Service Discussion Document

Kimberley Transit System – 2017 Service Expansion



April 7, 2017



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1.0 BACKGROUND

Existing transit service within the Kimberley Transit System comprises local door-to-door service on weekdays within the city of Kimberley, and regional service between Kimberley and Cranbrook. This regional service operates Tuesday through Friday, providing three daytime round trips to Cranbrook for medical appointments, shopping and other errands, and social activities. The earliest trip arrives in Cranbrook at 9:30 a.m. and the latest trip leaves Cranbrook at 3:45 p.m., with door-to-door pick-ups and drop-offs within Kimberley.

In February 2016 the Provincial Government announced their commitment to \$12.7 million in funding over the next three years to support transit expansion initiatives throughout the province. The Kimberley Transit System was identified as a candidate for potential expansion and subsequently the City of Kimberley requested that BC Transit develop annual service hour and cost estimates for introducing weekday commuter service to Cranbrook in order to serve Kimberley residents commuting to Cranbrook for work or school. This proposed commuter service to Cranbrook was included as a potential service option in the 2012 *Kimberley Transit System Service Review Report*, and identified in recent years as an expansion priority through discussions with local partners (see *Figure 1* below).

In May 2016 the City of Kimberley confirmed commitment to this expansion initiative by signing a Memorandum of Understanding (MOU) formalizing the process of securing expansion funding. In early 2017 this expansion request was included in BC Transit's draft Service Plan to the Province to seek the matching funding required for operating costs. Following confirmation of the Provincial budget and funding in February for this service expansion, the City of Kimberley is receiving this Service Discussion Document, which will be followed by an Implementation Memorandum of Understanding further detailing the specific service changes to be implemented.

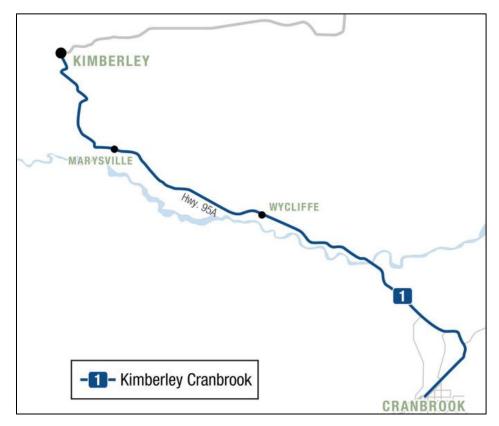


Figure 1: Kimberley Transit Route Designated for 2017 Service Expansion

2.0 Public Consultation

2.1 Methodology

An online survey was conducted February 16 through March 5 to gather local residents' feedback. As well as asking for information on current commuting habits, respondents' work or school start and end times, and their residence locations within Kimberley, input was requested on potential commuter service trip times, desired pick-up and drop-off locations within Cranbrook, and predicted frequency of usage in order to design this new service to meet the needs of the maximum number of respondents.

The survey was advertised in the local media (print and radio), as well as on board Kimberley's buses, on posters displayed around the city, and on BC Transit's website and the City of Kimberley's website.

The survey was also promoted through local targeted advertising on Facebook, and customer alerts were posted on the BC Transit website. Paper versions of the survey were made available at Kimberley City Hall and on the buses for people preferring this method of providing feedback.

2.2 Results

484 local residents completed the survey, a 6% response rate which compares favourably to the average response rate of 1-2% for similar surveys. 85% of respondents were aged between 25-64 years old.

As shown in *Figure 2* below, 49% of respondents currently commute to Cranbrook for work, 5% for school at College of the Rockies, 0% for other schools within Cranbrook, and 46% do not currently commute to Cranbrook for work or school (although some of them travel to Cranbrook 1-3 days per week for shopping and medical appointments).

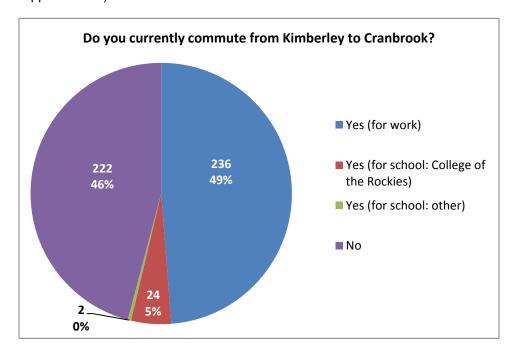
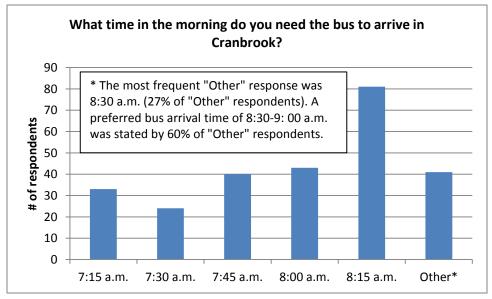


Figure 2: Current Commuter Travel to Cranbrook

As this new service is designed specifically for Kimberley residents currently attending work or school in Cranbrook (requiring trip times outside of existing service provision) in order to provide an alternative transportation mode, and in order to be able to optimize service design for their specific travel needs, all subsequent question responses have been filtered to only those respondents identifying as currently commuting to Cranbrook for work or school.

In terms of commuting mode, 88% of current commuters commute as a vehicle driver, 7% commute as a vehicle passenger, and 5% commute by carpooling.

The most popular times for the bus to arrive in Cranbrook in the morning were 8:15 a.m. (31%) and 8:00 a.m. (16%), and the most popular times for the bus to leave Cranbrook in the afternoon were 4:30 p.m. (27%) and 4:45 p.m. (25%), as shown in *Figure 3* below:



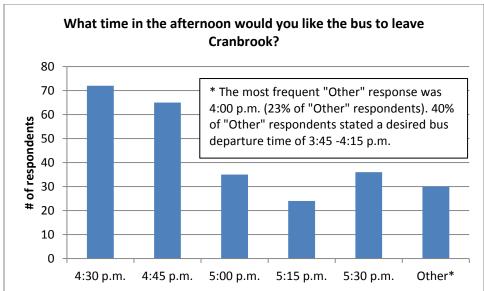


Figure 3: Desired Bus Arrival and Departure Times in Cranbrook

The most common work start times were 8:30 a.m. (37%) and 8:00 a.m. (28%), and the most common work finish times were 4:30 p.m. (37%) and 5:00 p.m. (20%).

In terms of work or school location, the following accounted for nearly half of the total responses:

- College of the Rockies (22%)
- East Kootenay Regional Hospital (13%)
- Interior Health Authority (6%)
- Regional District of East Kootenay (5%)
- Ministry of Environment (3%)

Locations employing only a single respondent each accounted for 32% of total responses. Further details are shown in *Appendix A, Additional Online Survey Results*.

A total of 81% of respondents stated their preferred bus pick-up and drop-off location to be either the downtown Cranbrook transit exchange (Safeway), the College of the Rockies, East Kootenay Regional Hospital, or Tamarack Mall. 1% stated that they would not use this commuter service, while the remaining 18% selected their preferred location as "Other" (see *Figure 4* below).

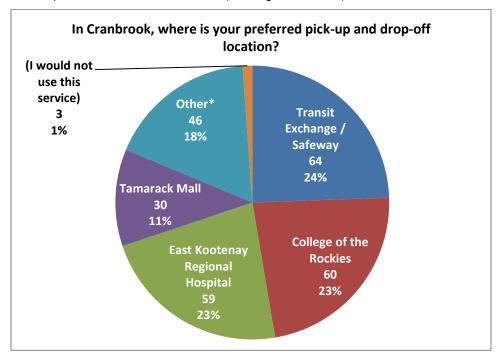


Figure 4: Preferred Cranbrook Pick-Up/Drop-Off Location

"Other" locations were parsed and are shown in Appendix A.

The results for how frequently respondents predicted that they would use this service are shown in *Figure 5* below.

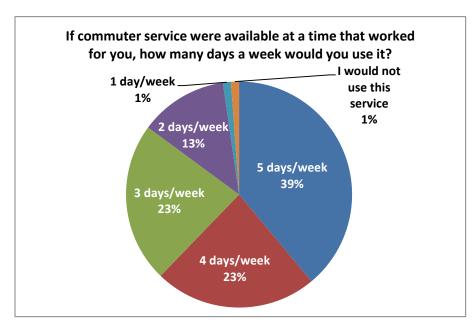


Figure 5: Self-Predicted Usage Frequency of Commuter Transit Service

These survey results are incorporated within the proposed service change details in *Section 3.0* below. In order to optimize service design by basing it on actual demand for commuter service, answers from respondents stating they would not use this service have not been included in the service concepts following.

3.0 PROPOSED SERVICE DESIGN

This service change would add one morning peak round trip and one afternoon peak round trip on weekdays between Kimberley and Cranbrook, using existing vehicles within Kimberley Transit's fleet.

It is recommended that commuter service design comprise fixed-route service (as opposed to the ondemand, ride booking service used for Kimberley's current transit options) in order to optimize convenience and predictability for riders, and minimize additional local administrative requirements.

The routings proposed in this section are based on suggestions from the City of Kimberley as part of their Official Community Plan update, industry best practice, and online survey results.

These high-level service design recommendations are based on the most frequent work start (8:30 a.m.) and finish (4:30 p.m.) times submitted by survey respondents. It should be noted that these routing and scheduling suggestions are subject to an operational field test to determine feasibility of routing and associated vehicle running times, further discussions with the City of Kimberley, discussions with the local operating company regarding vehicle and operator availability, as well as detailed scheduling work.

3.1 PROPOSED ROUTING

The proposed routings within Kimberley are shown in *Figure 6* (morning) and *Figure 7* (afternoon) below. Proposed routing within Cranbrook is shown in *Figure 8*. It is recommended that the morning inbound routing to Kimberley and the afternoon outbound routing to Cranbrook omit the Civic Centre stop, instead routing via Highway 95A/Wallinger Avenue due to time and vehicle availability constraints, as well as predicted lack of demand for this direction and time of travel.

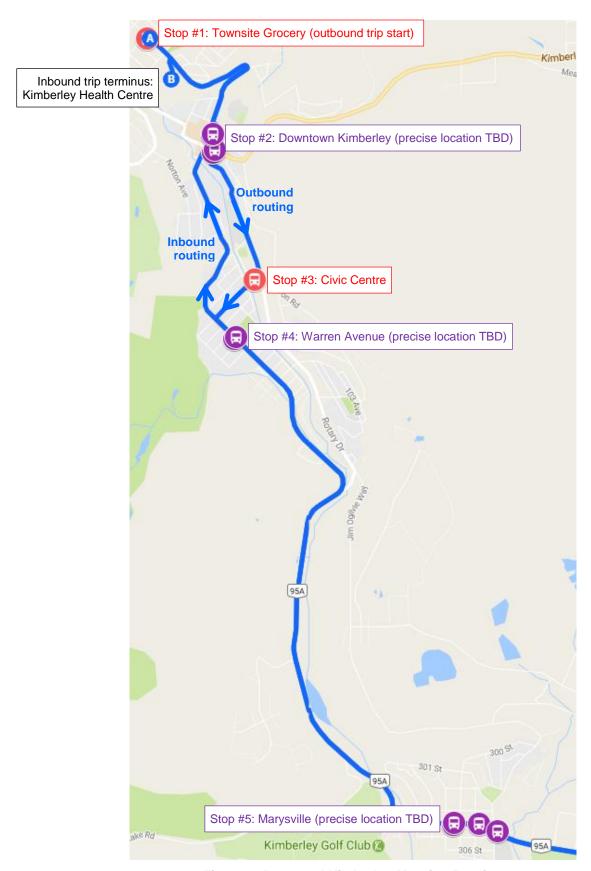


Figure 6: Proposed Kimberley Morning Routing

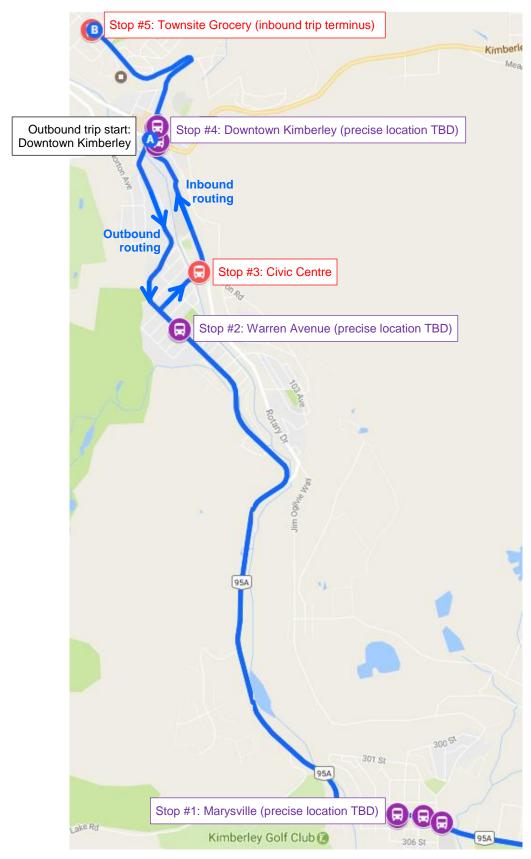


Figure 7: Proposed Kimberley Afternoon Routing

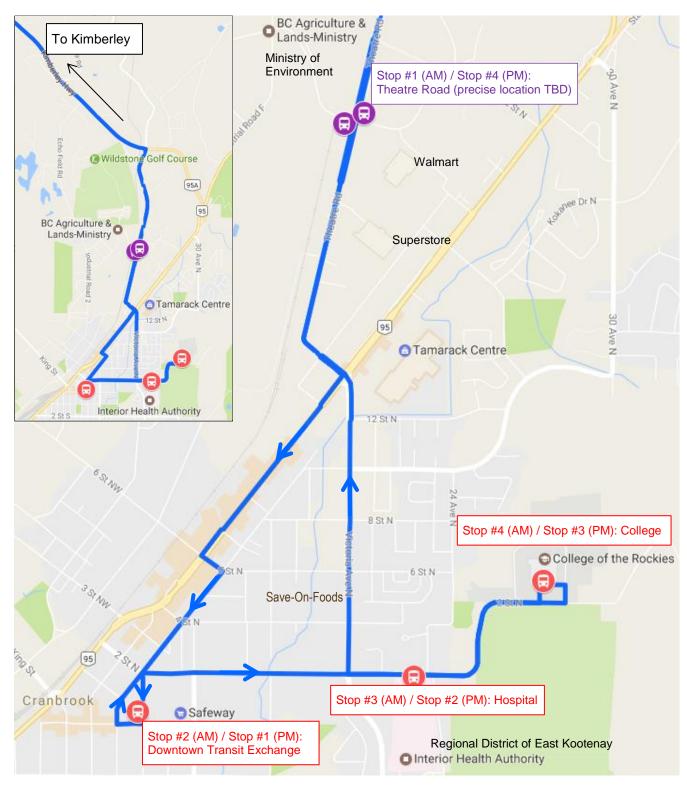


Figure 8: Proposed Cranbrook Routing

3.2 PROPOSED SCHEDULES

Based on the proposed routings shown above and online survey results, and subject to discussions with the local operating company and an operational field test, trips will likely be around the following approximate times:

Morning trip: Townsite Grocery depart: 7:30 a.m. Cranbrook arrivals: 8:10-8:20 a.m. **Afternoon trip:** Cranbrook departures: 4:40-4:55 p.m. Townsite Grocery arrive: 5:30 p.m.

Schedules will be finalized once all routings have been finalized and detailed scheduling work has been completed.

4.0 SPECIAL CONSIDERATIONS AND CONTINGENCY STRATEGIES

Depending on the level of actual uptake for this new service, vehicle capacity may become an issue, particularly since Kimberley's fleet consists of Chevrolet ARBOCs (maximum 20 passengers per vehicle). It is recommended that ridership on the commuter service be monitored, and an application for additional expansion funding be made for 2018-19 if required.

It is critical to ensure that no passengers are left stranded in Cranbrook overnight. As such, it is strongly recommended that daytime passengers for Cranbrook continue to be pre-booked on the existing 1:00 p.m. and 3:00 p.m. trips returning from Cranbrook to Kimberley, so that all commuters on the morning trip into Cranbrook have a guaranteed seat on the afternoon commuter trip returning to Kimberley.

5.0 Service Change Costing Estimates and Service Specifications

Costing estimates and service specifications for the above service changes are shown on the following page. These will be further refined once actual trip running times and final annual service hours have been determined through detailed scheduling work.

Table 1: Estimated Additional Annual Requirements

In-Service Date	Annual Hours	Vehicle Requirements	Revenue	Total Costs	Net Municipal Share
	1,010	-1	\$6,700	\$54,000	\$14,000
	Description:	Weekday commuter service to Cranbrook			
September 2017	Details:				

6.0 SUPPORTING STRATEGIES

6.1 INFRASTRUCTURE

Bus stop locations and directionality (i.e. inbound/outbound) will be finalized following an operational field test in April. Given that this is a brand new service and passenger demand may shift during the first 12 months of service, it may be beneficial to install temporary bus stop signage at some or all stops initially, before constructing permanent bus stops once travel patterns have become established.

Pending the operational field test, bus stop locations will be approximately as follows:

Stop	Description	Stop	Description
1	Townsite Grocery, inbound & outbound	6	Warren Avenue, outbound
2	Downtown Kimberley, outbound	7	Warren Avenue, inbound
3	Downtown Kimberley, inbound	8	Marysville, outbound
4	Civic Centre, outbound	9	Marysville, inbound
5	Civic Centre, inbound	10	Theatre Road (Cranbrook), outbound
		11	Theatre Road (Cranbrook), inbound

Table 2: Approximate Bus Stop Locations for Service Implementation

6.2 Marketing & Communications

A Marketing and Communications Plan will be developed that outlines the steps necessary to communicate this service expansion to the public. The objectives of this plan will be to make the public aware of the new Kimberley commuter service ahead of time and to promote a successful service launch. The plan will include various strategies to achieve these goals, for example media releases, radio, paper and social media advertising, promotion via BC Transit's website, and potential launch events.

6.3 MONITORING

The new transit service will be monitored closely by BC Transit and local partners post-implementation to ensure that schedules and route alignments are meeting the needs of customers. Monitoring will include ridership analysis, on-time performance analysis and customer feedback. This information will be relayed to City of Kimberley staff in late 2018 to allow for any required service adjustments the following year.

7.0 TIMELINE

The timeline towards service change implementation is outlined below.

Month	Actions & Deliverables
Early March 2017	Development of DRAFT Service Discussion Document
March 2017	Final Service Discussion Document sent
May 2017	Implementation Agreement MOU approved and signed
September 2017	Service expansion implementation

8.0 NEXT STEPS

Once this Service Discussion Document has been reviewed and approved by City staff it will be finalized. At this point, an Implementation Memorandum of Understanding (MOU) will be developed for review and sign-off by the City of Kimberley, BC Transit, and the operating company, Kimberley Community Transportation. This will identify the agreed route, schedule, infrastructure requirements and timeline to enable implementation to proceed.

APPENDIX A: SUPPLEMENTARY ONLINE SURVEY RESULTS

Supplementary results from the online survey are included here for information purposes.

From a demographic perspective, response frequency among the different age groups was as follows:

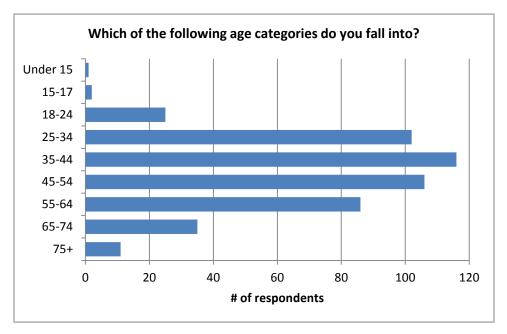


Figure 9: Respondent Age Categories

Of those respondents stating that they currently commute to Cranbrook for work or school, their commuting modes were as follows:

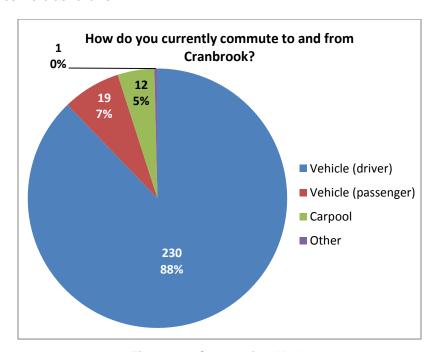


Figure 10: Commuting Mode

Respondents' work or school start and end times were as follows:

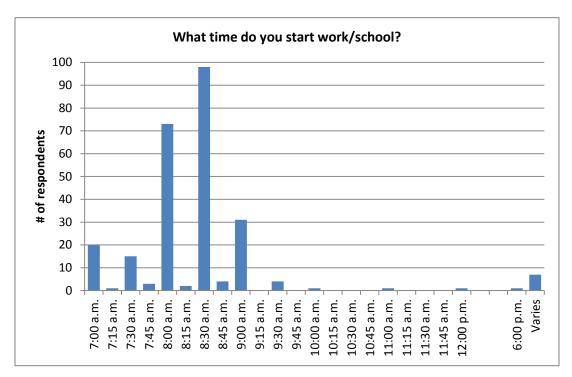


Figure 11: Work/School Start Time

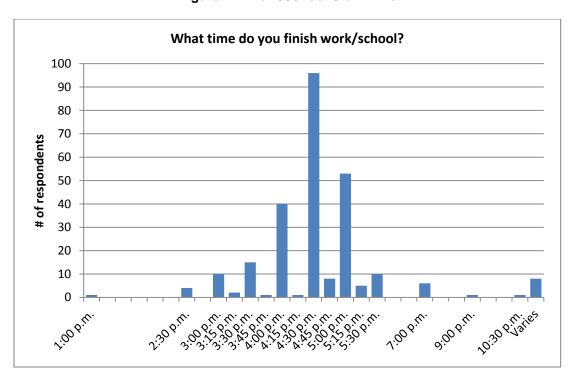


Figure 12: Work/School End Time

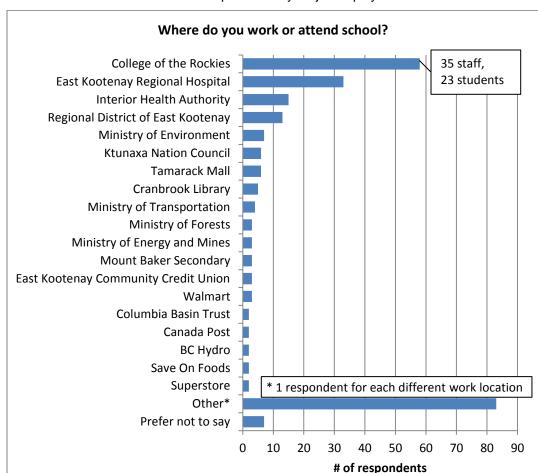


Figure 13 below indicates the number of respondents by major employment locations in Cranbrook.



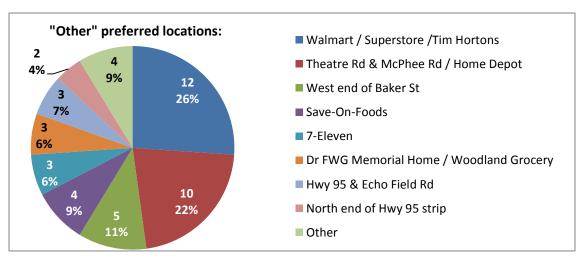


Figure 13a): Breakdown of "Other" Employment Locations

Filtering survey results to respondents' most frequent work start and end times, 8:30 a.m. and 4:30 p.m., yields the following preferred pick-up and drop-off locations in Cranbrook (*Figure 14*).

Location information in the maps following has been combined with self-predicted usage frequency results as follows:

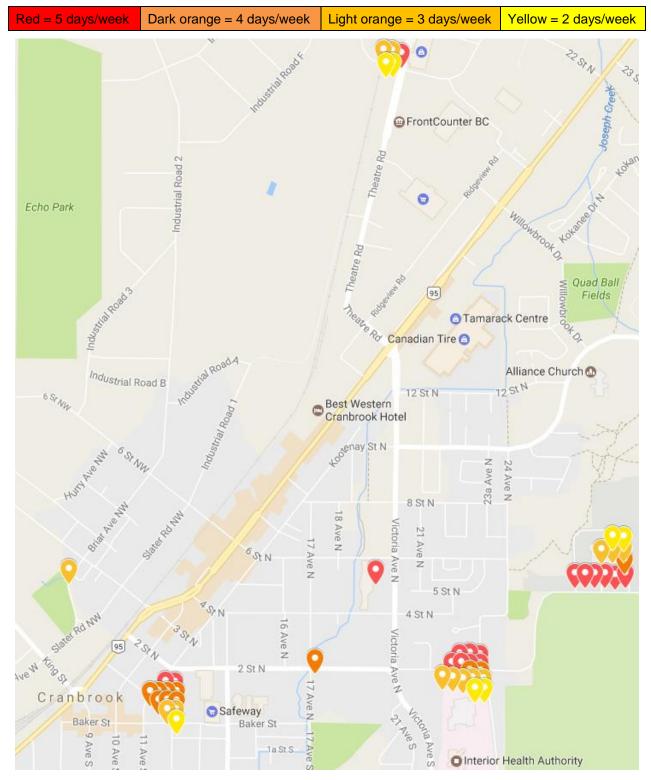


Figure 15: Preferred Cranbrook Pick-Up/Drop-Off Locations