

Revelstoke Service Review



January 12, 2011

City of Revelstoke



Background

Service in Revelstoke has been running for 16 years. In that time, ridership has slowly grown. It is at a point where ridership has stagnated. Around 23,000 passenger trips are made on the system per year. There are 3100 service hours used per year to run the current conventional schedule. This includes 10.5 hours of service on the weekdays and 9 hours on Saturdays.

Public Engagement

There were 3 different public engagement activities in support of this plan. Revelstoke's Transit Committee met with a BC Transit planner to go over their ideas and concerns around the plan. An open house was held on November 29th, 2010 at the Recreation Centre. This open house was advertised for the general public. A transit bus was used to provide door to door service for people wishing to attend the open house. Over 50 people attended the open house to look at the proposed plans. An online survey was also posted for those unable to attend the open house.

The Transit Committee emphasized the following points:

- The bus route needs to come through the Seniors' Centre parking lot and drop them right out front.
- The key focus for the system needs to be on day to day passengers, NOT ski hill service or tourists.
- More direct service and another bus are required to grow service.
- There is expansion dollars left over that can be used immediately for proposal 1 expansion.

At the open house and in online surveys people answered and asked 5 questions. The most common answers to the questions are listed after each question below.

The most pressing expressed transportation needs in the community are:

- More frequent service
- Reducing reliance on personal automobiles
- More service between downtown and outlying neighbourhoods
- More bicycle infrastructure
- Longer service day
- And more weekend service.

The transit system could provide the community with:

- The ability to lower green house gas (ghg) emissions
- Reduced need for private cars
- And transportation alternatives.

Transit can attract new riders with:

- Faster and more direct service

- More trips per day
- Special fare products (like seniors' passes)
- Better advertising
- And better schedules.

Transit could be improved for existing riders by:

- Following the scheduled route
- Keeping to the schedule
- Improving handyDART availability
- Offering discounted tickets and passes
- And offering service later into the evening (9 or 10pm).

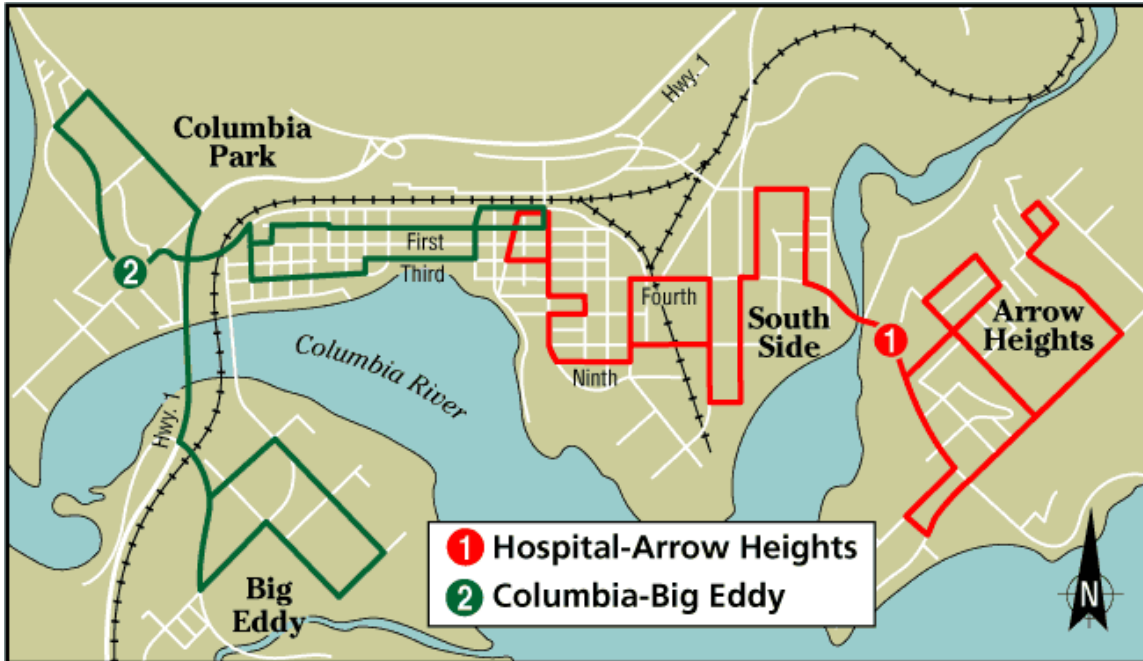
The important places for transit to connect in Revelstoke are:

- Downtown
- The hospital
- The Recreation Centre
- The Seniors' Centre
- Big Eddie
- Columbia Park
- Arrow Heights
- Grocery stores
- And the ski hill.

This plan aims to address as many of these issues as possible. The current system is described as well as the proposed changes. Certain constraints are present due to limited expansion budgets. The major expansion plus Sunday service listed in the last section would meet most of the requests.

Current System

The current system consists of 2 routes that loop around most of the town. There are 10 trips per day on the route 2 and 8 trips per day on the route 1. The map below shows the routes.



Ridership is likely low due to one bus trying to ‘do everything’. Passengers must ride for long distances to be looped around to or from their destination. Research shows that transit passengers like fast, direct and cost efficient trips that compete with the automobile. Streamlining the routes to provide service in both directions on most roads will make journeys faster and more direct.

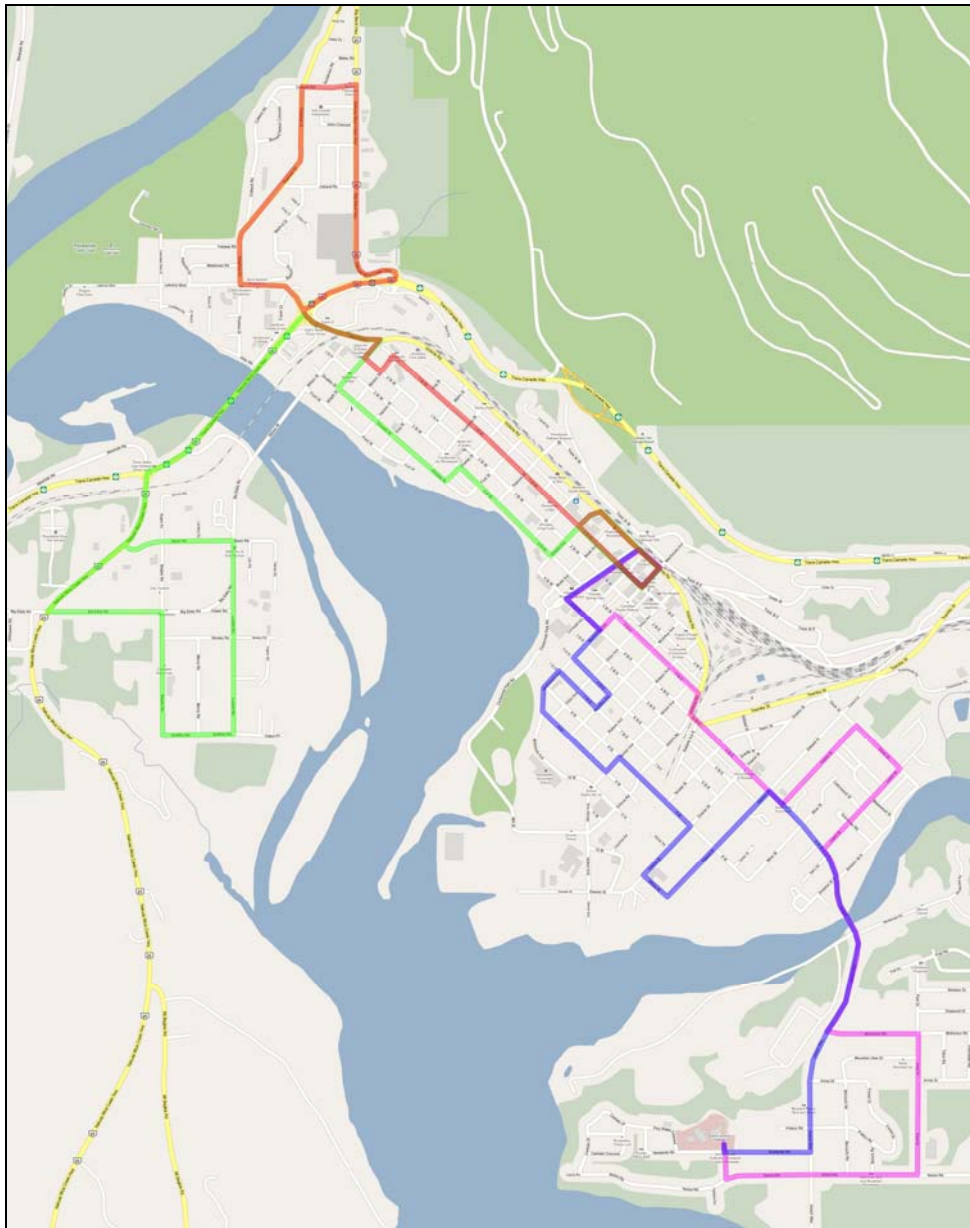
Future System

This report proposes 4 new routes to replace the existing 2 routes. These 4 routes would maintain much of the same coverage, but would increase service to the hospital, recreation centre, seniors’ centre and downtown. The parts of Arrow Heights losing service currently see very few passengers (in the order of 0-3 per day). Eliminating service in these parts of the neighbourhood would enable more service to higher ridership areas. The city is not interested in BC Transit providing service to the ski hill, as they would like a private company to operate this service.

The new Revelstoke transit service should be split into 4 routes to better serve the outlying areas of the city. The routes would encourage ridership through more direct trips, less time on the bus, and two way service on most roads that is less confusing. More frequency could be added to this system over the years as funding becomes available. This service would require expansion hours and an additional vehicle. The system is laid out in detail in the next section.

Route Proposals

Four routes are proposed for Revelstoke. These routes would completely replace the existing two routes. The routes would all start at the downtown stop on Mackenzie Avenue. Exchanges to other routes would also take place here. Each route is designed to serve the downtown with the outlying areas. Routes are structured to cover most of the existing routes, but at a higher level of service. The current downtown exchange is of sufficient size for an additional bus. The city may need to install a larger shelter should ridership grow with the service expansion. The following map shows all the proposed routes.



Route 1 – Downtown to Columbia Park via First Street

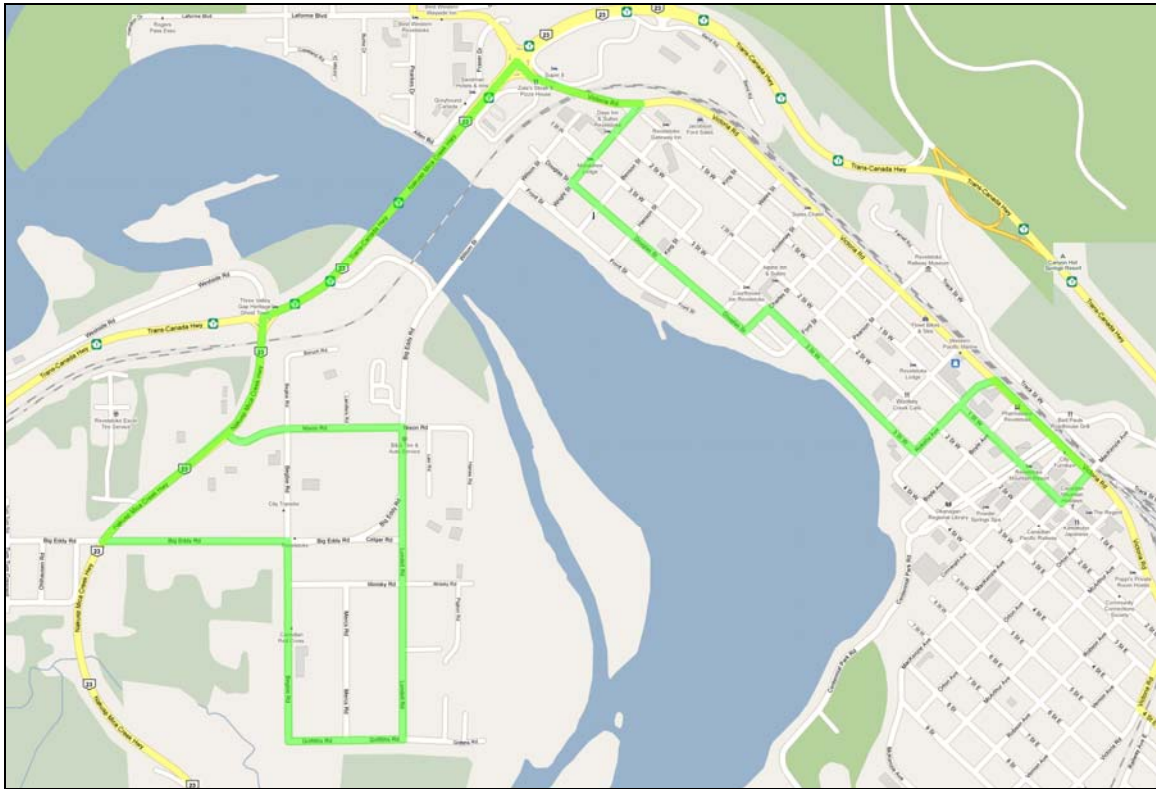
This route would replace part of the existing route 2. The route would leave the downtown Mackenzie Avenue stop, right on 1st Street, left on Benson Street, right on 2nd Street, right on Wright Street, left on Victoria Road to LaForme Blvd, right on Pearkes Drive, right on Colbeck Road, right on Nakusp Mica Creek Highway (23), right on Highway 1, left on Victoria Road, right on Wright Street, left on 2nd Street, left on Benson Street, right on 1st Street, left on Rokeby Avenue, right on Victoria Road and right on Mackenzie Avenue. The map below shows this route graphically.



This route would require 20 minutes round trip time and travel 7.5 kilometres.

Route 2 – Downtown to Big Eddy via Third Street

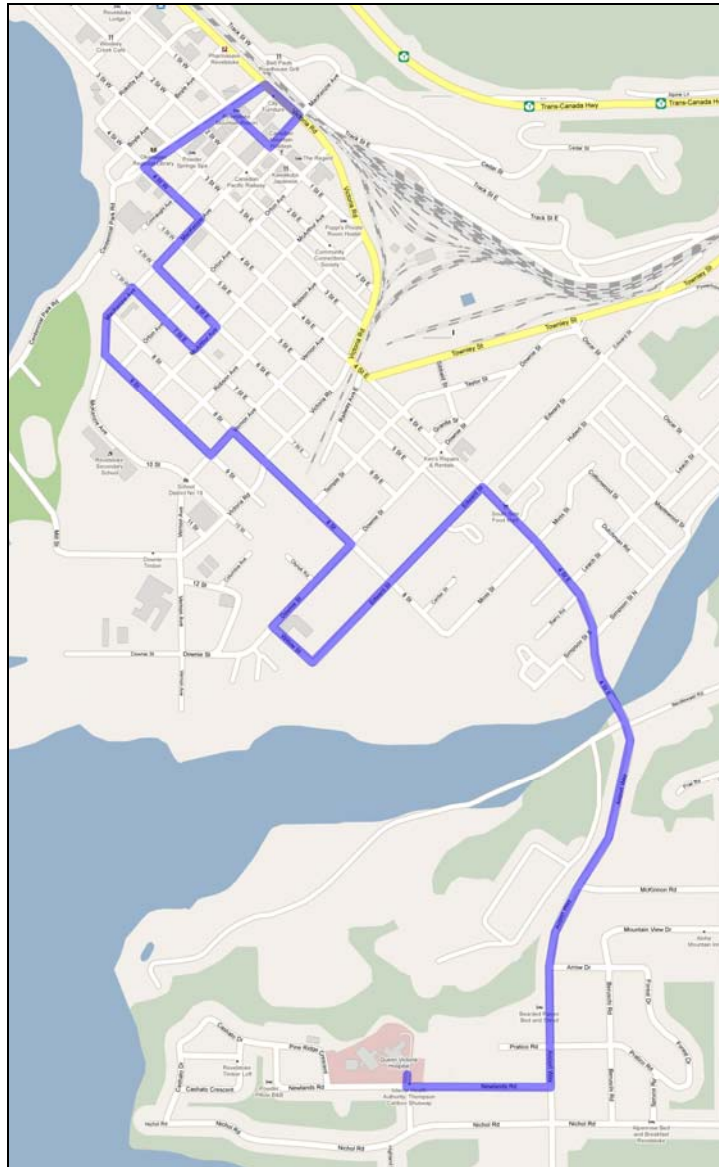
This route would replace part of the existing route 2. The route would leave the Mackenzie Avenue stop right on 1st Street, left on Rokeby Avenue, right on 3rd Street, left on Charles Street, right on Douglas Street, right on Wright Street, left on Victoria Road, left on Highway 1, left on Nakusp Mica Creek Highway (23), left on Big Eddy Road, right on Begbie Road, left on Griffiths Road, left on Lundell Road, left on Nixon Road, right on Nakusp Mica Highway (23), right on Victoria Road, right on Wright Street, left on Douglas Street, left on Charles Street, right on 3rd Street, left on Rokeby Avenue, right on Victoria Road, and right on Mackenzie. The map below shows this route graphically.



This route would require 26 minutes round trip time and travel 10.5 kilometres.

Route 3 – Downtown to Hospital via South Side

This route would replace part of the existing route 1. The route would leave the Mackenzie stop, right on 1st Street, left on Columbia Avenue, left on 4th Street, right on Mackenzie, left on 6th Street, right on McArthur Avenue, right on 7th Street, left on Mackenzie, left on 9th Street, left on Vernon Avenue, right on 8th Street, right on Downie Street, left on Willow Street, left on Edward Street, right on 4th Street to Airport Way, left on Newlands road to the Hospital turn around. The route would follow the same in reverse looping on 1st Street, Columbia Ave and Victoria Road to return to Mackenzie. The map below shows this route graphically.



This route would require 26 minutes round trip time and travel 11 kilometres.

Route 4 – Downtown to Hospital via Arrow Heights

This route would replace part of the existing route 1. The route would leave the Mackenzie stop, right on 1st Street, left on Columbia Avenue, left on 4th Street, left on Mackenzie, right on 3rd Street, right on Victoria Rd, left on 4th Street, left on Hubert Street, right on Oscar Street, right on Leach Street, left on 4th Street to Airport Way, left on McKinnon Road, right on Park Drive, right on Nichol Road, right on Elm Street and into the Hospital. The route would follow the same roads in reverse following Columbia Avenue to right on Victoria Road, right onto Mackenzie. The map below shows this route graphically. Service would be eliminated on the Windsor Dr. loop and Hay Road loop. The Windsor Dr. loop is mostly within a 400m walk of the McKinnon Rd and Park Dr intersection. About 2.5 people per day board here. The Hay Rd. Loop is a slightly further walk from that same intersection. About 3.5 people per day board here.



The route would require 32 minutes round trip and travel 12 kilometres.

Service Proposals

Using the above 4 routes, there are three service proposals given below. Each service proposal would require different levels of expansion service hours. Each service proposal would also require one additional bus. The estimated costs of each proposal are also included. These estimated costs are for the expansions only. They do not include the current costs paid for the existing vehicles and service hours.

These service proposals all require expansion hours. Without expansion hours, it is recommended that nothing be changed. The current system, while not well utilized, manages to serve much of the town at a low cost. Any changes without expansion would require cutting service to some parts that currently receive service.

Annual costs are based on actual data derived from the existing system. Current ridership is 7 rides per hour. Implementing new systems can sometimes reduce ridership in the short term. When doing budgets, care should be given to this uncertainty. The current average fare is \$1.50 and it costs \$75 per hour to run the system. Costs are over and above the existing costs.

Proposal 1 – Minor Expansion

This expansion would have 7 trips per weekday and 5 trips every Saturday on all routes. This service would require a total of 3600 annual service hours. This is a 500 annual hour expansion and would require one additional vehicle (3 total).

	Additional Annual Service Hours	Add. Annual Total Cost*	Add. Estimated Revenue**	Add. Annual Local Cost***
Proposal 1	500	\$94,000	\$5,250	\$43,000

* Costs based on a cost per service hour of \$75.00 plus additional debt service of \$56,400 (total debt service) for the required expansion vehicle.

** Based on ridership of 7 people per service hour and average fare of \$1.50

*** Based on the current cost sharing formula of Local = 51.31% and Provincial = 48.69%

Proposal 2 – Medium Expansion

This expansion would have 9 trips per weekday and 7 trips every Saturday on the routes 1 & 4. The routes 2 & 3 would run 10 times per weekday and 7 times on Saturdays. This service would require a total of 4900 annual service hours. This is an 1800 annual hour expansion and would require one additional vehicle (3 total).

	Additional Annual Service Hours	Add. Annual Total Cost*	Add. Estimated Revenue**	Add. Annual Local Cost***
Proposal 2	1800	\$191,000	\$19,000	\$79,000

* Costs based on a cost per service hour of \$75.00 plus additional debt service of \$56,400 (total debt service) for the required expansion vehicle.

** Based on ridership of 7 people per service hour and average fare of \$1.50

*** Based on the current cost sharing formula of Local = 51.31% and Provincial = 48.69%

Proposal 3 – Major Expansion

This expansion would have 12 trips per weekday and 9 trips every Saturday on all routes. This service would require a total of 6200 annual service hours. This is a 3100 annual hour expansion and would require one additional vehicle (3 total).

	Additional Annual Service Hours	Add. Annual Total Cost*	Add. Estimated Revenue**	Add. Annual Local Cost***
Proposal 3	3100	\$289,000	\$33,000	\$115,000

* Costs based on a cost per service hour of \$75.00 plus additional debt service of \$56,400 (total debt service) for the required expansion vehicle.

** Based on ridership of 7 people per service hour and average fare of \$1.50

*** Based on the current cost sharing formula of Local = 51.31% and Provincial = 48.69%

Sunday Service

Sunday service was recommended as a future expansion option by local partners. This section estimates the annual costs of providing this service. Hourly costs are the same as in the other proposals. No additional vehicles would be required for this service.

Option 1 would include 4 trips on routes 1 & 4 and 5 trips on the routes 2 & 3.

Option 2 would include 6 trips on all routes

Option 3 would include 8 trips on routes 1 & 4 and 9 trips on the routes 2 & 3.

	Additional Annual Service Hours	Add. Annual Total Cost*	Add. Estimated Revenue**	Add. Annual Local Cost***
Option 1	400	\$30,000	\$3,000	\$12,500
Option 2	540	\$40,500	\$4,000	\$17,000
Option 3	770	\$58,000	\$6,000	\$24,000

* Costs based on a cost per service hour of \$75.00

** Based on ridership of 5 people per service hour and average fare of \$1.50

*** Based on the current cost sharing formula of Local = 51.31% and Provincial = 48.69%

Recommendations

It is recommended that this report be given to council for their consideration. Until expansion hours are confirmed by both funding partners, commitment from the local level would be by council resolution to endorse one of the expansion proposals. While Revelstoke has 500 unused expansion hours, there are no expansion vehicles available. By endorsing one of the expansion proposals, Revelstoke will be placed on a list of cities to receive expansion dollars and vehicles at a future date.