonal ridership patterns in Kimberley. Wheelchair rides during the two sample periods were relatively low compared to 2011-2012's monthly average of 21%. In terms of ridership by time period, in both sample periods the busiest time of day was the "midday" period of 10:30 a.m. to 2:00 p.m. The 2:00 to 4:00 p.m. time period was the least busy in both samples.

3.2 Health Connections Service to Cranbrook

Appendix B shows the KTS's current schedules for the Health Connections service to Cranbrook. Appendix C shows a passenger origin/destination map and ridership summary charts for ridership data gathered over two 7-week periods (i.e. 28 service days), one period in November-December 2011 and one period in March-April 2012.

In brief, the major trip generators during the sample periods were Safeway, Tamarack Mall and Wal-Mart in Cranbrook, and Kimbrook and Kimbrook Manor in Kimberley. As with the local service sampling, ridership on the Health Connections service was higher during the winter sample period than during the late spring sample period, by 14%. Again, this reflects historical seasonal ridership patterns in Kimberley. Wheelchair rides accounted for 10% of total rides during the sample periods. As to be expected, the busiest trips to Cranbrook were the two morning trips, and the busiest trips returning to Kimberley were the two afternoon trips, reflecting the fact that the majority of Health Connections service users are residents of Kimberley and Marysville rather than Cranbrook residents.

3.3 Present Service and Market Analysis: Conclusions

The area maps in Appendix C show the very large number of locations in Kimberley and Marysville served not just by the local service but also by the Health Connections service to Cranbrook and demonstrate the wide passenger catchment area.

Due to the number of fragmented locations and the scattered nature of the ridership, there is no clear pattern that could be developed into a fixed-route type of local service or used to restrict Health Connections pick-up and drop-off locations locally. It should also be borne in mind that the majority of the KTS's present ridership have mobility issues and rely on the existing door-to-door service. While the idea of door-to-door service for the mobility-challenged and fixed pick-up and drop-off locations for the able-bodied has been raised, such a service design would not be feasible in Kimberley.

Together with anecdotal data and site-visit observations to the effect that the vast majority of current passengers have mobility impairments, the trip origin and destination data indicates that the current demand-responsive service type is indeed the most appropriate for the KTS in terms of being able to serve the local population, especially its members who are the most socially vulnerable.

4.0 VEHICLE FLEET AND INFRASTRUCTURE REVIEW

3.1 Vehicle Fleet Review

The current fleet consists of four Ford Polar minibuses seating twenty passengers and equipped with a wheelchair lift. One wheelchair occupies four seated spaces, so total passenger capacity varies depending on the number of wheelchairs carried. Maintenance and servicing are performed at Equicare Mechanical Services, located at 765 Knighton Road, Kimberley.

There are three in-service vehicles for the KTS (two for local service, one for the Health Connections service to Cranbrook), and one spare vehicle.

The current vehicle type is appropriate for the service in terms of capacity. However, in order to better serve the aging population, eventual replacement with similar-sized low-floor buses is recommended. BC Transit has recently acquired a new low-floor vehicle type, the ARBOC (shown below), with similar passenger capacity to the current fleet of Polars. Rather than a lift, this vehicle uses a ramp, deployable not just for wheelchairs but also for walkers and canes, for the added benefit of passengers using mobility aids.



The KTS's current vehicle years and recommended replacement dates are as follows:

	Local service vehicle	Local service vehicle	Health Connections vehicle	Spare vehicle
Vehicle number:	2160	2171	B012	B037
Year:	2008	2008	2005	2006
Replacement date:	2013	2013	2012	2011

It should be noted here that two vehicles are due for replacement this fiscal year, and two in the next fiscal year. One current vehicle was purchased using PTIP (Provincial Transit Infrastructure Program) funding and was thus obtained at no cost. In addition, the new vehicle type is more expensive than the current Ford Polar type. In consequence, vehicle replacement will incur increased lease fees, which may result in a considerable financial burden to the municipality. Estimated costs are shown below:

Estimated vehicle costs*:

Number of vehicles:	4	Local Share	BC Transit Share	Est IHA Share
Total annual lease fee for 4 vehicles:	\$225,600	\$67,026	\$139,173	\$19,401.60

* Based on 2014/15 projections in which PTIP funding has expired and vehicles have been replaced.

The operator has reported some recent issues with vehicle reliability due to mechanical issues. This has been attributed to the age of the vehicles and their mileage. The issues have not yet been severe enough to negatively impact service. These issues should disappear as the new fleet is introduced.

4.2 Infrastructure Review

The KTS does not use a depot facility. Two vehicles are stored at individual drivers' homes, and the remaining two are housed at Equicare Mechanical.

The KTS has only one bus stop currently, located outside Shoppers Drug Mart on Ross Street in Kimberley's downtown core.

While bus stop signs can increase the visibility of a transit system and thus serve as a form of public information in areas where people are used to public transit, it is debatable whether placing additional bus stop signs in a more rural area such as Kimberley would serve this purpose, especially given that the KTS is currently demand-responsive and does not make scheduled stops in specific locations.

Further, in order to avoid confusion for any potential riders, the bus stop signs on Ross Street could be removed, to avoid giving the impression that buses make scheduled stops there and in order to have consistency throughout the transit service area. With, on average, fewer than 0.5 passengers a day requesting a ride from or to this location, this stop is not a main passenger origin or destination (for comparison purposes, the Health Centre averages 2.5 pick-ups or drop-offs daily.) Alternatively, the signs could be replaced by flag signs indicating that people can call ahead 24 hours in advance to book a pick up at this stop.

5.0 SERVICE RELIABILITY AND OPERATING ISSUES

In general, the KTS appears to be operating well, especially for regular riders making trips up to the mid-afternoon period. However, as it is a shared service with the Interior Health Authority, the dispatch office closes at 3:30 p.m., which can pose problems for passengers wanting to make or change travel plans after that time.

There have been reports of the Health Connections service to Cranbrook running consistently late, due to the number of pick-ups and drop-offs, and the amount of passenger assistance needed for boarding, alighting, and loading parcels, required in a short time window. This was confirmed during on-site visits by BC Transit staff in May 2012. Possible solutions to this are presented under *Service Change Options*, Section 8.0. In addition, due to issues with the assigned gas station in Cranbrook, the Health Connections vehicle is refuelled in Marysville instead, with two minor scheduling adjustments that take this into account (shown in Appendix B). This system seems to be working well, and if the Health Connections system remains unaltered by the Interior Health Authority, it is suggested that these adjusted trip times be reflected in the next KTS Health Connections Riders' Guide.

One community group and two resident survey respondents reported instances of the bus not showing up at its scheduled time ("bus no shows"), and calls to the dispatch office going unanswered or voicemail messages requesting a callback for a trip booking not being responded to. While this doesn't appear at this stage to be a chronic problem, customer service failures such as these have a negative impact on ridership, both in the short and longer term. As a precautionary measure, the situation could be monitored by periodic online customer service surveys through the City of Kimberley and BC Transit.

6.0 COMMUNITY PROFILE

6.1 Population

As at the 2011 census, Kimberley's population was 6,652, showing an 8.4% increase from 2006 census figures and a net increase of 2.6% from 2001 census figures.

Seniors and low-income families are two major markets for public transit in North America. 20% of Kimberley's population were seniors aged 65 or older. While the median total employment income was 11% lower than the BC average, the proportion of low-income families in Kimberley is around 3% lower than the BC average.

City of Kimberley staff indicated that the Kimberley area is a retirement community, but also recently home to an increasing number of young families. The main employers are reportedly the City, the school district, Kimberley Alpine Resort (whose staff seems to be comprised of a higher number of permanent residents than seasonal workers, compared to other British Columbia resort communities), as well as three local golf courses.

6.2 Development

Two of the City of Kimberley's objectives for transportation and parking in its most recent Official Community Plan (OCP) (2005) focus on decreasing single-occupancy vehicles within the community, and between Kimberley and other communities:

- Encourage carpooling and decrease single-occupant vehicles travelling between Kimberley and Cranbrook
- Encourage the continued development of shuttle bus services

Strategies mentioned include encouraging alternative modes of transportation for the community and visitors, resulting in reduced traffic and less demand for commercial parking. The OCP also looked at providing public transportation both regionally and locally, with key destinations such as East Kootenay Regional Hospital and between Marysville, Downtown and Kimberley Alpine Resort.

Kimberley has experienced a significant amount of residential development since 1999, including over 620 new dwelling units (86% of which are moderate-density, multi-unit buildings) in the alpine resort area, over 120 in the Forest Crowne subdivision (a low-density, single-family neighbourhood) located along the highway between Kimberley and Marysville, and additional units constructed as infill development in

existing neighbourhoods. Additional units are proposed in the alpine resort area and Forest Crowne. New development areas have been started, or are proposed, in other areas of the community, including lands adjacent to the Kimberley Riverside Campground, the Taylor's Mill development lands, Sullivan Landing, and pockets of infill development in Marysville and the Rotary Drive area south of downtown Kimberley.

6.3 Commuting Profile

The following table shows Kimberley's commuting flow for the employed labour force aged 15 years and older:

**Commuting Flow for the Employed Labour Force 15 Years and Over
(Flows Greater than or Equal to 20)**

Place of residence / Place of work	Count	%
Kimberley (CY) / Kimberley (CY)	1190	39.2%
Kimberley (CY) / Cranbrook (CY)	600	19.8%
Kimberley (CY) / East Kootenay E (RDA)	115	3.8%
Kimberley (CY) / East Kootenay C (RDA)	75	2.5%
Kimberley (CY) / Canal Flats (VL)	45	1.5%
Kimberley (CY) / East Kootenay F (RDA)	30	1.0%
Kimberley (CY) / Vancouver (CY)	25	0.8%
Kimberley (CY) / Calgary (CY)	25	0.8%
No fixed workplace:	520	17.1%
Work at home:	275	9.1%
[Flows less than 20*]	[135]	[4.4%]
Employed Labour Force, 15+ Yrs:	3,035	100.0%

Sources: Statistics Canada & BC Stats - 2006 Census (2011 Census stats n/a)

* BC Transit assumption

The table shows that:

- Kimberley's main commuting flow (39%) is internal, i.e. within Kimberley itself
- Kimberley's second-highest commuting flow, at 20% approximately half as much as its internal flow, is to Cranbrook
- Its third-highest commuting flow, at 17%, comprises workers with no fixed workplace

Kimberley residents' method of commuting to work is shown in the table below:

**Mode of Transportation, % distribution
-- based on population with usual or no fixed workplace**

	Count	%
Automobile, as driver	2015	73.1%
Automobile, as passenger	320	11.6%
Walk	305	11.1%
Bicycle	50	1.8%
Public transit	10	0.4%
Motorcycle	0	0.0%
Taxi	0	0.0%
Other	55	2.0%
Total	2755	100.0%

Source: BC Stats - 2006 Census (2011 Census stats n/a)

The table shows that:

- The vast majority of employed Kimberley residents (85%) commute by automobile
- 0.4% of Kimberley commuters take public transit

The extremely low proportion of commuting by public transit is highly understandable given Kimberley's size, its rural quality, its highway location, and the present nature of the transit system. Additionally, commuting by public transit becomes a more popular choice for distances of greater than ten kilometres.

6.4 Conclusions

If the Kimberley area population continues to grow, it is possible that demand for public transit may increase, especially if there are new residents representing the traditional "elderly" or "low-income" transit ridership categories. This population could be served efficiently by the KTS if it were located in high-density infill development areas. While the Kimberley area's main commuting flow is internal, its relatively high commuting flow to Cranbrook would potentially be a source of new ridership if commuter service to Cranbrook were introduced (see 8.0 *Service Change Options* below). However, given the competitive convenience of commuting by automobile, Kimberley's rural nature, and its highway location, ridership expectations for such a commuter service would be conservative.

7.0 CONSULTATION AND FEEDBACK

Recommendations for improving the KTS were solicited from various sources, as outlined in Section 1.0. Appendix D details the public consultation methodologies used.

It should be noted that there was no strong consensus on desired changes across the different public consultation methodologies used. This lack of clear consensus presents a challenge to service change planning, in terms of being able to respond effectively to public input and satisfy a majority of residents' needs and desires and therefore garner more ridership for the system.

Stakeholder Priorities - The requests from some official stakeholders included the following:

- 1) Local service
 - Investigating the potential for
 - o Fixed and/or flexible routing, within the current service area and to new destinations such as the conference centre, campground and golf courses
 - o Introducing evening and/or weekend service
- 2) Cranbrook service
 - Consideration given to
 - o Adding more Health Connections-type service, or introducing commuter service
 - o Introducing service to the airport
 - o Eliminating the pre-booking requirement for trips
- 3) The KTS in general:
 - o Improving public information that service is available

It should be noted here that one other stakeholder, the operator, viewed the service suggestions under 1) and 2) as unfeasible.

Resident Survey Priorities - The most frequent responses from the resident survey, conducted in July and August 2012, were as follows:

- The service is good the way it is/I appreciate the service/The drivers are wonderful (9%)
- Request for service to Cranbrook more than the current two days per week (8%)
- Request for fixed-route service within Kimberley and Marysville (7%)
- Request for commuter service to Cranbrook (7%)
- "Other" comments (those made by a single respondent in each instance) (6%)

In addition to indicating current users' satisfaction with the current service, the survey responses also revealed an extremely high correlation between current KTS users (survey Question 9), lack of a vehicle in the household (Question 12), the need for door-to-door transportation due to a disability (Question 10),

and the use of mobility aids (Question 11). These survey responses match characteristics of the system noted during on-site observations by BC Transit staff and anecdotal information from the operator.

The following service proposals take into account, where and as practicable, the above responses from official stakeholders and from the resident survey. As stated above, the lack of strong consensus means that predictions on their level of success are relatively difficult to determine.

8.0 SERVICE CHANGE OPTIONS

This section presents a list of transit service change options that are judged to best meet the needs of both current and potential users of the KTS, based on stakeholder and survey respondent feedback, while also having the potential to generate sufficient ridership to make the service option relatively viable.

Options requested for consideration by the City that, following investigation, are not recommended are also discussed under Section 8.2 below.

Through BC Transit's Transit Improvement Program (TIP) which allocates available provincial transit expansion funding between transit systems, the KTS has been allocated up to 1,100 expansion hours for implementation in the 2012-13 fiscal year. This means that depending on the availability of local government funding to contribute to the local share portion of costs, up to 1,100 hours of extra service may be implemented, with the proviso that service changes are put into effect by March 31, 2013.

Once local government has approved a service option for implementation—and local and provincial funding has been approved for the year—an Implementation Agreement Memorandum of Understanding (MOU) will be developed for signature by the City of Kimberley and BC Transit. This MOU will outline the exact service changes to be developed for implementation, and the timelines for this.

In order to give estimated service hours, ridership, revenue, and costing projections, various underlying assumptions have been made. Cost, revenue and ridership projections are based on existing 2012/13 Annual Operating Agreement budget figures, and actual costs and impacts may vary depending on finalization of service and operating details.

“Additional ridership” is projected ridership over and above current ridership, and is defined as additional rides per day: for example, one round-trip passenger per day equals two rides per day.

As noted in Section 4.0, *Fleet and Infrastructure Review*, new vehicle purchases to replace the KTS's aging fleet may increase the local share of costs quite significantly.

8.1 Service Change Options

Service Option 1A: Wednesday Service to Cranbrook

Description:	This option would add one additional day of service (constituting three round-trips) to the existing Cranbrook service, which currently operates three round-trips per day on Tuesdays and Thursdays. Wednesdays are suggested as perhaps the most logical choice.
Key Benefit:	The additional service day would give local residents more opportunities for medical appointments and shopping in Cranbrook, as well as alleviate the issue of consistently late trips mentioned in Section 5, <i>Service Reliability and Operating Issues</i> , above.

- Public Consultation Tie-In: - Enhanced daytime service to Cranbrook was an option requested for consideration by the City.
- Additional service to Cranbrook was mentioned as being the top priority by the operating company.
 - The most frequent request from the resident survey for additional service (although constituting only 8% of respondents) was for service to Cranbrook more than two days per week.

Note: As a service in addition to the IHA-funded Health Connections service, operating costs would be carried by BC Transit and the City of Kimberley.

Summary Table:

Summary Information for		Option 1A: Wednesday Service to Cranbrook	
<i>Annual Impact:</i>			
Additional Service Hours:	350	Additional Revenue:	\$3,000
Additional Vehicles Required:	0	Additional Operating Cost:	\$20,000
Additional Ridership:	1,300	Additional Net Municipal Share:	\$4,000
		Additional BC Transit Share:	\$13,000

Service Option 1B: Monday & Friday Service to Cranbrook

Description: This option would add two additional service days of three round-trips each to the existing Cranbrook service. In this scenario, Mondays and Fridays are recommended.

Key Benefit: (same as for Option A above)

Public Consultation Tie-In: (same as for Option A above)

Note: (same as for Option A above)

Summary Table:

Summary Information for		Option 1B: Monday & Friday Service to Cranbrook	
<i>Annual Impact:</i>			
Additional Service Hours:	700	Additional Revenue:	\$6,000
Additional Vehicles Required:	0	Additional Operating Cost:	\$41,000
Additional Ridership:	2,400	Additional Net Municipal Share:	\$10,000
		Additional BC Transit Share:	\$25,000

Service Option 1C: Monday, Wednesday & Friday Service to Cranbrook

Description: This option would add three additional service days of three-round trips each to the current Cranbrook service. The suggested days would result in full weekday service to Cranbrook.

Key Benefit: (same as for Options A & B above)

Public Consultation Tie-In: (same as for Options A & B above)

- Notes:
- As a service in addition to the IHA-funded Health Connections service, operating costs would be carried by BC Transit and the City of Kimberley.
 - It should be noted that while estimated annual service hours are 50% higher than those for Option B above, projected ridership and revenue are about the same, as service supply begins to exceed demand.

Summary Table:

Summary Information for	Option 1C: Monday, Wednesday & Friday Service to Cranbrook		
<i>Annual Impact:</i>			
Additional Service Hours:	1050	Additional Revenue:	\$7,000
Additional Vehicles Required:	0	Additional Operating Cost:	\$61,000
Additional Ridership:	2,900	Additional Net Municipal Share:	\$16,000
		Additional BC Transit Share:	\$38,000

Service Option 2: Weekday commuter service to Cranbrook

Description: This option would provide an early morning and early evening trip Monday through Friday in addition to the current Cranbrook service.

Key Benefits:

- The additional trip times would provide an alternative means of transportation to local residents employed or attending school in Cranbrook and would help to reduce the number of single-occupancy vehicles travelling between Kimberley and Cranbrook, an objective of Kimberley's Official Community Plan. As noted in Section 6.0, *Community Profile*, 20% of Kimberley's commuting flow is to Cranbrook, and 85% of Kimberley's working population commutes by automobile (73% as a driver, 12% as a passenger). One particular potential market would be the College of the Rockies in Cranbrook, which alone has 125 registered students (as at April 1, 2012) residing in the Kimberley area, along with 40 employees.
- The early evening return trip to Kimberley might also prove popular with shoppers and people returning from medical appointments.

Public Consultation Tie-In:

- Commuter service to Cranbrook was an option requested for consideration by the City.
- Additional service to Cranbrook was mentioned as being the top priority by the operating company.
- The third most frequent request from the resident survey for additional service (although constituting only 7% of respondents) was for commuter service to Cranbrook.

Note:

- As a service in addition to the IHA-funded Health Connections service, commuter service operating costs would be carried by BC Transit and the City of Kimberley.

Summary Table:

Summary Information for	Option 2: Commuter Service to Cranbrook		
<i>Annual Impact:</i>			
Additional Service Hours:	1100	Additional Revenue:	\$12,000
Additional Vehicles Required:	0	Additional Operating Cost:	\$64,000
Additional Ridership:	4,600	Additional Net Municipal Share:	\$12,000
		Additional BC Transit Share:	\$40,000

8.2 Other Service Change Options Investigated

- **Local Fixed- and/or Flexible-Route Service**

Local fixed- and/or flexible-route service, including to areas such as the ski hill, campground, and golf courses, was also considered at the request of the City. While fixed-route service was the second most frequent request by survey respondents (although this constitutes only 7% of respondents), a previous attempt to introduce it in Kimberley did not succeed and the operating company is of the opinion that a second attempt would meet with the same result. It should also be noted that no respondents requesting this service were current users of the

KTS, and that fixed-route service is often understood by non-transit users to mean that transit would be available exactly when and where the individual requires it.

Additionally, within BC, public transit to tourist destinations such as campgrounds and golf courses has generally not proved viable, as the majority of tourists bring their own vehicle and staffing levels are such that demand for transit service is not viable. As noted in Section 2.0, *Background to Present Service*, ridership on Kimberley's ski shuttle has declined dramatically over the past five years to near zero, suggesting that there is little demand for this existing service.

Flexible service, e.g. maintaining demand-responsive routing during off-peak travel times and introducing fixed-route service during peak travel times, was also considered. However, due to the highly scattered origins and destinations of current users, this is not deemed to be viable. The current users of the KTS appear to be the most socially vulnerable local residents, and as such it is felt that this type of passenger is, and should continue to be, the KTS's service priority. Analysis of the existing market and on-site investigations indicate that the current demand-responsive model is the most appropriate for the KTS.

- **Local Evening and Weekend service**

Evening and weekend service in general generate extremely low ridership. Particularly on weekday evenings and Sundays, routes in even major urban centres within BC often average a passenger-per-hour ratio of between zero and one. While evening service could be viewed as useful to have in the case of a weekly scheduled event, this would translate into a very low average ridership across the week as a whole.

Among evening and weekend service options, Saturday service in general has the highest feasibility. An option of introducing on Saturdays limited local service in combination with service to Cranbrook was investigated, in order to maximize ridership potential and productivity and thus compensate for comparatively low Saturday ridership levels. Combinations of local service and Cranbrook service time allocation were considered, to try to provide enough interval time in Kimberley for passengers to complete their trip purpose before end of service, and yet keep the interval time in Cranbrook before the return trip to four hours or less. However, no combination was found that would be satisfactory to potential riders, and dedicated Saturday local service is unlikely to prove viable. Only six, or 2% of, survey respondents, requested weekend local service, and this potential ridership would translate into an actual daily ridership projection of between two to three passengers.

For these reasons, introduction of local evening and/or weekend service is not recommended.

8.3 Conclusions

The following table summarizes the estimated impacts for all service options presented above. All figures are annual and are based on 2012/13 Annual Operating Agreement budgets. These estimates would require review based on confirmed service and operational details. An option's estimated viability level has been assessed based on projected revenue hours, cost, ridership, revenue, and improvement in overall system functionality.

Service Options Summary: Estimated Additional Annual Impacts

Service Option:	Viability Level	Estimated Total Additional Annual:						
		Service Hours	Vehicles	Rides	Revenue	Operating Costs	Net Municipal Share	BC Transit Share
1 Daytime Service to Cranbrook								
A: Wednesday Service	High	350	0	1,300	\$3,000	\$20,000	\$4,000	\$16,000
B: Monday & Friday Service	Medium	700	0	2,400	\$6,000	\$41,000	\$10,000	\$31,000
C: Monday, Wednesday & Friday Service	Low	1,050	0	2,900	\$7,000	\$61,000	\$16,000	\$45,000
2 Commuter Service to Cranbrook	High-Medium	1,100	0	4,600	\$12,000	\$64,000	\$12,000	\$52,000

In summary:

- The Wednesday service would be the least costly to implement, and may have guaranteed ridership, and revenue, from passengers using the existing service on Tuesdays or Thursdays choosing to travel on Wednesdays as well.
- Judging from observations on the ground and analysis of ridership data, the Monday and Friday daytime service, while being the second-least costly to implement, might well result in supply exceeding demand, as it would draw on the identical passenger base as the existing Tuesday and Thursday service.
- Monday, Wednesday and Friday daytime service to Cranbrook would be the second highest in terms of cost, and even more than the option above would likely result in a much lower average daily ridership, to an unviable point.
- The commuter service would be the most costly to implement, and as a new type of service the amount of ridership and revenue it would attract is less certain than in the case of Wednesday daytime service to Cranbrook. However, implementing the commuter option may present the opportunity to work with the Interior Health Authority (IHA) to adjust the timing and scheduling of current Health Connections trips. Particularly if there would be the ability to adjust these daytime trips, the commuter service would provide the opportunity to attract new riders from a whole new market, while also providing better travel flexibility for existing passengers.

Of the presented options, the Wednesday daytime service or the commuter service would appear be the better investment.

9.0 OTHER CONSIDERATIONS AND SUPPORTING STRATEGIES

9.1 Fares

The fare implemented with the system's startup was in line with those of other BC Transit systems with similar levels of service. Since that time, fares have increased gradually, also in line with comparable transit systems within BC.

The current fares are as follows:

Kimberley Transit Fare Information	
Cash Fares*	
Effective April 1, 2010	
One-way, local service:	
Adults	\$3.00
Students	\$2.50
One-way, Cranbrook service:	
All Passengers	\$2.50

* as the KTS is a door-to-door service,
BC Bus Passes are not able to be utilized

A separate *Fare Structure Review* is being prepared by BC Transit’s Sales and Marketing department and will be presented to the City of Kimberley along with this Service Review Report.

9.2 Marketing

Marketing a transit system is one of the ways by which ridership can be increased, and the City and the local operator have taken an active role in this regard. The City of Kimberley’s website includes a link to BC Transit’s web page for the KTS, and the operator has reported initiating local marketing efforts within the past year, through advertising on the front page of the local newspaper, inserts every three months in local mail generated by the municipality, and Riders’ Guides mailed to every residence within the Kimberley area. This helps to explain the high level of local awareness of the transit system displayed by survey respondents, compared to surveys in other rural communities served by BC Transit: 79% were already aware that Kimberley and Marysville have a public bus system, versus 21% who were not. The nature of this survey type means that respondents are self-selecting, and residents already knowing about the KTS were perhaps more likely to complete a survey, so actual awareness of the KTS may be lower than these figures indicate.

The operator did note that their marketing efforts resulted in no subsequent increase in passengers. As a bedroom community within easy commute of Cranbrook and high vehicle ownership, and a small, compact, and walkable community that also lends itself to cycle travel (except in snow months), it could be that demand for the existing service is more or less being fully met.

Marketing will be a key factor in announcing and promoting any upcoming service changes planned as a result of this review, and BC Transit will continue to work with the City of Kimberley and the local operator to communicate and promote changes in advance, to increase these changes’ success.

10.0 IMPLEMENTATION PROCESS AND NEXT STEPS

Once local government has approved a service option for implementation, an Implementation Agreement Memorandum of Understanding (MOU) will be developed for signature by the City and BC Transit. This MOU will outline the exact service changes to be developed for implementation, and the implementation timeline. Once signed, any changes to the scope of service changes in the MOU may change timelines. Detailed costing would be confirmed through implementation. As mentioned previously, in order to qualify for the 1,100 available service hours, service changes must be implemented “on the ground” by March 31, 2013.

11.0 RECOMMENDATIONS

It is recommended that the City of Kimberley:

- **Receive this report as information, provide comment, and approve it for finalization by City and BC Transit staff;**
- **Identify which service change option is approved for implementation;**
- **Direct staff to work with BC Transit in order to proceed with implementation of the selected service change option, including assisting with development of, and signing of, an Implementation Agreement Memorandum of Understanding (MOU).**

12.0 LIST OF APPENDICES

Appendix A: Historical Ridership Statistics

Appendix B: Health Connections Schedule

Appendix C: Origin/Destination Data and Ridership Summaries

Appendix D: Public Consultation Methodologies & Results Summaries

Appendix E: Resident Survey Summary

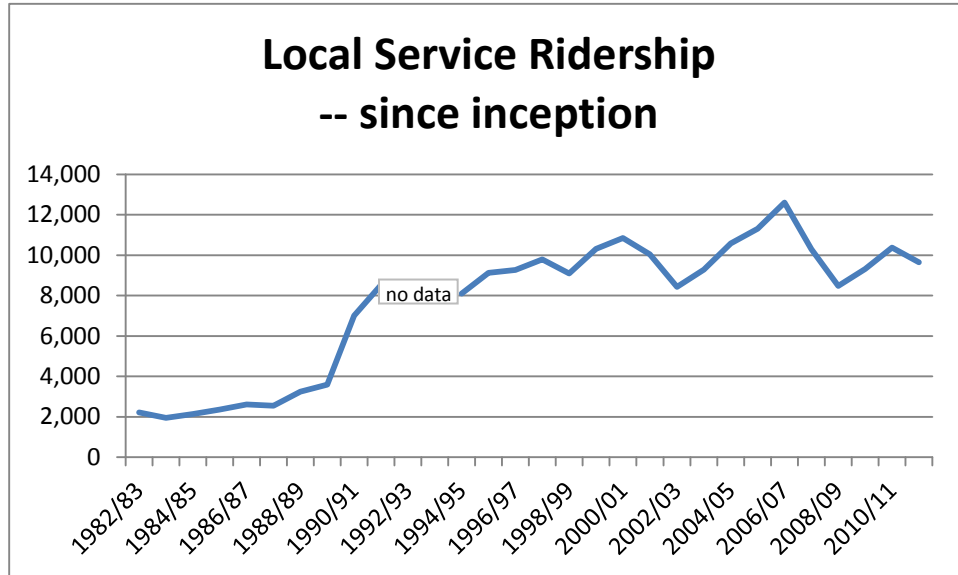
APPENDICES

Appendix A: Historical Ridership Statistics

Historical Ridership Statistics

1. Local Service

The chart below show monthly ridership levels since inception:

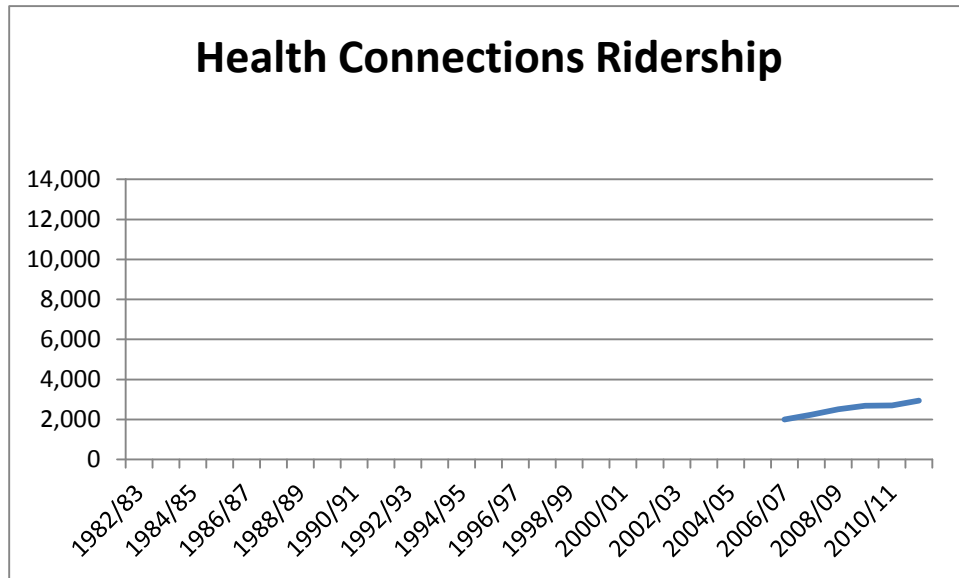


Analysis Summary:

- Between 1982 when service began and the 1989/1990 fiscal year, ridership levels were low, particularly during the period 1982 to 1987/1988.
- There was a significant ridership increase in 1990/1991, which showed a 95% increase over the previous fiscal year.
- This ridership increase continued for the most part until 2001/2002, although at a slower pace.
- Ridership dropped slightly between 2001/2002 and 2003/2004, but increased again for the three following years.
- Since 2007/2008, ridership has been dipping again, with 2010/2011 showing a recovery to 2007/2008 levels but 2011/2012 showing another slight decrease in ridership.

2. Health Connections Service to Cranbrook

Appendix A: Historical Ridership Statistics

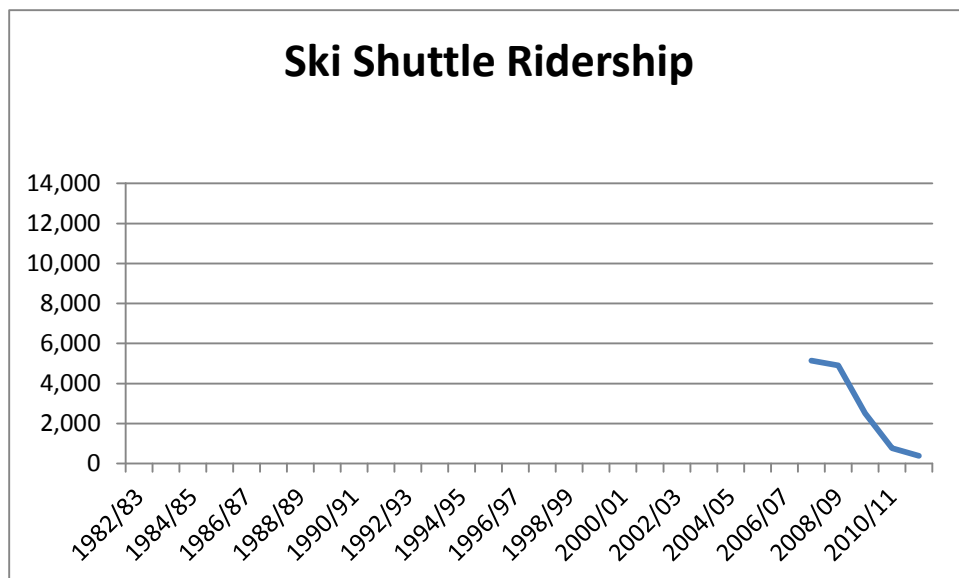


* Same scale used as for Local Service ridership, for comparison purposes.

Analysis Summary:

- Health Connections ridership showed incremental increases between inception in 2006/2007 and 2011/2012.
- These increases were relatively slight, compared to ridership increases on the local service, but steady.
- 2011/12 ridership showed a 47% increase over 2006/2007's.
- Health Connections ridership in 2011/12 comprised approximately one third of the local service's ridership in the same year.

3. Ski Shuttle Service



* Same scale used as for Local Service and Health Connections ridership, for comparison purposes.

Analysis Summary:

- Ski Shuttle ridership showed a slight decrease between 2007/2008 and 2008/2009.

Appendix A: Historical Ridership Statistics

- This decrease became pronounced in the three following years up to 2011/2012: between 2008/2009 and 2009/2010 ridership decreased by 49%, between 2009/2010 and 2010/2011, by 70%, and between 2010/2011 and 2011/2012, by 50%.
- Between 2007/2008 and 2011/2012, ridership decreased by 93% overall.

Appendix B: Health Connections Schedule

Health Connections Schedule

As the local service is demand-responsive, it does not have a schedule.

The current schedule for the Health Connections service to Cranbrook on Tuesdays and Thursdays, as published in the Riders' Guide, is as follows:

Kimberley to Cranbrook					
Tuesday & Thursday					
Lv. Kimberley	Lv. Cranbrook	Lv. Kimberley	Lv. Cranbrook	Lv. Kimberley	Lv. Cranbrook
8:30	10:00	11:00	1:00	2:15	3:00

The actual schedule being operated, due to issues with the assigned gas station in Cranbrook and refueling thus being done in Marysville, is shown below:

Kimberley to Cranbrook					
Tuesday & Thursday					
Lv. Kimberley	Lv. Cranbrook	Lv. Kimberley	Lv. Cranbrook	Lv. Kimberley	Lv. Cranbrook
8:30	9:45	11:00	1:00	2:30	3:00

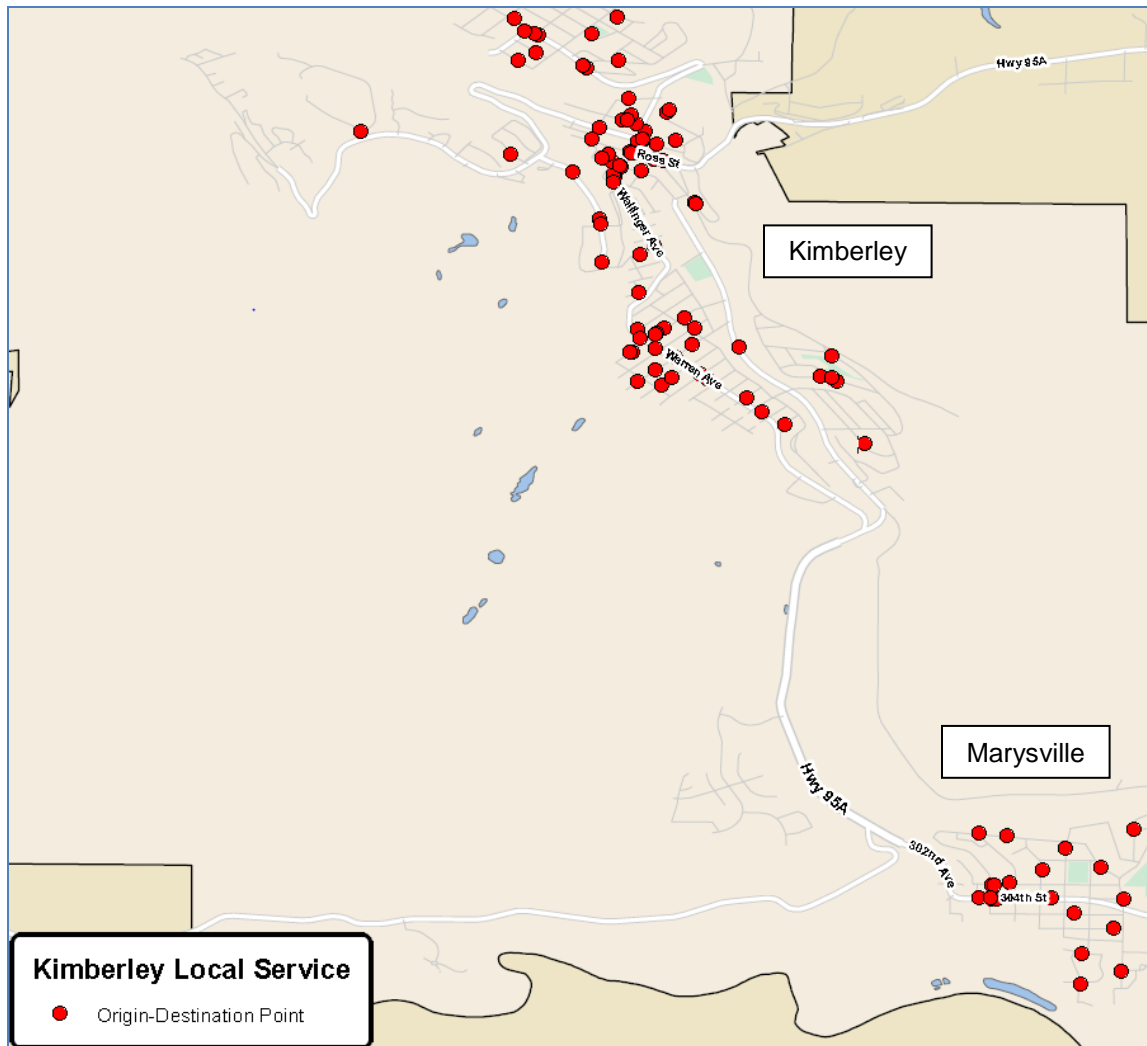
Appendix C: Passenger Origin/Destination Data and Ridership Summaries

Passenger Origin/Destination Data and Ridership Summaries

Passenger origin and destination data was gathered over two 2-week periods, or 20 service days, for the KTS's local service, and two 7-week periods, or 28 service days, for its Health Connections service to Cranbrook. The results can be summarized as follows:

A. Local Service: December 2011 and April 2012

1. Passenger Origin/Destination Data



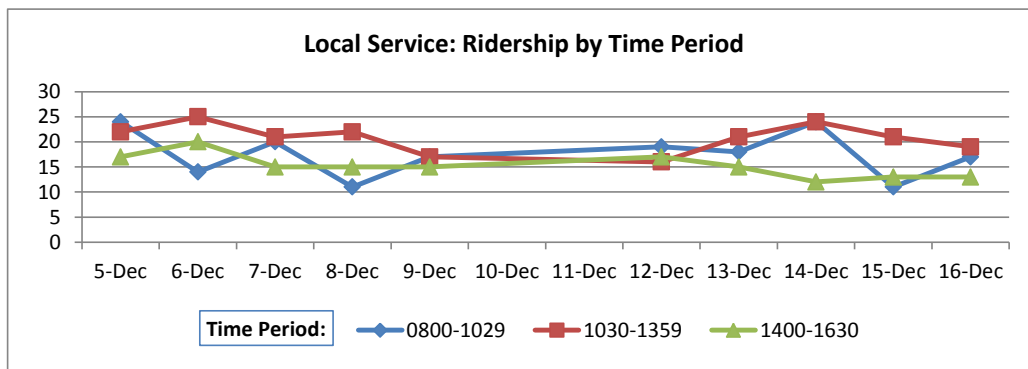
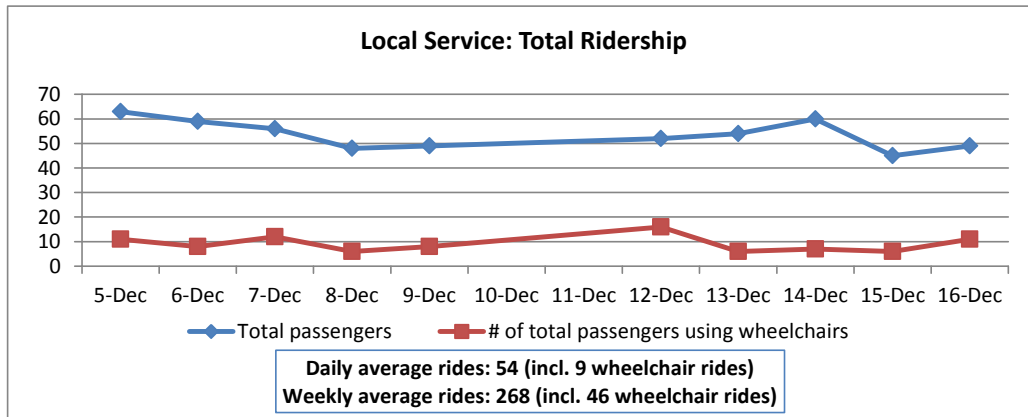
Major Trip Generators

Location	Number of daily origins/destinations generated Monday to Friday
The Pines Special Care Home	13
Kimbrook and Kimbrook Manor	13
Pool	8
Kimberley Health Centre	5
Garden View Village	4
AG Foods	3

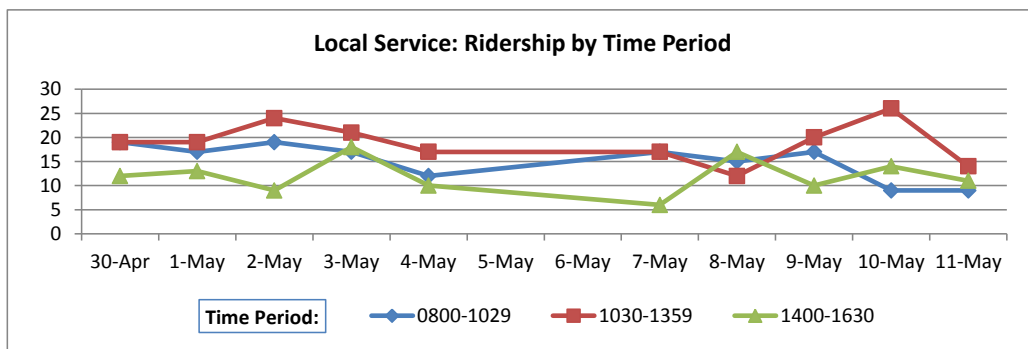
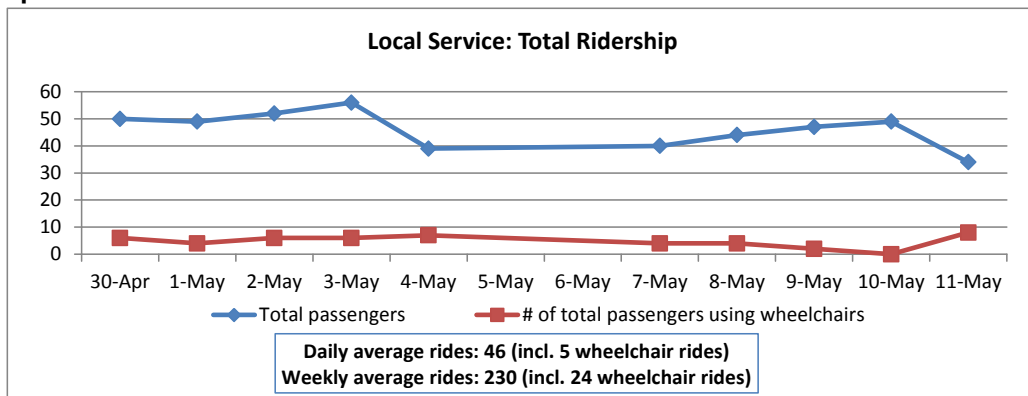
Appendix C: Passenger Origin/Destination Data and Ridership Summaries

2. Passenger Count Summaries

a. December 2011



b. April 2012



Appendix C: Passenger Origin/Destination Data and Ridership Summaries

The origin/destination data above shows that during the sample periods Kimberley's local service was used for service to and from a wide variety of locations. The highest trip generators were The Pines special care home, Kimbrook and Kimbrook Manor, the swimming pool, Kimberley Health Centre, and Garden View Village retirement home.

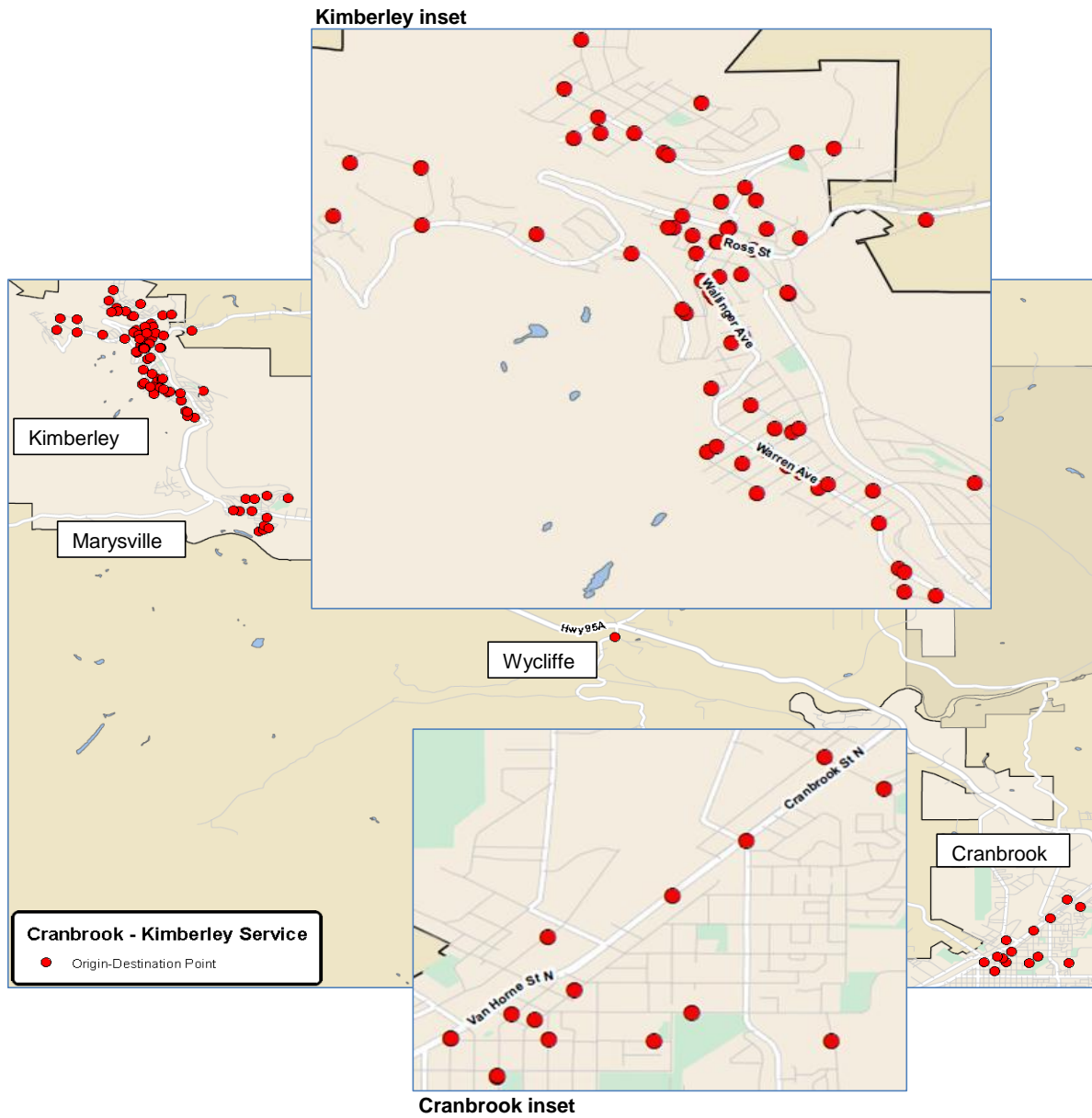
The passenger count summaries show that:

- Overall ridership on the local service was higher in December's two-week sample period than in May's. This reflects historical annual ridership patterns in Kimberley, where winter ridership is in general higher than summer ridership. Anecdotal data from the operator and on-site investigations by BC Transit staff suggest that this is due to Kimberley's high proportion of passengers with mobility issues relying even more on public transit when pavements are snowy and icy.
- Wheelchair users accounted for an average of between five (May sample) and nine (December sample) rides per day. This calculates to 11% and 17% of total passengers respectively. In the 2011-2012 fiscal year, wheelchair users represented between 14% and 29% of monthly passengers on the local service, averaging 21% of passengers each month, so these two-week sample percentages are not representative of the Kimberley local service's usual proportion of wheelchair users.
- In terms of ridership by time period, in both samples 10:30 a.m. to 1:59 p.m. was the busiest time period, followed by 8:00 a.m. to 10:29 a.m. The 2:00 p.m. to 4:30 p.m. time period was the least busy for both samples.

Appendix C: Passenger Origin/Destination Data and Ridership Summaries

B. Health Connections Service to Cranbrook: November-December 2011 and March-April 2012

1. Passenger Origin/Destination Data



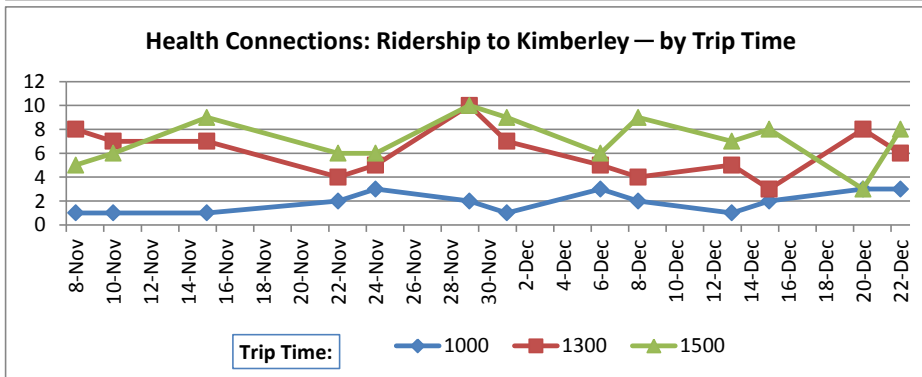
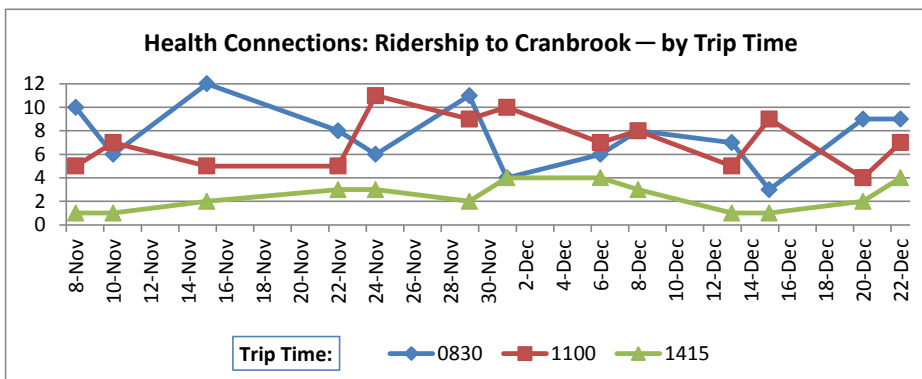
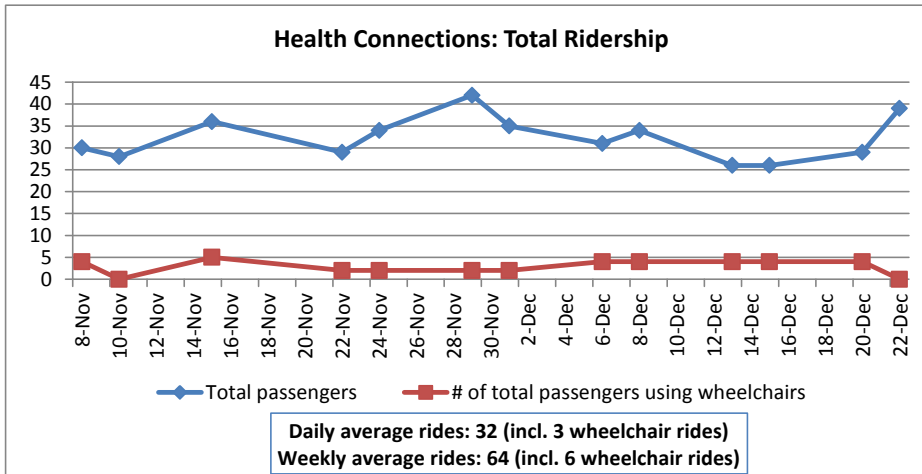
Major Trip Generators

Location	Number of daily origins/destinations generated per service day
Safeway	8
Tamarack Mall	6
Wal-Mart	5
Kimbrook and Kimbrook Manor	4
East Kootenay Regional Hospital	3

Appendix C: Passenger Origin/Destination Data and Ridership Summaries

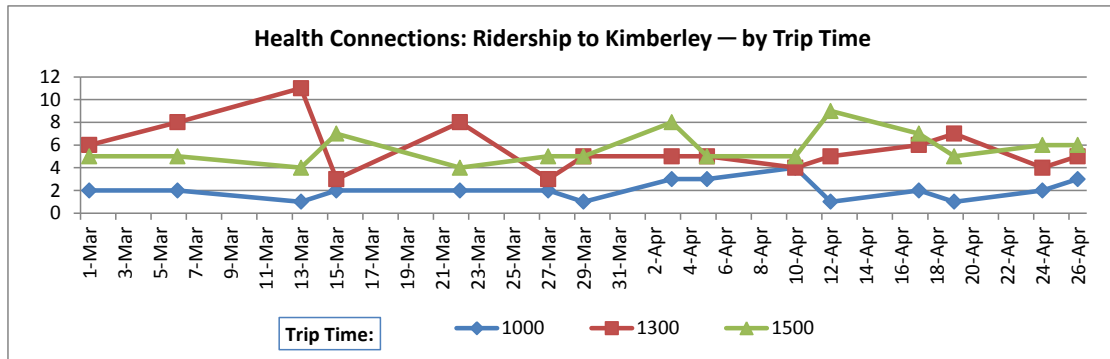
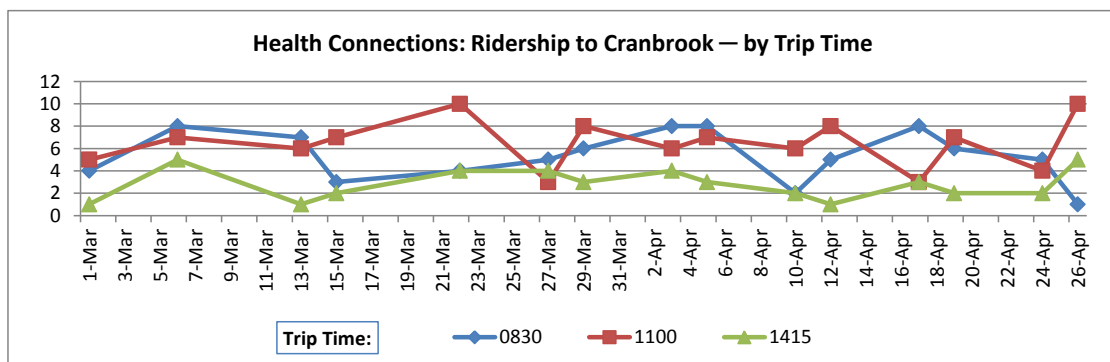
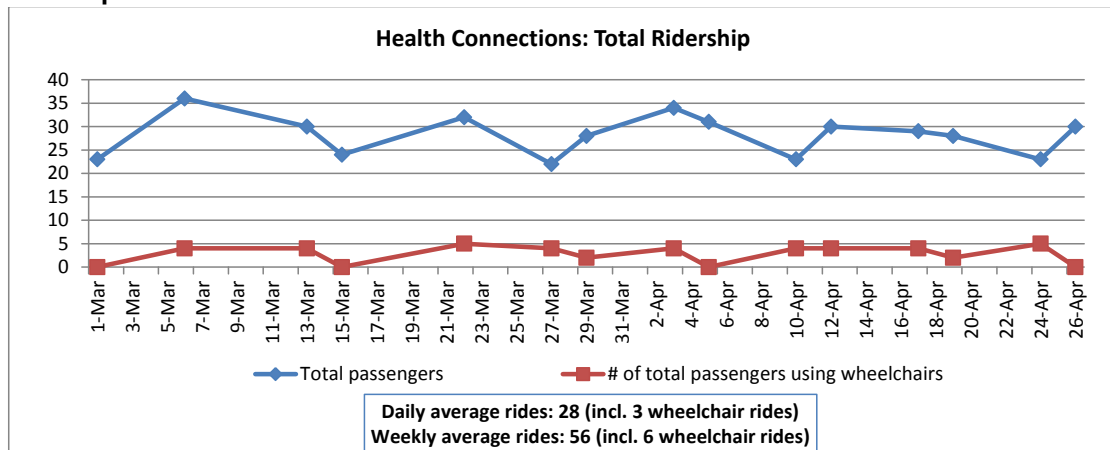
2. Passenger Count Summaries

a. November-December 2011



Appendix C: Passenger Origin/Destination Data and Ridership Summaries

b. March-April 2012



The origin/destination data above shows that during the sample periods Kimberley's Health Connections service to Cranbrook was used between a wide variety of locations in Kimberley and Marysville and key locations in Cranbrook. The highest trip generators during the sample period were Safeway, Tamarack Mall and Wal-Mart in Cranbrook, and Kimbrook and Kimbrook Manor in Kimberley.

The passenger count summaries show that:

- Overall ridership on the Health Connections service was slightly higher in the November-December sample period than in March-April's. This reflects historical ridership patterns in Kimberley, where winter ridership is in general higher than summer ridership, perhaps due to some people preferring to take the bus than driving themselves in snow conditions.
- Wheelchair users accounted for an average of three rides per service day during both sample periods. This calculates to approximately 10% of total passengers. However, total wheelchair rides can reach up to six rides per service day.
- In terms of ridership by trip time:

Appendix C: Passenger Origin/Destination Data and Ridership Summaries

- For trips to Cranbrook, in the November-December sample the 8:30 a.m. and 11:00 a.m. trips averaged approximately the same number of passengers. In the March-April sample the 11:00 a.m. trip averaged 25% more passengers than the 8:30 a.m. trip. In both samples, the 2:15 p.m. trip to Cranbrook had by far the fewest number of passengers. This reflects the fact that the return trip to Kimberley and Marysville departs again immediately from Cranbrook with no interval time, and that the majority of Health Connections service users are residents of Kimberley and Marysville rather than residents of Cranbrook.
- For trips to Kimberley, in the March-April sample the 1:00 p.m. and 3:00 p.m. trips averaged the same number of passengers. In the November-December sample, the 3:00 p.m. trip averaged 15% more passengers than the 1:00 p.m. trip. In both samples, the 10:00 a.m. trip to Kimberley had by far the fewest number of passengers. This reflects the fact that there is no interval time in Cranbrook before the 10:00 a.m. departure, and again that the majority of Health Connections service users are Kimberley and Marysville residents rather than residents of Cranbrook.

Public Consultation Methodologies and Results Summaries

1. Official Stakeholders

Official stakeholders were consulted during a BC Transit site visit in May 2012 or by subsequent follow-up phone calls or e-mails. The results can be summarized as follows:

City of Kimberley

The City of Kimberley requested that four main areas be considered:

- i. introducing fixed- and/or flexible-route local service, either fully or just at peak travel times
- ii. having this fixed and/or flexible route continue to connect:
 - Downtown Kimberley
 - Marysville
 - Townsite
 - the medical clinicas well as beginning to serve:
 - the ski hill
 - the conference centre
 - the local campground
 - golf courses
- iii. adding evening and weekend service to the local service
- iv. enhancing the current daytime service to Cranbrook and/or introducing commuter trips

Interior Health Authority and Operating company staff

- *Regarding possible additional service to Cranbrook:*
Operating company staff, which includes Interior Health Authority staff, recommended that commuter service to Cranbrook be introduced. Staff reported that the overwhelming majority of additional service suggestions they receive are for additional service to Cranbrook, and stated that based on their observations and experience over the years, as well as the recent closure of Kimberley's only remaining department store, Cranbrook service should be the KTS's top priority.
- *Regarding possible fixed-route local service:*
Staff reported that fixed-route service was implemented ten years previously but that it did not work, and that it would not work if re-implemented today. It was felt that the senior population, especially, would like to see a bus operating along their streets of residence at regular intervals on the off chance that they might need it, but that the service would not in fact be used.
- *Regarding possible later evening local service:*
Staff were of the opinion that, despite a few requests for this service being received, this service addition would generate zero ridership.
- *Regarding possible earlier morning or early evening service:*
Staff felt that there was no demand for earlier morning service, due to opening times of local businesses, and little demand for early evening service, i.e. service extending past 4:30 p.m.

Community groups:

- **Chamber of Commerce:**
The Chamber commended the general great quality of the transit service. It reported that its focus is on tourists as well as Kimberley residents, and as such, had the following suggestions:
 - improving public information that service is available

Appendix D: Public Consultation Methodologies & Results Summaries

- introducing fixed-route service
- eliminating the pre-booking requirement for Health Connections trips to Cranbrook
- introducing service to the airport, including after 5 p.m. to coincide with flights

➤ **Summit Community Services – Seniors’ Program**

The Seniors’ Program Coordinator reported being very reliant on the community bus system, for transporting seniors to and from seniors’ community programs that preventative health, and healthful ageing in place. The Coordinator made the following suggestion:

- extending local service hours past 4:00 p.m., to allow for:
 - participation in evening programs
 - attendance at late-afternoon medical appointments

2. Resident Survey

A resident survey was conducted over three weeks in July and August 2012. The survey was available online on BC Transit’s website and via the City of Kimberley’s website, and paper surveys were available at Kimberley City Hall, the Aquatic Centre, and on the buses.

The survey had 243 respondents, 56% online and 44% on paper. This reasonably high response rate—4% of the area population, versus a typical response rate of 1% to 2%—reflects the efforts of the City of Kimberley to publicize the survey in advance and encourage local participation.

It should be noted however that such a response rate is not necessarily statistically significant, and that as survey respondents tend to be self-selecting, there is a consequent voluntary response bias in the results.

A summary report of the survey is shown in Appendix E. Following is a brief summary of results for each question:

1. 79% of respondents already knew that Kimberley and Marysville have a public bus system
2. 79% of respondents resided in Kimberley, 15% resided in Marysville, and 6% resided in various areas lying just outside Kimberley or Marysville or in Cranbrook
3. 21% of respondents were under 40 years of age, 33% were between 40 and 59 years of age, and 47% were 60 years of age or older
4. 37% worked either full- or part-time outside the home, 4% attended school or college either full- or part-time, and 59% did not work, or attend school or college
5. Of those attending work or school either full- or part-time, 61% attended in Kimberley, 31% attended in Cranbrook, 2% attended in Marysville, and 6% attended in various other areas
6. Of those attending work or school either full- or part-time, 54% travelled by automobile as a driver, 16% by automobile as a passenger, 15% walked, 8% cycled, 4% used the public bus, and 2% used a school bus
7. The most frequent arrival times at work or school were 8:00-8:29 a.m. and 8:30-8:59 a.m., and the most frequent time of leaving work or school was between 5:00-5:29 p.m.
8. In the three months prior to the survey, 56% of respondents had not used a public bus either within the KTS or elsewhere, 17% had used the bus on average between one to three days per month, 14% had used the bus on average two to three days per week, 10% had used the bus one day per week, and 3% had used the bus four to five days per week
9. 73% of respondents said they did not door-to-door transportation due to a disability, while 27% said they did require it. It should be noted that whereas only 9% of online survey respondents said they needed door-to-door transportation, 50% of respondents to the paper surveys, available mainly on the buses, said that they required it
10. 76% of respondents said they did not use mobility aids, while 24% said they did. As for Question 9. above, it should be noted that whereas only 6% of online survey respondents said they used mobility aids, 46% of respondents to the paper surveys said they used mobility aids
11. 42% of those using mobility aids said they used a cane, 38% said they used a walker, and 16% said they used a wheelchair or scooter

Appendix D: Public Consultation Methodologies & Results Summaries

12. Overall, 33% of respondents' households had one vehicle, 26% had two, 5% had three and 3% had four or more, while 32% had no vehicle. Broken down by survey method, however, only 9% of online respondents' households had no vehicle, versus 60% of paper survey respondents'. While 31% of paper survey respondents' households had one vehicle, only 9% had more than one, versus 35% and 56% for online survey respondents' households
13. When asked which of a set of eight additional bus service options they preferred, respondents were fairly evenly divided among the various options:

13. For added bus service in your transit system, which of the options below are the most important to you?

Response	Chart	Percentage	Count
Service to Cranbrook on Friday mornings and afternoons		14%	57
Service to Cranbrook on Friday afternoons and evenings		4%	15
Service to Cranbrook on Saturday mornings and afternoons		13%	51
Service to Cranbrook on Saturday afternoons and evenings		3%	14
Local service between 4:30-5:30 p.m. Monday through Friday		10%	42
Local service between 5:30-8:30 p.m. on Friday evenings		11%	45
Local service on Saturday mornings and afternoons		11%	43
Local service on Saturday afternoons and evenings		7%	30
Other (Please give details):*		15%	61
Don't add anything - it's good the way it is		2%	10
Don't know		4%	17
Doesn't apply to me (Wouldn't use it)		5%	19
		Total Responses	404
No response		7%	30

* For a clearer overview of overall weighting of different comments, "Other" comments have been amalgamated into Question 14, Comments.

As a brief summary:

- 34% of respondents selected additional service options for Cranbrook, versus 40% for Kimberley. *It should be noted here that commuter service to Cranbrook was not among the service options listed, and that the results should be viewed while taking this into consideration.* In addition, there was a high correlation among survey respondents between those requesting additional service within Kimberley in this question and those reporting no public transit use within the past three months, so additional service requests for Kimberley could be based on a respondent assumption, through lack of comprehension of the existing service type, that such additional service would be implemented as a fixed-route service
- The highest response rate was "Other", indicating service options not covered by the eight suggestions. For comparison purposes, these comments were added to the general comments question following (see Question 14. below). Otherwise, the next highest response rate was for Friday daytime service to Cranbrook, followed by Saturday service to Cranbrook, then by Saturday local service and also Friday evening local service, then by Saturday local service, then by Friday afternoon and evening service to Cranbrook and Saturday afternoon and evening service to Cranbrook, in this order
- *It should also be noted here that due to the inherent bias in non-commitment responses, these survey results are not indicative of actual future usage of these hypothetical services. More reliable are self-generated responses, i.e. those generated by Question 14 below, that require more effort on the part of the respondent*

Appendix D: Public Consultation Methodologies & Results Summaries

14. When giving their own comments on the KTS, responses were categorized as follows:

14. Do you have any other comments on public bus service in your area?

	Comment	Percentage	Count		
Cranbrook-specific	Service to Cranbrook >2 days/week	7.6%	21	19.2%	53
	Commuter service to Cranbrook	6.5%	18		
	Later service from Cranbrook	2.5%	7		
	Earlier service to Cranbrook	1.4%	4		
	Weekend Cranbrook service	1.1%	3		
Kimberley-specific	Fixed-route service within Kimberley & Marysville	7.2%	20	14.5%	40
	Later service within Kimberley	2.9%	8		
	Weekend Kimberley service	2.2%	6		
	Sunday Kimberley service (specifically)	2.2%	6		
	More frequent service (general)	2.2%	6		
Service to other areas	Airport service	2.2%	6		
	Service for special events	1.1%	3		
	Regular ski hill service	1.4%	4		
	Service to the casino	0.7%	2		
Complaints	Service inflexibility complaints (e.g. 24 hrs' advance notice)	2.2%	6		
	Service reliability complaints	0.7%	2		
	Good the way it is/I appreciate the service/The drivers are wonderful	9.4%	26		
	Other*	5.8%	16		
	I'll use it in the future/now I know about it	2.9%	8		
	Introduce the BC Bus Pass/Lower fares for low-income users	0.7%	2		
	No response	44.6%	123		
	Total	100.0%	276		

* The "Other" category was used for comments made by a single respondent in each instance

To summarize briefly:




- Respondents' most frequent comment expressed approval of the service as it stands and did not request any additions or changes
- The next most frequent comments, with popularity levels very close to each other, requested service to Cranbrook more than two days per week, fixed-route, fixed-schedule service within Kimberley and Marysville, and commuter service to Cranbrook
- In total, 19% of respondents requested service additions or changes for service to Cranbrook, and 15% requested service additions or changes for the local service

Appendix E: Resident Survey Summary




Resident Survey Results Conducted July–August 2012

Total number of respondents: 243

1. Did you already know that Kimberley and Marysville have a public bus system?

Response	Chart	Percentage	Count
Yes		79%	189
No		11%	26
I do now		10%	23
		Total Responses	238
No response		2%	5






2. What general area do you live in?

Response	Chart	Percentage	Count
Kimberley		80%	188
Marysville		14%	34
Other (Where?)		6%	13
		Total Responses	235
No response		3%	8

2. What general area do you live in? (Other (Where?))






Response	Percentage	Count
[blank]	8%	1
meadowbrook	15%	2
Cranbrook	38%	5
St. Mary Lake	8%	1
Forest Crowne	15%	2
Chapman Camp	8%	1
Frequent tourist from out of province	8%	1
Total Responses		13

3. What age group are you in?

Response	Chart	Percentage	Count
Under 18		2%	4
18 to 39		19%	45
40 to 59		33%	78
60 to 75		24%	58
Over 75		23%	54
		Total Responses	239
No response		2%	4





Appendix E: Resident Survey Summary

4. Do you...

Response	Chart	Percentage	Count
... work full-time outside the home?		22%	51
... work part-time outside the home?		16%	37
... go to school or college full-time?		3%	8
... go to school or college part-time?		1%	2
I don't go to work or school.		59%	139
		Total Responses	237
No response		3%	7

* Multiple responses allowed








5. If you go to work or school, where do you go?

Response	Chart	Percentage	Count
Kimberley		61%	60
Marysville		2%	2
Cranbrook		31%	30
Other (Where?)		6%	6
		Total Responses	98

5. If you go to work or school, where do you go? (Other (Where?))

Response	Percentage	Count
St. Eugene Golf Resort & Casino	17%	1
Elkford	17%	1
Skookumchuck	17%	1
Airport (halfway between Cranbrook and Kimberley)	17%	1
aqam (St Mary's Reserve)	17%	1
out of town	17%	1
Total Responses		6

6. If you go to work or school, how do you get there?

Response	Chart	Percentage	Count
Vehicle (as a driver)		54%	60
Vehicle (as a passenger)		16%	18
School bus		2%	2
Public bus		4%	5
Cycle		8%	9
Walk		15%	17
Taxi		0%	0
Other (How?)		1%	1
		Total Responses	112

* Multiple responses allowed

6. If you go to work or school, how do you get there? (Other (How?))

Response	Percentage	Count
Fly	100%	1
Total Responses		1

Appendix E: Resident Survey Summary

7. What time do you arrive at work or school?

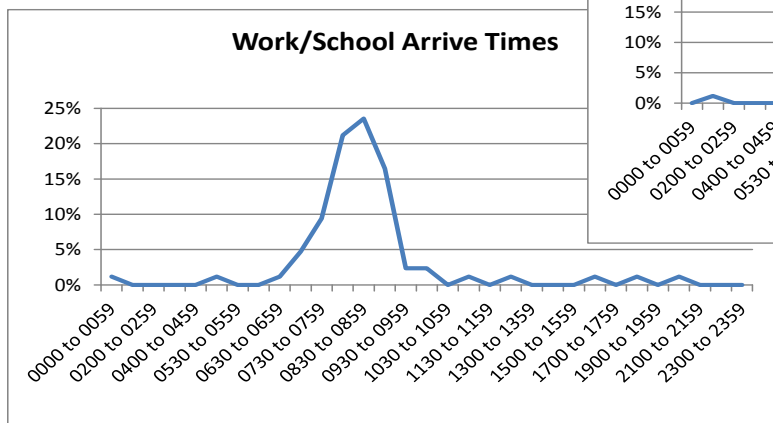
Response	Chart	Percentage	Count
0000 to 0059		1%	1
0100 to 0159		0%	0
0200 to 0259		0%	0
0300 to 0359		0%	0
0400 to 0459		0%	0
0500 to 0529		1%	1
0530 to 0559		0%	0
0600 to 0629		0%	0
0630 to 0659		1%	1
0700 to 0729		5%	4
0730 to 0759		9%	8
0800 to 0829		21%	18
0830 to 0859		24%	20
0900 to 0929		16%	14
0930 to 0959		2%	2
1000 to 1029		2%	2
1030 to 1059		0%	0
1100 to 1129		1%	1
1130 to 1159		0%	0
1200 to 1259		1%	1
1300 to 1359		0%	0
1400 to 1459		0%	0
1500 to 1559		0%	0
1600 to 1659		1%	1
1700 to 1759		0%	0
1800 to 1859		1%	1
1900 to 1959		0%	0
2000 to 2059		1%	1
2100 to 2159		0%	0
2200 to 2259		0%	0
2300 to 2359		0%	0
Varies		11%	9
		Total Responses	85

Mode Time: 8:30

8. What time do you leave work or school?






Response	Chart	Percentage	Count
0000 to 0059		0%	0
0100 to 0159		1%	1
0200 to 0259		0%	0
0300 to 0359		0%	0
0400 to 0459		0%	0
0500 to 0529		0%	0
0530 to 0559		0%	0
0600 to 0629		0%	0
0630 to 0659		0%	0
0700 to 0729		1%	1
0730 to 0759		0%	0
0800 to 0829		0%	0
0830 to 0859		0%	0
0900 to 0929		1%	1
0930 to 0959		0%	0
1000 to 1029		0%	0
1030 to 1059		0%	0
1100 to 1129		0%	0
1130 to 1159		0%	0
1200 to 1259		1%	1
1300 to 1359		0%	0
1400 to 1459		2%	2
1500 to 1559		19%	16
1600 to 1659		22%	19
1700 to 1759		25%	21
1800 to 1859		5%	4
1900 to 1959		6%	5
2000 to 2059		2%	2
2100 to 2159		1%	1
2200 to 2259		2%	2
2300 to 2359		0%	0
Varies		11%	9
		Total Responses	85

Mode Time: 17:00





Appendix E: Resident Survey Summary



9. In the past 3 months, how often have you taken a public bus?

Response	Chart	Percentage	Count
Never		56%	132
1-3 days per month		17%	40
1 day per week		10%	24
2-3 days per week		14%	33
4-5 days per week		3%	6
		Total Responses	235
No response		3%	8






10. Do you need door-to-door transportation because of a disability?

Response	Chart	Percentage	Count
Yes		27%	64
No		73%	169
		Total Responses	233
No response		4%	10

11. Do you use mobility aids?

Response	Chart	Percentage	Count
Yes		24%	55
No		76%	174
		Total Responses	229
No response		6%	14

a) If yes, do you use...

Response	Chart	Percentage	Count
Cane		42%	31
Crutches		1%	1
Walker		38%	28
Wheelchair or scooter		16%	12
Other (What do you use?)		3%	2
		Total Responses	74
No response		4%	3

* Multiple responses allowed

Appendix E: Resident Survey Summary

12. How many registered, licensed vehicles does your household have?

Response	Chart	Percentage	Count
0		32%	75
1		33%	78
2		26%	61
3		5%	11
4 or more		3%	8
		Total Responses	233
No response		4%	10

13. For added bus service in your transit system, which of the options below are the most important to you?

Response	Chart	Percentage	Count
Service to Cranbrook on Friday mornings and afternoons		14%	57
Service to Cranbrook on Friday afternoons and evenings		4%	15
Service to Cranbrook on Saturday mornings and afternoons		13%	51
Service to Cranbrook on Saturday afternoons and evenings		3%	14
Local service between 4:30-5:30 p.m. Monday through Friday		10%	42
Local service between 5:30-8:30 p.m. on Friday evenings		11%	45
Local service on Saturday mornings and afternoons		11%	43
Local service on Saturday afternoons and evenings		7%	30
Other (Please give details):**		15%	61
Don't add anything - it's good the way it is		2%	10
Don't know		4%	17
Doesn't apply to me (Wouldn't use it)		5%	19
		Total Responses	404
No response		7%	30

* Multiple responses allowed

** For a clearer overview of overall weighing of different comments, "Other" comments have been amalgamated into Question 14, Comments.

Appendix E: Resident Survey Summary

14. Do you have any other comments on public bus service in your area?

	Comment	Percentage	Count		
Cranbrook-specific	Service to Cranbrook >2 days/week	7.6%	21	19.2%	53
	Commuter service to Cranbrook	6.5%	18		
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	Other*	5.8%	16		
	I'll use it in the future/now I know about it	2.9%	8		
	Introduce the BC Bus Pass/Lower fares for low-income users	0.7%	2		
	No response	44.6%	123		
	Total	100.0%	276		

* Multiple responses allowed

** The "Other" category was used for comments made by a single respondent in each instance