

City of Merritt

Transit Service Review



November, 2016



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Executive Summary

In partnership with the City of Merritt, BC Transit has undertaken a Service Review of the City of Merritt Transit System. As identified within the Service Review Memorandum of Understanding, the key objectives of the Service Review included the following:

- Review ridership and system performance
- Consider Merritt's expansion requests within the context of system performance including handyDART service, Sunday operation, later operating hours, service to Cold Water Reserve, additional trips to Lower Nicola and Rocky Pines, additional Health Connections service to Kamloops and Kelowna, and an additional Diamond Vale stop.

Merritt's conventional system operates four routes from Monday to Saturday between 6:15am and 9:30pm, and is currently operated by two low-floor, 20-passenger ARBOC vehicles. Health Connections service is also available to Merritt residents, providing weekly regional service to Kelowna and Kamloops. The Merritt Transit System functions heavily as a transfer-based system, with about 40% of ridership attributed to passengers transferring between routes to reach their final destination.

The fares for the Merritt Transit System have not changed since the system was established in 2007, and this report includes recommendations from the Merritt Fare Review which is being conducted simultaneous to the Service Review.

Merritt's transit ridership has grown substantially since service was introduced in 2007, and the projected population growth and the aging baby boomer generation are likely to continue driving transit ridership growth in the Merritt Transit System moving forward. The Merritt Transit System performs better than other transit systems in communities of similar size on Key Performance Indicators (KPIs) such as 'rides per service hour' and 'cost recovery'.

BC Transit planning staff visited Merritt several times over the course of the Service Review to research transit system operations and to speak with current transit users and key stakeholders. Key public consultation efforts included a driver survey, an on-board customer survey, and consultation meetings with the Nicola Valley Transportation Society and City of Merritt staff.

A summary of the proposed service change options and supporting actions from this Service Review are presented in Table 1 and Table 2 respectively. These proposals have been divided into four time horizons for implementation including immediate-term (Spring 2017), short-term (Winter 2018), medium-term (2 to 5 years), and longer-term (5+ years).

BC Transit recommends that the City of Merritt:

- **Receive this report for review and comment prior to finalization by BC Transit staff;**
- **Direct staff to work with BC Transit to implement immediate term service options and supporting actions;**
- **Approve staff to work with BC Transit to conduct additional public consultation to inform short term service option details**
- **Receive the Appendices of this report as information.**

Merritt Transit System Service Review

Table 1 – Service Option Summary

#	Proposed Service Change Option	Proposed Implementation Timeline	Integration with Local Plan	Infrastructure Requirements
1	Include Nicola Valley Institute of Technology (NVIT) stop on first outbound Route 1 North End trip	Immediate-Term		
2	Alter schedule for Route 4 Lower Nicola to address schedule reliability issues	Immediate-Term		
3	Address Route 3 Diamond Vale safety concern	Immediate-Term		
4	Implement Sunday service, later service, and additional trips to Lower Nicola	Short-Term		To be determined
5	By Request Service for Improved Transit Service Accessibility	Short-Term	Age Friendly Action Plan (Action 2.1)	Additional Bus Parking Space at City Hall
6	Provide on-demand service to Nicola Meadows, the Florentine, and the Nicola Valley Hospital and Health Centre	Short-Term		
7	Alter 3 Diamond Vale Routing to address left turn from Merritt Ave. onto Voght St.	Short-Term		To be determined
8	Revisit routing and consider adding or altering locations of certain bus stops on Route 4 Lower Nicola	Short-Term		Yes
9A	Service expansion to Coldwater Reserve	Medium-Term		Yes
9B	Add trips to Routes 2 and 3 to provide consistent hourly service	Medium-Term		
10	30-minute service frequency on Routes 1, 2, and 3	Long-Term		

Merritt Transit System Service Review

Table 2 – Supporting Action Summary

#	Proposed Supporting Action	Proposed Implementation Timeline	Integration with Local Plan	Infrastructure Requirements
1	Utilize BC Transit's Development Referral Program	Immediate-Term		
2	Integrate Fare Review recommendations with Service Review	Immediate-Term		
3	Improve transit infrastructure and information at key transit stops	Short-Term		Yes
4	Implement bus stop infrastructure guidelines	Short-Term	Age Friendly Action Plan (Action 2.2)	
5	Create a bus stop database, conduct an infrastructure assessment, and prioritize bus stop infrastructure improvements	Short-Term	Age Friendly Action Plan (Actions 2.2 & 2.3)	
6	Implement Google Transit	Medium-Term		
7	Consider altering Merritt's Snow Removal Policy and Procedure Bylaw to prioritize transit routes and infrastructure	Medium/Long-Term		
8	Adopt Service Standards and Performance Guidelines	Short-Term		

1.0 Introduction

In partnership with the City of Merritt, BC Transit has undertaken a Service Review of the Merritt Transit System. It has been five years since Merritt's last Service Review, and it is BC Transit's organizational goal to review systems approximately every five years. This provides the opportunity to optimize transit service and to address any issues that have developed since the last review.

1.1 Objectives

As identified within the Service Review Memorandum of Understanding, the key objectives of the Service Review included the following:

- Review ridership and system performance
- Consider Merritt's expansion requests within the context of system performance including handyDART service, Sunday operation, later operating hours, service to Cold Water Reserve, additional trips to Lower Nicola and Rocky Pines, additional Health Connections service to Kamloops and Kelowna, and an additional Diamond Vale stop.

1.2 Service Review Process

The following steps were undertaken by BC Transit staff between April and September 2016 as part of this Service Review:

- Traveled to Merritt several times to better understand the local transit system and to talk with and get feedback from key stakeholders and transit customers;
- Designed and implemented a driver survey, an on-board passenger survey, and updated the driver ridecheck process for improved ridership data;
- Reviewed local planning documents to align the service review recommendations with local community objectives;
- Proposed detailed service changes as short, medium, and long-term recommendations including an estimate of associated service hours and costs;

2.0 Community Demographics

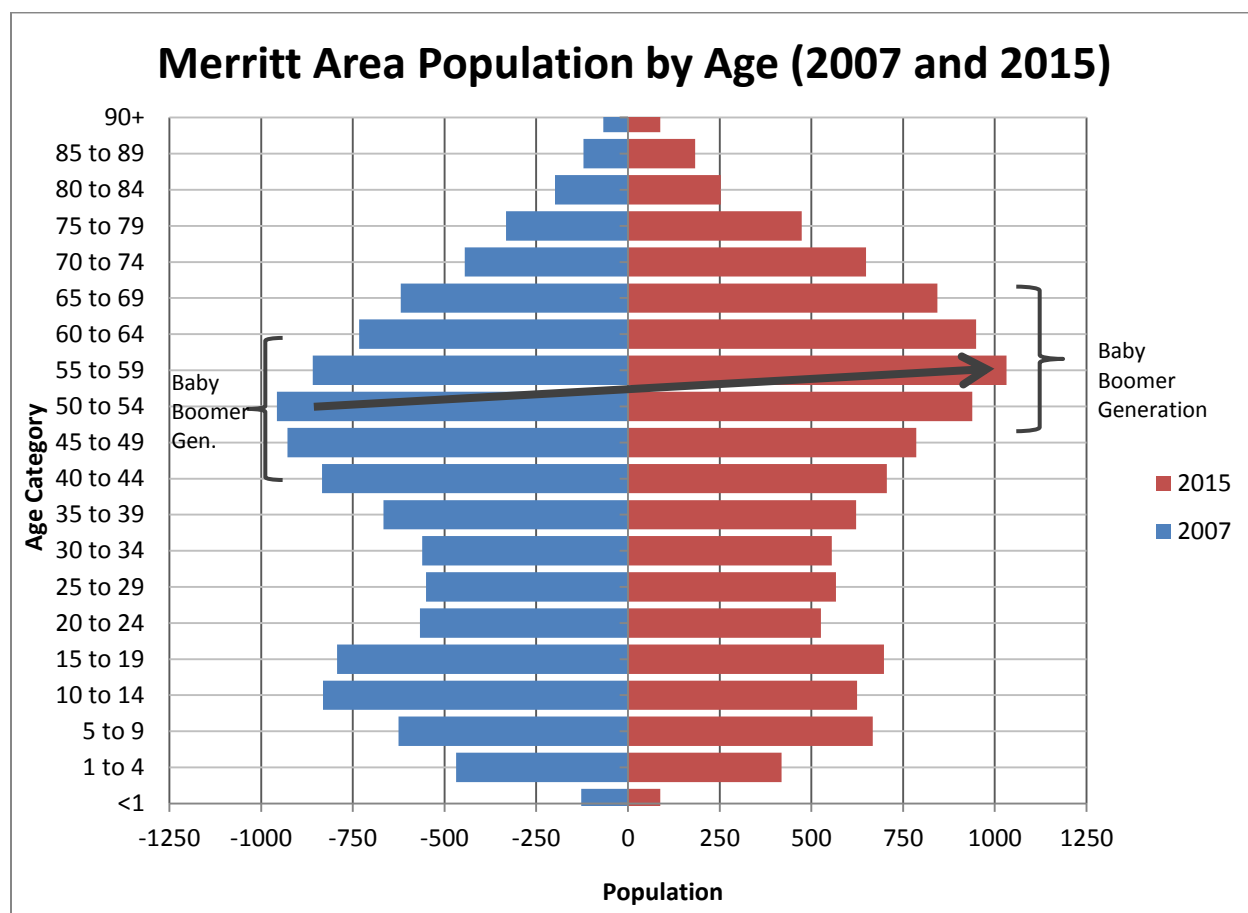
Merritt's changing demographics trends have implications for transit ridership. The City of Merritt saw minor population growth between 2006 and 2011, and the population within the Merritt area is projected to continue growing slowly into the foreseeable future. Merritt's population is also strongly characterized by the aging baby boomer generation (currently aged 51 to 70).

Figure 1 displays the Merritt area population by age category between the year the Merritt Transit System was first established (2007) and 2015. Merritt's aging population will likely drive continued transit ridership growth as larger portions of the population become reliant on alternative modes of transportation.

Table 3 – City of Merritt's Population over Time

Area	2006	2011	Change in Population (2006 to 2011)
City of Merritt	7000	7110	+1.6%

Figure 1 – Merritt's Local Health Area Population by Age



Source: Population estimates for 'Merritt Local Health Area' (2007-2015) by BC Stats, BC Ministry of Citizens' Services

3.0 Merritt Transit System

3.1 Background

Merritt's transit system is currently operated by the Nicola Valley Transportation Society and offers fixed-route service to the City of Merritt and Lower Nicola through a funding partnership between BC Transit and the City of Merritt; the Thompson Nicola Regional District (TNRD) and the Lower Nicola Indian Band also contribute financially to this service through a local funding agreement with the City of Merritt. Regional travel to Kamloops and Kelowna is available through the Health Connections program.

This section describes the history, the existing transit system and fleet, and the transit system performance and ridership benchmarked against similar transit systems in B.C.

3.2 Conventional Service

3.2.1 Merritt's Conventional System History

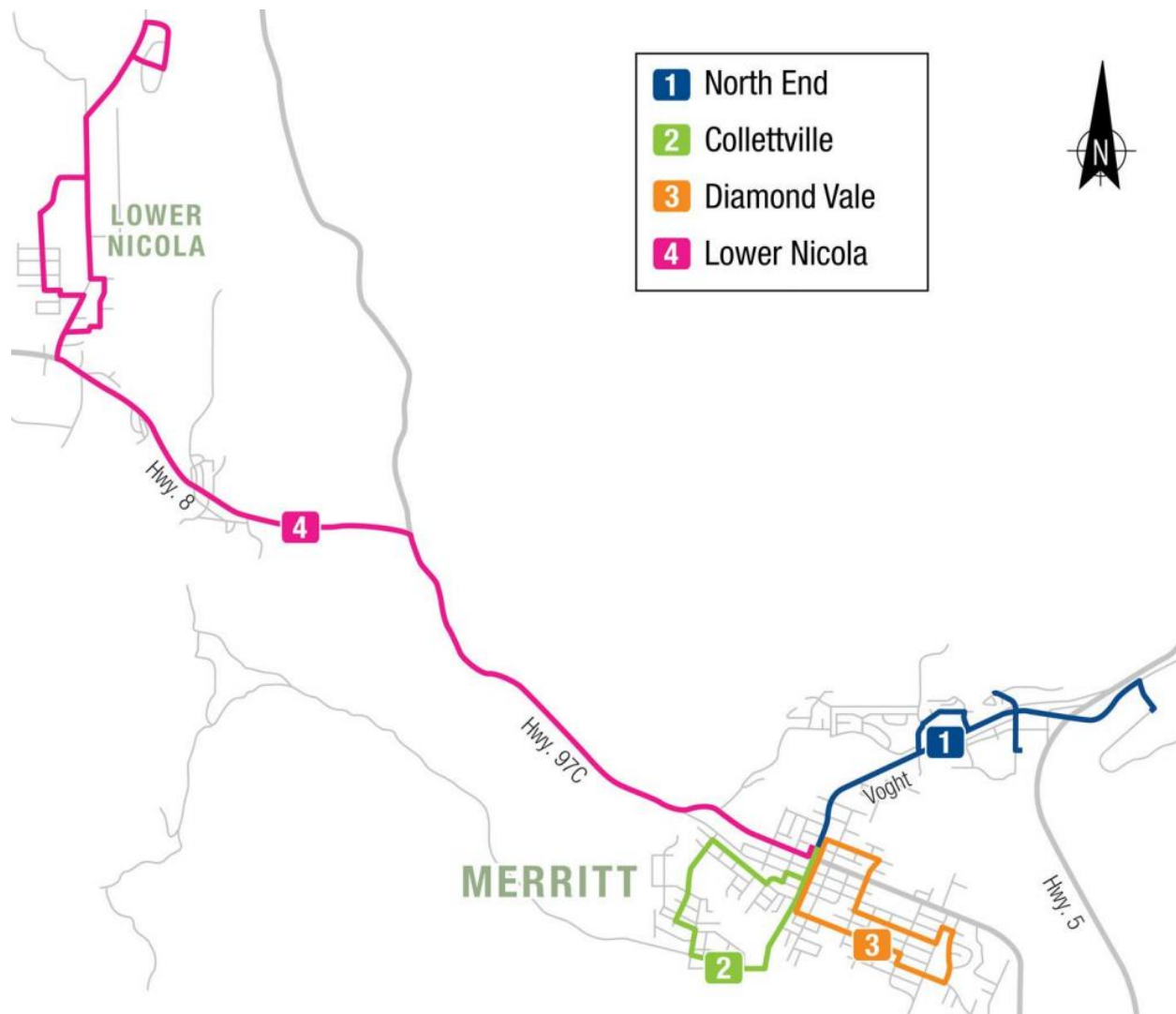
Merritt's conventional system was established in November of 2007. A synopsis of Merritt's transit system history is outlined below:

- **November 2007:** System established with Monday to Friday service between 8:30am and 6:30pm
- **September 2008:** Hours of service were extended with service starting two hours earlier each day (6:30am – 6:30pm)
- **July 2011:** Saturday service introduced and service span extended to three hours later each day (6:30am – 9:30pm)
- **October 2015:** Route 3 Diamond Vale and Route 1 North End modified to provide service to Nicola Meadows and the Florentine.

3.2.2 Merritt's Conventional System Today

Merritt's conventional system currently operates Monday to Saturday between 6:15am and 9:30pm. The system operates with one bus in constant operation during the service day, providing service on four conventional routes that all begin and end in Downtown Merritt at Nicola & Voght (Figure 2). Merritt's fleet currently includes two low-floor, 20-passenger ARBOC buses, with one of those vehicles acting as a spare. Both of these buses are fully accessible to passengers using wheelchairs and scooters, while also offering ease of boarding to other passengers with mobility aids and families using strollers.

Figure 2 - Merritt Transit System—Existing Service (Bus Routes)



- **Route 1 North End** – This route provides service along Voght Street between downtown Merritt and Walmart, providing service to several key destinations between including the Nicola Valley Hospital and Health Centre, the Nicola Valley Institute of Technology, and Extra Foods.
- **Route 2 Collettsville** – This route covers the southwest portion of Merritt, providing service between the Collettsville neighbourhood and downtown Merritt.
- **Route 3 Diamond Vale** – This route covers the southeast portion of Merritt, primarily providing service between Diamond Vale Elementary school, several apartment complexes near Clapperton Avenue and Menzies Street, and downtown Merritt.
- **Route 4 Lower Nicola** – This route provides service between downtown Merritt and Lower Nicola along Highway 8.

Merritt Transit System Service Review

Table 4 – Merritt Transit Service Frequency and Service Span

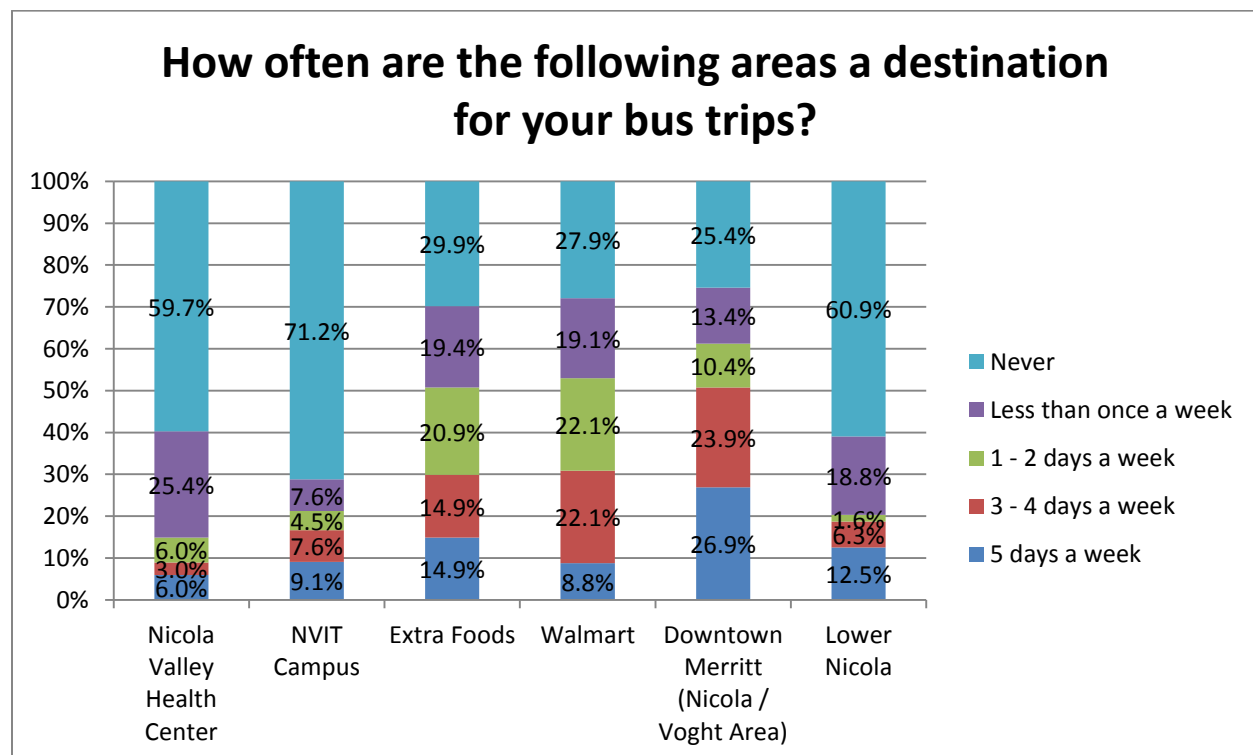
Route #	Route Name	Average Service Frequency (Monday to Saturday)	Service Span (Monday to Saturday)
1	North End	Every Hour	6:45am to 9:15pm
2	Collettville	Every Hour*	6:30am to 8:45pm
3	Diamond Vale	Every Hour*	6:15am to 9:30pm
4	Lower Nicola	2 morning trips, 1 evening trip	7:15am to 5:45pm

*There are three gaps in the hourly service frequency to Routes 2 and 3 to provide service to Lower Nicola

Major Destinations for the Merritt Transit System

Given that a large proportion of key trip destinations are located along Voght Street in the North End (Figure 3), Merritt's system operates as a transfer-based system, with a large proportion of passengers from Routes 2, 3, and 4 transferring to Route 1 to reach their final destinations. According to ridecheck information from May 2016, approximately 40% of Merritt's ridership can be attributed to passengers transferring between routes. Any future changes to the Merritt Transit System should be mindful of this key system characteristic.

Figure 3 - Transit Trip Destinations in Merritt



3.3 Health Connections Service

Merritt residents currently have regional transit service to Kamloops and Kelowna through the Health Connections service, which provides accessible, regional transit services to communities for accessing non-emergency medical appointments. Although medical appointments have priority, everyone is eligible to use this service if space is available, and passengers must phone 24 hours ahead to arrange their trip. Health Connections pick up locations within Merritt include the Florentine retirement facility, the Nicola Valley Hospital and Health Centre, and the Merritt Library.

The Health Connections service in Merritt is provided by First Canada in Kamloops, and funding and planning for this service is shared between the Interior Health Authority, the City of Kamloops and BC Transit. Decisions about fares, routes and service levels are made by the Interior Health and the City of Kamloops. The schedule for the Health Connections service can be found in Appendix F.

3.4 Merritt's Transit System Ridership and Performance

3.4.1 Ridership Profile

The results of the on-board survey¹ presented in *Appendix A* provides a snapshot of key ridership characteristics within Merritt including the following:

- the majority (77%) of transit users in Merritt do not have access to a personal vehicle;
- 73% of transit users in Merritt use transit for work, shopping, or errands²; and
- transit users in Merritt tend to use the system regularly, with 40% of survey respondents taking transit almost every day and only 20% of survey respondents taking transit less than once a week.

¹ The on-board survey had a sample size of 68 transit users

² Only 15% of survey respondents stated that their primary transit trip purpose was school, but this survey was implemented in May when NVIT was not in full session.

Merritt Transit System Service Review

The results of the two-week ridecheck conducted by the Merritt Transit System operators between late May and early June show the following:

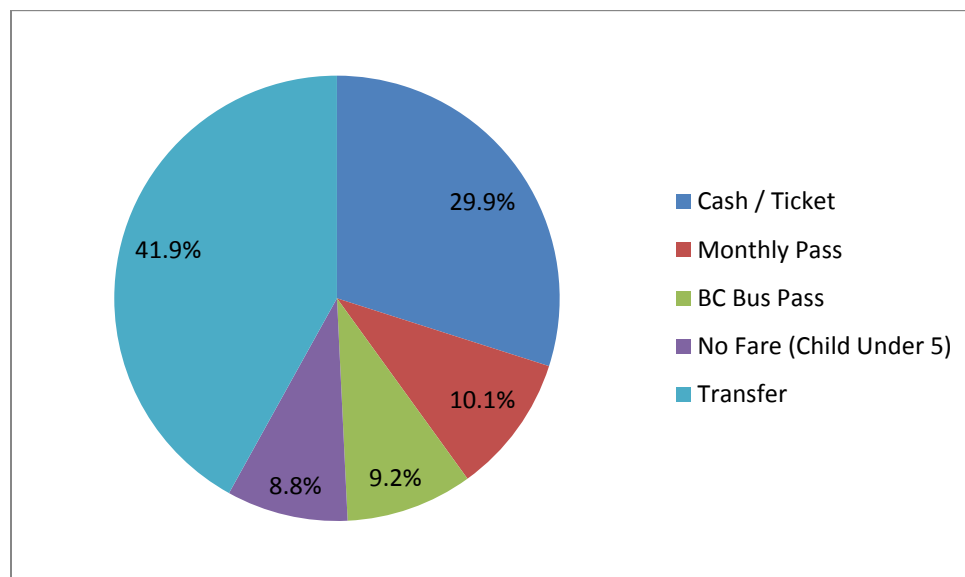
- the majority (65%) of transit riders are adults (Table 5);
- a large portion (42%) of ridership in the Merritt Transit System comes from transfers, as a large portion of riders are collected on Routes 2, 3, and 4 and transfer to Route 1 North End to reach their final destinations (Figure 4);
- cash and tickets are the most commonly used fare payment method (30%), with a relatively equal proportion of Monthly Passes, BC Bus Passes, and free fares (for children under five years old) making up the rest of ridership (Figure 4);
- the system carries an average of three bicycles and eight mobility aids each day; and
- Route 1 North End and Route 4 Lower Nicola have the most bicycle rack use while Route 1 North End and Route 3 Diamond Valley have the most people using mobility aids.

Table 5 – Ridership Demographic Breakdown

	Adults	Seniors	College Students	Students (K-12)	Children Under 5
Percent of Total Ridership	65%	8%	9%	9%	9%

*NVIT was not in full session when this data was collected

Figure 4 – Merritt Transit System Fare Usage



3.4.2 System Ridership and Performance

Overall, the Merritt Transit System is performing very well, with ridership growing steadily and over 80% of current riders reporting that they are satisfied or very satisfied with the current system (Figure 8). Merritt's ridership has grown substantially over the past 8 years, with the 2015/16 ridership over four times higher than in 2008/09 (Figure 5). Although the number of service hours has increased by approximately 60% over this period, the productivity of the system has still increased relative to service hours, with the rides per service hour increasing by more than 150% between 2008/09 and 2015/16 (Figure 6). Ridership in the Merritt Transit System is distributed reasonably well throughout the day, with a morning peak between 8am and 9am, an afternoon peak between 3pm and 5pm, and lower ridership before 7am and after 7pm (Figure 7).

Figure 5 – Merritt Transit Total Annual Ridership and Service Hours

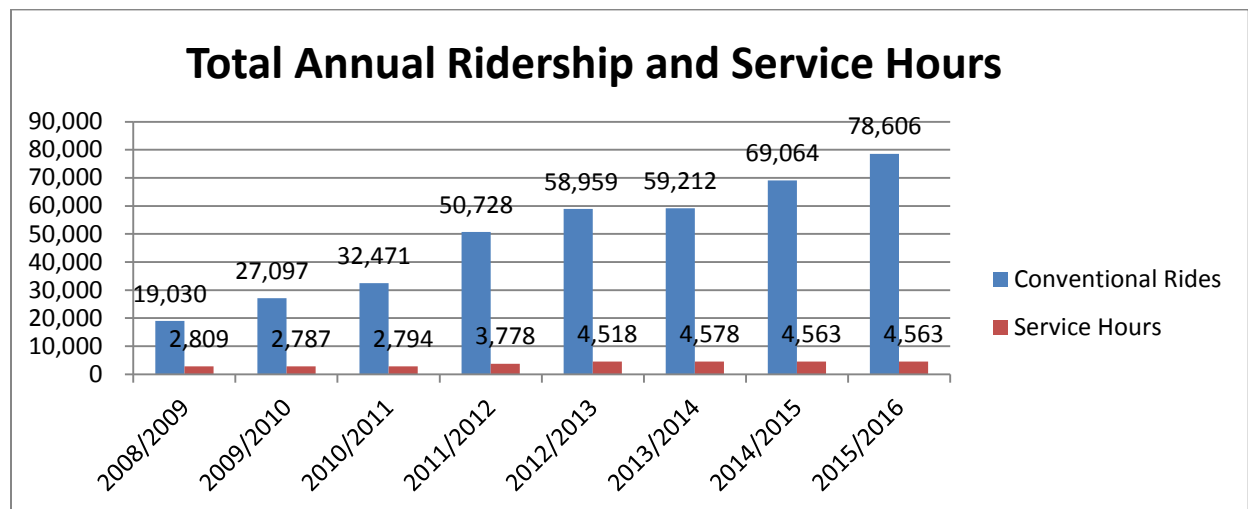


Figure 6 – Merritt Transit Rides per Service Hour

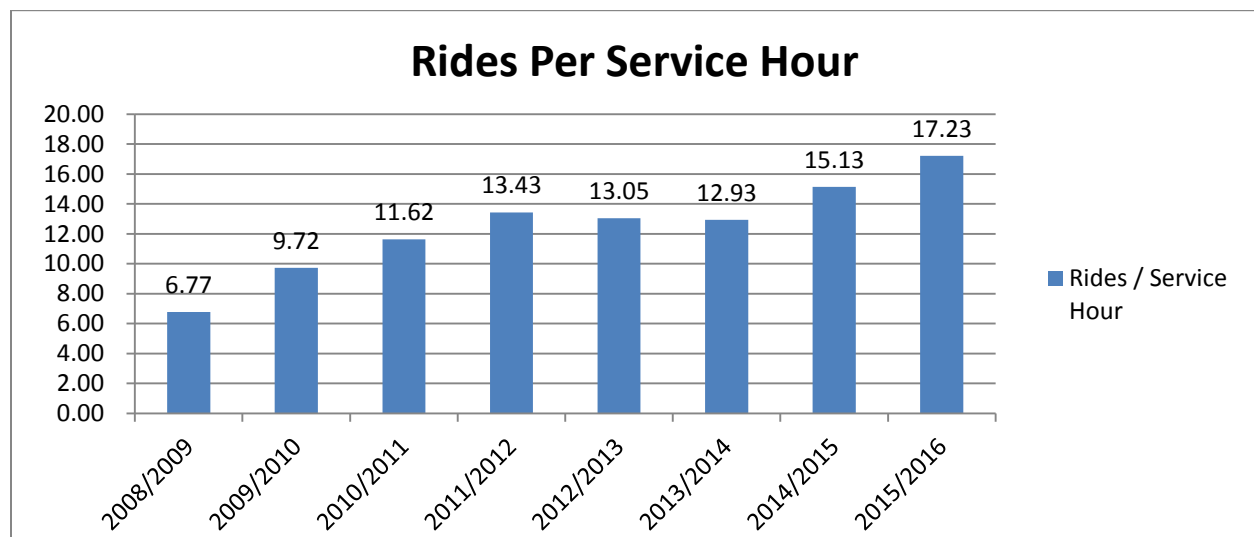


Figure 7 – Merritt's Daily Ridership Distributed by Time Period

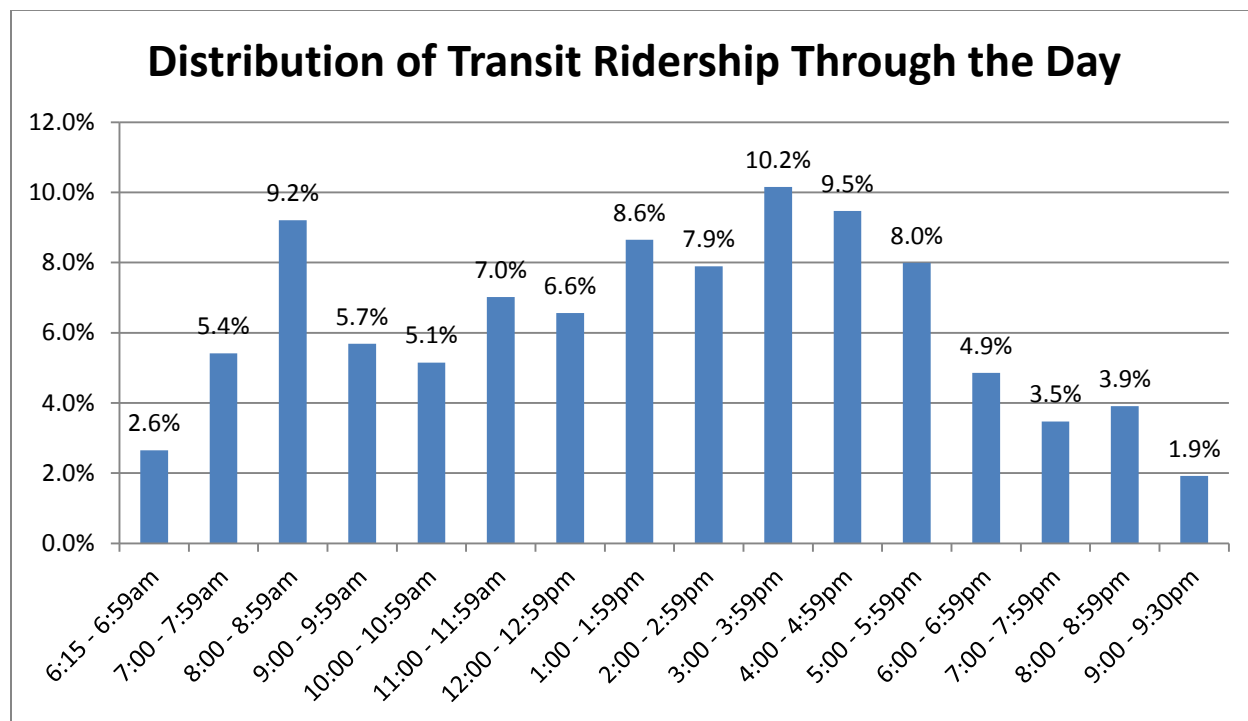
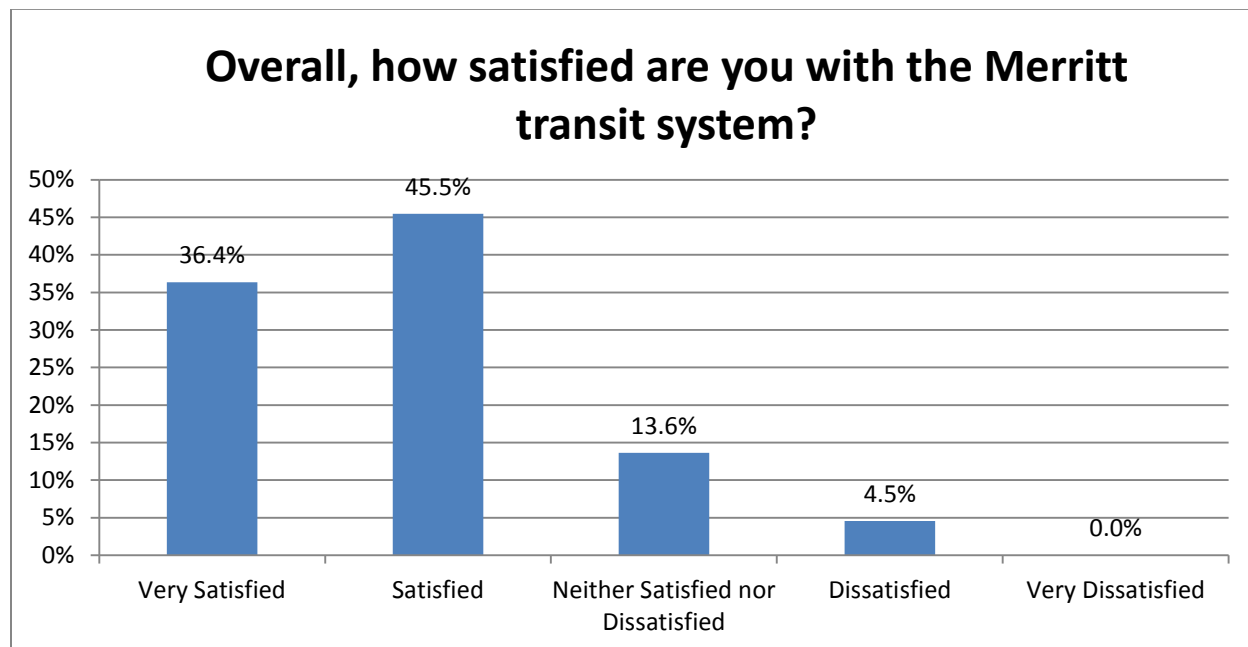


Figure 8 – Merritt's Transit Rider Satisfaction (On-board Survey, 2016)



3.4.3 Route Ridership and Performance

Route 1 North End carries almost half of the Merritt Transit System ridership but it also has the most service frequency and the highest number of service hours dedicated to it (Table 6). Conversely, Route 4 Lower Nicola carries only 11% of total system ridership, but only has three round trips per day. The number of rides per service hour is a key indicator of route performance as it factors in the amount of service provided on a given route. When considered from a per-service-hour perspective, the performance of each route in the Merritt Transit System is reasonably consistent with rides per service hour varying between 14 and 19. See Appendix C for a breakdown of average ridership per trip by route and time of day.

Table 6 – Ridership by Route

	Rides per Round Trip	Daily Round Trips	Approximate Daily Service Hours	Rides per Service Hour	Share of Total Ridership
1 North End	7.5	15	7.5	14.9	46%
2 Collettville	3.7	12	3	14.7	18%
3 Diamond Vale	4.5	13	3.25	18.2	24%
4 Lower Nicola	9.1	3	1.5	18.1	11%

3.4.4 Peer Comparison

The Merritt Transit System performs well in comparison with other transit systems of a similar size with similar characteristics. For example, Merritt's key performance indicators (KPIs) including 'rides per service hour' and 'operating cost recovery' exceeds other comparable systems (Table 7).

Table 7 – Transit Performance Peer Comparison

	Merritt	Quesnel	Terrace (2015/16)	Salmon Arm (2015/16)
Population	7,100	10,000	11,500	17,500
Population Density (people/km²)	320	282	200	112
Fleet Size	2	7	3	8
Conventional Rides	78,600	77,250	131,450	116,000
Conventional Service Hours	4,550	8,050	8,250	11,900
Rides per Service Hour	17.2	9.6	15.9	9.8
Total Revenue	\$61,000	\$88,000	\$157,000	\$173,000
Operating Cost Recovery	22.5%	11.6%	20.3%	16.8%

*Population Data Source: Statistics Canada, 2011 Census

3.5 Merritt Transit Fares

Transit fares have not changed in Merritt since the system was established in 2007. Current transit fares for the Merritt Transit System are shown below in Table 8. Both options within the Fare Review can be found in *Appendix B* and include projected impacts to system ridership and revenue. Although both options were designed to simplify the fare structure, increase customer understanding, and to be more compatible with future fare collection technology, one of the options maintains a relatively similar average fare and the other increases average fares somewhat.

Table 8 – Merritt Transit Fares

TYPE	FARE	NOTES
ADULT		
CASH FARE	\$1.50	Drivers do not carry change
10 TICKETS	\$13.50	
MONTHLY PASS	\$42.00	
SENIOR (65+)		
CASH FARE	\$1.25	Drivers do not carry change
10 TICKETS	\$11.25	
MONTHLY PASS	\$34.00	
STUDENT (POST-SECONDARY)		
MONTHLY PASS	\$34.00	
STUDENT (K TO 12)		
CASH FARE	\$1.25	Drivers do not carry change
10 TICKETS	\$11.25	
MONTHLY PASS	\$28.00	
CHILD (4 AND UNDER)		
Free when accompanied by an adult		

4.0 Public Consultation

BC Transit planning staff visited Merritt several times over the course of the Service Review to research transit system operations, and to speak with current transit users and key stakeholders. Key public consultation efforts included a driver survey, an on-board customer survey, and consultation meetings with the Nicola Valley Transportation Society and with City of Merritt staff.

4.1 On-board survey

An on-board survey was implemented in late May to gather information about current transit users and to get feedback on how the system could be improved. A total of 68 transit users provided feedback through the survey. The on-board survey results provided a profile of transit riders in Merritt (section 3.4.1 pg. 11) as well as feedback on some key expansion options. For example, of the expansion options brought forward by the City of Merritt Council, Sunday service, later evening service, and more service frequency on Route 4 Lower Nicola were the expansion options most supported by current transit users (Figure 26, pg. 46). See Appendix A for a detailed summary of the on-board results.

4.2 Driver Survey

Drivers with Merritt's local operating company had the opportunity to weigh in on what they perceive as the biggest operational issues and opportunities currently facing the Merritt Transit System. Some of the key results from the driver survey involved safety concerns, on-time performance issues, and a reiteration of several findings from the on-board survey. The results of the driver survey along with follow-up discussions with the local operating company helped to shape several recommendations within this Service Review.

4.3 Key Themes

4.3.1 Transit Accessibility

The fixed-route transit service currently operating in Merritt is accessible with low floor buses and loading ramps, and it provides service to passengers with varying degrees of mobility including passengers with mobility aids and wheelchairs. On average, 8 passengers with mobility aids currently use Merritt's fixed-route service every day (3.4.1 Ridership Profile, pg. 11).

Through various local planning processes (including Merritt's Age Friendly Plan and this Transit Service Review), the community has expressed a desire for even greater transit accessibility in the future to provide transit access to residents who currently cannot (or may not be able to in the future) access the fixed-route service without assistance. These requests involve two aspects of transit accessibility including bus stop accessibility and accessible transit services.

Bus Stop Accessibility

There were a number of comments related to bus stop accessibility and requests for improvements to bus stops, particularly within Collettville and along the 4 Lower Nicola route.

Accessible Transit Services

Although handyDART service is often the most commonly understood and requested accessible transit service type, BC Transit is capable of providing a range of accessible transit services with varying levels of accessibility and cost (see Table 9). The best accessible transit service type within a given community depends on a number of factors including availability of other transit services, the road network, population density, and the distribution of key trip origins and destinations throughout the community.

Table 9 – Accessible Transit Services

	Lowest Cost	Higher Accessibility, Higher Cost	Highest Accessibility, Highest Cost
Service Type	Fixed-Route service (low floor buses with loading ramps)	Flex Routing or On Request Service (curb-to-curb service)	handyDART service (door-to-door service)

Of the services listed above, Fixed-Route service normally carries the highest number of passengers for every hour of service provided whereas handyDART service typically carries the lowest. handyDART also requires that passengers meet eligibility criteria in order to receive service based on having a disability sufficiently severe that travel on regular Fixed Route transit is not possible some or all of the time.

In smaller towns and more rural areas - particularly those that may experience colder winter conditions - Flex Routing or On Request Service is an option that can provide a balance in terms of ridership and cost while also improving transit access to a larger proportion of the population, such as seniors who may not have a disability but who may be less mobile than other passengers.

5.0 Service Options

Based on the analysis of existing and future community demographics and land use, existing transit service, and feedback from the public engagement process, the following proposed changes are presented to address key issues and opportunities that were identified through the Service Review process. These proposals have been refined through ongoing collaboration with the local operating company and with City of Merritt staff.

These proposals have been divided into four time horizons for implementation: immediate-term, short-term, medium-term, and long-term (Figure 9). The ultimate order of implementation (including the opportunity to combine multiple options into a single option) will be confirmed in collaboration with the City of Merritt. Service hours and costs for expansion options have been estimated at a high level and are based on 2016/17 Annual Operating Agreement (AOA) budget figures. Actual costs may vary depending on confirmed budget figures and finalization of operating details at the time of implementation.

Figure 9 – Proposed Service Option Implementation Timeline

Term	Immediate-Term	Short-Term	Medium-Term	Long-Term
Proposed Implementation Date	Spring 2017	Winter 2018	2019-2022	2022+

5.1 Immediate-Term Service Options

These immediate-term service options are recommended for implementation within the next year, with a possible implementation date as early as Spring 2017.

Service Option #1: Ensure all 1 North End trips serve the Nicola Valley Institute of Technology (NVIT)

Every outbound trip on Route 1 North End has a scheduled stop at the Nicola Valley Institute of Technology (NVIT) Campus except the 6:45am trip (Figure 10). Currently, NVIT students taking this 6:45am trip must travel all the way up to Walmart and then back to NVIT, requiring them to travel on the bus for an additional 20 minutes before reaching their destination. There is enough time in the existing schedule to serve the NVIT campus on this 6:45am outbound trip, which would substantially improve the transit experience for several transit riders without causing any adverse system impacts or requiring expansion funding.

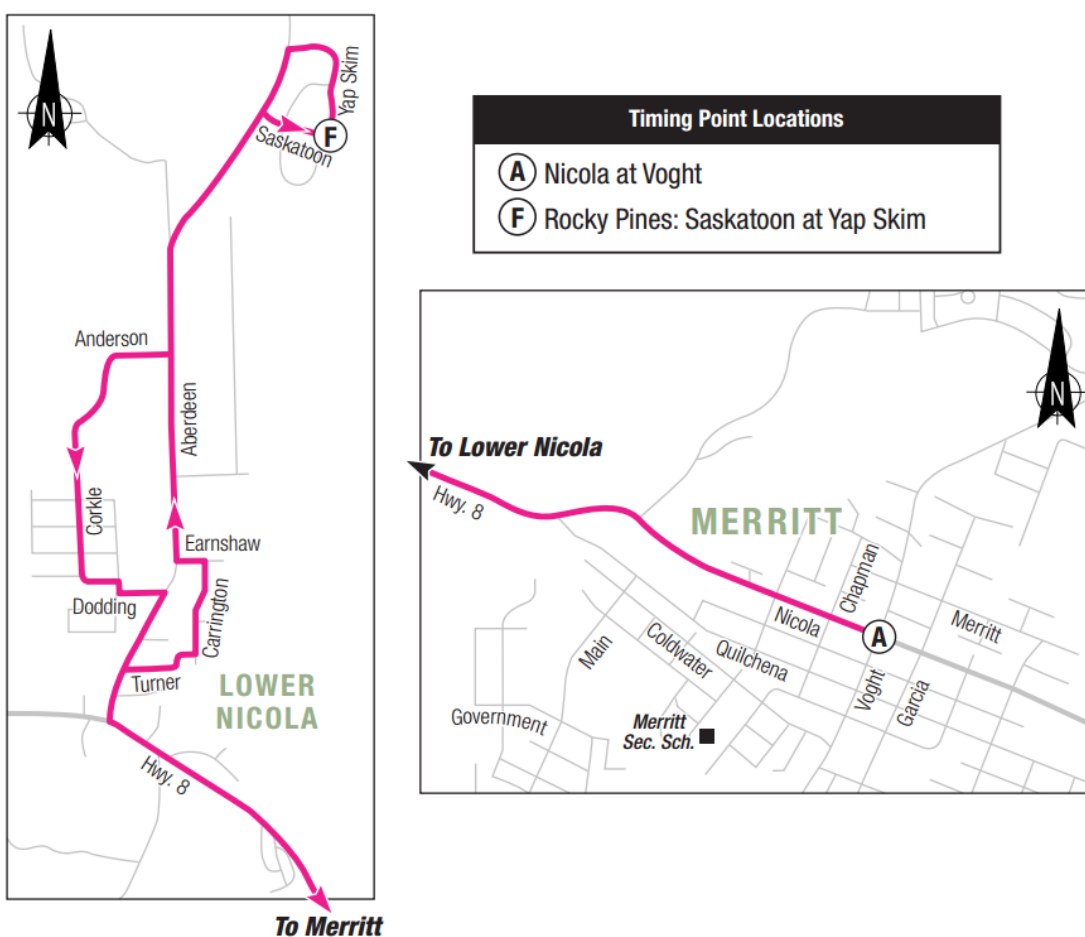
Figure 10 – Route 1 North End Schedule

1 North End									
Monday to Saturday									
(A)	(B)	(G)	(S)	(C)	(G)	(B)	(H)	(A)	
Lv. Downtown (Mamette at Voght)	Lv. Nicola Valley Institute of Technology	Lv. Extra Foods (River Ranch Rd.)	Ar. Walmart	Lv. Walmart	Lv. Extra Foods (River Ranch Rd.)	Lv. Nicola Valley Institute of Technology	Lv. Nicola Valley Health Centre	Ar. Downtown (Mamette at Voght)	
6:45	—	6:50	6:54	7:00	7:04	7:06	7:08	7:11	
7:45	7:49	7:51	7:55	8:00	8:04	8:06	8:08	8:11	
8:45	8:49	8:51	8:55	9:00	9:04	9:06	9:08	9:11	
F 9:45	9:49	9:51	9:55	10:00	10:04	10:06	10:08	10:11	
F 10:45	10:49	10:51	10:55	11:00	11:04	11:06	11:08	11:11	
11:45	11:49	11:51	11:55	12:00	12:04	12:06	12:08	12:11	
12:45	12:49	12:51	12:55	1:00	1:04	1:06	1:08	1:11	
F 1:45	1:49	1:51	1:55	2:00	2:04	2:06	2:08	2:11	
F 2:45	2:49	2:51	2:55	3:00	3:04	3:06	3:08	3:11	
F 3:45	3:49	3:51	3:55	4:00	4:04	4:06	4:08	4:11	
4:45	4:49	4:51	4:55	5:00	5:04	5:06	5:08	5:11	
5:45	5:49	5:51	5:55	6:00	6:04	6:06	6:08	6:11	
6:45	6:49	6:51	6:55	7:00	7:04	7:06	7:08	7:11	
7:45	7:49	7:51	7:55	8:00	8:04	8:06	8:08	8:11	
8:45	8:49	8:51	8:55	9:00	9:04	9:06	9:08	9:11	
F Trip stops at The Florentine.									

Service Option #2: Improve schedule reliability on 4 Lower Nicola

With the current schedule, all trips on 4 Lower Nicola return to Merritt late. This is partially because the current schedule allows the same amount of time for the outbound and inbound trips even though the inbound trip requires more time than the outbound trip³. Currently, the bus occasionally arrives early to the Lower Nicola timing point at Saskatoon and Yap Skim in Rocky Pines (Figure 11), waits at that timing point, and then arrives back in Merritt several minutes late. Scheduling Lower Nicola outbound trips to leave earlier from downtown Merritt and allocating a larger proportion of the total running time for the inbound trips would address the majority of the on-time performance issues on this route (see Figure 12 for the proposed schedule changes).

Figure 11 – Route 4 Lower Nicola Routing



³ The inbound trip services the Yap Skim loop (which has speed bumps to reduce traffic speeds) and the Anderson, Corkle, and Dodding loop.

Figure 12 – Route 4 Lower Nicola Proposed Schedule

4 Lower Nicola			
Monday to Saturday			
A	F	F	A
Lv. Downtown (Mamette at Voght)	Ar. Rocky Pines (Saskatoon at Yap Skim)	Lv. Rocky Pines (Saskatoon at Yap Skim)	Ar. Downtown (Mamette at Voght)
7:12 (7:15)	7:26 (7:30)	7:26 (7:30)	7:45 (7:45)
11:12 (11:15)	11:26 (11:30)	11:26 (11:30)	11:45 (11:45)
5:12 (5:15)	5:26 (5:30)	5:26 (5:30)	5:45 (5:45)

*Proposed schedule is represented in black while the current schedule is represented in red

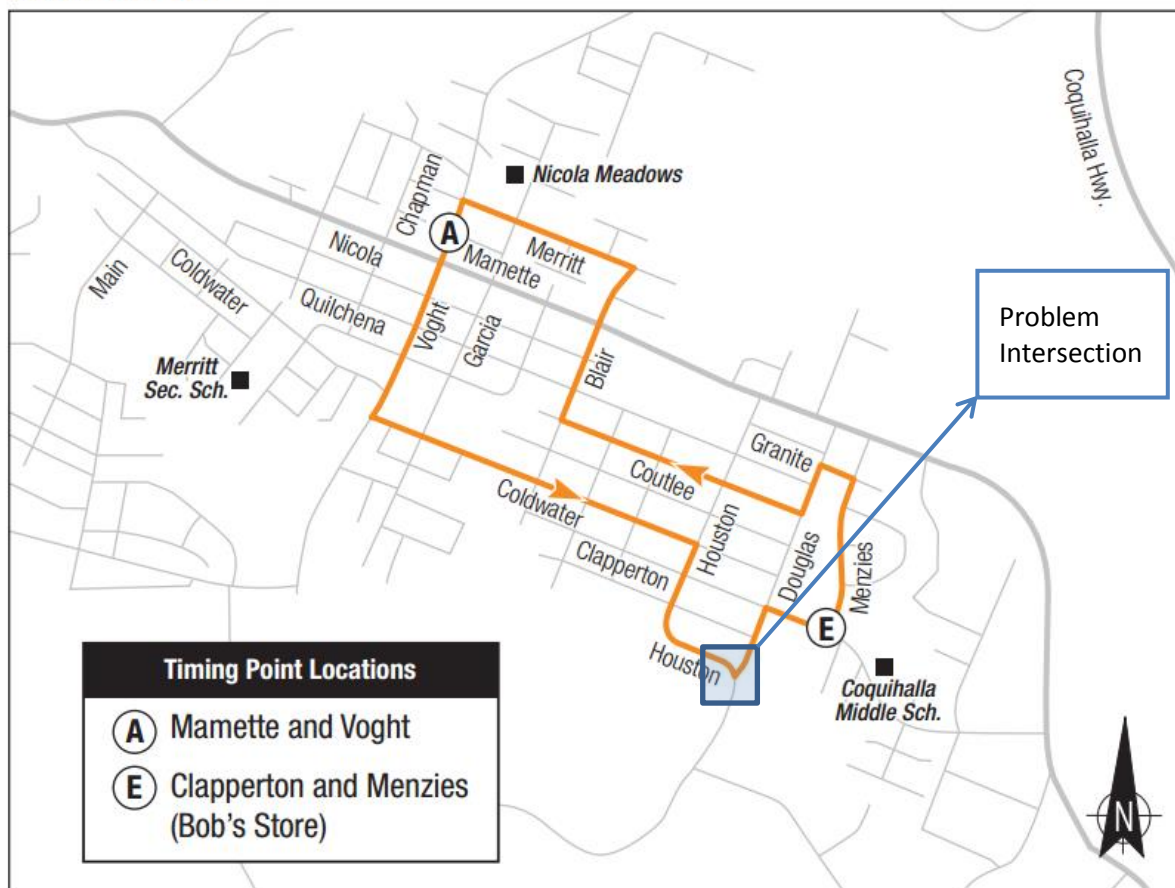
Service Option #3: Address 3 Diamond Vale safety concern

The left turn from Houston Street onto Douglas Street on Route 3 Diamond Vale emerged as a key safety concern through the Driver Survey and consultation with the local operating company (Figure 13). Trees were blocking sight lines on the corner approaching this left turn zone which made it difficult for drivers to assess the safety of this left turn. This safety issue went beyond transit to traffic safety generally.

Although the trees blocking sightlines on this corner were trimmed once the issue was brought to the City of Merritt's attention through the Service Review process, if visibility on this corner becomes an ongoing issue, it may be necessary to revert to the previous routing⁴ to address this safety concern.

Figure 13 – Left Turn from Houston onto Douglas

3 Diamond Vale



⁴ Turning left from Houston Street onto Clapperton Avenue rather than onto Douglas Street

5.2 Short-Term Service Options

These short-term service options could feasibly be implemented for Winter, 2018. Service options requiring an additional vehicle need substantial lead time, and January 2018 was identified as the earliest date for the procurement of an additional vehicle for Merritt. Some of these options have already been approved by the City of Merritt Council, and are currently going through BC Transit's Transit Improvement Program (TIP)⁵ for a January 2018 implementation; the other identified short-term service options could be implemented at the same time to reduce the number of disruptions and changes to the system for transit riders.

5.2.1 Approved Short-Term Service Options

Service Option #4: Implement Sunday service, later service, and additional trips to Lower Nicola

Of the six service expansion proposals put forward by Council to be considered within the Service Review, Sunday service, later service span, and additional trips to Lower Nicola were the most supported by current transit users (Figure 26, pg. 46). Additionally, funding for these three expansions have already been approved by the City of Merritt Council, and are currently going through BC Transit's TIP process for potential implementation in January of 2018. Table 10 presents the number of estimated service hours and the net municipal share of costs for implementing these three expansion options.

Sunday Service

As part of the on-board survey, each survey respondent chose their top three expansion priorities from the list of five expansion proposals. Sunday service was the most strongly supported expansion proposal by current transit users, with 93% of respondents prioritizing this expansion. Some survey respondents work on Sundays, and many others have social, recreational, or shopping needs on Sundays.

Later Service

Later Monday to Saturday service was also strongly supported, with 71% of survey respondents prioritizing this expansion. A number of survey respondents work late in the North End and are unable to get the bus home after their shift. There are also NVIT students who will benefit from the later service span, particularly those living in Lower Nicola. Although system ridership currently declines in the later evening (Figure 7, pg. 14), adopting a later service span will expand accessibility for current transit users and may allow transit to become a feasible transportation option for residents that currently cannot rely on the system for their transportation needs.

⁵ The implementation of any option requiring expansion is dependent on BC Transit's fiscal year budget, total provincial funding, and the allocation of available provincial transit expansion funding between transit systems as determined through BC Transit's Transit Improvement Program (TIP).

Lower Nicola

Additional service frequency to Lower Nicola was mentioned by several drivers in the driver survey, and was also supported by 41% of on-board survey respondents. Many survey respondents mentioned the benefit of earlier and later service on the Route 4 Lower Nicola to allow better access for work and school. Additionally, the ARBOC buses currently operating in the Merritt Transit System have a maximum ridership capacity of 20, and when NVIT is in session, there are occasionally capacity concerns on the 5:15pm trip returning to Lower Nicola. With additional service frequency in the late-afternoon, this capacity concern can be improved, and there will be a lower likelihood of stranding Lower Nicola residents in Merritt.

Table 10 – Conventional Transit Service Expansion: Service Hours and Net Municipal Cost Estimates⁶

Expansion Option	Description	Annual Hours	Net Municipal Share of Costs
Sunday Service	Add limited Sunday service (10 service hours a week)	500	\$10,400*
Later Service Span	Extend evening service by 1.5 hours Monday to Saturday (1 additional trip for all routes)	460	\$9,550*
Lower Nicola	Add 1 morning and 1 evening peak round trip on Route 4 Lower Nicola	310	\$6,450*

⁶ Service hours and costs for this expansion proposal have been estimated at a high level and will be refined during detailed scheduling. These expansion cost estimates use figures from the 2016/17 AOA, and do not include the cost for an additional bus, as these expansions are utilizing the additional bus capacity from the HandyDART expansion (see proposal #5 below).

Service Option #5: By Request Service for Improved Transit Service Accessibility

Background

Improving transit accessibility was a key theme emerging from the Merritt Transit Service Review, and the City of Merritt has already approved funding to improve Merritt's transit accessibility in January 2018. As described in Section 4.3.1 Transit Accessibility (pg. 18), BC Transit provides a spectrum of accessible transit options with varying levels of cost and operating styles, and the best accessible transit option for a community depends largely on local needs and travel patterns. Given Merritt's population, and land use distribution, an integrated *By Request Service* is recommended as the most efficient option for improving access to transit service. This option would ensure transit access for those residents who may have mobility challenges of a broader nature than what might be defined through traditional handyDART. Additionally, it improves the overall access and frequency of transit for Merritt residents of all abilities and needs. This proposed service option is possible within the vehicle and estimated budget of the existing 2017/18 expansion funding already approved by the City of Merritt (Table 11).

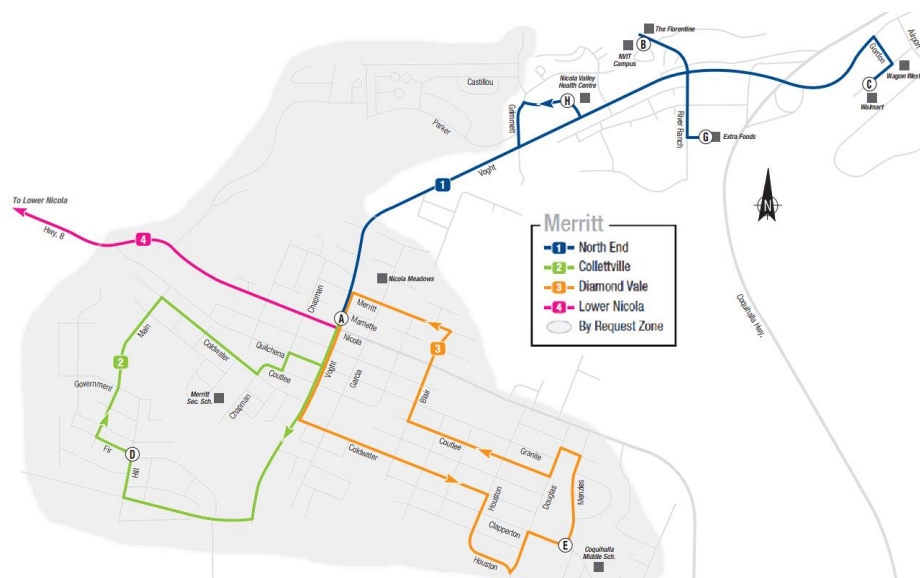
By Request Service Description

This service option proposes the following services each weekday:

- four 30-minute trip windows of By Request Service; and
- four additional trips on the 1 North End.

The By Request Service would provide accessible, curb-to-curb service to pick up and drop off residents who request it within an identified By Request Zone⁷ (see Figure 14). Each By Request Service trip would turn into one of the additional 1 North End trips, thereby providing access to key destinations in the North End of Merritt for both By Request riders and other riders as well.

Figure 14 – Preliminary By Request Zone Proposal



⁷ Details subject to further planning work

Rationale

Merritt's key destinations are primarily located downtown or in the North End. By integrating the By Request Service with additional trips on the Route 1 North End it most efficiently delivers service to the highest number of residents.

- Passengers using the curb to curb service in the residential areas seamlessly transition to and from key destinations on the Route 1 North End.
- By making these additional Route 1 North End trips open to all Merritt residents, it builds the frequency and attractiveness of the system for all transit users.

Benefits

This proposed Service Option provides a number of benefits:

- curb-to-curb transit accessibility for residents unable to access the fixed-route system;
- By Request Service allows improved transit access for residents who may have mobility challenges of a broader nature than allowed through traditional handyDART service (since handyDART service requires eligibility criteria based on disability); and
- a higher level of service for all transit users between downtown and the North End (requested by 20% of current transit users through the on-board survey).

Further Considerations

Further planning work is required to identify the exact service details for the By Request, curb-to-curb service including the By Request Zone boundaries and preferred trip-window times. BC Transit recommends hosting a Key-Stakeholder workshop to inform these details.

Table 11 – By Request Accessible Transit Service Expansion: Service Hours and Net Municipal Cost Estimates

Expansion Option	Description	Annual Hours	Net Municipal Share of Costs
By Request Service and 1 North End trips	<ul style="list-style-type: none">• Four, 30-minute By Request Service trip windows each weekday• Four additional 1 North End trips each weekday	1,010	\$53,850

5.2.2 Other Short-Term Service Options

Service Option #6: Provide on-demand service to Nicola Meadows, the Florentine, and the Nicola Valley Hospital and Health Centre

In October 2015, direct service to the Florentine retirement facility was included on five trips each day on Route 1 North End and on six trips each day to Nicola Meadows on Route 3 Diamond Vale. However, additional time was not provided in the schedule to accommodate these route deviations, and ridership from these locations is extremely low for the level of service being provided, with only 4 to 6 percent of trips to these facilities generating ridership⁸. Additionally, the bus does not currently provide service to the Nicola Valley Hospital and Health Centre on 1 North End outbound trips. Passengers traveling to the Nicola Valley Hospital and Health Centre on outbound trips must walk up the hill to the hospital from Voght Street, or wait an additional 20 minutes on the bus to directly access the hospital on the inbound 1 North End trip. Walking up to the hill to the hospital can be challenging in the winter or all year for passengers with mobility challenges.

It is recommended that service to Nicola Meadows and Florentine retirement facilities change to on-demand service (by phone). This will help improve service reliability and on-time performance while still providing an adequate level of service to these two locations. Additionally, this will expand access for Nicola Meadows and Florentine customers to all trip times rather than the limited subset of trip times currently provided. Additionally, if service to the Florentine were altered to on-demand, it may allow capacity for on-demand service to the Nicola Valley Hospital and Health Centre for outbound 1 North End trips.

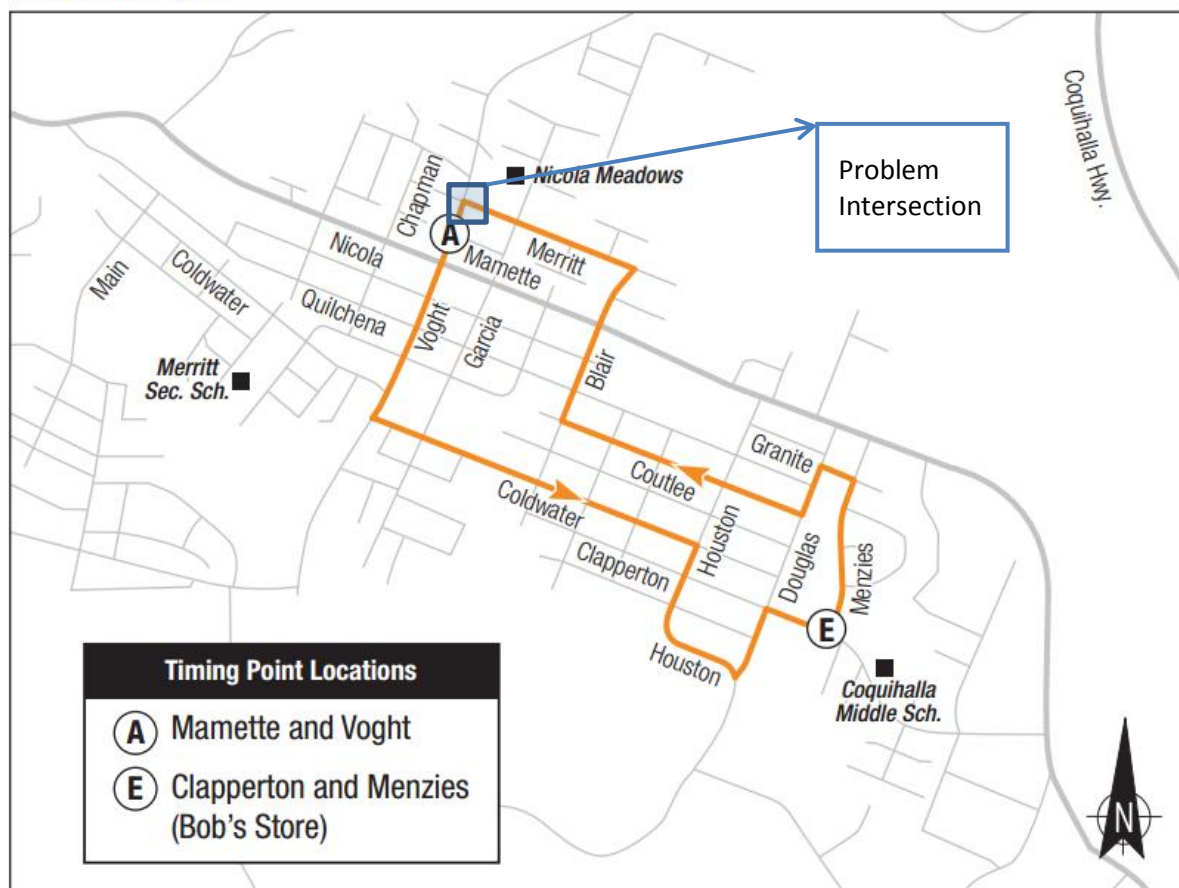
⁸ On a ridecheck of 14 service days between August 2nd and August 17th 2016, only five riders were picked up from Nicola Meadows from 84 trips and three riders from the Florentine from a total of 70 trips. This equates to six percent of trips to Nicola Meadows and four percent of trips to the Florentine generating ridership respectively.

Service Option #7: Alter 3 Diamond Vale routing to address left turn from Merritt Ave. onto Voght St.

During peak traffic periods, particularly in the summer months, bus drivers can get stuck waiting for up to 5 minutes waiting to turn left from Merritt Avenue onto Voght Street on Route 3 Diamond Vale (Figure 15). This issue can significantly impact service reliability, which can negatively impact ridership. There are a number of potential options to address this issue, and it is recommended that a separate study and service discussion document be undertaken to consider them in greater detail.

Figure 15 – Left turn from Merritt onto Voght

3 Diamond Vale



Service Option #8: Revisit routing and consider adding or altering locations of certain bus stops on Route 4 Lower Nicola

There were a number of bus stop issues on Route 4 Lower Nicola that came up through consultation with the local operating company and the on-board survey. Given the number of requests that emerged through these processes, it is recommended that a separate, formalized planning process be undertaken to assess the routing and the stop locations along this route.

5.3 Medium-Term Service Options (2 – 5 years)

The following medium-term service options have been provided for ongoing consideration as ridership grows and as expansion funding becomes available (2019-2022). The two Medium-Term Service Options have been grouped together because implementing either expansion option will almost certainly require an additional vehicle (unless substantial service was reallocated from other routes); consequently, the medium-term service options are presented as Service Options #9A and #9B, with the cost of the additional vehicle included in Option #9A.

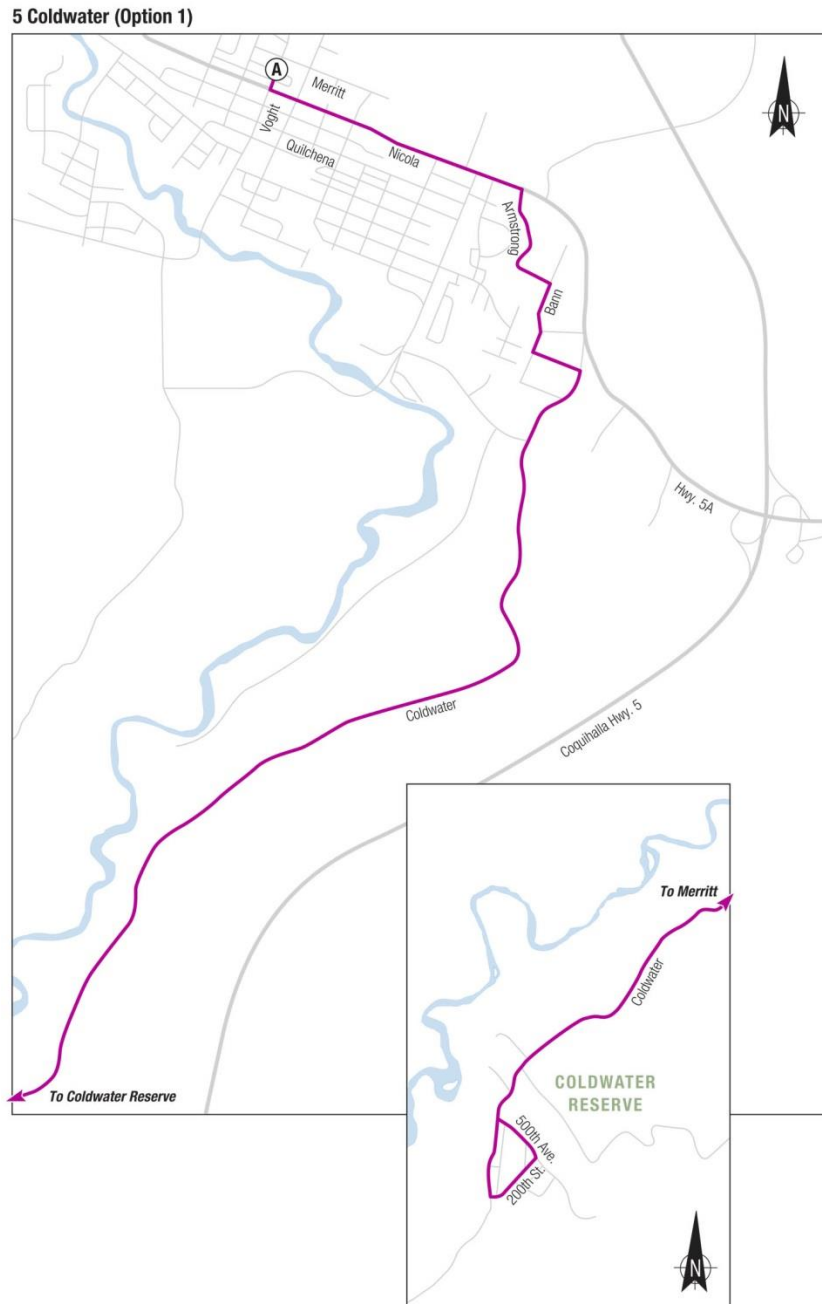
Service Option #9A: Service expansion to Coldwater Reserve

Request for service to Coldwater Reserve has been a recurring theme for years, with this expansion recommendation showing up within Merritt's 2011 Service Options Report. Developing an agreement on service levels and cost-sharing with the relevant jurisdictions has not yet occurred, and has proven challenging to initiate in the past. Depending on the resulting service levels, this service could simultaneously provide transit access to Coldwater, the residents of the Armstrong & Bann St. area in Merritt, and possibly to gateway 286 (if development moves forward there), all of which currently have no transit access. This service expansion will likely require an additional bus unless service is reallocated from the current system. Consequently, the cost for an additional bus has been included in the costing for this option. If an additional bus is required, it is recommended that Merritt also implement Service Option #9B to improve the efficiency of vehicle usage (fill in service gaps on Routes 2 and 3). Two different service options are presented below for providing transit access to the Coldwater Reserve. When an agreement on service levels and cost sharing with the relevant jurisdictions is completed, this service can be implemented.

Coldwater Service Option 1:

Coldwater service option 1 provides service to Coldwater Reserve and the Armstrong and Bann Street area within Merritt, both of which are not currently served by transit (Figure 16). Option 1 may be preferable to option 2 if development planned for Gateway 286 lands (as identified within the OCP) does not occur by the time service to Coldwater is implemented. Table 12 shows the service details for this option, and Table 13 provides the estimated service hours and costs for implementing this service with both two and three daily round trips respectively.

Figure 16 – Coldwater Service Proposed Routing (Option 1)



Merritt Transit System Service Review

Table 12 – Coldwater Service Details (Option 1)

Round Trip Distance (km)	Round Trip Running Time (min)	Round Trip Cycle Time (min)	Estimated Service Hours per Round Trip
28.5	35	40	0.67

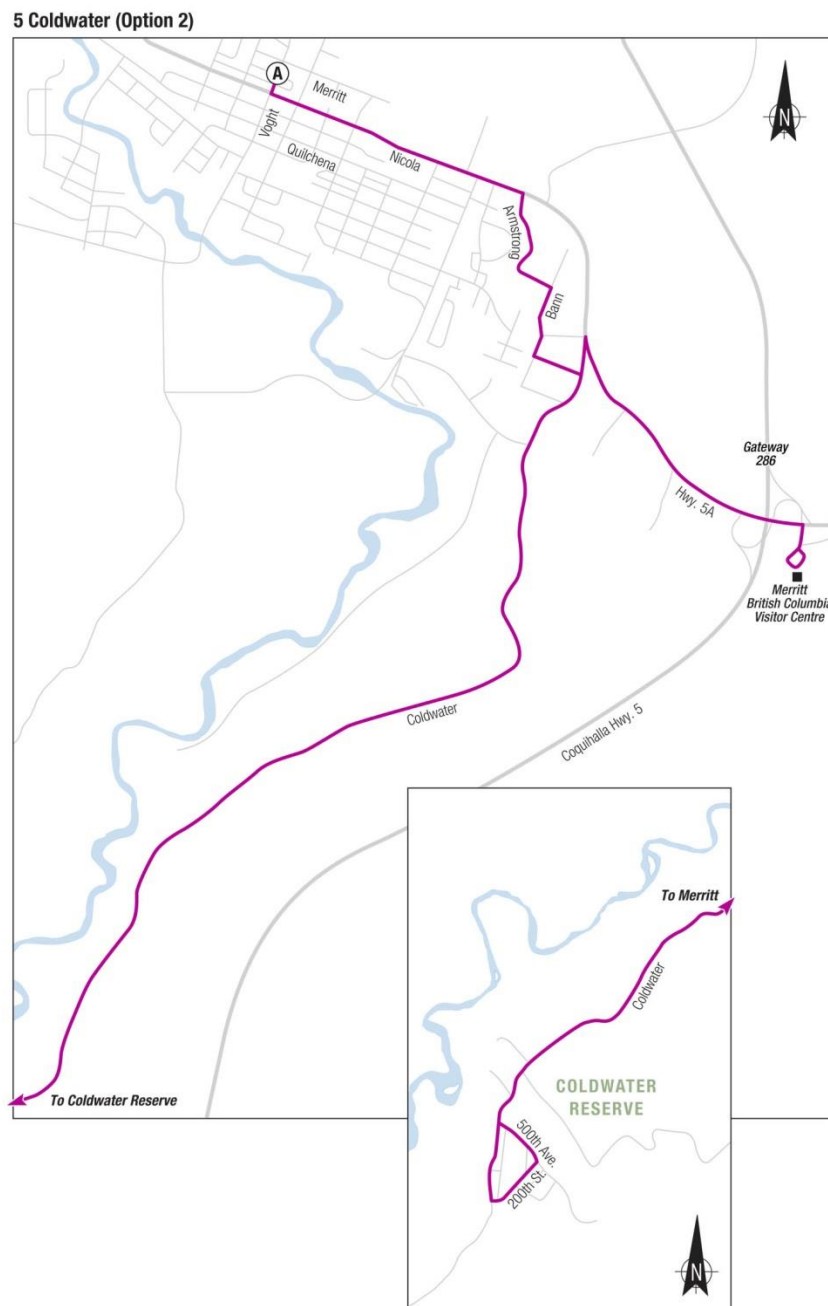
Table 13 - Service Costing Details for Coldwater Service (Option 1)

Option 1: Two daily round trips to Coldwater Reserve, Monday to Saturday			
Service Hours:	410	Passenger Revenue:	\$2,900
Annual Ridership:	3,700	Total Cost:	\$51,100**
Vehicles Required:	1	<i>Net Local Share of Op. Costs:</i>	<i>\$8,900</i>
Local Lease Fees:	\$27,200	Net Local Share of Total Costs:	\$36,100**
		Provincial Share of Costs:	\$12,100**
Option 1: Three daily round trips to Coldwater Reserve, Monday to Saturday			
Service Hours:	610	Passenger Revenue:	\$4,300
Annual Ridership:	5,500	Total Cost:	\$61,900**
Vehicles Required:	1	<i>Net Local Share of Op. Costs:</i>	<i>\$12,900</i>
Local Lease Fees:	\$27,200	Net Local Share of Total Costs:	\$40,100**
		Provincial Share of Costs:	\$17,500**
<p>*Service hours and costs for this expansion proposal have been estimated at a high level and will be refined during detailed scheduling. These expansion cost estimates use figures from the 2016/17 AOA.</p> <p>**Costs shown do not include the provincial share of the vehicle costs.</p>			

Coldwater Service Option 2:

Coldwater service option 2 provides service to Coldwater Reserve, the Armstrong and Bann Street area within Merritt, and to Gateway 286, all of which are currently not served by transit (Figure 17). Option 2 may be preferable to option 1 if substantial development occurs on the Gateway 286 lands as identified within the OCP. Table 14 shows the service details for this option, and Table 15 provides the estimated service hours and costs for implementing this service with both two and three daily round trips respectively.

Figure 17 - Coldwater Service Proposed Routing (Option 2)



Merritt Transit System Service Review

Table 14 – Coldwater Service Details (Option 2)

Round Trip Distance (km)	Round Trip Running Time (min)	Round Trip Cycle Time (min)	Estimated Service Hours per Round Trip
36.5	53	60	1.00

Table 15 – Service Costing Details for Coldwater Service (Option 2)

Option 2: Two daily round trips to Coldwater Reserve and Gateway 286, Monday to Saturday			
Service Hours:	610	Passenger Revenue:	\$4,300
Annual Ridership:	5,500	Total Cost:	\$61,900**
Vehicles Required:	1	<i>Net Local Share of Op. Costs:</i>	<i>\$12,900</i>
Local Lease Fees:	\$27,200	Net Local Share of Total Costs:	\$40,100**
		Provincial Share of Costs:	\$17,500**
Option 2: Three daily round trips to Coldwater Reserve and Gateway 286, Monday to Saturday			
Service Hours:	910	Passenger Revenue:	\$6,300
Annual Ridership:	8,100	Total Cost:	\$78,100**
Vehicles Required:	1	<i>Net Local Share of Op. Costs:</i>	<i>\$18,800</i>
Local Lease Fees:	\$27,200	Net Local Share of Total Costs:	\$46,000**
		Provincial Share of Costs:	\$25,800**
<p>*Service hours and costs for this expansion proposal have been estimated at a high level and will be refined during detailed scheduling. These expansion cost estimates use figures from the 2016/17 AOA.</p> <p>**Costs shown do not include the provincial share of the vehicle costs.</p>			

Service Option #9B: Add trips to Routes 2 and 3 to provide consistent hourly service

Although Routes 1, 2, and 3 are separated within the Rider's Guide, they operate more like one large, transfer-based route, with Routes 2 and 3 operating as feeder routes for Route 1 to allow passengers to reach their final destinations in the Merritt's North End. Currently, Route 1 has hourly frequency all day between 6:45am and 9:15pm, but Routes 2 and 3 have three gaps in their service⁹ each day to provide service on Route 4 Lower Nicola. Although this expansion option was not included for consideration within the on-board survey, more than one survey respondent brought up these service gaps as a concern (Figure 28, Appendix A). Additionally, you can see spikes in Route 2 and Route 3 ridership on the trips following the current service gaps, particularly on the 8:00am Route 3 and 8:15am Route 2 trips (Figure 31 & Figure 32; Appendix C). By closing these three daily service gaps, residents in the Collettsville and Diamond Vale neighbourhoods would have uninterrupted, all-day hourly service like Route 1.

Table 16 shows the estimated service hours and costs for implementing this service option. Although this service expansion requires an additional vehicle, the utilization of an additional vehicle would be improved by implementing Service Options #9A and #9B together. Consequently, the cost for an additional vehicle is shown only in Service Option #9A.

Table 16 – Service Cost Details for Filling Service Gaps on Routes 2 and 3

Three additional trips each day on Routes 2 and 3, Monday to Saturday			
Service Hours:	460	Passenger Revenue:	\$3,200
Annual Ridership:	4,100	Total Cost:	\$24,900**
Vehicles Required:	0*	<i>Net Local Share of Op. Costs:</i>	\$9,100
Local Lease Fees:	\$0	Net Local Share of Total Costs:	\$9,100**
		Provincial Share of Costs:	\$12,600**
*This cost estimate relies on the implementation of Option 9A to provide vehicle capacity. If Option 9A is not implemented, the cost of an additional vehicle will be required to implement this service			
**Costs shown do not include vehicle costs			

⁹ These gaps occur between 7:00am-8:00am, 11:00am-12:00pm, and 5:00pm-6:00pm

5.3 Long-Term Service Options (5+ years)

The following long-term service options are recommended for ongoing consideration as expansion funding becomes available and after ridership grows substantially (2022+).

Service Option #10: 30-minute service frequency on Routes 1, 2, and 3

Despite not being one of the five expansion options considered within the on-board survey, there were a surprising number of survey comments related to 30-minute transit service frequency, with 20% of all survey comments targeted at increasing service frequency to 30-minutes (Figure 28, pg. 47). This comment was also identified through the Driver Survey regarding common complaints heard from passengers. This service option requires the lease of an additional vehicle, and Table 17 shows the estimated service hours and costs for implementation.

Table 17 – Service Cost Details for 30-Minute Service Frequency on Routes 1, 2 & 3 Service Costing Details

Service Hours:	3020	Passenger Revenue:	\$21,100
Annual Ridership:	27,000	Total Cost:	\$192,100**
Vehicles Required:	1	<i>Net Local Share of Op. Costs:</i>	<i>\$60,200</i>
Local Lease Fees:	\$27,200	Net Local Share of Total Costs:	\$87,400
		Provincial Share of Costs:	\$83,600**
**Costs shown do not include the provincial share of the vehicle costs			

6.0 Supporting Actions

The following priority actions support or are in addition to the transit service options presented in Section 5.0, and are based on key themes from public consultation.

6.1 Immediate Term Supporting Actions

Supporting Action #1: Utilize BC Transit's Development Referral Program

When new development projects arise, the City of Merritt may find it helpful to use BC Transit's development referral service, which enables local governments to send larger-scale development or rezoning proposals to BC Transit for comment. As part of this referral process, BC Transit reviews the proposal and provides local government with comments on how the proposed development fits with the existing transit network, the outlook for future transit service to the development area, and comments on pedestrian links or transit amenities that would make the development more transit-friendly.

Development referrals can be sent to developmentreferrals@bctransit.com. *Appendix E* shows a sample BC Transit development referral response.

Supporting Action #2: Integrate Fare Review recommendations with Service Review

Merritt's Fares have not changed since the system was implemented in 2007. A Fare Review was conducted in tandem with this Service Review, and presents two options. Both options within the Fare Review can be found in *Appendix B* and include projected impacts to system ridership and revenue. Although both options were designed to simplify the fare structure, increase customer understanding, and to be more compatible with future fare collection technology, one of the options maintains a relatively similar average fare and the other increases average fares somewhat.

6.2 Longer Term Supporting Actions

Supporting Action #3: Improve transit infrastructure and information at key transit stops

Improving the available infrastructure at key stops can raise the profile of transit within a community while improving customer convenience. Providing basic transit system information (e.g. route maps and bus arrival times) at key stops can help reduce potential barriers to taking transit, as it does not require that potential riders find the website or a Rider's Guide (Figure 18). Additionally, this recommendation aligns with the goals of, and the previous work done by, the Nicola Valley Transportation Society. At a minimum, route and schedule information should be posted at the following key stops: Walmart, Nicola Valley Institute of Technology, Extra Foods, Nicola Valley Hospital and Health Centre, Downtown Merritt, Bob's Mini Mart, and Rocky Pines.

Figure 18 – Bus Stop Schedule Example



Supporting Action #4: Implement bus stop infrastructure guidelines

A key theme heard throughout the Service Review process related to bus stops and bus stop accessibility concerns. To address the scale of the bus stop accessibility issues identified through this Service Review, a formalized process to prioritize bus stop infrastructure improvements is required. The first step of this process involves adopting bus stop design guidelines to determine minimum acceptable standards. BC Transit has comprehensive Infrastructure Design Guidelines that could be adopted by the City of Merritt, or could be used as a baseline for Merritt's own guidelines.

Figure 19 – BC Transit's Bus Stop Infrastructure Guidelines Example

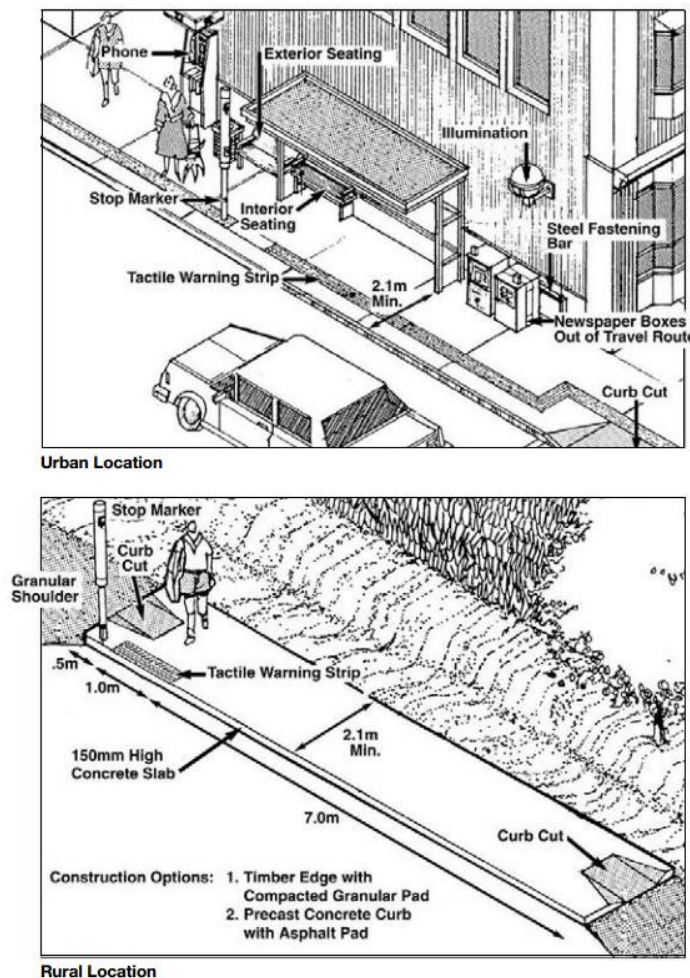


Figure 2.2 Example of Bus Stop Amenities in Urban and Rural Locations

BC Transit's Infrastructure Design Guidelines document can be found here:

<http://bctransit.com/servlet/documents/1403640670226>

Supporting Action #5: Create a bus stop database, conduct an infrastructure assessment, and prioritize bus stop infrastructure improvements

As part of the Google Transit implementation, BC Transit creates a bus stop database. The process that goes along with the bus stop database creation includes a basic infrastructure assessment. The results of this assessment could be compared to the current bus stop conditions to help prioritize bus stop infrastructure improvements.

Supporting Action #6: Implement Google Transit

Google Transit allows transit users to plan their transit trips using googlemaps. This can allow prospective riders to compare transit travel with other potential travel options. This action also aligns with the goals of the Nicola Valley Transportation Society who were at one point looking into implementing Google Transit independently of BC Transit.

Supporting Action #7: Consider altering the City of Merritt's Snow Removal Policy and Procedure Bylaw to prioritize transit routes and infrastructure

Through the driver survey, a number of roads with steep grades in Merritt (including Belshaw Street approaching NVIT and River Ranch Road) were identified as an issue in winter due to snow removal limitations. The City of Merritt may want to consider including bus routes and key bus stop infrastructure as a snow removal priority within their Snow Removal Policy and Procedure Bylaw.

Supporting Action #8: Adopt Service Standards and Performance Guidelines

BC Transit is in the process of developing a set of transit Service Standards and Performance Guidelines (SSPG) for communities of Merritt's size as a way of benchmarking and optimizing transit system performance. When these Service Standards and Performance Guidelines are completed, it is recommended that the City of Merritt adopt them to guide future transit service expansion and optimization.

7.0 Conclusions

7.1 Future Considerations

The service options and supporting actions identified in this Service Review have been developed in collaboration with current transit riders, City of Merritt staff, and local operating company staff. This collaboration will continue in the implementation and evaluation of these options, as well as the general operation of the system.

These proposed service options and supporting actions are not intended to be prescriptive and do not necessarily need to be implemented linearly. Subsequent monitoring, evaluation, three-year budget planning, and five-year service planning will reflect on the outcomes of this Service Review and will help the partners continue to serve the City of Merritt's transit needs successfully.

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

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

7.2 Recommendations

It is recommended that the City of Merritt:

- **Receive this report for review and comment prior to finalization by BC Transit staff;**
- **Direct staff to work with BC Transit to implement immediate term service options and supporting actions;**
- **Approve staff to work with BC Transit to conduct additional public consultation to inform short term service option details**
- **Receive the Appendices of this report as information.**

8.0 Appendices

Appendix A: On-Board Survey Results

Figure 20 – Age of Survey Respondents

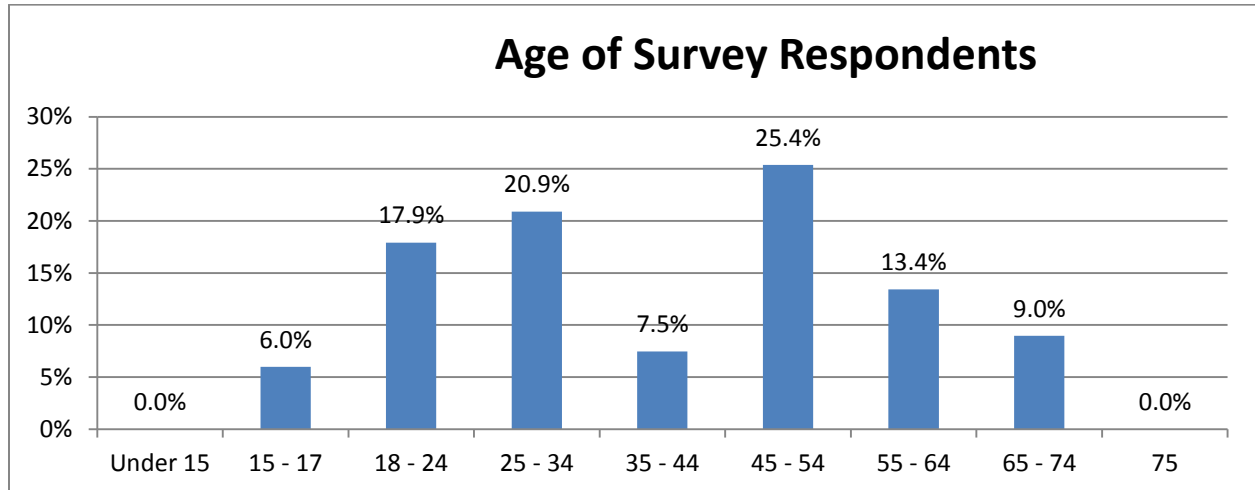


Figure 21 – Ownership or Access to Private Vehicle

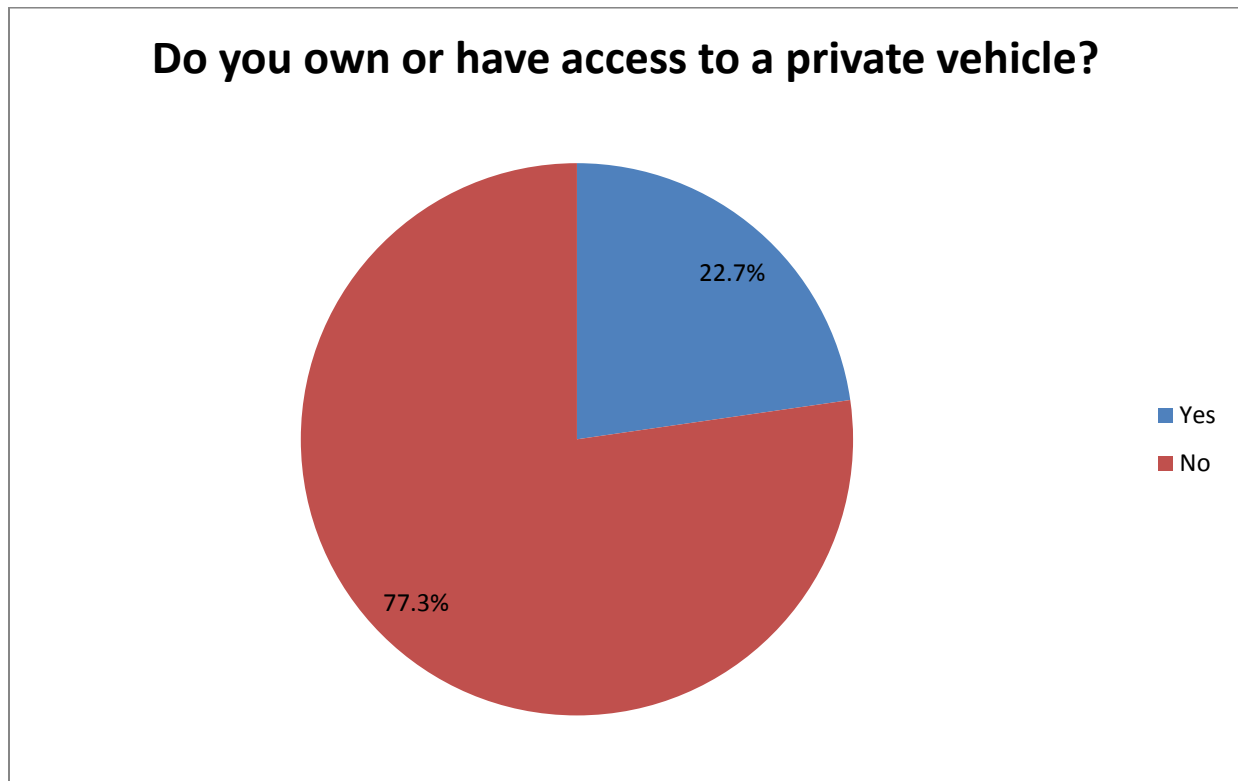


Figure 22 – Transit Use Frequency

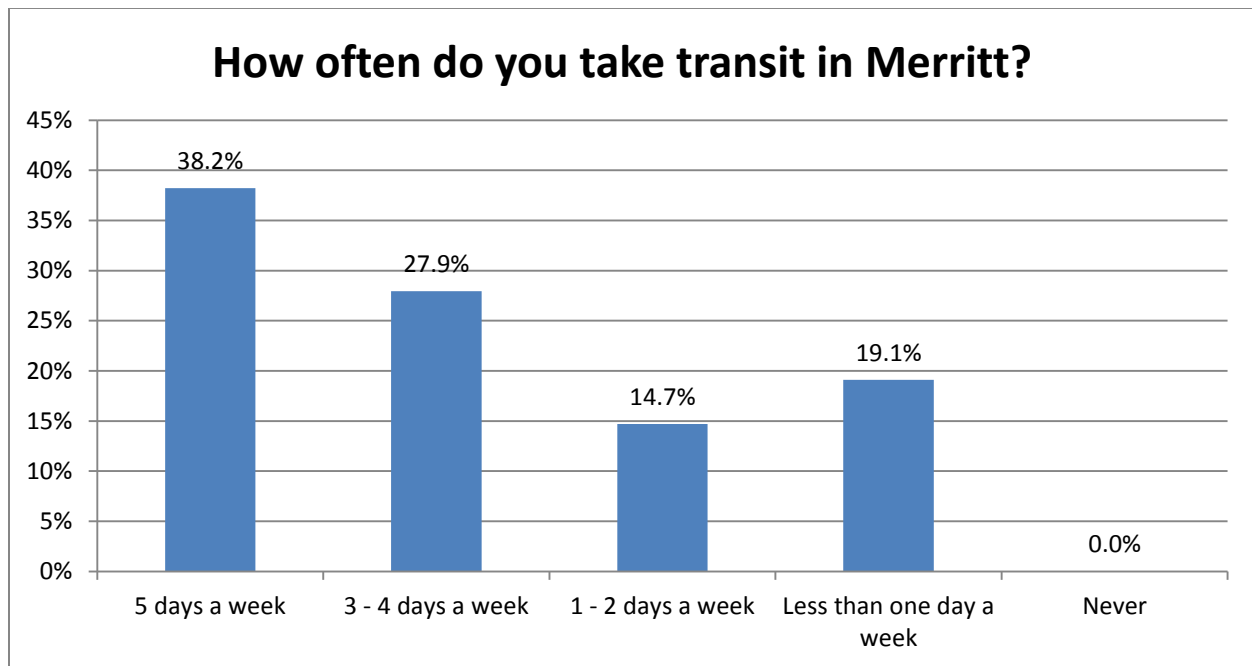


Figure 23 – Primary Transit Trip Purpose

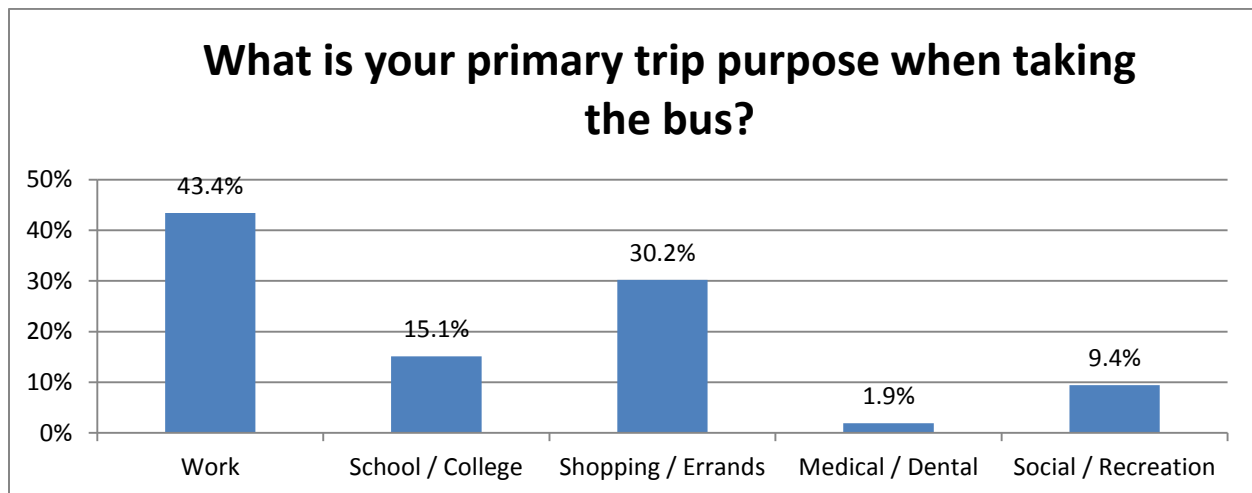


Figure 24 – Fare Payment Usage

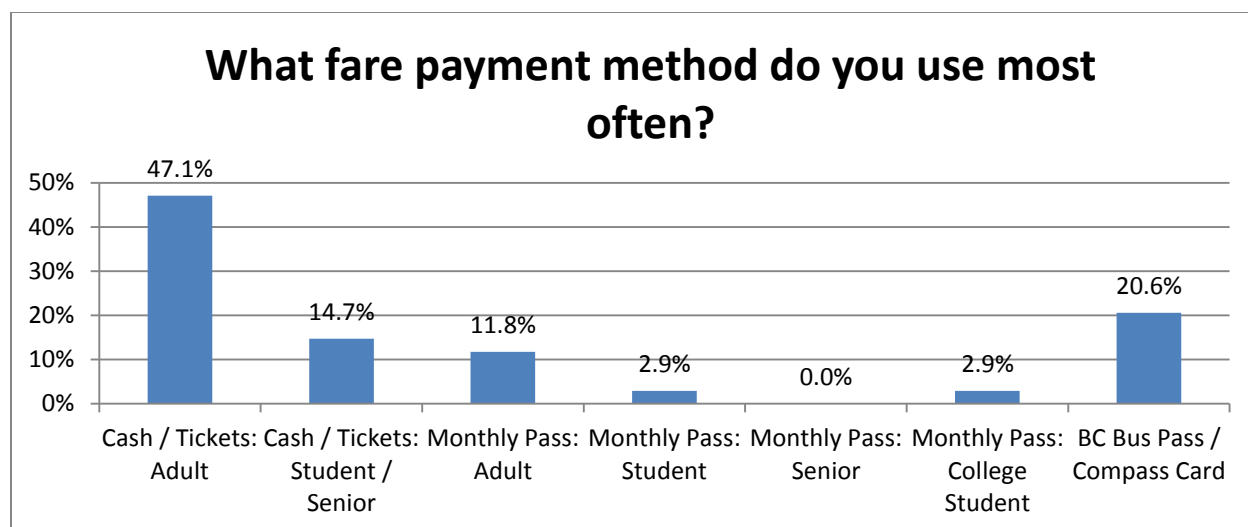
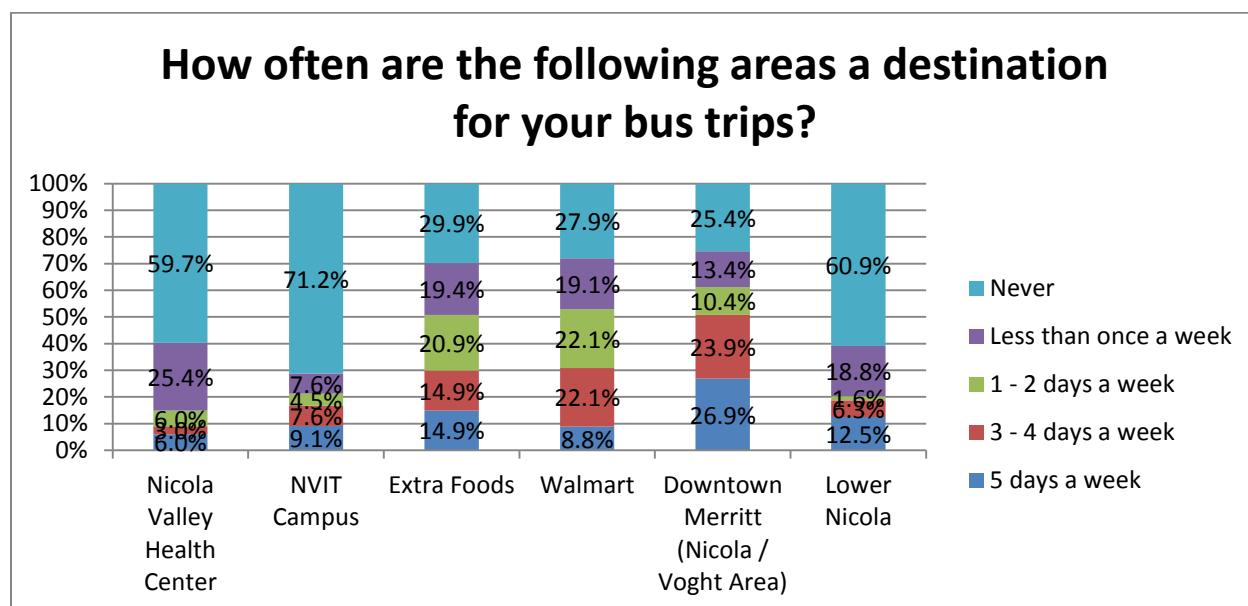


Figure 25 – Trip Destinations on Route 1 North End



*This survey was conducted in May when ridership to the College is lower than usual

Figure 26 – Expansion Option Priorities

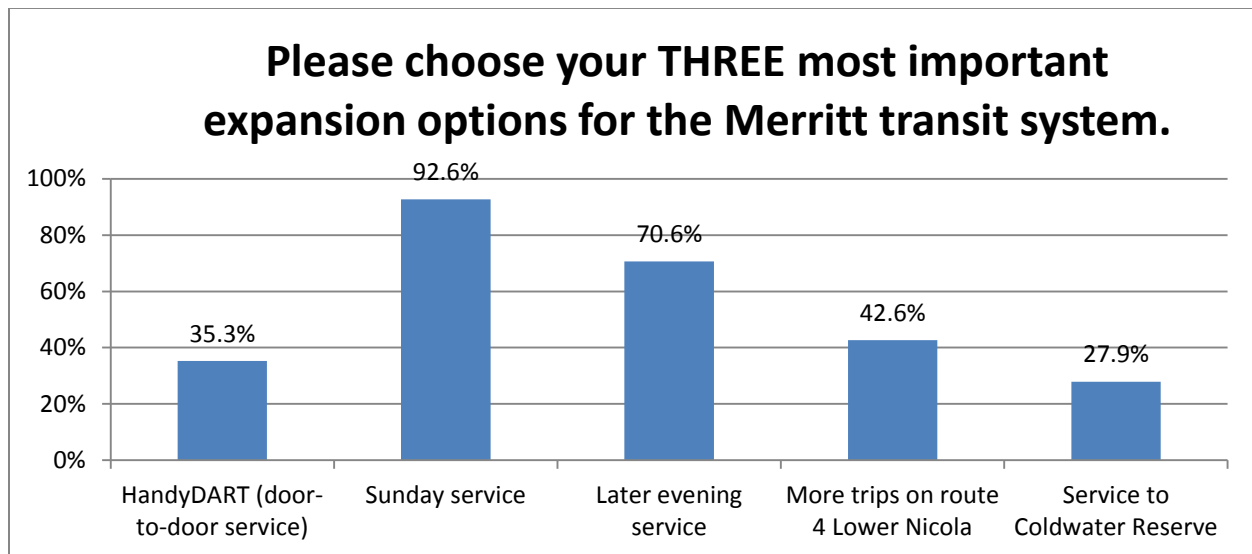


Figure 27 – Satisfaction with Merritt Transit System

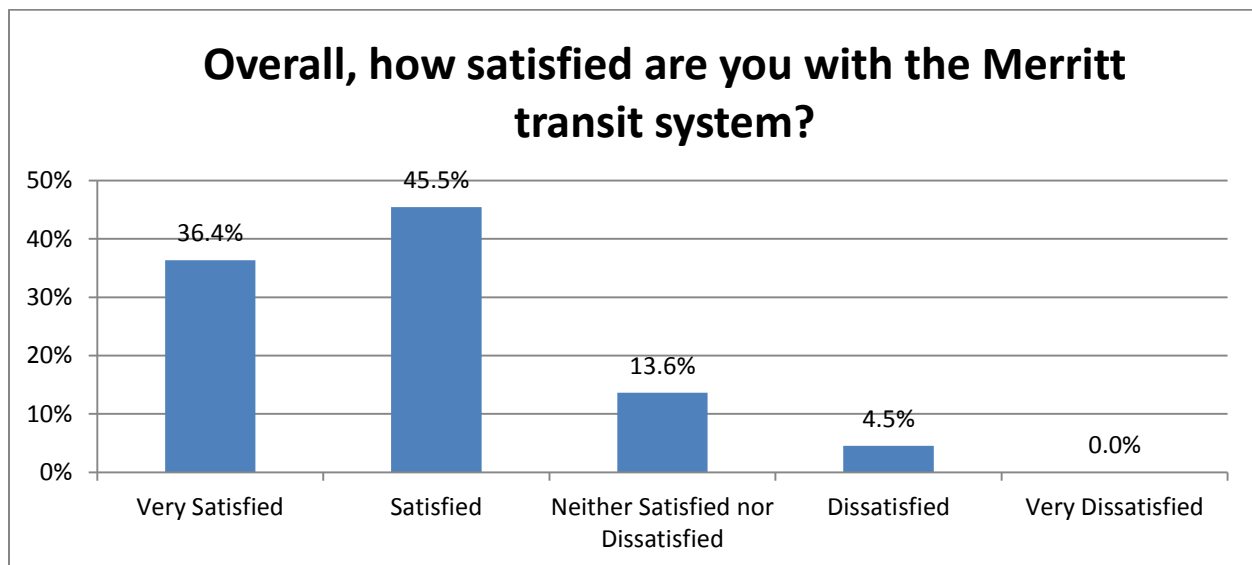
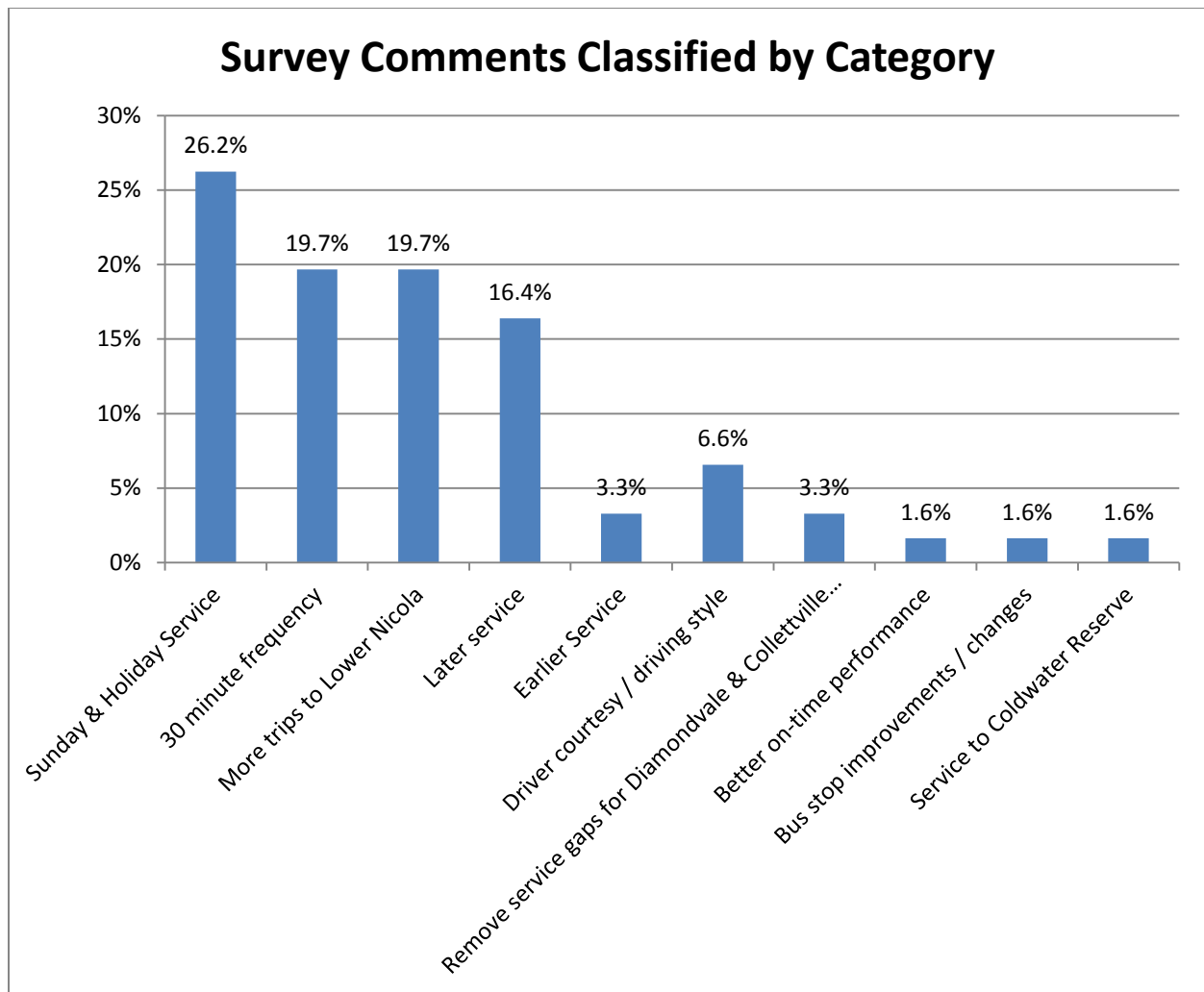


Figure 28 – Survey Comment Classification



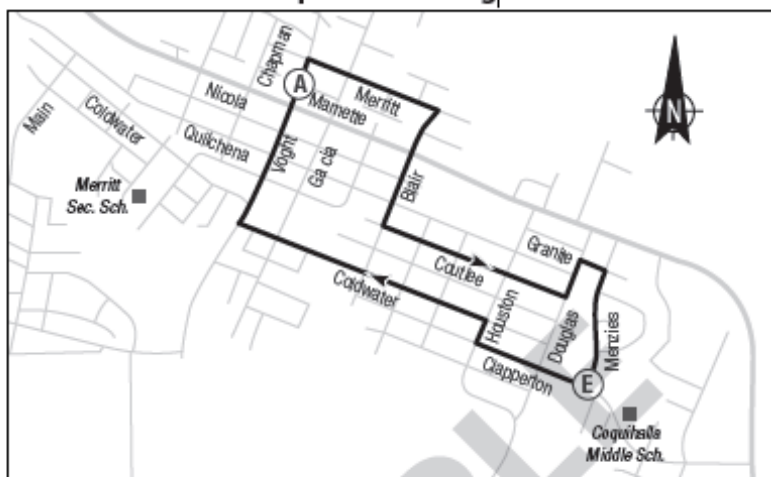
3 Diamond Vale and 2 Collettville

There are several operational challenges with **3 Diamond Vale** that could be addressed by reversing its routing (see proposed map below).

In order to make this routing change work properly, **2 Collettville** would have to run before 3 Diamond Vale, causing a 15-minute change to the schedules for both routes (see proposed schedules below).

We are looking for feedback from customers on the feasibility of this potential operational solution.

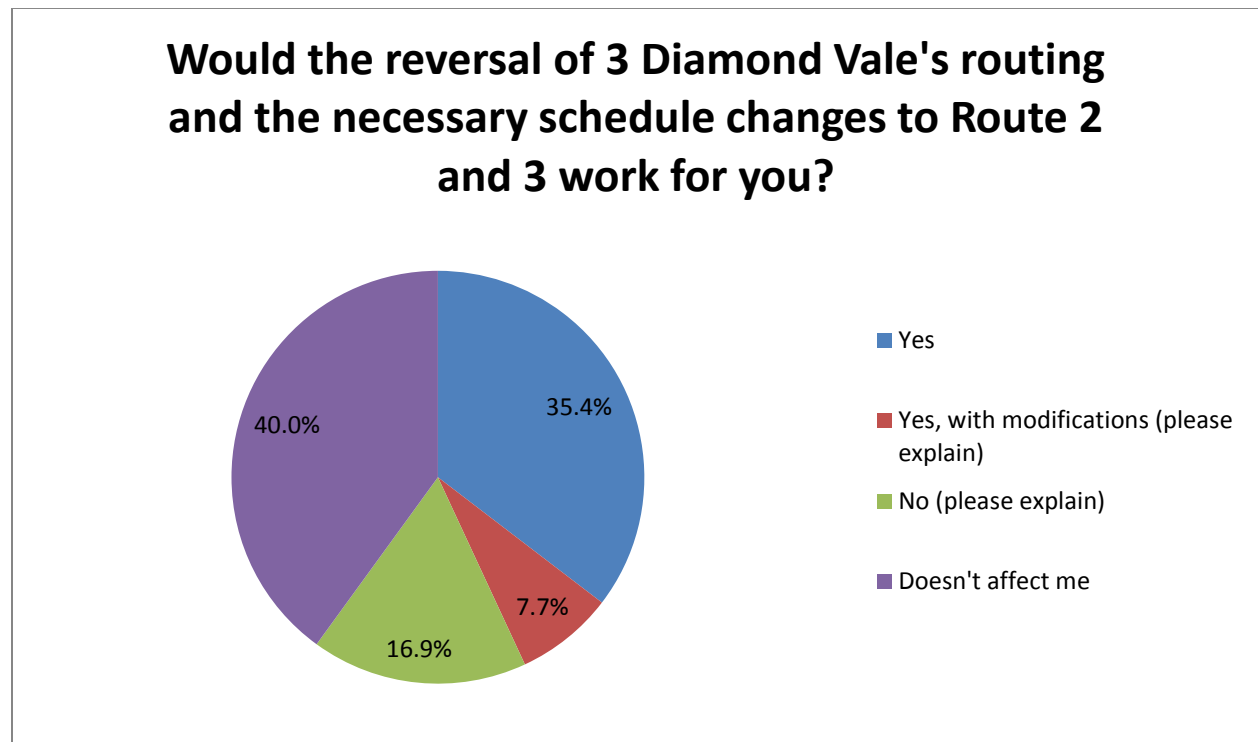
3 Diamond Vale – Proposed Routing



Proposed Schedules

2 Collettville		
Monday to Saturday		
(A)	(D)	(A)
Lv. Downtown (Mamette at Voght)	Lv. Fir at Hill	Ar. Downtown (Mamette at Voght)
6:15	6:22	6:29
8:15	8:22	8:29
9:15	9:22	9:29
10:15	10:22	10:29
12:15	12:22	12:29
1:15	1:22	1:29
2:15	2:22	2:29
3:15	3:22	3:29
4:15	4:22	4:29
6:15	6:22	6:29
7:15	7:22	7:29
8:15	8:22	8:29

Figure 29 – Diamond Vale Routing Change Option



Appendix B: Fare Review

1.0 Overview

BC Transit has prepared this report for the City of Merritt and proposes a new fare structure. This proposal reflects BC Transit's fare strategy, which is to create a simple, easily understandable fare structure that will increase ridership and fare revenue, is more cost-effective to administer, and is compatible with future fare collection technology.

2.0 Current Fares

The following table outlines the current fare structure in Merritt. This fare structure was implemented in November 2007.

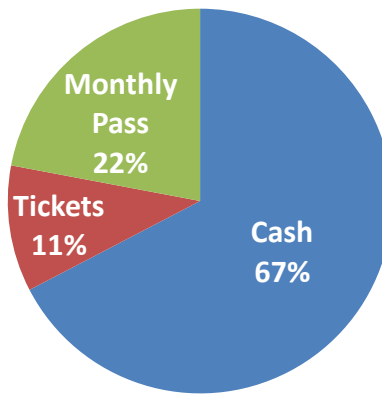
Table 1: Current Fare Structure

Fare Product	Audience	Current Fare
Cash	Adult	\$1.50
	Student/Senior	\$1.25
Tickets (10)	Adult	\$13.50
	Student/Senior	\$11.25
Monthly Pass	Adult	\$42.00
	Student	\$28.00
	Senior	\$34.00
	College Student	\$34.00

3.0 Fare Revenue Composition

Fare revenue in 2015/16 (excluding BC Bus Pass) was \$60,892. The chart below indicates how this revenue was divided by fare type:

Figure 1: Revenue by Fare Type



This chart shows that cash is the predominant fare type, and so any changes made to the cash fare will have the biggest overall revenue.

4.0 Proposed Fare Structures

The following fare structures were developed with the objective to maximize revenue and ridership within the Merritt Transit System. They were also designed to simplify the fare structure, increasing customer understanding and be more compatible with future fare collection technology.

Table 2: Proposed Fare Structure

Fare Product	Audience	Current Fare	Option 1	Option 2
Cash	Adult	\$1.50	\$1.50	\$2.00
	Student/Senior	\$1.25		
Tickets (10)	Adult	\$13.50	\$13.50	\$18.00
	Student/Senior	\$11.25		
Monthly Pass	Adult	\$42.00	\$42.00	\$42.00
	Student	\$28.00	\$32.00	\$32.00
	Senior	\$34.00		
	College Student	\$34.00		
Impact on revenue			+\$1,700 (3%)	+\$10,000 (19%)
Impact on ridership			-900 (2%)	-5,600 (9%)

These impacts assume that the demographic information gathered in recent ride counts is representative of overall ridership.

5.0 Recommendations

It is recommended that the City of Merritt:

1. Receive this report as information
2. Approve one of the proposed fare structures
3. Direct staff to work with BC Transit to implement the fare change along with the immediate-term service options outlined within the Service Review Report for April, 2017

Appendix C – Detailed Ridership Statistics

Figure 30 – Average Rides per Trip on Route 1 North End by Time of Day

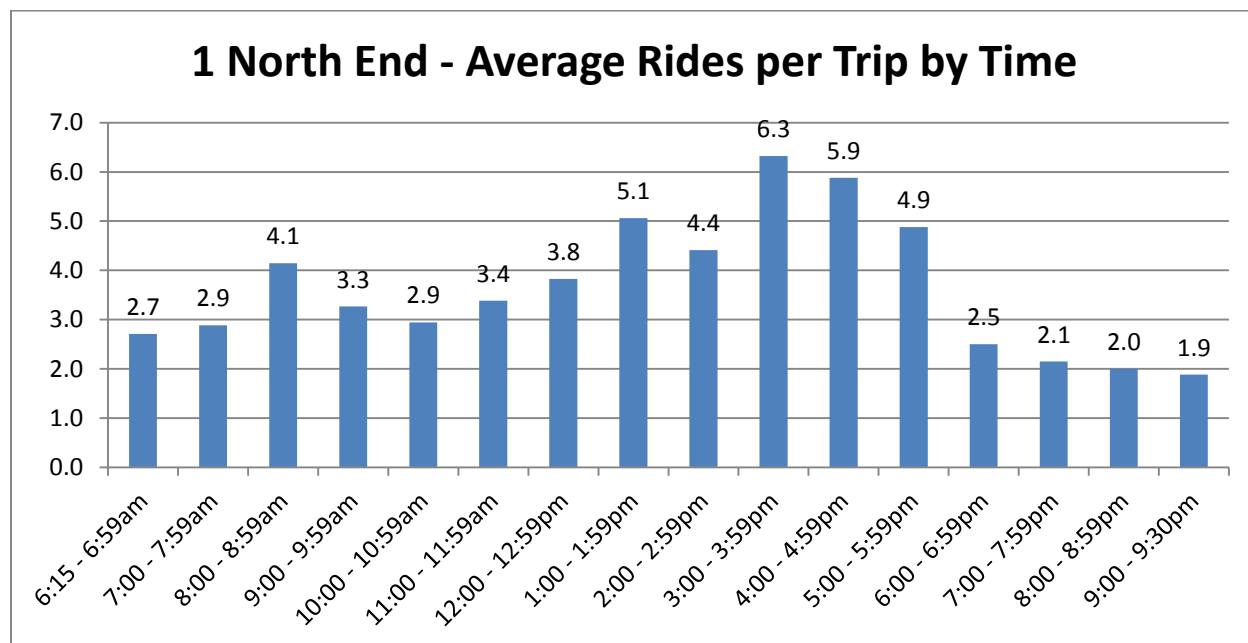


Figure 31 - Average Rides per Trip on Route 2 Collettsville by Time of Day

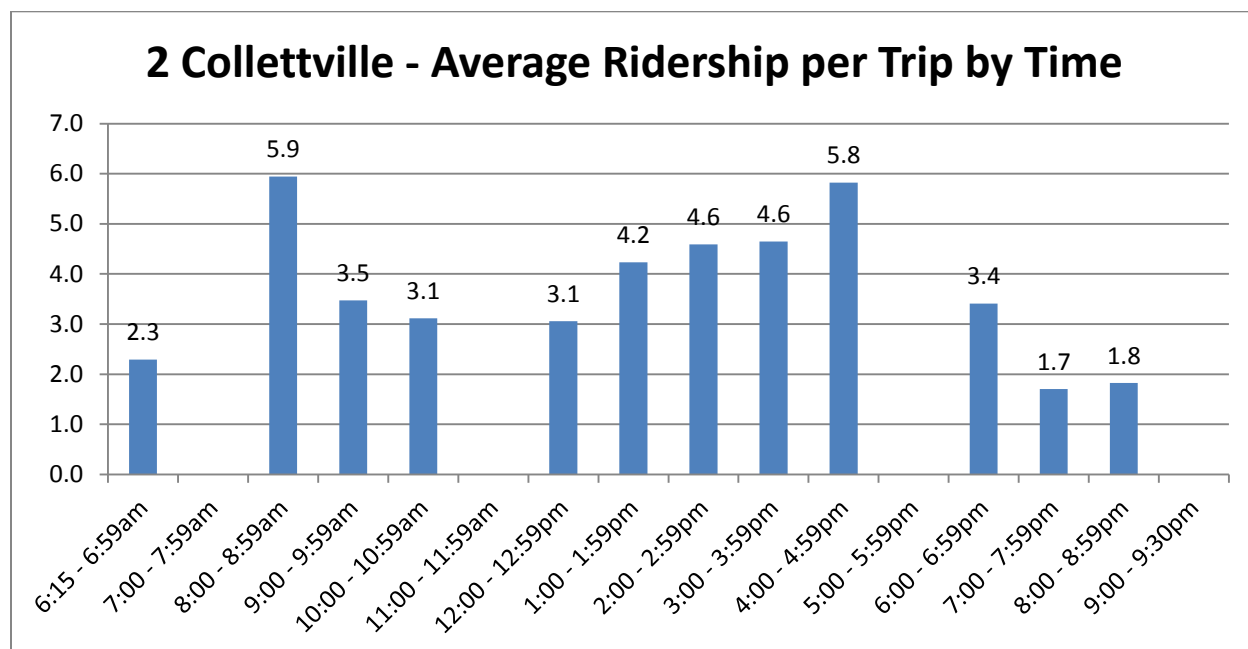


Figure 32 - Average Rides per Trip on Route 3 Diamond Vale by Time of Day

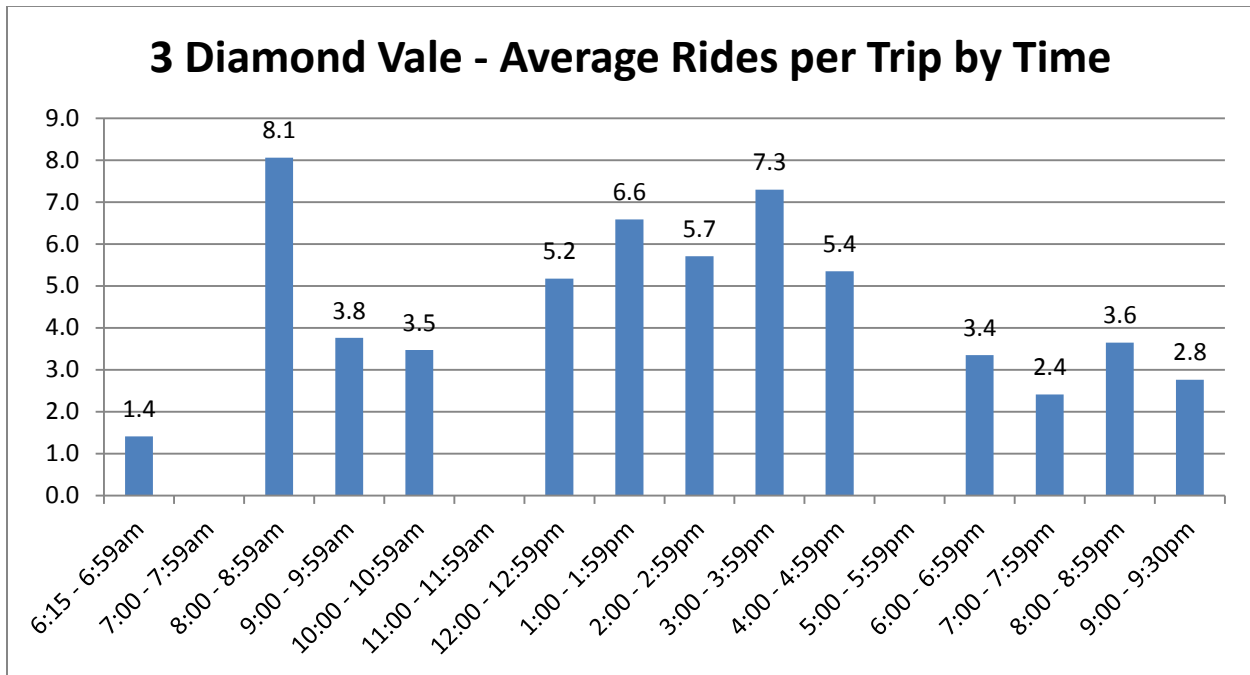


Figure 33 - Average Rides per Trip on Route 4 Lower Nicola by Time of Day

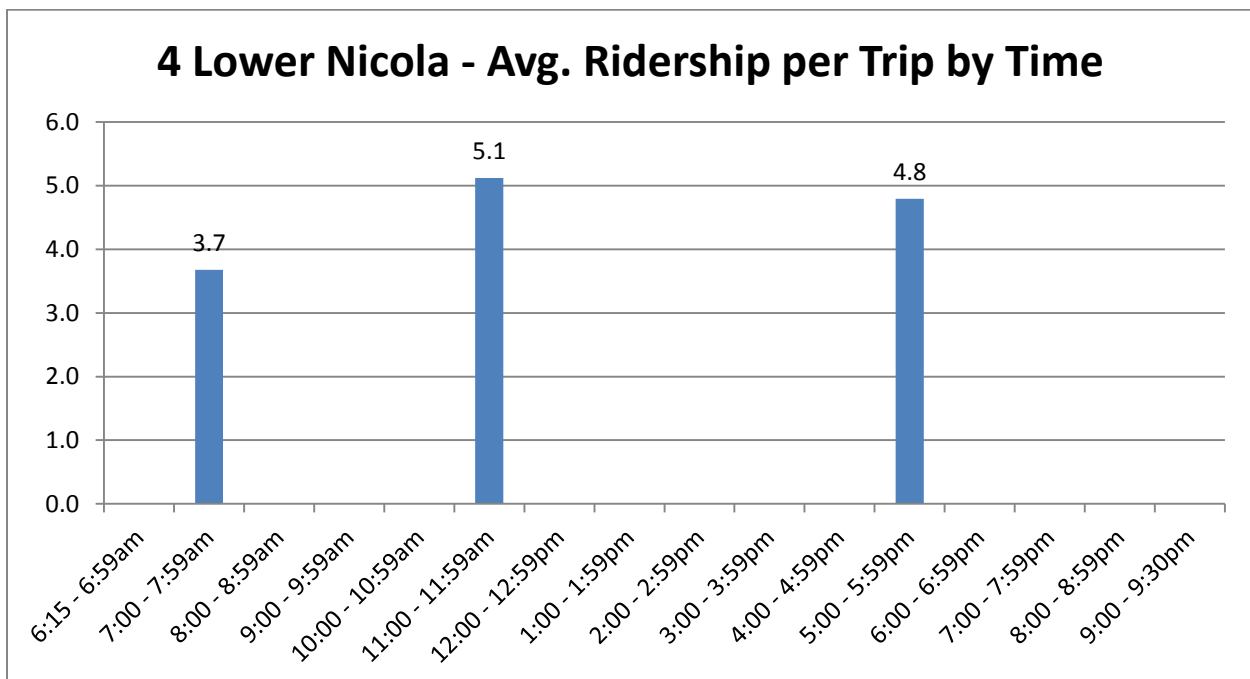
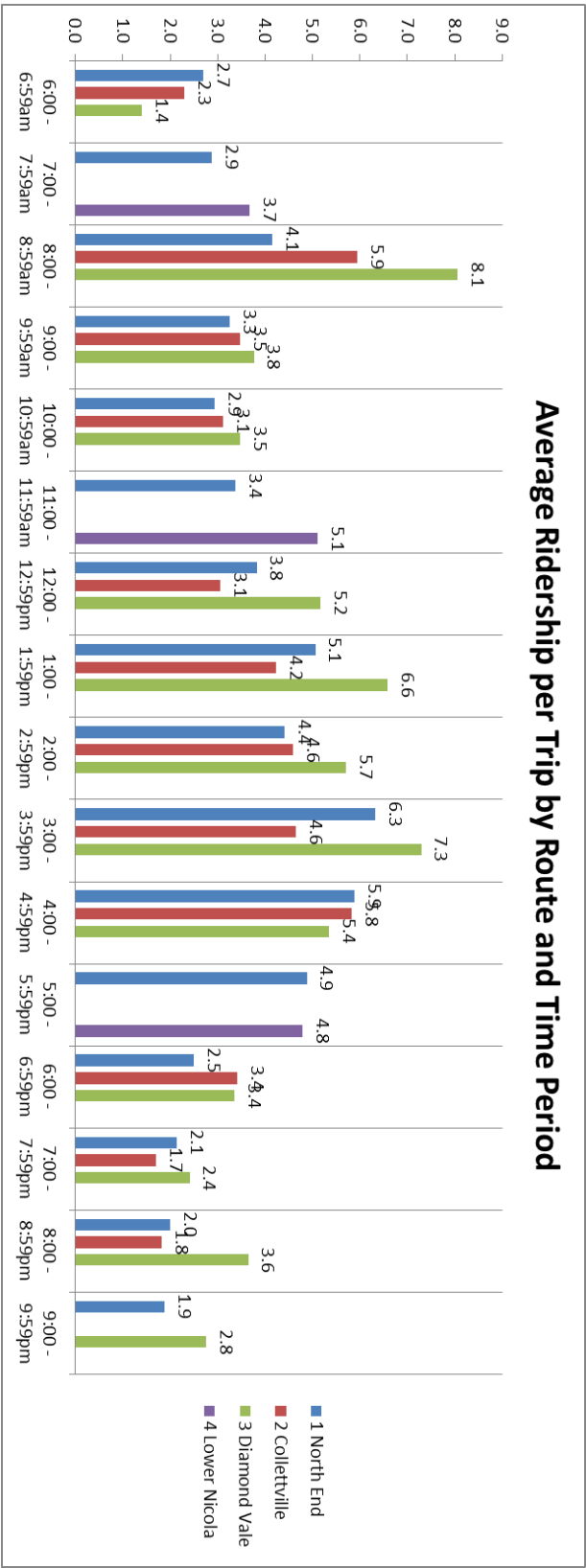


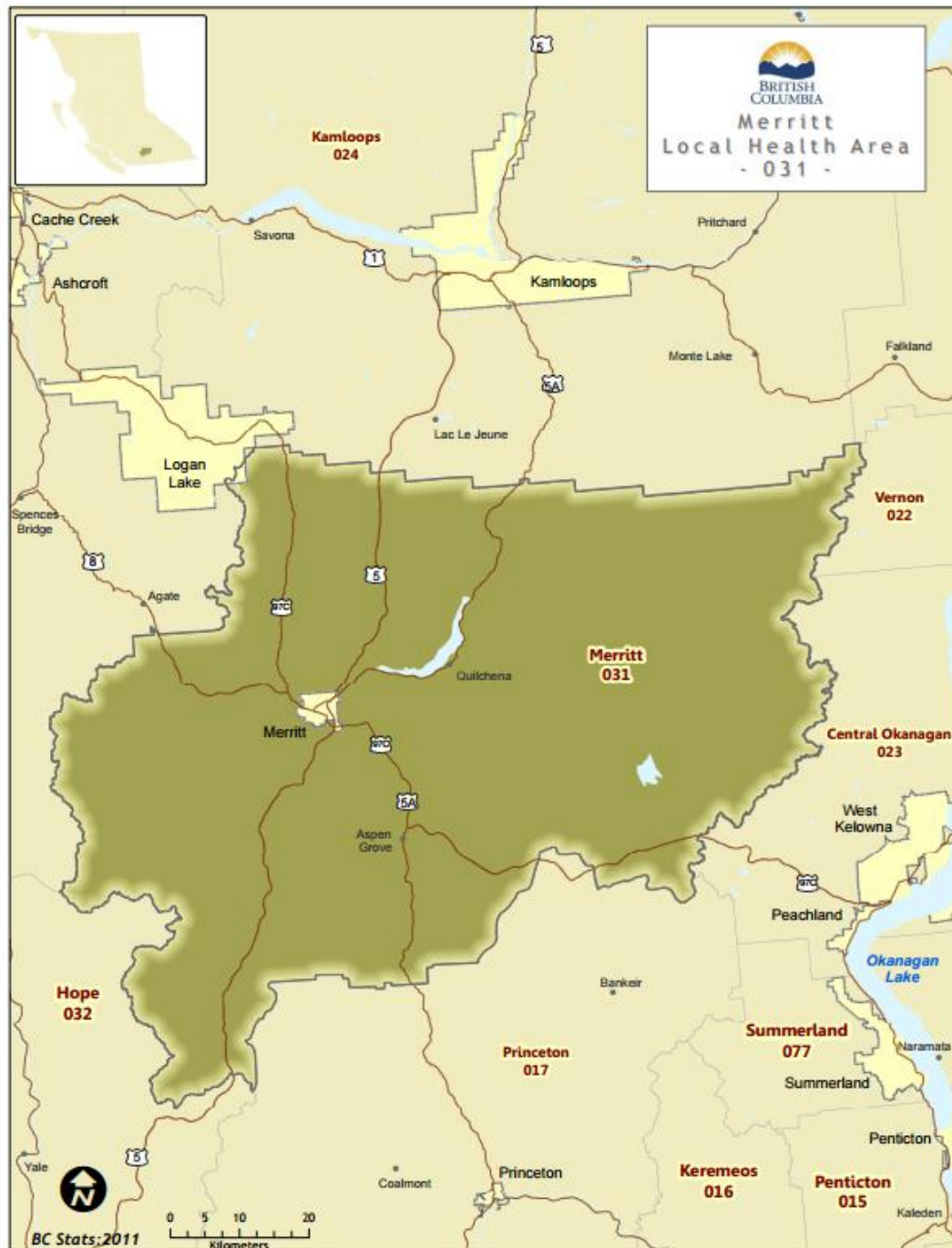
Figure 34 - Average Rides per Trip by Route and Time of Day



Appendix D – Merritt Population Context Map

The map below shows the boundaries of the Merritt Local Health Area (LHA) in comparison to the City of Merritt's boundaries (which is colored beige within the Merritt LHA boundaries).

Figure 35 – Merritt Local Health Area Context Map



Appendix E - Development Referral Example

Development Referral Response

November 28, 2016

Project No. SO62 (Subdivision 580049)

Development Location:

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

Located at 1835 Highway 99

Local Government: Village of Pemberton

Transit System: Pemberton Valley Transit

Overall Transit Impact

The proposed site:

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

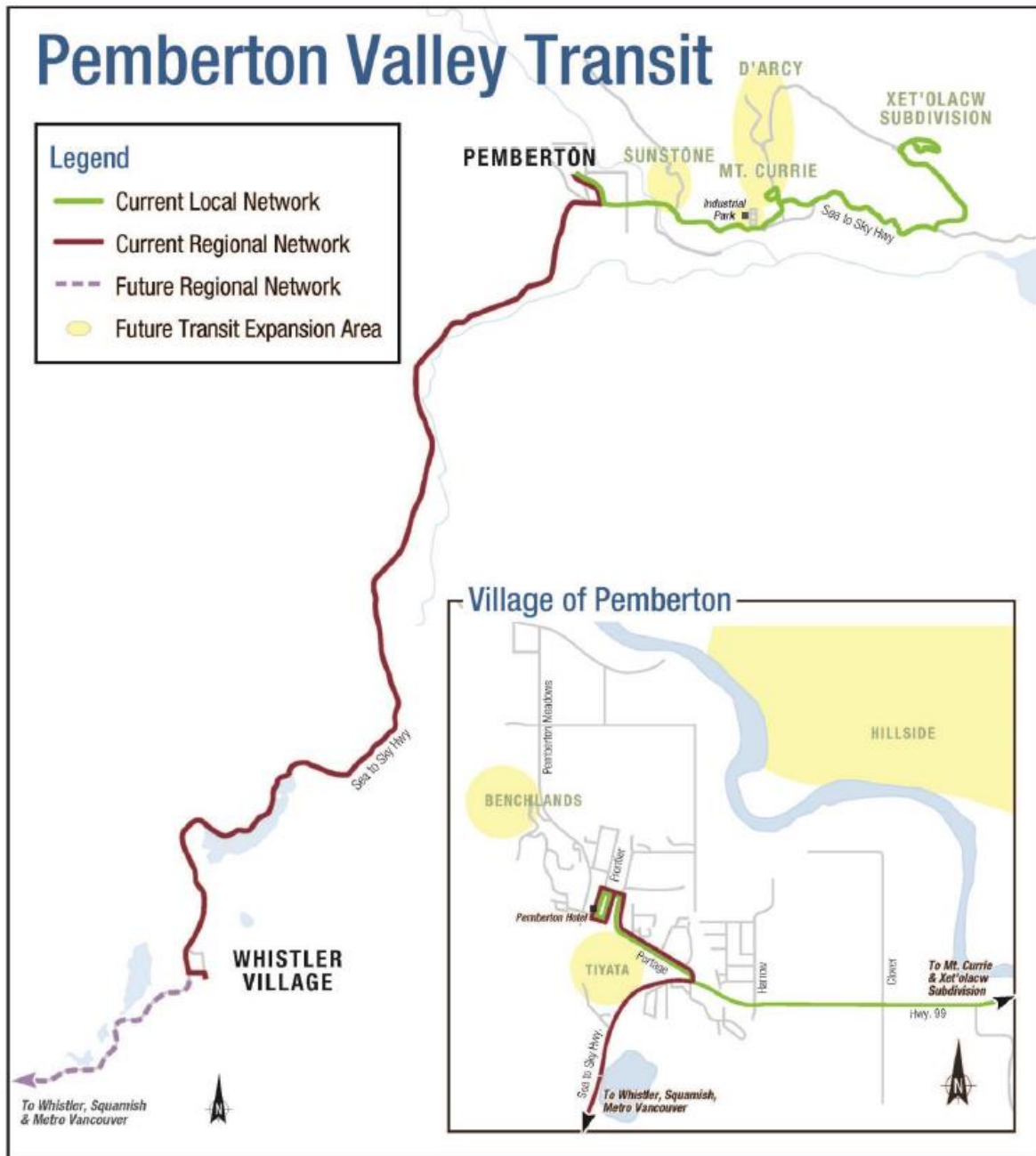
Land Use

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

Bus Stops and Stations

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

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



BC Transit Level of Support

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

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

Appendix F – Health Connections Service

Health Connections

Kamloops Transit

Service to
KAMLOOPS & KELOWNA
Effective July 1, 2016



Health Connections is a transit service providing communities with accessible transportation options to access non-emergency medical appointments. Although medical appointments have priority, everyone is eligible to use this service if space is available.

Service is available to any community along the route. You must phone two business days ahead to arrange your trip. (Day before bookings *may* be accommodated.) Transit staff will let you know the location and time of pick up.

When scheduling medical appointments, let them know you will be using Health Connections.



KAMLOOPS > LOGAN LAKE

Monday and Wednesday: Leaves Kamloops at 7:00 a.m., Logan Lake at 8:30, arriving in Kamloops at 10:00 a.m.

Return: Leaves Kamloops at 2:30 p.m., Logan Lake at 3:30, arriving in Kamloops at 5:00 p.m.

KAMLOOPS > LOGAN LAKE > MERRITT

Tuesday: Leaves Kamloops at 7:00 a.m., Logan Lake at 7:45, Merritt at 8:30, Merritt Hospital at 8:40, arriving in Kamloops at 10:00 a.m.

Return: Leaves Kamloops at 2:30 p.m., Logan Lake at 3:30, Merritt at 4:00, arriving in Kamloops at 5:00 p.m.

KAMLOOPS > MERRITT > KELOWNA

Thursday: Leaves Kamloops at 7:00 a.m., Logan Lake at 7:45, Merritt at 8:30, arriving in Kelowna at 10:00 a.m.

Return: Leaves Kelowna at 1:30 p.m., Merritt at 3:30, Logan Lake at 4:00, arriving in Kamloops at 5:00 p.m.

KAMLOOPS > CHASE

Friday: Leaves Kamloops at 7:00 a.m., Chase at 8:30, Pritchard at 9:00, arriving in Kamloops at 9:30 a.m.

Return: Leaves Kamloops at 2:30 p.m., Pritchard at 3:15, Chase at 3:30, arriving in Kamloops at 4:30 p.m.

***Note: all times are approximate.**

One-way Fare: \$5.00
Have exact fare ready; the driver does not carry change.

Phone Ahead: 1-888-376-7525.
All passengers must phone ahead to book a seat and find out pick up and drop off locations. All trips must be booked before 2:00 p.m.



www.bctransit.com
Transit Info 1-888-376-7525

6229-9 - 2K