VILLAGE OF PEMBERTON -REGULAR COUNCIL MEETING AGENDA-

Agenda for the Regular Meeting of Council of the Village of Pemberton to be held Tuesday, November 17, 2015 at 9:00 a.m. in Council Chambers, 7400 Prospect Street. This is Meeting No. 1412.

"This meeting is being recorded on audio tape for minute-taking purposes as authorized by the Village of Pemberton Audio recording of Meetings Policy dated September 14, 2010."

Item of Business Page No.

- 1. CALL TO ORDER
- 2. SWEARING IN
 - a) Councillor-Elect Ted Craddock
- APPROVAL OF AGENDA

Recommendation: THAT the Agenda be approved as presented.

- 4. RISE WITH REPORT FROM IN CAMERA (CLOSED)
 - a) Red Cross Emergency Social Services Agreement
- 5. ADOPTION OF MINUTES
 - a) Regular Council Meeting No. 1411 -Tuesday, November 3, 2015

5

Recommendation: THAT the minutes of Regular Council Meeting No. 1411 held Tuesday, November 3, 2015, be adopted as circulated.

- **BUSINESS ARISING**
- 7. COMMITTEE MINUTES FOR INFORMATION
- **DELEGATIONS**
 - a) Sea to Sky Transit Future Plan BC Transit, Johann van Schaik, Senior Regional Transit Manager, and Matthew Boyd, Regional Planning Work Lead
- **REPORTS** 9.
 - a) Office of the CAO
 - i. Sea to Sky Transit Future Plan

11

Recommendation: THAT Council receives the Sea to Sky Transit Future Plan;

AND THAT Council support the Vision, Goals, Targets and Transit Future Network for the Local and Regional Transit service as presented in the Plan;

AND THAT Council direct staff to work with BC Transit on the next steps described in the Sea to Sky Transit Future Plan to analyze the regional and local transit improvements.

ii.	Bullying, Harassment and Discrimination Policy				
	Recommendation: THAT the Bullying, Harassment and Discrimination Policy be adopted by Council.				
iii.	Banking Resolution and MFA Resolution – Authorized Signatories	254			
	Recommendation: THAT Mr. Ted Craddock be named as an elected official signing authority on the Village of Pemberton TD Bank account (s);				
	AND THAT Mr. Ted Craddock be named as an elected official signing authority on the Village of Pemberton Scotiabank account (s);				
	AND THAT Mr. Ted Craddock be named as a signing authority on all authorizations from Municipal Finance Authority by the Village of Pemberton.				
b) Co	rporate & Legislative Services				
i.	By-Election for the Office of Councillor Results	256			
	Recommendation: THAT the report from the Chief Election Officer providing the results of the 2015 By-Election be received.				
	Recommendation: THAT any unexpended funds allocated from the 2015 Community Initiative & Opportunity Fund to facilitate the 2015 By-Election be transferred back to the Community Initiative & Opportunity Fund budget.				
ii.	2016 Committee Appointments	260			
	Recommendation: THAT Council confirm appointments for 2016;				
	AND THAT Council provide direction with respect to the Standing Committee on Finance.				
iii.	Alternative Approval Process – Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015	267			
	Recommendation: THAT Council proceed with an Alternative Approval Process to borrow funds to purchase a new Triple Combination Pumper Truck for the Village of Pemberton Fire Department;				
	AND THAT Council establish Tuesday, December 29, at 4:00 p.m. as the deadline for receipt of elector response forms from electors not wanting Council to proceed with the adoption of Bylaw No 795, 2015;				
	AND THAT Council establish the Elector Response Form as shown on Appendix B;				
	AND THAT Council determine the total number of electors as 1900 for which the alternative approval process applies as shown on Appendix F.				
c) Operations & Development Services					
i.	Draft Solid Waste and Resource Management Plan	282			
	Recommendation: THAT the Draft Solid Waste and Resource Management Plan report be received for information;				

AND THAT the Village inform the SLRD that it supports the Vision and Strategies contained in the Stage 2 Report (SLRD Draft Solid Waste and Resource Management Plan) in principle;

AND THAT any items identifying the Village of Pemberton with the responsibility for implementing, including public consultation, shall be managed and facilitated by the Village;

AND THAT any capital improvements (i.e., Re-Build It Centre) or implementation of shared services (i.e. curbside collection) be operated and managed by the Village.

- d) Mayor
- e) Councillors

10. BYLAWS

- a) Second Reading
 - i. Village of Pemberton Official Community Plan ('580' Hillside Lands)
 Amendment Bylaw No. 789, 2015

438

Recommendation: THAT Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 be given Second Reading;

Recommendation: THAT any referral agencies comments submitted after noon on Wednesday, November 25, 2015 will be presented to Council on December 1, 2015, so that they can be received prior to the Public Hearing.

AND THAT a Public Hearing for Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 be scheduled for 7PM Tuesday, December 8th, 2015, at Council Chambers;

ii. Village of Pemberton Zoning ('580' Hillside Lands) Amendment Bylaw No. 790, 2015

Recommendation: THAT Village of Pemberton Zoning Bylaw No. 466, 2011, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 be given Second Reading.

Recommendation: THAT any referral agencies comments submitted after noon on Wednesday, November 25, 2015 will be presented to Council on December 1, 2015, so that they can be received prior to the Public Hearing.

AND THAT a Public Hearing for Village of Pemberton Zoning Bylaw No. 466, 2011, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 be scheduled for 7PM Tuesday, December 8th, 2015, at Council Chambers.

11. CORRESPONDENCE

- a) For Information
 - i. St. David's Church, dated October 28, 2015, regarding appreciation for Tax 459 Exemption

Recommendation: THAT the correspondence from St. David's Church, dated October 28, 2015, be received for information.

b) For Action

i. Ms. Janet Simpson, dated October 29, 2015, regarding Noise Bylaw 460 amendment request

Recommendation: THAT Council provide direction to staff.

- 12. DECISION ON LATE BUSINESS
- 13. LATE BUSINESS
- 14. NOTICE OF MOTION
- 15. QUESTION PERIOD

16. IN CAMERA

Recommendation: THAT pursuant to Section 90 (1) (a) personnel and (k) negotiations, of the *Community Charter*, the Council of the Village of Pemberton serve notice to hold an In-Camera Meeting on today's date for the purpose of dealing with matters for which the public shall be excluded from attending.

17. ADJOURNMENT

Village of Pemberton Regular Council Meeting No. 1412 Tuesday, November 17, 2015 Page 4 of 463

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VILLAGE OF PEMBERTON -REGULAR COUNCIL MEETING MINUTES-

Minutes of the Regular Meeting of Council of the Village of Pemberton held on Tuesday, November 3, 2015 at 7:00 p.m. in Council Chambers, 7400 Prospect Street. This is Meeting No. 1411.

IN ATTENDANCE: Mayor Mike Richman

Councillor Jennie Helmer Councillor James Linklater Councillor Karen Ross

STAFF IN ATTENDANCE: Nikki Gilmore, Chief Administrative Officer

Sheena Fraser, Manager of Corporate & Legislative

Services

Lisa Pedrini, Planner

Wendy Olsson, Executive Assistant Paige MacWilliam, Legislative Assistant

Public: 3

1. CALL TO ORDER

At 7:00 p.m. Mayor Richman called the meeting to order.

2. APPROVAL OF AGENDA

Moved/Seconded

THAT the Agenda be approved as presented.

CARRIED

3. RISE WITH REPORT FROM IN CAMERA (CLOSED)

a) Airport History

At the In Camera portion of the Regular Council meeting held on Tuesday, October 20, 2015, Council requested that staff prepare a presentation for the Committee of the Whole on the history of the airport. Staff will work to bring this report forward at an upcoming meeting.

b) Public Hearing Process

At the In Camera portion of the Regular Council meeting held on Tuesday, October 20, 2015, Council requested that staff prepare a report to be presented at a Regular meeting regarding case law and how it pertains to discussions with Council following the close of a public hearing. Staff have prepared the report for Council's consideration at today's meeting.

c) Strategic Planning Working Session

At the In Camera portion of the Regular Council meeting held on Tuesday, October 20, 2015, Council requested that the CAO arrange a working session on 2015 strategic priorities. This Working Session was held earlier today.

d) Fire Services Agreement Extension

At the In Camera meeting held earlier today, Tuesday, November 3, 2015, the Mayor and CAO were authorized to execute the Fire Services Agreement Extension. The Village and SLRD are currently in negotiations related to the provision of Fire Services by the Village to portions of the SLRD Electoral Area C. The hope was that these negotiations would be concluded by December 31, 2015 but it is recognized that due to unforeseen delays this will not occur. As such, both the SLRD and Village of Pemberton have agreed that it would be appropriate to extend the existing agreement until December 31, 2016 to accommodate these negotiations.

e) Council Code of Conduct

At the In Camera meeting held earlier today, Tuesday, November 3, 2015, Council has also requested that the Code of Conduct for Mayor, Council, Committee Members and Staff of the Village of Pemberton to be brought forward to the next Committee of the Whole meeting for review.

4. ADOPTION OF MINUTES

a) Regular Council Meeting No. 1409 - Tuesday, October 20, 2015

Moved/Seconded

THAT the minutes of Regular Council Meeting No. 1409, held Tuesday, October 20, 2015 be adopted as circulated.

CARRIED

b) Special Council Meeting No. 1410 - Thursday, October 22, 2015

Moved/Seconded

THAT the minutes of the Special Council Meeting No. 1410, held Thursday, October 22, 2015 be adopted as circulated.

CARRIED

5. BUSINESS ARISING

Village of Pemberton Regular Council Meeting No. 1411 Tuesday, November 3, 2015 Page **3** of **6**

There was no business arising.

6. COMMITTEE MINUTES - FOR INFORMATION

No minutes to be received.

7. DELEGATIONS

No delegations to be received.

8. REPORTS

a) Corporate & Legislative Services

i. Public Hearing Procedure and Case Law

Moved/Seconded

THAT at subsequent Public Hearings everyone who wishes to speak will be given the opportunity to do so for up to five (5) minutes and, once everyone has had a chance to speak, those who wish to speak again may do so only if they are presenting new points.

CARRIED

b) Development Services

i. Regional Growth Steering Committee Update

Moved/Seconded

THAT the Squamish-Lillooet Regional District Regional Growth Strategy 2015 Scoping Period Update report be received for information.

CARRIED

c) Mayor

Mayor Richman provided the following highlights of the SLRD Board Meeting, held on October 28-29:

- Received delegation Allen Gabriel, Chief Executive Officer, Gerard Peters, Chief Negotiator and Gene McInnes, Consultant from the In-SHUCK-ch Nation
- Received delegation Claire Gram, Policy Consultant and Healthy Built Environment Lead, from Vancouver Coastal Health
- Considered an Agriculture Land Reserve non-farm use Application
- Discussed Pemberton Valley Agricultural Area Plan implementation
 - Learned of upcoming CivX 2015 Event

Village of Pemberton Regular Council Meeting No. 1411 Tuesday, November 3, 2015 Page **4** of **6**

Mayor Richman also attended the Sea-to-Sky Hospital District Board meeting on October 28 and provided highlights:

 Discussed investing in the provincial funding priority, closed loop medication management

Mayor Richman reported on the following events:

- Attended the Chamber of Commerce Young Entrepreneurs Meet & Greet on October 28
- Announced plan to join the Men's Shed seniors for lunch November 4
- Announced plan to attend Signal hill Elementary School to discuss festivals on November 4
- Reminded of Remembrance Day Ceremony on November 11
- Acknowledged staff one-year anniversaries:
 - Nikki Gilmore, CAO
 - Paige MacWilliam, Legislative Assistant
- Extended appreciation to the Fire Department for providing safety and security services, to Tom Quenneville for the Halloween fireworks display and to the residents of The Glen for welcoming trick-or-treaters

d) Councillors

Councillor Ross

Councillor Ross did not have anything to report at this time.

Councillor Helmer

Councillor Helmer did not have anything to report at this time.

Councillor Linklater

Councillor Linklater reported on the following:

- Attended the Library Board Meeting on October 20
- Attended a Halloween fundraiser for the Birken landslide victims
- Acknowledged the Pemberton Secondary School Senior Boys Soccer team achievement of representing Pemberton at the Provincials this coming weekend
- Reminded of Remembrance Day ceremony on November 11
- Reminded of By-Election voting opportunities on November 4 & 7

9. BYLAWS

No bylaws for consideration.

10. CORRESPONDENCE

a) For Information

i. Mr. Martin Dahinden, dated October 15, 2015, proposal to improve One Mile Lake Park beach

Mr. Dahinden's proposal has been forwarded to Staff for inclusion as part of the One Mile Lake Master Plan initiative and Mr. Dahinden is participating as a member of the Stakeholder Working Group.

Moved/Seconded

THAT the correspondence from Mr. Dahinden, dated October 15, 2015, be received for information.

CARRIED

ii. Ms. Susan Lee, Woodlands Supervisor, BC Timber Sales, dated October 16, 2015, regarding Timber Sale Licence A91145

Moved/Seconded

THAT the correspondence from Ms. Susan Lee, dated October 16, 2015, be received for information.

CARRIED

b) For Action

i. Ms. Kari Mancer, Program Manager, Sea to Sky Clean Air Society, regarding a new annual membership program

Moved/Seconded

THAT consideration of subscribing to the Sea to Sky Clean Air Society Strato Silver annual membership, in the amount of \$1000, be added to 2016 budget deliberations.

CARRIED

ii. Ms. Julie Kelly, Chair, Friends of the Library, request for donation for a gift basket for the "Wine and Cheese" Silent Auction

Moved/Seconded

THAT \$100 be allocated from the Community Enhancement Fund for staff to create a silent auction basket as a donation to the Friends of the Library "Wine and Cheese" event.

CARRIED

Village of Pemberton Regular Council Meeting No. 1411 Tuesday, November 3, 2015 Page 6 of 6

11. DECISION ON LATE BUSINESS

There was no late business to be considered.

12.LATE BUSINESS

There was no late business.

13. NOTICE OF MOTION

There was no notice of motion.

14. QUESTION PERIOD

Niki Vankerk, 7451 Aspen Boulevard

Ms. Vankerk requested clarification on Council's tactics for avoiding hearing new information after the close of a Public Hearing. Also, Ms. Vankerk requested information on the processes for revisiting a zoning amendment bylaw.

Anthony Siedschlag – New Pemberton Resident

Mr. Siedschlag requested information about the process to vary a bylaw.

15. AJOURNMENT

Moved/Seconded THAT the November 3, 2015 Regular meeting be adjourned at 8:05 p.m. CARRIED							
Mike Richman Mayor	Sheena Fraser Corporate Officer						



REPORT TO COUNCIL

Date: November 17, 2015

To: Council

From: Nikki Gilmore, Chief Administrative Officer

Subject: 2015 Sea to Sky Transit Future Plan

PURPOSE

The purpose of this report is to provide Council with a summary and recommendations from the 2015 Sea to Sky Transit Future Plan.

BACKGROUND

Over the course of 2014/2015 BC Transit undertook Community Engagement, in the forms of a Survey, Transit Future Bus Tour, Key Stakeholder Workshops and through information sharing on the Transit Future Plan webpage. In addition, regular discussions (by email and telephone) took place between BC Transit and the member municipalities, including the Squamish-Lillooet Regional District (SLRD) Electoral Area C and Lil'Wat Nation. As a result of the engagement process outlined above, BC Transit compiled and created the attached Final Version of the 2015 Sea to Sky Transit Future Plan.

This plan developed a Vision, Goals and ¹Transit Mode Share Targets for the area and outlines several recommendations for each member municipality based on Short-Term Priorities (2015-2020), Medium-Term Priorities (2020-2025) and Long-Term Priorities (2025-2040).

At the Regular Meeting of Council No. 1400, held June 16, 2015, Mr. Johann Van Schaik, Regional Transit Manager, South Coast Region and Ms. Elicia Elliot, Senior Transit Planner for the BC Transit General Update and Sea to Sky Transit Future Plan Update, appeared as a delegation to provide an overview on BC Transit, the current transit funding model and the development of the Transit Future Plan that summarized key transit goals and priorities for the Pemberton area, including increasing transit mode share from the current share of 1.5% to 6% in 2040.

In early 2015, the Transit administrative duties were transferred from the SLRD to the Village of Pemberton. As a result of this administrative adjustment and correspondence from BC Transit on the Transit Betterments Program funding opportunity which was received at the Regular Council Meeting No. 1408, held October 6, 2015, the following resolution was passed:

Moved/Seconded

THAT a multi-jurisdictional Transit Working Committee, comprised of staff representing the Village of Pemberton, Lil'wat Nation and Squamish-Lillooet Regional District, be established to review related issues and initiatives;

¹ Transit Mode Share is a percentage of all trips that are made by transit in a given community, and is typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall. Reference: 2015 Sea to Sky Transit Future Plan, Page 7.

Regular Council Meeting No.1412 Tuesday, November 17, 2015 2015 Sea to Sky Transit Future Plan Page 2 of 4

AND THAT the Transit Minor Betterments Program and referred to the Committee to prepare recommendations for consideration by each local government Board/Council;

AND THAT correspondence be sent to Squamish-Lillooet Regional District & Lil'wat requesting their participation and appointment of a staff member to the Transit Working Committee.

CARRIED

While the three jurisdictions are in the process of creating the multi-jurisdictional Transit Working Committee, which has been delayed as a result of staffing changes in all organizations, the plan was referred to all parties, who provided feedback to the group and to BC Transit.

As a result of the engagement outlined above, BC Transit compiled and created the attached Final Version of the 2015 Sea to Sky Transit Future Plan.

DISCUSSION & COMMENTS

At today's Regular Meeting of Council, representatives of BC Transit will be presenting the final draft of the Sea to Sky Transit Future Plan. The presentation will include Service and Infrastructure Recommendations for both Local and Regional services for Short-Term Priorities (2015-2020), Medium-Term Priorities (2020-2025) and Long-Term Priorities (2025-2040).

Below is a summary of recommendation as identified in the Final Plan all of which are depended on the following²:

- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- · Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Local Transit:

2015-2016

1. Initiate a more detailed review of the financial and operational sustainability of the Pemberton Valley Transit System

2015-2020

- 2. Introduce midday service on weekdays on the Local Transit Network
- 3. Continue to improve transit customer facilities

2020-2025

- 4. Introduce Local Transit service to developing areas
 - Benchlands
 - Tiyata
 - Hillside

² Following recommendations were taken from the BC Transit Presentation Update – 2015-11-17

5. Introduce new bus stops for any expansion areas

2025-2040

- Improve / introduce Local Transit service to Mt. Currie, D'Arcy/N'Quatqua, Sunstone, and WedgeWoods with introductory levels of service
- If already in place, expand Local Transit service to service Benchlands, Tiyata and Hillside residential areas
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows
- Continue to improve local system service to provide efficient, reliable and safe connectivity

Regional Transit:

2015-2020 (items italicized specific to Pemberton Valley)

- 1. Undertake a Sea to Sky Transit Corridor Study
- 2. Explore the Development of a Regional Governance Structure

2015 -2020

- 3. Based on the findings of the Corridor Study: Possibly introduce weekday Interregional Transit service between Squamish and Metro Vancouver
- 4. Introduce midday or evening Regional Transit service between Whistler and Pemberton
- 5. Establish a Park & Ride facility in downtown Squamish
- 6. Examine existing transit exchanges to ensure that capacity is available for introduction of regional and interregional service
- 7. Examine the expansion or relocation of existing Transit Operations and Maintenance Facilities
- 8. Explore highway improvement measures on the Sea to Sky Highway at Britannia Beach

2020-2025

- Increase Interregional Transit service between Squamish and Metro Vancouver on weekdays and introduce service on weekends
- Reinstate Regional Transit service between Squamish and Whistler
- Identify sites and develop new Park & Ride and Transit Exchange Facilities:
 - A second Park & Ride site in Squamish (Garibaldi Village)
 - o A secondary Transit Exchange in Squamish (Garibaldi Village)
 - Improved transit infrastructure at Gateway Loop in coordination with RMOW plans (Whistler Village)

2025-2040

- Continue to improve service frequency and extend service span on connections as demand on the corridor grows.
- Continue to improve local system service in each community to provide efficient, reliable and safe connectivity across the region.

Regular Council Meeting No.1412 Tuesday, November 17, 2015 2015 Sea to Sky Transit Future Plan Page 4 of 4

COMMUNICATIONS

Following the receipt of the 2015 Sea to Sky Transit Master Plan by all member municipalities, the SLRD and Lil'Wat Nation, the Plan will be uploaded on our website and distributed via ENEWS.

LEGAL CONSIDERATIONS

There are no legal, legislative or regulatory considerations at this time.

IMPACT ON BUDGET & STAFFING

The 2015 Sea to Sky Master Plan will have future cost implications that will need to be considered when and if they are actioned. Further information will be brought to Council for approval through the budgeting process when required.

INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts or approval required as this project is managed through the Office of the CAO.

ALTERNATIVE OPTIONS

There are no alternative options for consideration

POTENTIAL GOVERNANCE CONSIDERATIONS

Supporting the 2015 Sea to Sky Transit Master Plan meets with Strategic Priority Four: To create a strong and vibrant community, recognizing the importance and benefits of both healthy, engaged citizens as well as an accessible and well managed environment.

RECOMMENDATIONS

THAT Council receives the Sea to Sky Transit Future Plan;

AND THAT Council support the Vision, Goals, Targets and Transit Future Network for the Local and Regional Transit service as presented in the Plan;

AND THAT Council direct staff to work with BC Transit on the next steps described in the Sea to Sky Transit Future Plan to analyze the regional and local transit improvements.

Attachments:

ikh Silme

Appendix A – 2015 Sea to Sky Transit Master Plan

Nikki Gilmore, Chief Administrative Officer



Transit Future Plan

SEA TO SKY | 2015













Acknowledgements

BC Transit would like to acknowledge the contributions of the many individuals and organizations that supported the development of the Sea to Sky Transit Future Plan.

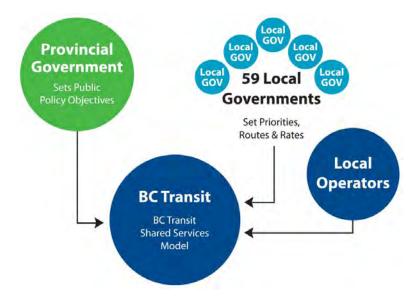
Thank you to staff at the District of Squamish, the Resort Municipality of Whistler, the Village of Pemberton, and the Lil'wat Nation for their continued partnership. Thanks also to staff at the Squamish-Lillooet Regional District and the Squamish Nation for their continued participation in developing a Transit Future for the Sea to Sky region. In addition, thank you to the local transit operating companies for participating the in the process along the way.

Finally, thank you to all who joined us on the Sea to Sky Transit Future Bus, at the stakeholder workshops, and to those who provided feedback throughout the process.



About BC Transit

BC Transit is a Crown corporation established by British Columbia's Provincial Government to support local investment in transit services across the province (excluding the Metro Vancouver area served by TransLink).



BC Transit connects people, communities, and businesses across the province through cost-effective, sustainable public transit. As of 2015, BC Transit:

- Operates 83 transit systems in 130 communities across B.C. in collaboration with 59 local government partners, providing Conventional, Community, Custom, and Paratransit services
- Contracts with 18 private management companies, 6 public operating organizations and 13 nonprofit agencies
- Provided 51 million passenger trips in 2013/14
- Serves over two million people in B.C.
- Owns a fleet of 1,002 Conventional and double-deck buses and minibuses
- Reports total operating expenditures in 2013/14 of \$222.3 million
- Reports total capital expenditures in 2013/14 of \$79.4 million

BC Transit in the Sea to Sky Region

In the Sea to Sky region, BC Transit provides a range of management services that include:

- Expertise in areas such as planning, scheduling, operations, safety programs, marketing, communications, information technology, financial management and fleet support
- Cost-savings through bulk purchases of supplies and assets, such as fuel and vehicles
- Providing efficiencies in contract management for public transit operators
- Managing the distribution of Provincial Government funding to communities in the Sea to Sky region

Funding for transit services is generated from three main sources; B.C. Provincial Government via BC Transit, local partners (local governments and First Nations), and operations revenue (customer fares, advertising, investments, rental of excess owned transit fleet and facility space to third parties).

BC Transit's Board will endorse the final Transit Future Plan, and BC Transit staff will continue to provide management services as described above with an eye to implementing the Transit Future Plan.

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Executive Summary

The Sea to Sky Transit Future Plan is a 25-year strategic plan that has been developed by BC Transit in collaboration with stakeholders, the public, and staff at the Squamish-Lillooet Regional District, the District of Squamish, the Squamish Nation, the Resort Municipality of Whistler, the Village of Pemberton, and the Lil'wat Nation.

The Sea to Sky Transit Future Plan details transit service and infrastructure recommendations for Squamish, Whistler, The Pemberton Valley, and the encompassing Sea to Sky region.

These recommendations, along with the Plan's vision, goals, local and regional networks, and targets, help envision what transit in the Sea to Sky region could look like between now and 2040. Developing an actionable, measurable strategy for public transit in the Sea to Sky area is critical to ensuring the environmentally- and fiscally-sustainable and efficient growth of these communities in the near and long terms.

The Sea to Sky Transit Future Plan has been developed in consideration of the goals and directives found in local and regional land use plans such as Official Community Plans, as well as strategic Provincial plans such as the Provincial Transit Plan and BC Transit's 2030 Strategic Plan. Transit service and infrastructure recommendations have been developed iteratively and in consideration of technical analysis, best practices in transportation planning, and feedback collected through stakeholder and public engagement activities.

Vision and Goals

While future transit service and infrastructure recommendations vary across the Sea to Sky communities, a unified vision and set of goals have been developed to guide transit expansion to 2040.

Vision

Collaboration with stakeholders, the public, and government and First Nations partners has helped shape the final vision statement to represent what the Transit Future Plan aims to inspire.

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

As with the development of the vision statement, drafting the goals was an iterative and collaborative process with stakeholders, the public, and government and First Nations partners. The goals have been crafted to reflect the most commonly-heard themes: Inclusive, Integrated, Safe, and Sustainable.

By 2040, local and regional public transit networks in the Sea to Sky area are:

- 1. For everyone.
- 2. Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling.
- 3. Safe.
- 4. Environmentally Sustainable.

Transit Mode Share Targets

Transit Mode Share is the percentage of all trips that are made by transit in a given community, typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall.

Setting transit mode share targets and identifying methods for achieving these targets is a goal of the B.C. Provincial Government per its aims to mitigate provincial contributions to climate change. In transportation, this relates directly to reducing greenhouse gas (GHG) emissions by making more trips by active and alternative transportation modes. Alternative transportation is thought of as almost any mode of transportation other than single-occupancy vehicle driving, and in the Sea to Sky region, is known as a suite of *preferred modes*.

To reflect each community's unique land use, travel behaviour, and existing transit use, separate transit mode share targets have been developed for Squamish, Whistler and The Pemberton Valley.

	Sea to Sky Region	Squamish	Whistler	The Pemberton Valley
2015 Transit Mode Share		1.3%	15%	1.5%
2020 Transit Mode Share Target	5% by 2030	2.5%	16%	2%
2025 Transit Mode Share Target		5%	20%*	4%
2040 Transit Mode Share Target			25%*	6%

The Sea to Sky region's overall transit mode share target aligns with the target identified in the Provincial Transit Plan, which states that by 2030, 5 per cent of all trips in the region will be made by transit. Communities in the Sea to Sky region have already cumulatively achieved this target. Implementation of the Transit Future Plan will help the Sea to Sky region's transit mode share continue to increase.

These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process.

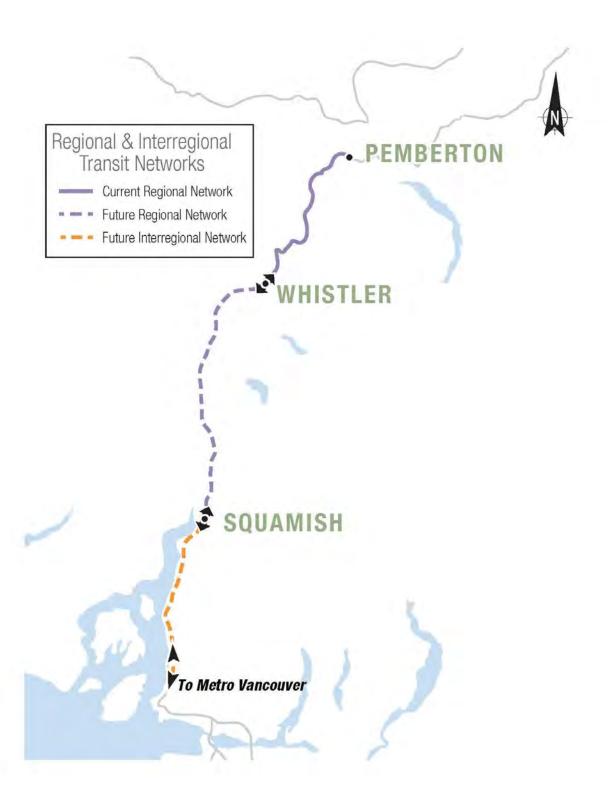
*Long-term targets for Whistler will be defined in coordination with the RMOW's Transit Management Advisory Committee or its forthcoming Transportation Advisory Group.

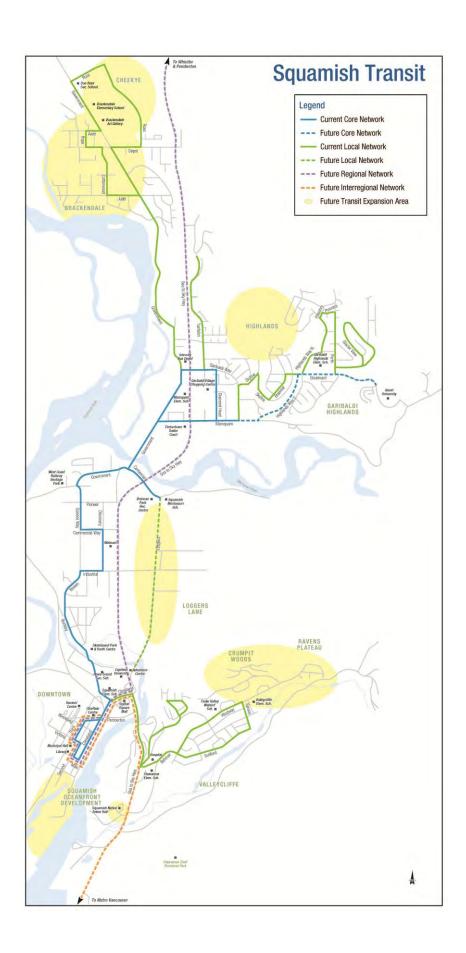
Transit Future Plan Network

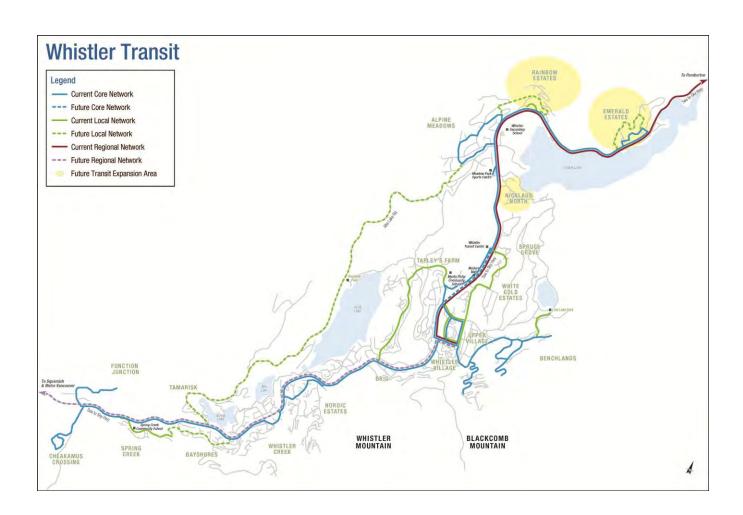
The Sea to Sky Transit Future Network has been designed with the passenger in mind, linking people to popular origins and destinations, aiming to provide a reasonable alternative to driving. The network builds upon the existing network's directness, reliability, and frequency, and has been created in consideration of current and planned land uses.

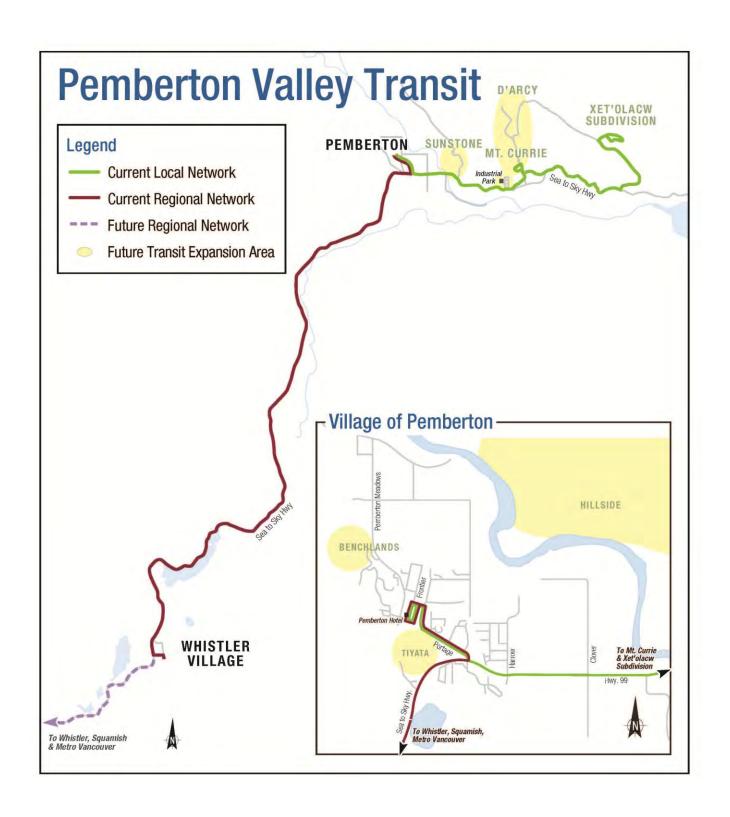
The Sea to Sky Transit Future Plan includes four distinct networks:

- **Core Transit Network** links people to major destinations within a given community, typically through downtown.
- **Local Transit Network** links people to destinations within neighbourhoods, as well as to the other Transit Networks.
- Custom Transit Network provides transit service to people within 1.5 km of a given community with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time.
- Targeted Transit Network
 - Regional Transit Network includes public transit service within the Sea to Sky region, linking the communities of Squamish, Whistler, and The Pemberton Valley.
 - o **Interregional Transit Network** includes public transit service *between* the Sea to Sky region and other regions, namely the Metro Vancouver region.









Transit Service and Infrastructure Recommendations

Achieving the vision, goals, and targets described in the Sea to Sky Transit Future Plan will require capital and operating investments over the next 25 years. The Plan provides detailed transit service and infrastructure recommendations for the Sea to Sky region and the communities of Squamish, Whistler, and The Pemberton Valley.

Options do not represent all of the possible changes that could be made to the Regional and Interregional Transit systems in the region between today and 2040, but should serve as a starting point each time the systems undergo analysis or change. Recommendations vary in terms of required timelines, complexity, cost, and process, meaning that initiatives may not be undertaken linearly.

The fulfillment of the Transit Future Plan is contingent on:

- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Given the level of transit investment anticipated over the coming decades, alternative funding sources and new regional governance structures for transit in the Sea to Sky must be examined. BC Transit and Sea to Sky Transit Future Plan funding partners will need to work together to achieve stable and predictable funding sources beyond the existing funding mechanisms.

Recommendations on funding and governance for the Sea to Sky Transit Future are included in this Plan.

Estimated resource requirements for the immediate- and short-term are detailed below. These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated costs are based on 2014/15 AOA Operating Costs. Final costs may change based on final budgets and confirmation of final operational details.

Sea to Sky Region

TRANSIT SYSTEM RECOMMENDATIONS TO 2020

- R1. Undertake a Sea to Sky Corridor Transit Study
 This comprehensive study will include the entire corridor (Metro Vancouver to the Pemberton Valley), and will consider the expansion of Regional and Interregional transit service in detail.
- R2. Explore the Development of a Sea to Sky Regional Governance Structure
 Explore options for a more integrated regional governance structure for the Sea to Sky area.
 The study would look at the benefits and risks with the goal of streamlining the implementation of Regional and Interregional transit, and enabling more comprehensive system management and performance monitoring.
- Priorities of partners, stakeholders, and the public are to provide public transit service between Metro Vancouver and Squamish, and to increase existing transit service between Pemberton and Whistler. Therefore, outcomes of R1 and R2 should include:
 - R3. Introduce weekday Interregional Transit service between Squamish and Metro Vancouver
 - The existing volume of travel between Squamish and Metro Vancouver is high and is continuing to grow, particularly for Squamish residents who commute. Implementing transit service along this corridor will improve regional options.
 - R4. Introduce midday or evening Regional Transit service between Pemberton and Whistler

Ridership on the Pemberton Commuter Service is growing. Expanding service in the midday and evening would improve access for recreation and tourism, shift employment, and access to amenities.

CAPITAL INVESTMENTS FOR REGIONAL TRANSIT INFRASTRUCTURE TO 2020

- Potential new or expanded transit exchanges in Squamish
- New Park & Ride facility in downtown Squamish
- Potential new or expanded Transit Operations and Maintenance Facilities in Squamish and/or Pemberton
- Improvements to customer amenities at bus stops and the existing or new Squamish Transit Exchange
- New Sea to Sky Highway transit priority measures

RESOURCE REQUIREMENTS TO 2020

At the regional level, an estimated **5,200** additional annual Conventional transit service hours and two additional buses will be required to achieve the goals outlined to 2020. Implementing these options is estimated to require a total of **\$800,000**. Cost sharing between Sea to Sky communities can be determined through the regional governance development recommended in the Transit Future Plan.

TRANSIT SYSTEM RECOMMENDATIONS TO 2025

- Increase Interregional Transit service between Squamish and Metro Vancouver on weekdays and introduce service on weekends
- Reinstate Regional Transit service between Squamish and Whistler, and as part of that explore serving communities along the corridor including Black Tusk and Pine Crest.
- Identify sites and develop new Park & Ride and Transit Exchange Facilities
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows

TRANSIT SYSTEM RECOMMENDATIONS TO 2040

- Continue to improve service frequency and extend service span on connections as demand on the corridor grows
- Continue to improve local system service in each community to provide efficient, reliable and safe connectivity across the region

Squamish

TRANSIT SYSTEM RECOMMENDATIONS TO 2020

- S1. Finalize operational plans for South Squamish Parks Pilot Transit Service
 BC Transit recommends finalizing operational plans to introduce summer transit service connecting downtown Squamish to the South Squamish Parks District
- S2. Increase Sunday and Holiday transit service
 Increasing transit service frequency and span on Sundays and holidays will improve access to employment, recreation, and shopping in Squamish
- S3a. Improve Core Transit Network service during off-peak periods between Garibaldi Village and Downtown Squamish
 - Strengthening the Core Transit Network in Squamish provides a foundation from which the entire Squamish Transit System can grow
- S3b. Increase service on the Core Transit Network to improve access to Quest University Canada

Transit Ridership to Quest University continues to grow. The campus is located at the end of a curvilinear road with a steep grade that can be difficult to walk and cycle on; consequently, direct, frequent, and reliable transit access to the campus is important.

S4. Implement a handyDART Registration Program
 A handyDART Registration Program (with an in-person assessment) matches applicants' needs with the most appropriate type of transit service

CAPITAL INVESTMENTS FOR TRANSIT INFRASTRUCTURE TO 2020

- New or expanded transit exchange
- Potential new or expanded Transit Operations and Maintenance Facility
- Improvements to customer amenities at bus stops and at the Squamish Transit Exchange

RESOURCE REQUIREMENTS TO 2020

In Squamish, an estimated **5,350 additional annual Conventional and Custom transit service hours and one additional bus** will be required to achieve the goals outlined to 2020. Implementing these options is estimated to require a total of **\$700,000**.

TRANSIT SYSTEM RECOMMENDATIONS TO 2025

- Service improvements on Core Transit Network to meet Service Standards
- Introduce Local Transit service to developing areas (Cheekye, Loggers Lane, Ravens Plateau, Squamish Oceanfront Development site, Brennan Park)
- Introduce new bus stops for any expansion areas

TRANSIT SYSTEM RECOMMENDATIONS TO 2040

- Introduce new Local Transit service to select areas such as North Squamish Parks District,
 Furry Creek, Britannia Beach
- Reinstate Local Transit service to Squamish Nation area if it is not already served by Regional Transit
- Continue to improve service frequency and extend service span on Regional and Interregional connections as demand on the corridor grows
- Continue to improve local system service to provide efficient, reliable and safe connectivity

Whistler

TRANSIT SYSTEM RECOMMENDATIONS TO 2020

- W1. Improve the operational efficiency of Route 1 Valley Connector
 Explore opportunities to improve the design of the Route 1 to address on-time performance issues
- W2. Undertake an in-depth ridership analysis of the Free Village Shuttles and make any necessary adjustments or improvements
 An in-depth ridership analysis would inform the possibility of investing additional resources,
 - changing routing to improve efficiency, or expanding service
- W3. Increase service on the Core Transit Network during the winter season
 The majority of Whistler's ridership occurs during the busy winter season. Increasing service on
 the Core Transit Network during winter is recommended to ensure that transit travel demand is
 being met for both locals and visitors.
- W4. Increase service on the Core Transit Network during the spring, summer and fall
 Increasing service on Core Transit Network during spring, summer and fall was identified as a
 priority in the participation process, and will help Whistler in its journey towards being a yearround resort destination
- W6. Explore Opportunities to Improve the Fare Structure & Media
 While a diversity of fare products is currently available in Whistler, interest in introducing a ski season-related pass has been expressed. BC Transit recommends collaboration with Whistler Blackcomb to explore the feasibility of providing a seasons' transit pass linked with a Whistler Blackcomb ski seasons' pass.
- W7. Conduct feasibility assessment around the introduction of Custom transit services
 The base population in Whistler continues to age. Examining Custom transit options could
 benefit Whistler as the community ages and as travel needs in Whistler continue to diversify.

CAPITAL INVESTMENTS FOR TRANSIT INFRASTRUCTURE TO 2020

• Improvements to customer amenities at bus stops and at Gondola Transit Exchange

RESOURCE REQUIREMENTS TO 2020

In Whistler, an estimated **750 additional annual Conventional transit service hours** will be required to achieve the goals outlined to 2020. This service hour increase is estimated to require a total of **\$90,000**. No additional buses are required to implement the immediate- and short-term recommendations described in the Transit Future Plan for Whistler.

TRANSIT SYSTEM RECOMMENDATIONS TO 2025

- Continue to examine seasonal service trends and rebalance service levels if necessary
- Introduce Transit Priority Measures / Improve Transit Operations
- Continue to improve transit customer facilities

TRANSIT SYSTEM RECOMMENDATIONS TO 2040

- Examine the feasibility of introducing Dial-a-Ride / Paratransit service to Alta Lake Road between Tamarisk and Alpine Meadows, Upper Nordic, and Upper Emerald
- Introduce Local Transit service connection between Rainbow Estates and Alpine Meadows (dependent on new road connection)
- Introduce Local Transit service connection between Spring Creek and Bayshores (dependent on new road connection)
- Introduce Local Transit or Paratransit service along Alta Lake Road and further into Emerald Estates with introductory service levels
- Explore opportunities to Whistler Olympic Park and Whistler Sliding Centre with some form of transit
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows
- Continue to improve local system service to provide efficient, reliable and safe connectivity

The Pemberton Valley

TRANSIT SYSTEM RECOMMENDATIONS TO 2020

- P1. Initiate a more detailed review of the financial and operational sustainability of the Pemberton Valley Transit System
 - This detailed review should be considered with a full-cost accounting lens, considering fleet, facilities, and operations.
- P2. Introduce midday service on weekdays on the Local Transit Network
 Increasing the span and frequency of transit service on the Local Transit Network will benefit
 local residents by providing increased access to recreation, employment, and commercial
 amenities

CAPITAL INVESTMENTS FOR TRANSIT INFRASTRUCTURE TO 2020

Improvements to customer amenities at bus stops

RESOURCE REQUIREMENTS TO 2020

In The Pemberton Valley, an estimated **750 additional annual Conventional and Custom transit service hours** will be required to achieve the goals outlined to 2020. This service hour increase is estimated to require a total of **\$55,000**. No additional buses are required to implement the immediate-term recommendations described in the Transit Future Plan for The Pemberton Valley, though additional vehicles may be required to introduce midday service on weekdays on the Local Transit Network.

TRANSIT SYSTEM RECOMMENDATIONS TO 2025

- Introduce Local Transit service to developing areas (Benchlands, Tiyata, Hillside)
- Introduce new bus stops for any expansion areas

TRANSIT SYSTEM RECOMMENDATIONS TO 2040

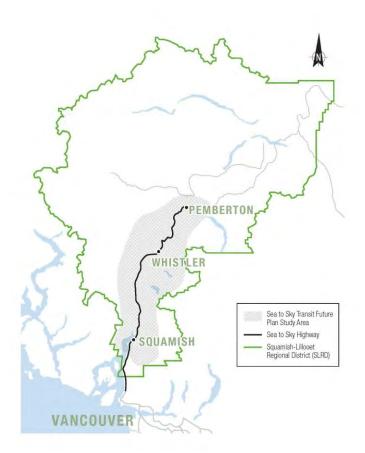
- Improve / introduce Local Transit service to Mt. Currie, D'Arcy/N'Quatqua, Sunstone, and WedgeWoods with introductory levels of service.
- If already in place, expand Local Transit service to service Benchlands, Tiyata and Hillside residential areas.
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows.
- Continue to improve local system service to provide efficient, reliable and safe connectivity.

Introduction

The Sea to Sky Transit Future Plan is a 25-year strategic plan that has been developed by BC Transit in collaboration with stakeholders, the public, and staff at the Squamish-Lillooet Regional District, the District of Squamish, the Squamish Nation, the Resort Municipality of Whistler, the Village of Pemberton, and the Lil'wat Nation.

The Transit Future Plan study area, known here as the Sea to Sky region, is part of the much larger Squamish-Lillooet Regional District (SLRD), located within the traditional territory of the Squamish First Nation and the Lil'wat First Nation. The SLRD is located on the south coast of British Columbia, northwest of Metro Vancouver, as illustrated in Figure 1.

Figure 1: Sea to Sky Transit Future Plan Study Area.



The Sea to Sky Transit Future Plan includes a vision, overarching goals, local and regional Transit Future Networks, and transit service and infrastructure recommendations for implementation between 2015 and 2040. Developing an actionable, measurable strategy for public transit in the Sea to Sky area is critical to ensuring these communities' environmentally- and fiscally-sustainable and efficient growth in the near and long terms.

The Plan was developed between winter 2013 and fall 2015, as shown in Figure 2.

Figure 2: Sea to Sky Transit Future Plan Development.



Ongoing partnership and collaboration between BC Transit and the Sea to Sky Transit Future Plan partners is required to guide this Plan from vision to reality.

To reflect the distinctive nature of each community in complement to the Sea to Sky Region overall, the Transit Future Plan is presented in two separate parts that follow.

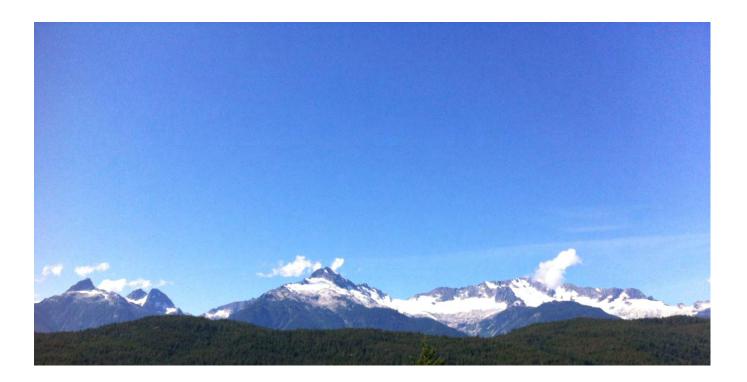
The first part of this document describes the Sea to Sky region and its communities as they exist in 2015, including:

- Community overviews of the Sea to Sky region, Squamish, Whistler, and The Pemberton Valley, detailing:
 - o Population and Demographics, Land Use, Employment, and Transportation Today
 - Key Strategic Plans that inform these communities' futures
- Existing Transit Systems in the Sea to Sky region

The second part of the document details the Sea to Sky Transit Future Plan, including:

- Partner and Community Participation
- Vision, Goals, and Targets for the Sea to Sky Transit Future
- Transit Future Foundations
- Transit Future chapters for the Sea to Sky region, Squamish, Whistler, and The Pemberton Valley, detailing:
 - Transit Future Networks
 - Transit Service Standards and Performance Guidelines
 - Transit Future service and infrastructure improvements
- Moving toward the Sea to Sky Transit Future:
 - Funding and Implementing the Transit Future Plan

Setting the Scene in the Sea to Sky Region



This section of the Sea to Sky Transit Future Plan describes the Sea to Sky region and its communities of Squamish, Whistler, and The Pemberton Valley as they exist today.

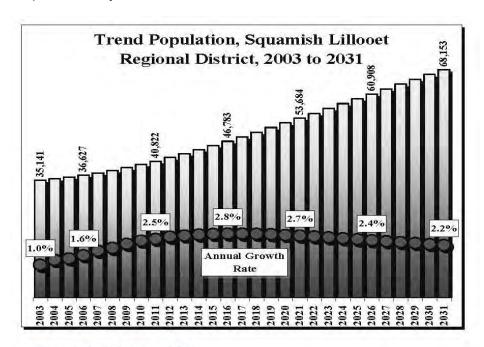
Population and Demographics

Sea to Sky Region

Most of the Sea to Sky area's population and employment is concentrated within the urban boundaries of Squamish, Whistler, and the Village of Pemberton, and especially in the southern part of the SLRD. The SLRD's entire population has increased to nearly 40,000 today - an increase of 86 per cent over 25 years. This is a substantially higher rate of growth than the provincial population increase of less than three per cent over the same period.

Projected growth in the region overall is expected to increase between 2.2 per cent and 2.6 per cent each year until 2031, as shown in Figure 3. This is higher than Provincial projections ranging from 0.9-1.3 per cent between 2015 and 2031.

Figure 3: SLRD Population Projections, 2003-2031.

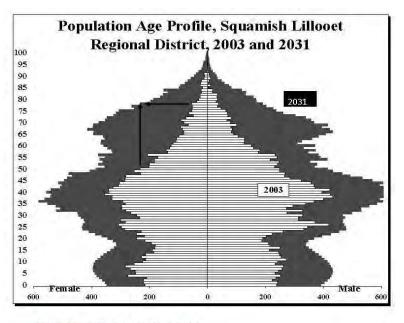


Source: Urban Futures, 2004

Source: SLRD Regional Growth Strategy

The SLRD has a relatively young age composition compared to the rest of British Columbia, with a median age of 36.2. This is nearly five years younger than the provincial median, though communities in the Sea to Sky region are also aging; BC Statistics projects a significant increase in the population in the 65-79 and 80+ age categories, as shown in Figure 4.

Figure 4: SLRD Population Projections by Age Cohort.



Source: Urban Futures, 2004

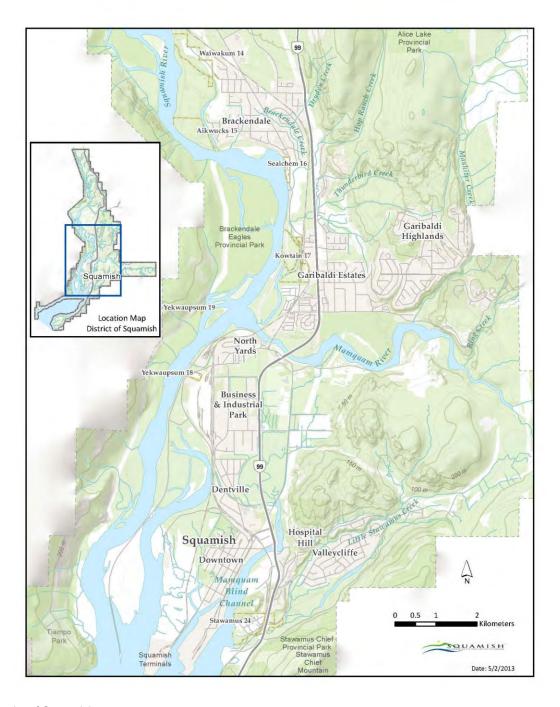
Source: SLRD Regional Growth Strategy

The Sea to Sky Region is a young, growing part of British Columbia that will be home to over 70,000 people by 2040.

Squamish

The District of Squamish is the southernmost community in the Sea to Sky Transit Future Plan study area, located midway between Vancouver and Whistler. Squamish and its neighbourhoods are shown in Figure 5.

Figure 5: The District of Squamish.



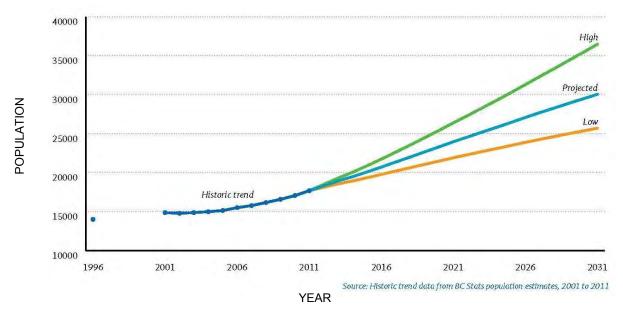
Source: District of Squamish

Now home to nearly 20,000 residents, the community has grown substantially in recent years. Squamish is home to an abundance of outdoor recreation opportunities, attracting investment, growth, and tourism.

Squamish's proximity to Metro Vancouver via the Sea to Sky Highway makes it a relatively affordable residential alternative to Vancouver, with its attractive setting, growing economy, and nearly identical driving time to downtown Vancouver from communities east of Burnaby.

Having experienced 23 per cent population growth over the past 15 years, Squamish is expected to significantly increase its population within the horizon of the Transit Future Plan (to 2040), and is already surpassing growth rates in Sea to Sky communities and the region overall, as shown in Figure 6.

Figure 6: District of Squamish Forecasted Growth Scenarios to 2031.



The District of Squamish's Official Community Plan and its 2015 Development Cost Charge Bylaw Update estimate Squamish's 2035 population at 33,100.

Squamish's population had a median age of 36.8 as of 2011, which is younger than the provincial average. While the bulk of the community is comprised of people aged 25-44, Squamish's population is also aging, with the 65+ demographic projected to grow between now and 2031.

Figure 7: Squamish Population Growth Forecasts to 2031 by Age Cohort.



Squamish will continue to grow significantly over the life of the Transit Future Plan. Its age 0-14 and age 65+ populations will increase transit service demand in and around Squamish between now and 2040.

Whistler

The Resort Municipality of Whistler (RMOW) is located north of Squamish in the Sea to Sky Transit Future Plan study area, about 120 km or 90 minutes north of Vancouver by car. Whistler was incorporated as Canada's first designated resort municipality in 1975. Whistler hosts nearly two million annual visitors.

Figure 8: The Resort Municipality of Whistler (RMOW).



Whistler has experienced 120 per cent population growth in the last 25 years, increasing from 4,500 to over 10,000 today. Note that these numbers do not account for the total visiting population in Whistler at any given time. *Total population equivalent* is an estimate of the total population in Whistler on average at a given time during peak (winter) season. The RMOW's 2013 Economic Partnership Initiative Report estimates that the Population Equivalent was 28,500. This population equivalent can be considered in three subsets; the permanent population, one temporary population of visitors or tourists, and one semi-temporary population of seasonal workers who live in Whistler transiently. The RMOW Official Community Plan (2013 OCP, not approved) also identifies that seasonal swells in population can reach 45,000 on holiday weekends. Today, the Whistler Transit System is operationally planned to meet moderate spikes in seasonal transit demand. These nuances are discussed in more detail in the *Transit Today* chapter for Whistler.

Whistler manages growth with three tools in its OCP; the Whistler Urban Development Containment Boundary (WUDCA), the Bed Unit Limit and the Whistler Land Use Map. A Bed Unit is defined as:

"A measure of development intended to reflect servicing and facility requirements for one person. Different accommodation types and sizes are allocated a specified number of bed units based on the gross floor area of the unit..."

The OCP Bed Unit Limit restricts Whistler's total Bed Units to 61,750 and notes that there is "significant remaining development potential as part of its already committed and approved capacity". As remaining allocated bed units are built, Whistler will likely continue to see increases in its resident population and population equivalent.

Whistler is home to the youngest population in the Sea to Sky area. The median age in Whistler was 32.4 in 2011, with 44 per cent of its population represented in the age 25-44 demographic. 16 per cent of the provincial population is over the age of 65, whereas in Whistler, people aged 65 and over make up less than 5 per cent of the population. However, Whistler's senior population continues to grow.

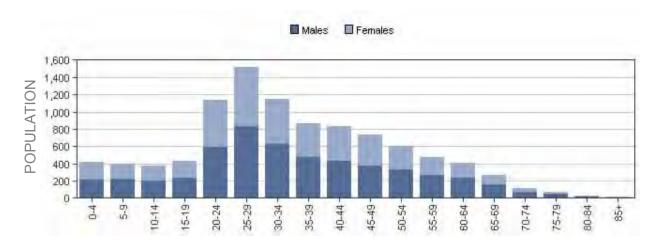


Figure 9: Whistler Population by Age Cohort and Gender, 2014.

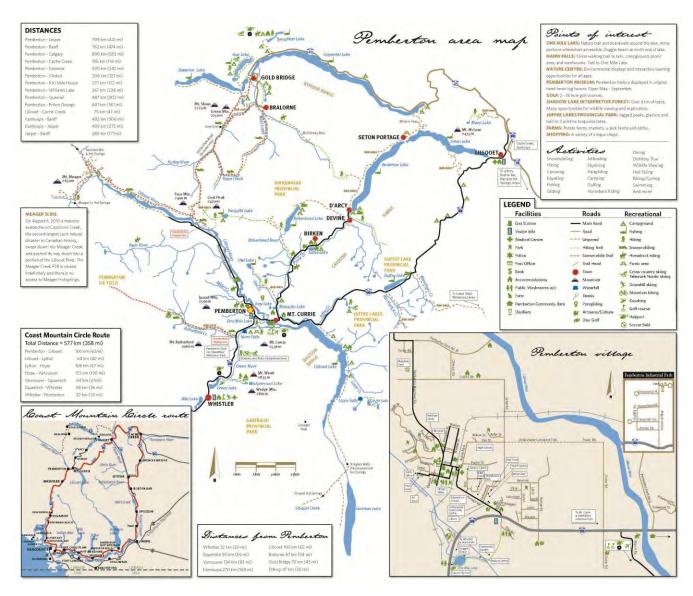
Source: RMOW

Although Whistler's permanent population is not expected to significantly increase, the Resort Municipality's year-round visiting population is expected to continue to grow over the life of the Transit Future Plan.

The Pemberton Valley

The Pemberton Valley is the northernmost group of communities in the Sea to Sky Transit Future Plan study area, located approximately 150 km northwest of Vancouver and about 30 km from Whistler.

Figure 10: The Pemberton Valley.



Source: Pemberton & District Chamber of Commerce

The Pemberton Valley is now home to nearly 5,000 people, with the Village of Pemberton at the centre of a growing community linked strongly to the Lil'wat Nation and SLRD Electoral Areas C and D.

The least populous of the Sea to Sky Transit Future Plan communities, the Pemberton Valley has also experienced significant population growth over the past 25 years, from 500 in 1991 to nearly 3,000 today. In 2005, The Pemberton Valley was the fastest-growing community in the province, with 13.9 per cent growth in that year alone. Population growth in both The Pemberton Valley overall as well as the

Village of Pemberton is expected, given the community's affordability and attractiveness, and especially considering that 47 per cent of the population falls within the childbearing age cohort.

In 2011, The Pemberton Valley had a median age of 34.9, which is younger than the provincial median as well as the SLRD's median.

The Pemberton Valley's young majority, combined with 21 per cent of the population being between the ages of 0-14, will create significant transit demand over the life of the Transit Future Plan.

Employment

Historically, resource extraction and manufacturing have been the main sources of economic value in the Sea to Sky area. Tourism and related service sector jobs have begun to outpace the resource sector in the southern part of the region, but have been impacted by the post-Olympic Games slowdown.

The 2015 District of Squamish Employment Lands Strategy projects a shift between today and 2031 to public sector human services jobs, targeted at serving population growth and an aging population. This trend is expected to be reflected across the Sea to Sky region, with the bulk of service sector jobs remaining in Whistler.

If the proposal to construct a facility for the extraction and export of liquid natural gas (LNG) in the Howe Sound area comes to fruition, hundreds of temporary (construction) and permanent (operational) jobs could be created in the region. It is likely that the local and regional economic outcomes of this venture will generate increased transit demand in Sea to Sky communities overall.

While the SLRD Regional Growth Strategy notes that a growing proportion of its population is beginning to work within the Sea to Sky area, about a third of the region's employment base continues to commute to work outside the Sea to Sky region. This commuting market (currently comprising mainly car drivers) is well-suited to being served by regional public transit.

Increased Investment in the Sea to Sky Region

= Increased Population & Employment Growth

= Increased Transit Service Demand

Land Use

Sea to Sky Region

In addition to the communities of Squamish, Whistler, and the Pemberton Valley, several new and developing bedroom communities are taking shape in the Sea to Sky region. These include First Nations lands and electoral areas lands, Porteau Cove, Furry Creek, Britannia Beach, Pinecrest, Black Tusk, and WedgeWoods.

Squamish Lillooet Regional District Bylaw 1062 Map 1 D'A Area C Squamish Regional Settlement Squamish - Lillooet Planning Map 🧮

Figure 11: Rural and Suburban Development Areas in the SLRD.

Source: Squamish-Lillooet Regional District Regional Growth Strategy

Regional Growth Strategu

These communities are primarily residential, and are dependent on access to larger centres for amenities. While the bulk of growth and transit provision in the region is concentrated in the more transit-friendly, larger centres, population and transit travel demand in these outlying areas will continue

to grow. Serving these low-density, low-population bedroom communities with transit will require a significant allocation of resources.

Although development is not concentrated into central areas within Squamish, Whistler, and the Pemberton Valley, these communities' neighbourhood-focused growth is generally transit-supportive. Growth in Sea to Sky communities is constrained by a limited land base containing natural hazards, steep slopes, lands with high elevations, protected areas, and lands in the Agricultural Land Reserve or with environmentally-sensitive features. Overall, this has encouraged creative land development in the region.

The Transit Future Networks have been planned to include transit expansion to areas that are projected to experience intensification or new development. These areas are shown in yellow shading on the Transit Future Plan Network maps.

Squamish

As a result of the constraints described in the previous section, approximately 25 per cent of the land base in Squamish is suitable for development, as illustrated in the map below.

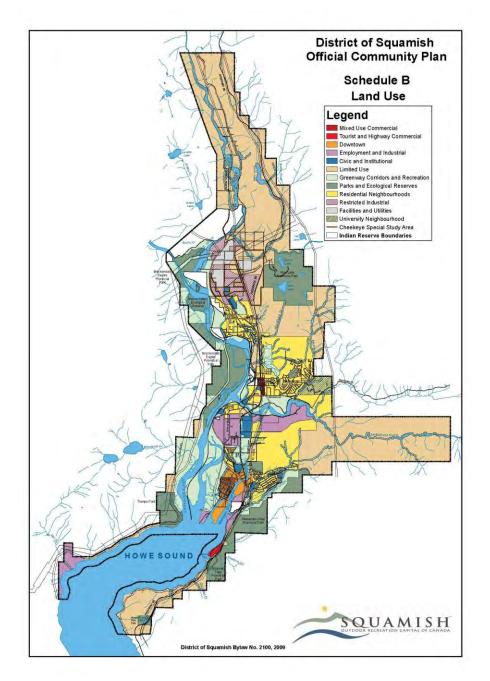


Figure 12: Developable Areas within Squamish.

Source: Squamish Official Community Plan

Numerous new development and redevelopment projects are proposed or underway in Squamish, particularly in the yellow areas on the figure above. Downtown Squamish is also intensifying and undergoing some residential and commercial revitalization. Areas for future transit expansion have

been identified in the areas forecasted to develop significantly over the course of the Transit Future Plan, including Loggers Lane, Cheekye, Garibaldi Highlands, and Ravens Plateau.

As illustrated in Figure 13, Squamish's residential and employment areas are not generally co-located. The densest concentration of employment is in the downtown, while most of the residential growth occurs in communities in northeast Squamish.

Squamish
Employment per km²
0-000 1000-4000
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Figure 13: Population and Employment Density in Squamish.

Source: BC Transit, based on Statistics Canada and BC Statistics data

Mixed-use developments where people can live, work, and shop in concentrated areas are generally easily served by transit.

Squamish's largest development currently underway is the Squamish Oceanfront Development project, which is a master-planned community aimed at revitalizing the oceanfront in downtown Squamish. The project is phased and includes a mix of uses and densities. Full buildout is expected over 20 years, with over 1,100 new homes projected for the area.

Figure 14: Squamish Oceanfront Development Plan.

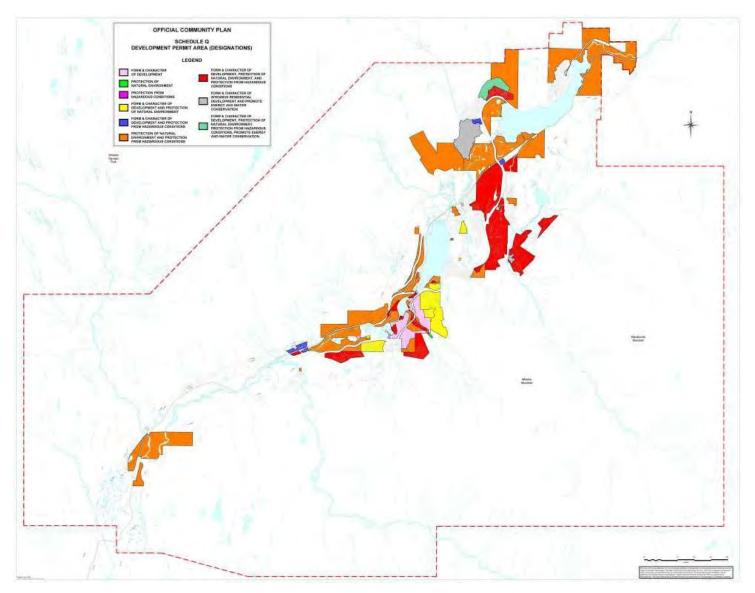


Source: Squamish Oceanfront Development Corporation

Whistler

Whistler is a municipality of neighbourhoods, with the central Village boasting the majority of Whistler's dense, mixed-use development. Whistler's long, linear footprint contributes to many of its neighbourhoods' town centre-like retail areas.

Figure 15: Developable Areas within Whistler.



No major new development areas of significance to the Transit Future Plan are forecasted for Whistler at this time. The areas of Baxter Creek (above Rainbow Estates) and Cheakamus Crossing are expected to develop gradually, requiring more service on existing routes.

The Whistler-Blackcomb Master Plan and a revision recently submitted to the Provincial Government also identify areas for development, though no timeline for build-out is known. As Whistler-Blackcomb expands its business offerings and operations (for example, to the Whistler Creek base in the summer), transportation and transit patterns may change.

Future Transit expansion to new areas is subject to community changes, noting that the possible relocation of the Whistler Community Services Society (WCSS) offices and Re-Use-It Store to the area between Nesters and Whistler Village may result in a realignment of core transit service, as demand to WCSS facilities in Spring Creek and Function Junction may be reduced.

As illustrated in Figure 16, the highest concentration of employment is in the Whistler Village. Residential populations are concentrated in neighbourhoods south and north of Whistler Village, true to Whistler's development patterns of being a municipality of neighbourhoods.

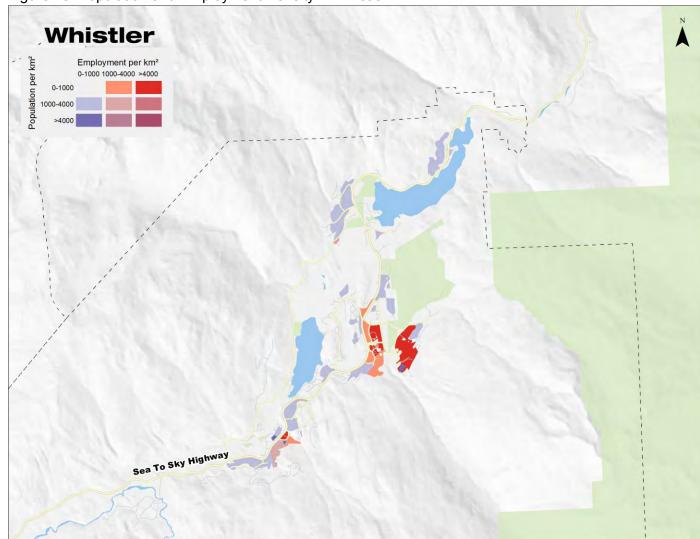


Figure 16: Population and Employment Density in Whistler.

Source: BC Transit, based on Statistics Canada and BC Statistics data

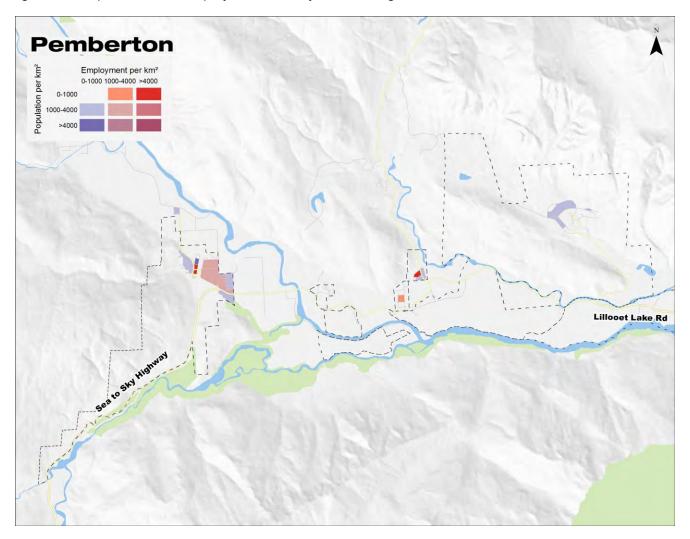
Whistler's success in developing communities that are accessible by transit and active transportation will enable efficient transit expansion over the course of the Transit Future Plan.

The Pemberton Valley & Village

The Village of Pemberton's physical footprint is quite small (about 30 per cent of the total area of The Pemberton Valley). In reflection of the physical development constraints described earlier, and with an eye to sustainability, growth is contained within the Village's Urban Growth Boundary.

As illustrated in Figure 17, people generally live and work in the centre of the Village, with growing residential numbers observed east of town in rural settlements. Figure 16 also illustrates that the Village of Pemberton is not a particularly densely-developed place.

Figure 17: Population and Employment Density in the Village of Pemberton.

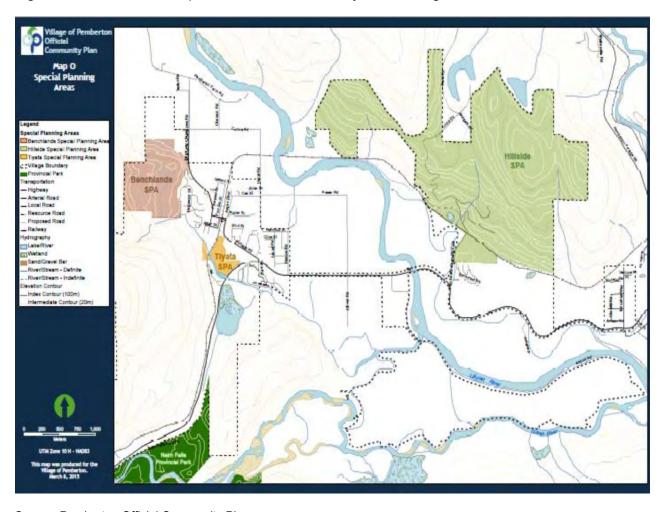


Source: BC Transit, based on Statistics Canada and BC Statistics data

Efficiently serving the growing rural areas around Pemberton with transit will require effective resource planning over the life of the Transit Future Plan.

Significant development – primarily residential - is planned to occur in the long term in the Benchlands, Tiyata, and Hillside areas.

Figure 18: Planned Development Areas in the vicinity of the Village of Pemberton.



Source: Pemberton Official Community Plan

Population, employment, and related land development will continue to increase over the life of the 25-year Transit Future Plan in and around Squamish, Whistler, and The Pemberton Valley.

Creating robust Local and Regional Transit networks to meet these increases will improve the environmental, fiscal, and socioeconomic sustainability of communities in the Sea to Sky region.

Transportation

Transportation within the Sea to Sky region today is comprised of a variety of services. While the area is most commonly accessed by car, an overview of transportation options in the area is provided here.

It is worth noting that most of the data presented in this section are from the Statistics Canada 2011 National Household Survey's Travel Behaviour section. Transportation data have not been collected on a national level since 2011, so more recent or current data have been included here in cases where data were collected and summarized locally.

Public Transit

Squamish, Whistler, and the Pemberton Valley are distinct communities with unique travel needs. Each of these communities is served by its own unique transit system with tailored services. More information about these transit systems is included in the *Transit Today* section.

A small portion of the corridor linking the Sea to Sky and Metro Vancouver regions is currently served by publicly funded BC Transit or TransLink. The Pemberton Valley is connect to Whistler via BC Transit's Pemberton Commuter and Lions Bay is connected to Park Royal via TransLink's Route 259.

School Busing

Public School District 48 (SD48) provides school bus transportation to nearly 1,000 elementary and secondary school students per day between September and June each year. The School District serves several schools throughout the Sea to Sky region with its fleet of about 30 buses, which are stored and maintained at SD48's own sites in Squamish, Whistler, and Pemberton.

SD48 provides school bus transportation when eight or more eligible pupils require transportation. Eligibility for school bus transportation is based on:

- Kindergarten to Grade 3 students living more than 3.2 km from the nearest school, and;
- Grade 4 to 12 students living more than 4 km from the school in their catchment area.

School bus routes are reviewed and finalized in September each year to be effective for the school year. Routes may be extended if population growth warrants.

While no formal school trips are allocated on the conventional transit systems in Squamish, Whistler, and the Pemberton Valley, it is estimated that student ridership comprises less than 30 per cent of all ridership in the Sea to Sky region. The bulk of this - about 20 per cent - is represented in Squamish, due to the community's demographics.

Future partnerships in operations, maintenance, and storage may be worth exploring with school bus and other private transportation providers as communities in the Sea to Sky region grow.

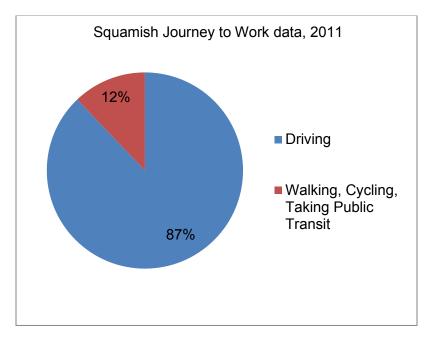
Car Travel (Private Vehicle)

Given the area's climate, topography, tourism/travel demand from other regions, and relatively transient population, transportation to, from, and within the Sea to Sky region is heavily car-oriented.

As reported in the 2011 Census, the majority of journey-to-work trips made in Squamish and Whistler were made by car, as a driver or passenger. These data are described in Figures 19 and 20.

About 87 per cent of all trips to work made in 2011 by Squamish residents were made by car.

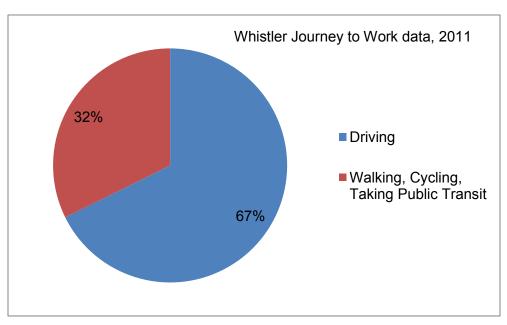
Figure 19: 2011 Squamish Journey to Work Data.



Source: Statistics Canada, 2011

About 67 per cent of all trips to work made in 2011 by Whistler residents were made by car.

Figure 20: 2011 Whistler Journey to Work Data.



Source: Statistics Canada

Although Census transportation data for Pemberton was not collected by Statistics Canada, the Village conducted its own community census in 2010. This census reported that about 46per cent of Pemberton residents use a car to access employment.

Squamish and Whistler are both linear communities that are situated along the Sea to Sky Highway. Although many neighbourhoods include areas of mixed amenity, some origins and destinations within Squamish and Whistler are up to 20 km apart. Robust Local and Core Transit Networks must continue to develop in order to serve this travel demand with transit.

Given the Village of Pemberton's size, origins and destinations within the Village are relatively close to one other. Major destinations outside the Village are spread throughout the Pemberton Valley, with the heaviest travel demand to the south of Pemberton.

Observed travel patterns within the Sea to Sky region show that the strongest travel demand exists between Squamish and Whistler, for access to amenities in Squamish and alpine recreation and jobs in Whistler.

The strongest observed travel pattern *outside* of the Sea to Sky region is to and from Metro Vancouver.

Distances between regional and interregional destinations are expressed in Table 1. Drive times between destinations often vary as a result of weather, congestion and based on road conditions.

Table 1: Distances between Metro Vancouver and Sea to Sky Communities.

	Vancouver	Squamish	Whistler	Pemberton
Vancouver		65km	120km	150km
Squamish	65km		60km	90km
Whistler	120km	60km		35km
Pemberton	150km	90km	35km	

In preparation for the 2010 Winter Olympic and Paralympic Games, significant infrastructure improvements were made to the Sea to Sky Highway (Highway 99) to enable improved travel between Metro Vancouver and the Sea to Sky area. The B.C. Ministry of Transportation and Infrastructure (MOTI) reports that at present, nearly 6 million trips are made on this corridor annually.

Less-direct road access to the Sea to Sky region is also possible from the east and north via the Trans-Canada Highway to the Lytton-Lillooet Highway (Highway 97), linking at Lillooet to Duffey Lake Road (Highway 99), which becomes the Sea to Sky Highway.

Several rideshare systems are in place throughout the Sea to Sky region, and hitchhiking and informal ridesharing is observed in the area.

Highway Coach and Shuttle Service

Highway coach and shuttle bus service to, from, and within the Sea to Sky region is overseen by the Passenger Transportation Board (PTB), which approves two Special Authorization Licenses for Inter-City bus service, in addition to approving trip frequency and communication with the public regarding service changes. These services include:

- Greyhound Canada Through the PTB, Greyhound Canada is required to operate at least four round trips per day between Vancouver and Whistler, with additional requirements to serve West Vancouver, Lions Bay, Britannia Beach, Squamish, Black Tusk, Pinecrest, Pemberton, and Mt. Currie.
- Pacific Coach Lines (PCL) PCL's SkyLynx service is licensed to provide daily trips from the Vancouver International Airport to Whistler. PCL is also permitted to stop at the Adventure Centre in Squamish and at hotels in downtown Vancouver.

Coordination with the PTB, as well as partnerships for providing Regional and Interregional bus service in the Sea to Sky, should be explored over the life of the Transit Future Plan.

Air Travel

Scheduled air access to the Sea to Sky region is limited to floatplane service to Whistler in the summer months, though unscheduled or chartered flights are also available across the Sea to Sky region.

The Whistler floatplane terminal is located less than 1 km from a Route 1 bus stop on the Sea to Sky Highway. Pedestrian and cyclist access is safely accommodated between the floatplane terminal and the bus stop.

Ferry Travel

BC Ferries' Horseshoe Bay Ferry Terminal is located approximately 20 km from Vancouver and approximately 45 km from Squamish, linking Vancouver Island, Bowen Island, and the Sunshine Coast to the Sea to Sky region and to Metro Vancouver. The terminal docks multiple daily ferries all year round.

As illustrated in Figure 23, public transit access is provided by TransLink as far north as Lions Bay, but does not extend further into the Sea to Sky region. Greyhound Canada services Horseshoe Bay once per day.

Figure 21: TransLink Route 259.



Source: TransLink

Active Transportation

The Sea to Sky region is home to a robust cycling community, with many people cycling recreationally as well as for transportation within and between communities. While the Sea to Sky Highway includes a narrow shoulder bike lane in some segments, off-highway facilities are also in place, such as the Whistler Valley Trail and the Sea to Sky Trail. The Sea to Sky Trail is a 180 km multi-use trail that is still under construction, but will ultimately connect the Sea to Sky corridor from Squamish to D'Arcy. To the south, the Marine Trail links Horseshoe Bay to Squamish.

Walking within Sea to Sky communities is generally accommodated by sidewalks and trails, though these infrastructure networks are still growing in Squamish, Whistler, and Pemberton. East-west pedestrian access across the Sea to Sky Highway is accommodated by several crossings in Squamish and Whistler, and one crossing in the Village of Pemberton at the intersection of the Sea to Sky Highway and Portage Road. Crossings in Squamish and Whistler are illustrated in the following figure and maps, by crossing type.

Figure 22. Whistler Pedestrian Overpass.



Types of crossings across the Sea to Sky Highway:

- Above grade crossing: an overpass or bridge above the ground
- Below grade crossing: a tunnel under the ground
- At grade crossing: a crossing at ground level

Figure 23: Sea to Sky Highway Pedestrian Crossings in Squamish.

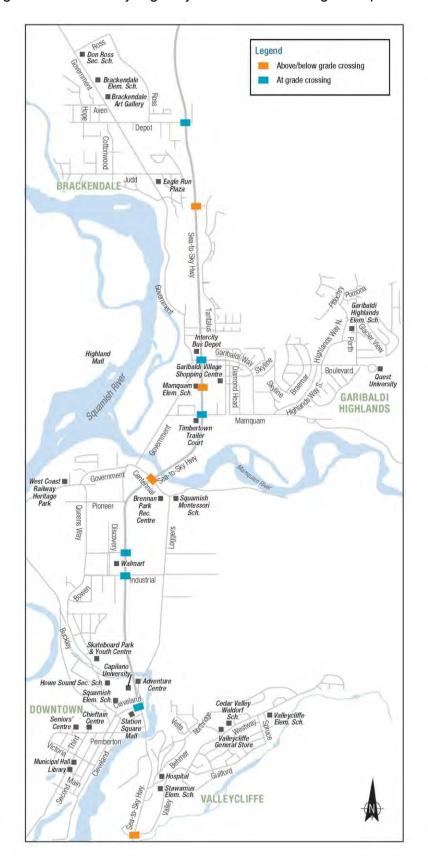
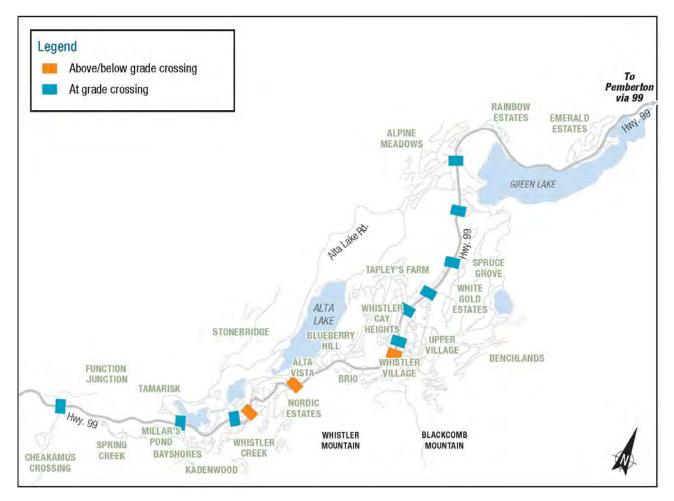


Figure 24: Sea to Sky Highway Pedestrian Crossings in Whistler.



Linking all modes of transportation to public transit to enable multimodal linked trips is a key objective of the Sea to Sky Transit Future Plan.

Links to other Planning Initiatives

A key principle of the Sea to Sky Transit Future Plan is to align with overarching strategic plans, as well as the area's existing land use and transportation plans. These plans and strategies, and their relationships to transit, are described in this section.

B.C. Provincial Transit Plan (2008)

The B.C. Provincial Transit Plan (PTP) is British Columbia's strategy for expanding fast, reliable, and green transit.

The PTP emphasizes that the best means of reducing transportation-related greenhouse gas emissions is to focus on dramatically increasing transit ridership (and thereby reducing single occupancy vehicle use), linking transit to active modes of travel (walking and cycling) and having land use decisions, largely made by local government, focus on transit-oriented development or at least transit-supportive development. The Province's focus on increasing transit mode share, or the percentage of all trips that are made by transit, is captured in quantifiable targets set in the 2008 Plan, such as:

- Doubling transit ridership in B.C. to over 400 million trips a year by 2020
- Increasing the transit mode share in regional centres (areas outside of Victoria and Vancouver) from three per cent to 4 per cent by 2020, and 5 per cent by 2030
- Reducing greenhouse gas emissions and air contaminants from cars by 4.7 million tons by 2020

These regional transit mode share targets have informed the development of community-level transit mode share targets for each of Squamish, Whistler, and Pemberton.

BC on the Move (2015)

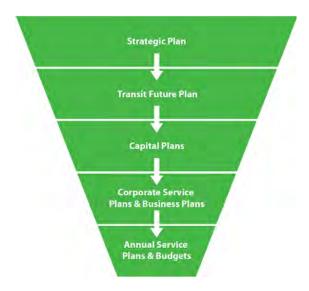
BC on the Move is the Government's 10-year plan for the improvement of the province's transportation network.

The Plan identifies investment in transit as a key priority, including specific provincial transit goals of:

- Maintain the highest level of operating support for transit in Canada, with the Province providing BC Transit with \$312 million in operating contributions over the next three years
- Partner with local communities throughout the province to replace half of BC Transit's fleet (about 500 buses) over the next five years
- Partner with local communities to build transit infrastructure to provide more efficient operations and improved transit services
- Continue to work with BC Transit to improve transit service accessibility for people with disabilities

BC Transit 2030 Strategic Plan (2009)

The strategic plan establishes BC Transit's vision to lead the development of sustainable transportation networks that will shift the balance to greener travel and a healthier province. It determines BC Transit's long-term direction and priorities, and declares the organization's ongoing commitment to develop transportation options that connect people and communities to a more sustainable future.



The Transit Future Plan is designed to support key initiatives and priorities in BC Transit's Strategic Plan, specifically:

- Increase integration with other types of sustainable travel, such as walking and cycling
- Influence land use and development patterns
- Identify and establish priority corridors for transit
- Enhance existing partnerships and develop new ones
- Increase BC Transit's environmental, social and economic accountability

The Transit Future Plan components developed for each community provide guidance to future BC Transit Capital Plans, Corporate Three Year Service Plans, Annual Business Plans, and budgeting processes.

Squamish-Lillooet Regional District Regional Growth Strategy (2010)

The Squamish-Lillooet Regional District Regional Growth Strategy (SLRD RGS) acts as a guide in promoting development and services that are sustainable, recognizing a long-term responsibility for the quality of life for future generations. The RGS supports an improved regional transportation system that sustains compact, livable communities, economic vibrancy and a healthy environment. Additionally, the SLRD supports the development of a Regional Transit System that is convenient, efficient, integrated with land uses and other transportation modes, is financially sustainable, and connects the region with the Lower Mainland and the B.C. Interior.

The transportation focus of the RGS is to maintain and further improve current levels of transit ridership and to facilitate a regional approach to transit service.

This regional focus has been reflected in the development of the Sea to Sky Transit Future Plan networks.

Squamish-Lillooet Regional District Integrated Sustainability Plan (2013)

The Integrated Sustainability Plan is a document intended to help the Sea to Sky area navigate towards a desired sustainable future. The Plan addresses eleven strategy areas, one of which is transportation, and is concerned with the movement of residents and materials to, from and within the region in a more efficient and sustainable manner.

The Plan outlines the following goals to achieve by 2030:

- Travel modes are prioritized in the following order: 1) pedestrians and cyclists, 2) transit and goods movement, 3) private vehicles
- *Preferred* transportation modes as prioritized above are well-used and connect the region's communities and many rural areas to each other and to major destinations
- The transportation system and infrastructure is convenient, affordable, safe and accessible for people of all ages and abilities, and minimizes impacts on wildlife and natural areas
- Rail systems and rights-of-way have been preserved for passenger and freight service

Specific actions related to transportation and transit for the SLRD include:

- Lobby the Province to adequately fund a Regional Transit System
- Require new development to be transit-friendly, pedestrian-friendly and bike-friendly
- Encourage passenger/commuter rail service through the Sea to Sky corridor through a variety of actions: development approvals, provincial lobbying, etc.

The Transit Future Plan's focus on multimodal integration and regional connections aligns with these objectives.

Squamish-Lillooet Regional District Electoral Area C Official Community Plan (1999)

Based on the community's values, the SLRD Electoral Area C Official Community Plan aims to balance the demands placed on the land base in order to ensure an equitable, comprehensive, and logical distribution of land uses.

Specific objectives related to transportation and transit for the SLRD Electoral Area C include:

- Improving access by providing for a safe and efficient transportation network that allows year-round transportation through and within the area
- Supporting a transit system that connects regional communities
- Integrating road, trail, and transit systems to provide direct access to local and regional destinations

Additionally, in order to accommodate anticipated future growth, the plan recognizes 'special planning areas' with a design focus allowing for efficient and effective transit service.

Squamish-Lillooet Regional District Electoral Area D Official Community Plan (2014)

The SLRD Electoral Area D Official Community Plan addresses long range land use planning issues, and contains objectives and policies to guide local government decisions related to land use and development within Area D.

Specific objectives related to transportation and transit for the SLRD Electoral Area D include:

- Improving public transportation options
- Supporting transit-oriented development, to help ensure that all new development is transit-friendly.
- Identifying and supporting all opportunities for convenient, reliable, and lower impact multimodal transportation, e.g. walking, cycling, transit, auto share, water, rail, etc. and the infrastructure to sustain these amenities
- Designing for transit and alternate transportation modes especially in the designated Planned Communities, as well as retrofitting existing transit deficient communities.

Sea to Sky Air Quality Management Plan (2007)

The Sea-to-Sky Air Quality Management Plan (AQMP) is a regional, collaborative, action plan for protecting air quality in the Sea-to-Sky Airshed. The Sea-to-Sky Airshed is the geographic area that due to its topography and similar meteorology, shares the same air. It consists of the region from Bowen Island to just north of Pemberton including communities along the eastern and western shores of Howe Sound from West Vancouver, Horseshoe Bay, Lions Bay, and Squamish, through to Whistler, Pemberton and Mount Currie. A multi-stakeholder committee, the Sea-to-Sky Air Quality Coordinating Committee (AQCC), which consisted of provincial, region and municipal government representatives of the corridor, transit companies, utility companies and local industry, developed the plan. The implementation plan had three categories of actions identified. The Mobile Sources section has many actions related to improving transportation and transit options in the airshed much of which overlaps with the Sea to Sky Transit Future Plan Study area.

The 2007 AQMP specified that a Five Year AQMP Update Report be undertaken and include a detailed review of progress to date as well as recommendations for adjusting the AQMP over the next five year period. In 2010, the AQCC became Sea to Sky Clean Air Society (SSCAS) and in 2014 the SSCAS conducted a formal review of the Sea to Sky Air Quality Management Plan. The recommendations of the 2014 AQMP Review formed the basis of the S2S AQMP Implementation Framework, completed in 2015. This AQMP Implementation Framework details goals, strategies and actions for moving the AQMP forward, including actions related to transportation and reducing mobile emissions and reinforcing the importance of transportation issues in relation to maintaining good air quality in the Sea to Sky airshed. The Implementation Framework also emphasizes the importance of collaborative efforts among airshed stakeholders.

District of Squamish Official Community Plan (2009)

The District of Squamish Official Community Plan (OCP) outlines that the District will work towards providing a balanced transportation system that encourages transit, cycling, walking and other modes of travel that minimize greenhouse gas emissions. An update to the Squamish OCP is expected to begin in 2016, so the priorities outlined below could shift. Overall, the District is committed to working with Provincial and Regional authorities to ensure a safe and efficient transportation and transit system between the communities in the Sea to Sky area.

Transportation priorities outlined in Squamish's OCP include:

- A transportation network that enables transit to travel with a minimal reliance on the Sea to Sky Highway
- Continue to work with BC Transit to improve transit service frequency, and identify new routes to support emerging neighbourhoods
- Encourage BC Transit to increase transit service, improving transportation choice for residents in an effort to reduce transportation-related greenhouse gas emissions
- Work with BC Transit and other transit service providers to maintain current transit area plans and encourage commuter bus service connecting Pemberton, Whistler and communities to the south of Squamish
- Commercial and higher density residential development is encouraged on collector roads where transit service is planned, as is streetscape design that reflects the needs of transit, cyclists and pedestrians
- New development should follow transit-supportive land-use planning and transit-oriented design principles to encourage:
 - Residential densities that support transit service areas
 - A high proportion of housing within walking distance (400m or less) of a bus stop
 - Commercial developments that incorporate pedestrian and transit-supportive site design
 - Bus stops incorporated with sidewalk design for pedestrian safety and universal accessibility

These directives align closely with BC Transit's standards and objectives and can help ensure the continued expansion of the transit system.

Whistler2020 Moving Toward a Sustainable Future (2005)

Whistler2020 is Whistler's integrated community sustainability plan, highest level policy document, and vision. Whistler2020 is the community's shared vision and plan for continued success to the year 2020 – an ambitious step on a longer journey to a sustainable future. The plan has been developed to address social, economic and environmental challenges in an integrated manner.

The transportation component of Whistler 2020 envisions the movement of residents, visitors, and material to, from, and within Whistler being convenient, safe, seamless, and affordable. Transit-related aspirations include:

- Neighbourhoods are relatively compact and are easily accessed by transit and the Valley Trail
- Residents live, work and play in relatively compact mixed-use neighbourhoods that reflect Whistler's character, and are close to appropriate green space, transit, amenities and services
- Housing has been developed close to transit, pedestrian and bicycle routes, and amenities and services to reduce auto dependency
- Preferred methods of transportation in order of priority are:
 - o Pedestrian, bicycle and other non-motorized means
 - Transit and goods movement
 - Private automobile (high-occupancy vehicle, followed by single occupancy vehicle)

This outlook has informed the development of the Transit Future Plan.

The Resort Municipality of Whistler (RMOW) Official Community Plan (1993)

Whistler's most current Official Community Plan (2013 OCP) is currently at third reading and will guide decisions on planning and land-use management for the resort community over the next 5-10 years and beyond in support of the Whistler2020 vision; to be the premier mountain resort community, while moving toward sustainability. The OCP and Whistler2020 work together to articulate the resort community's vision, values and shared commitment to collectively maintain a resilient, four-season tourism resort community and economy.

The RMOW has a goal of encouraging walking, cycling, and transit as Whistler's preferred modes of transportation. To this end where transit is concerned, the following policies are included in the OCP:

- Ensure neighbourhoods are well connected to transit, trails, green space, amenities and services
- Continue to operate a successful and accessible transit system in collaboration with funding and operating partners, expanding service area coverage and frequency as demand and resources permit
- Work with Provincial Government and regional stakeholders to develop an equitable regional transit model
- Preserve opportunities to modify Highway 99, such as queue jumper lanes for transit vehicles, while providing for local uses

The RMOW's OCP's sustainability-focused policies have informed the development of incremental, achievable targets in the Transit Future Plan.

Village of Pemberton Official Community Plan (2012)

The Village of Pemberton Official Community Plan provides clear policies and directions that focus on integration between sustainability, growth management, land use planning, and transportation. Specific transit goals include:

- Establishing a sense of arrival to the downtown, catering to transit and pedestrian/cyclist traffic
- Ensuring that transit service and infrastructure meets the needs of the work force, local residents, persons with disabilities, seniors and visitors
- Providing safe, efficient and effective transportation connections between the Village and surrounding employment and population centres

These goals have helped shape the goals and targets within the Transit Future Plan.

Lil'wat 2010-2015 Strategic Plan (2010)

The Lil'wat Strategic Plan describes the Lil'wat vision and values, and sets goals and strategic priorities for the Lil'wat people moving forward. No transportation-specific direction is provided in the Plan, although the Plan's focus on safety, security, and healthy communities aligns closely with the vision and goals of the Transit Future Plan.

Lil'wat Land Use Plan (2009)

The Lil'wat Land Use Plan outlines how land should be treated and used by the Lil'Wat nation and others in order to ensure that the lands and waters in the Lil'wat's Traditional Territory remain healthy. The plan describes the Lil'Wat vision and values for the Traditional Territory. From those values, the plan defines acceptable land uses and applies them to various portions of the Traditional Territory.

Lil'wat Community Land Use Plan (2015)

The 2015 Lil'wat Community Land Use Plan acts as an update to the 2009 Land Use Plan, provides additional details, and sets a vision for community land use objectives for the following five years. A special focus on safety and security related to transportation is echoed in this update from the Strategic Plan.

North Shore Area Transit Plan (2012)

Development of the Sea to Sky Transit Future Plan also includes analysis and input from TransLink's North Shore Area Transit Plan. This area transit plan provides guidance for transit service and infrastructure investments for the five municipalities (the City of North Vancouver, District of North Vancouver, District of West Vancouver, Bowen Island Municipality and the Village of Lions Bay) plus three significant First Nations' lands (covered by two different First Nations – Tsleil-Waututh and Squamish). Similar to the Transit Future Plan, the purpose of this plan is to coordinate transportation and land use, with the goal of increasing transit mode share in support of TransLink's regional objectives as stated in its long term strategy, *Transport 2040*. As part of this plan, an interregional transit service connecting Metro Vancouver with the Sea to Sky region was identified as a potential future project. The report recommends that interregional service along the Sea to Sky Highway be considered where appropriate levels of demand, operational and jurisdictional agreements, and sufficient funding and resources exist.

Future interregional transit studies linking the Sea to Sky region and Metro Vancouver should reference the North Shore Area Transit Plan, and should integrate with and complement TransLink's work and objectives.

Planning and Analysis Previously Completed by BC Transit

Transit systems in the Sea to Sky communities are assessed and reported on continuously. These analyses have helped inform the development of the Transit Future Plan. Recent major undertakings have included:

- Squamish Service Effectiveness Review (2012)
- Whistler Transit Service Review (2011)
- Whistler Transit System Winter Monitoring Program Report (2013)
- The Pemberton Valley Transit Service Review (2010)

Key Conclusions

- The Sea to Sky region and its communities are experiencing significant growth today, and sustained growth is projected over the life of the Transit Future Plan.
- While the bulk of growth is projected to occur in the southern part of the Sea to Sky region in and around Squamish, some growth in other areas of the region is expected. Strategic resource allocation will be required in order to maintain and continuously improve transit in the region overall.
- The region and its communities are home to a combined population that will grow increasingly dependent on public transit very young people (0-14), people of childbearing age (18-40), and elderly people (65+).
- The absence of robust Regional and Interregional Transit service contributes to a high incidence of private automobile travel. Shifting travel behaviour to include transit as a preferred transportation mode will require significant resources.
- The Sea to Sky area sees a large seasonal variation in population, particularly in the summer and winter peaks when there is an increase in tourism. The transit system needs to be able to consistently and reliably accommodate these seasonal population influxes.
- There are several key transit passenger markets in the Sea to Sky region, including a growing number of seniors, work trips for commuters (within Squamish and Whistler, across the SLRD, and to Metro Vancouver), and trips for visitors to the area. Each of these markets has special needs and expectations for transit service. To grow ridership in each market will require special consideration of these needs, as well as appropriate resource allocation.
- A suite of strategic plans for the Sea to Sky region supports the development and implementation of the Sea to Sky Transit Future Plan to achieve common goals and targets.
- A culture of environmental, economic, and social sustainability is present in the Sea to Sky region, fostering transit-supportive development and travel behaviour.

Transit Today

Squamish, Whistler, and the Pemberton Valley are distinct communities with unique travel needs. Each of these communities is served by its own transit system with tailored services. These systems are represented in two categories:

CONVENTIONAL: A transit service using scheduled, fixed-route vehicles, operating according to published route maps and timetables.

CUSTOM (handyDART): A door-to-door service for customers with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time.

Conventional and Custom transit service is provided by Diversified Transportation in Squamish, and Conventional transit service in Whistler and the Pemberton Valley is provided by Whistler Transit Ltd. Pacific Western Transportation is the parent operating company for transit in Squamish, Whistler and Pemberton.

Transit systems in the Sea to Sky region are described in this chapter.

Transit in the Sea to Sky Region

Transit ridership across the Sea to Sky region is among the highest in the province, with significant demand for transit service expansion around Squamish, Whistler, and the Pemberton Valley.

Regional service in this area began in 2000 with the Pemberton Valley Transit System's 99 Pemberton Commuter, which still links Whistler and the Pemberton Valley today.

The Squamish-Whistler Commuter (Route 98) was implemented as a winter-only pilot project linking Squamish to Whistler. The service started on January 3, 2005.

The Squamish-Whistler Commuter pilot project was cost-shared between the District of Squamish and the Resort Municipality of Whistler until 2007/08. In April 2008 this service expanded to include year-round service in when Provincial Government funding became available. At that time, the RMOW committed to continue funding the pilot project for three years to the end of 2010.

A fare increase was implemented in 2010 to help offset rising operational costs, which impacted ridership, along with speculation about the stability of the service and future funding for it. The District of Squamish funded the local share of the service for six months beyond the RMOW's involvement, but ultimately the service ceased in 2011.

The service linking Pemberton and Whistler is still in operation and is provided today by Whistler Transit Ltd. It is described in further detail in the *Transit in The Pemberton Valley* section.

Transit in Squamish

The Squamish Transit System was first introduced in 1990. The early transit system consisted of a single, infrequent, and circuitous route that operated to all neighbourhoods. Now 25 years old, the system has evolved into a multi-route system including Custom and Conventional service that connects most of the neighbourhoods in Squamish.

Conventional transit service is provided via four routes to Brackendale, Highlands and Valleycliffe neighbourhoods, in addition to a route along Tantalus Road that was introduced in 2013. Most of these routes offer service every 60 minutes with increased service during the busy peak periods. The Squamish transit network has a primary exchange in Downtown Squamish where all of the routes connect.

Recently, the Conventional transit ridership in Squamish has grown at one of the highest rates in the province. This is attributable to continuous population growth, transit-supportive land use planning, additional investment in transit, and the environmental sustainability values fostered in the community.

Squamish's Targeted or Custom Transit service (handyDART) is an on-demand transportation service for people who have a disability that is sufficiently severe that they are unable to use Conventional transit service without assistance some or all of the time.

Squamish's handyDART system has been in place since 1982 and has carried an average of 2,500 passengers per year to-date.

Routes

Squamish Transit operates four Conventional transit routes without significant seasonal operational changes. The system is described in Figure 25 and Table 2.

Figure 25: Squamish Transit System, 2015.

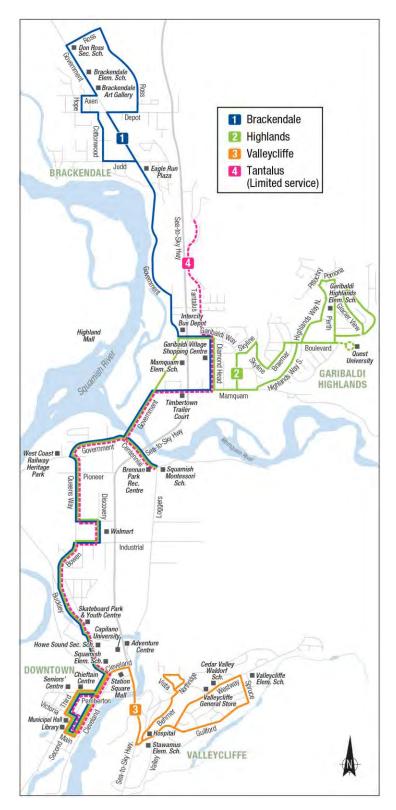


Table 2: Squamish Transit System Routes.

Route	Description
1 Brackendale	Provides service between Downtown Squamish and Brackendale with stops at Municipal Hall, Library, Capilano University, Skateboard Park and Youth Centre, Wal-Mart, Brennan Park Recreation Centre, Squamish Montessori School, Garibaldi Village Shopping Centre, Intercity Bus Depot, Eagle Run Plaza, Brackendale Elementary School and Don Ross Secondary School.
2 Highlands	Provides service between Downtown Squamish and Garibaldi/Highlands with stops at Municipal Hall, Library, Capilano University, Skateboard Park and Youth Centre, Wal-Mart, Brennan Park Recreation Centre, Squamish Montessori School, Intercity Bus Depot, Garibaldi Village Shopping Centre, Canadian Tire, Garibaldi Highlands Elementary School, and Quest University.
3 Valleycliffe	Provides service between Downtown Squamish and Valleycliffe with stops at Municipal Hall, Library, Station Square Mall, Stawamus Elementary School, Squamish General Hospital, Valleycliffe Elementary School, Cedar Valley Waldorf School, and Valleycliffe General Store.
4 Tantalus	Provides service between Downtown Squamish and Tantalus with stops at Municipal Hall, Library, Capilano University, Skateboard Park and Youth Centre, Wal-Mart, Brennan Park Recreation Centre, Squamish Montessori School, Garibaldi Village Shopping Centre, and Tantalus. This route has limited weekday service only.
handyDART	handyDART is not a fixed-route service, and instead provides door-to-door service for registered clients within Squamish's municipal area.

Ridership

The top-performing routes in Squamish are Route 1 Brackendale and Route 2 Highlands. These routes serve corridors of diverse and higher-density developments in Squamish along with connecting key activity centres such as Quest University, Garibaldi Village Shopping Centre and other popular commercial centres.

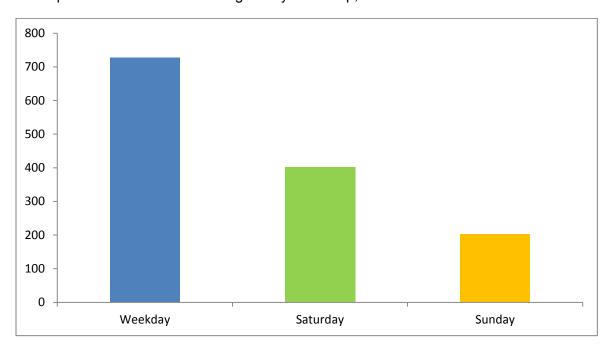
Table 3: Squamish Transit Weekday Ridership by Route.

Route Number	Route Name	Average Ridership Per Weekday	Hours Per Weekday	Rides Per Hour - Weekday
1	Brackendale	269	13.18	20.4
2	Highlands	218.3	13.43	16.3
3	Valleycliffe	186.4	8.57	21.8
4	Tantalus	53.1	4.45	11.9

Source: Farebox Data

Figure 26 illustrates the relative simplicity of ridership in Squamish; that ridership is highest on weekdays. Demand for increased weekend service was raised throughout the Transit Future Plan Participation process, so it is expected that if service increases on weekends, so will the ridership.

Figure 26: Squamish Transit Total Average Daily Ridership, 2014/15.



Source: Farebox data

Service Profile

Squamish enjoys medium frequency and span of Conventional transit service, though demand for increased frequency and span has been observed throughout the Transit Future Plan's Participation process. In 2013, approximately 3,000 service hours were added to the transit system. This expansion included extended evening service, new Sunday and holiday service, and a new peak period service that connects Tantalus to Downtown Squamish.

Table 4: Squamish Transit Service Profile, 2015.

Route		Mond	Monday-Friday		turday	Sunday and Select Holidays	
		Total Trips	Start/End	Total Trips	Start/En d	Total Trips	Start/End
1	To Brackendale	17	6:15 am/ 10:56 pm	15	7:21 am/ 10:56 pm	5	11:15 am/ 6:17 pm
Brackendale	To Downtown	17	6:20 am/ 11:06 pm	15	7:26 am/ 11:06 pm	5	11:24 am/ 6:43 pm
2 Highlands	To Highlands	16	7:18 am/ 10:41 pm	15	7:37 am/ 10:41 pm	5	10:30 am/ 6:01 pm
	To Downtown	16	7:27 am/ 10:48 pm	15	7:46 am/ 10:48 pm	5	11:06am/ 6:08 pm
3 Valleycliffe	Loop Route	22	6:30 am/ 9:59 pm	15	8:15 am/ 9:59 pm	4	10:00 am/ 3:59 pm
4 Tantalus	To Tantalus	7	6:30 am/ 6:26 pm				
	To Downtown	6	6:51 am/ 5:56 pm				
handyDART			8:00 a.m./ 4:30 p.m.				

Fares

Fares vary by demographic and fare type.

Table 5: Squamish Transit Fare Structure.

	Cash	Tickets (10)	DayPASS	Monthly Pass	Semester Pass					
Adult	\$1.75	\$14.50	\$3.25	\$39.00	-					
Seniors 65+	\$1.50	\$12.00	\$2.75	\$20.00	-					
Student	\$1.25	\$12.00	\$2.75	\$20.00	\$80.00					
Children 4 or under		FREE								
handyDART			\$1.75							

Transfers are available on the Conventional system, enabling travel on one fare for up to 90 minutes.

handyDART fares include two types of service:

- Regular subscription trips once a week or more often
- One-time trips for purposes such as shopping, social visits or recreational activities

Registered handyDART Customers using wheelchairs or scooters, or CNIB pass holders may travel with an attendant. Attendants travel free but must board and alight at the same times as the customer who requires assistance. Riders must register with the handyDART office before using the service; however, registration is free.

A fare review was conducted in 2012 as part of the Service Effectiveness Review. While the Review recommended a fare increase, this District of Squamish has chosen to maintain current fares with an eye to encouraging ridership.

Fleet

Squamish Conventional Transit operates six Conventional medium-duty buses, with four buses operating during the weekday peaks. Squamish Custom Transit operates two light-duty buses, with one bus operating during the weekday peaks. These ratios of operating-to-spare buses align with BC Transit's Fleet Maintenance and Safety requirements.

A medium-duty bus for Conventional Transit Service in Squamish can transport up to 49 passengers, with 27 seats and one wheelchair seat position.

Figure 27: Conventional Transit Bus.



Squamish Transit operates two light-duty buses for Custom or handyDART Service. Each of these buses can transport up to 20 passengers if no person using a wheelchair is on board, or 17 passengers including one person in a wheelchair.

Figure 28: Custom Transit Bus.



Squamish's Conventional transit bus fleet is equipped with bike racks that can accommodate up to two bicycles per rack.

Figure 29: Bike Rack on Conventional Transit Bus.



Bike rack use on Squamish buses is high. Throughout the Transit Future Plan's Participation process, stakeholders expressed a need for increased bike capacity on buses, including racks that can accommodate wider bike tires.

Bus Stops

Currently, there are 120 bus stops in Squamish, with 8 existing shelters. The District of Squamish reviews opportunities to install new bus stop and shelter infrastructure on an ongoing basis. The District's participation in BC Transit's Development Referral Program helps ensure that bus stop infrastructure is provided for new developments that are projected to generate transit demand.

Figure 30: New Bus Shelter in Downtown Squamish, 2015.



Bus Exchange

Today, Squamish Transit's converges at the Downtown Transit Exchange adjacent to the Chieftain Centre shopping development.

Figure 31: Squamish Transit Exchange.



The exchange has capacity for four medium-sized buses, which is suitable for existing operations. Future system growth may require a larger off-street bus exchange. As the transit system develops,

one prospective site for a secondary exchange is in central Squamish's rapidly-developing commercial and residential Garibaldi-Highlands area.

Park & Ride

While no formal facility exists in Squamish today, the introduction of regional service of any kind will require the identification of a site or multiple sites. Formalized Park & Ride facilities can also deter transit passengers from parking in nearby neighbourhoods.

Operations and Maintenance Facility

The Operations and Maintenance Facility is leased by Diversified Transportation and is located in south-central Squamish. The maintenance facility currently has three bays and fenced outdoor parking that can accommodate five medium-sized buses.

Additional planning work will be required to ensure there is capacity at the existing facility or another appropriate facility to service the system for the next 25 years.

Figure 32: Squamish Transit Garage.



Performance

PERCEPTION OF TRANSIT IN SQUAMISH

The Squamish Transit Conventional system's ridership is among the fastest-growing in British Columbia, with a reasonable level of customer satisfaction. Known for its focus on environmental sustainability, the District of Squamish has made transit a priority in their community, and is working hard to improve the attractiveness of transit.

PERFORMANCE OF TRANSIT IN SQUAMISH

Peer assessment typically involves comparing one community to other communities with similar population, annual service hours, and annual ridership. Benchmarking in this way can help convey the system's strengths and weaknesses, as outlined below. Operating costs vary significantly across the province due to operating conditions (climate, topography and passenger loads) and personnel costs - which are often driven by local cost of living - and agreements.

Ridership information in Squamish is collected and analyzed using magnetic swipe card data from the bus farebox and observational data from transit operators. Since its inception of service in 1990, Conventional transit ridership in Squamish has grown significantly to nearly 300,000 in 2014/15.

350,000 20,000 18,000 300,000 16,000 250,000 14,000 12,000 200,000 10,000 Annual Ridership 150,000 8,000 Annual Hours 6,000 100,000 4,000 50,000 2,000 0 0 * 5198 51/98 5910 01/03 5104 05106 01/08 6910

Figure 33: Squamish Conventional Transit Annual Ridership and Annual Hours.

Source: BC Transit IPS Actuals (1991 - 2013)

In 2013/14, Squamish's handyDART ridership was 5,426, which shows little change from the previous year. The existing handyDART system has capacity to serve some short-term ridership growth, though more resources will be required to effectively serve the growth that is expected over the long-term as the population in the Sea to Sky area continues to grow and age.

In general, Squamish Transit performs on par with its peer communities across performance measures. Annual statistics indicate a good use of the system – for every hour of Conventional transit service provided in Squamish, 20-25 passengers use the system. This trend is slightly higher than the peer community average of 19 passenger rides per service hour. On Squamish's Custom transit system, about 2.7 passengers use the system per service hour. This aligns with the average across peer Custom transit service communities.

Other highlights for the Squamish Systems include:

- A total of 248,371 Conventional passenger trips were made in 2013/14, which is 20 per cent higher than the average ridership among peer communities, and is a 20 per cent increase from the previous year
- The cost to the District of Squamish per passenger trip and per service hour for both Conventional and Custom transit service is higher than in peer communities. This is attributable in part to the linear form of the community, which requires more hours to serve it than many of its more compact peers.

Table 6: Squamish Conventional and Custom Transit Performance.

	Approximate Service Area Population	Annual Serv	ice Hours	Annual R	tidership	Rides Pe	r Hour	Cost Per	r Ride	Total Cost P	er Hour*	Operating Co	ost Per Hour	Net Local Cos	st Per Hour**	Annual Cost I	Recovery
		Conventional	Custom	Conventional	Custom	Conventional	Custom	Conventional	Custom	Conventional	Custom	Conventional	Custom	Conventional	Custom	Conventional	Custom
										\$141.43							
Squamish	18,000	12,021	2,000	248,371	5,426	21	2.7	\$6.85	\$48.96		\$132.49	\$129.07	\$119.49	\$58.64	\$46.17	14.4%	n/a
Cranbrook	19,000	11,716	3,625	224,496	7,522	18	1.9	\$5.92	\$34.61	\$107.94	\$69.86	\$101.71	\$65.10	\$42.01	\$18.91	18.8	n/a
Nelson	10,000	11,145	n/a	263,010	n/a	24	n/a	\$5.39	n/a	\$127.10	n/a	\$110.23	n/a	\$42.98	n/a	24.2	n/a
Penticton	30,000	22,751	3,000	432,384	21,428	19	2.2	\$5.52	\$11.06	\$104.83	\$48.64	\$104.83	\$50.79	\$35.88	\$11.68	25.5	n/a
Powell River	13,000	11,146	4,164	201,989	13,405	18	3.2	\$6.00	\$17.72	\$108.81	\$54.25	\$98.76	\$54.95	\$39.41	\$16.77	19.8	n/a
Prince Rupert	11,800	9,603	1,740	318,809	5,691	32	3	\$3.22	\$20.60	\$119.55	\$67.27	\$103.43	\$60.00	\$31.48	\$22.27	36.7	n/a
Kitimat	8,000	9,078	4,320	148,348	4,337	16	1	\$7.58	\$40.34	\$123.92	\$40.51	\$106.90	\$40.50	\$54.02	\$10.28	14.6	n/a
Terrace Regional	11,000	8,292	2,082	149,912	7,690	18	3.7	\$5.31	\$20.91	\$95.99	\$81.75	\$85.25	\$75.72	\$33.35	\$23.57	22.2	n/a

^{*}Total Cost Per Hour is Total System Cost divided by annual service hours

Source: BC Transit IPS Actuals (2013/14)

Key Conclusions – Squamish Transit System

- Transit in Squamish has grown consistently and effectively, and demand for continued expansion has been observed.
- Squamish is a growing community both in terms of population and service area. Expanding transit to meet the needs of the community and its growing neighbourhoods will require careful resource allocation.
- Similarly, growing interest in outlying recreation areas from locals and visitors will require resource allocation.
- Squamish Transit performs strongly among its peers, with room for improvement as the system expands – particularly on its handyDART system.
- Squamish Transit's fleet and facilities will need to grow considerably to accommodate any of the
 transit service recommendations captured in the following chapters. This includes adding more
 buses, expanding to a second transit exchange, expanding or relocating its Operations and
 Maintenance Facility, and establishing Park & Ride sites within the District.
- The Squamish transit network is currently designed primarily for coverage which results in circuitous and long routings. As the community grows and the demand increases, the transit network should evolve to provide more opportunities for faster and more direct service between key activity centres, especially to attract new customers.
- Providing transit service to some of the growing bedroom community areas outside of the Squamish core will be resource-intensive.

Transit in Whistler

Introduced in 1991, what is now known as the Whistler Transit System had a simple vision – to emulate the success of transit systems in other resort communities such as Vail and Aspen, Colorado. The system started with five buses in 1991 and carried just under half a million passengers in its first full year of operation. In 1999, the system was rebranded as the Whistler and Valley Express (WAVE).

In 2010, Vancouver hosted the 2010 Olympic and Paralympic Winter Games with Whistler serving as the Host Mountain Resort. This was a major milestone for the Whistler Transit System, as it provided an opportunity to showcase the efficiency of the transit system and its world-class customer service. In preparation for the Olympics, an Operations and Maintenance Facility was built that is equipped to accommodate the transit system for many years into the future.

The Whistler Transit System has had many service adjustments over the years to match evolving economic conditions, travel demand, and resource availability. A suite of substantial changes was introduced in 2011, when nearly 20 per cent of service was eliminated in response to a decrease in resource availability. Service expansion since 2011 has occurred incrementally as resources have become available. Today, the system operates effectively and responsively.

Routes

The Whistler Transit System comprises five year-round Conventional routes and three seasonal routes. Whistler's system is pictured in Figure 34, and detailed in Table 7.

The Pemberton Commuter route, shown in Figure 35, also terminates Whistler Village. The Commuter is part of the Pemberton Valley Transit System, is operated by Whistler Transit Ltd., and is funded by the Village of Pemberton, the Lil'wat Nation, and the SLRD. The Commuter route is described in more detail in the *Transit in The Pemberton Valley* chapter.

Figure 34: Whistler Transit System, 2015.

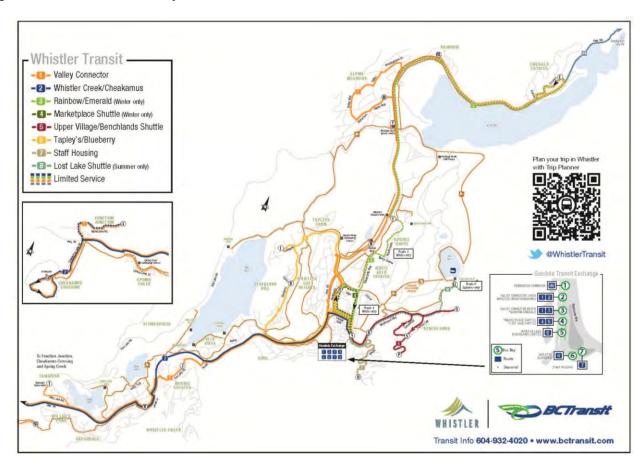


Figure 35: The Pemberton Valley Transit System, 2015.

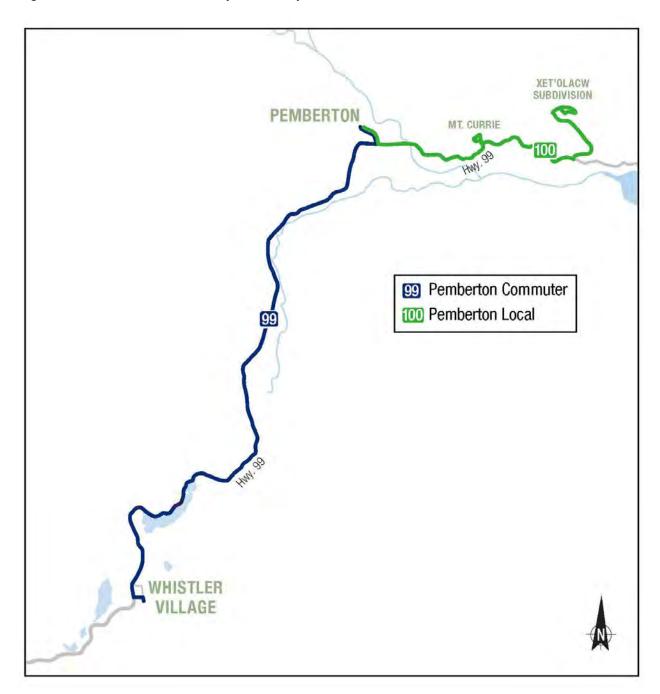


Table 7: Whistler Transit System Routes.

Route	Description	Free Shuttle
1 Valley Connector	Connects most of the residential areas both south and north of Whistler Village with key destinations: serving Cheakamus Crossing, Function Junction, Tamarisk, Spring Creek, Whistler Creek, Nordic, Whistler Village, Nesters, Meadow Park Sports Centre, Alpine Meadows, Rainbow Estates, Emerald Estates.	No
2 Whistler Creek/Cheakamus	Service from Gondola Transit Exchange in Whistler Village with stops along the Sea to Sky Highway at Blueberry, Brio, Alta Vista, Nordic, Whistler Creek, Bayshores, Tamarisk, Millar's Pond, into Spring Creek and into Cheakamus Crossing and Function Junction.	No
3 Rainbow/Emerald	Winter seasonal service from Gondola Transit Exchange in Whistler Village with stops in White Gold Estates, Spruce Grove, at Meadow Park Sports Centre, Rainbow Estates and Emerald Estates.	No
4 Marketplace Shuttle	Winter seasonal service that loops the core of Whistler Village. This service is free to the passengers.	Yes
5 Upper Village/Benchlands Shuttle	Provides service between Gondola Transit Exchange in Whistler Village and accommodations located in the Upper Village and Benchlands. This service is free to passengers.	Yes
6 Tapley's/Blueberry	Service from Gondola Transit Exchange in Whistler Village with stops at Myrtle Philip Community School, Tapley's Farm, Crabapple turnaround, Falcon Drive, and Blueberry Hill.	No
7 Staff Housing	Service from Gondola Transit Exchange in Whistler Village to Glacier Staff Housing Complex.	No
8 Lost Lake Shuttle	Loops between Gondola Transit Exchange in Whistler Village and the Lost Lake parking lot. Operates from the Canada Day long weekend to the Labour Day long weekend and is free to passengers.	Yes

All routes serve the Gondola Transit Exchange in the heart of Whistler Village, with trip frequency varying between 10 – 30 minutes. Route 3 Rainbow/Emerald and Route 4 Marketplace Shuttle operate only during the winter ski season and Route 8 Lost Lake Shuttle operates only during the summer months.

Ridership

As described in Figure 36 below, ridership in Whistler varies significantly by season and by day-of-week. It is clear in the illustration below that ridership is at its peak during the winter season on weekends.

approximate boardings per day approximate level of transit service provided ~Dec 15 Easter Ski & Snowboard Festival ends Whistler & Blackcomb Canada Day Labour Weekend Day open SUMMER SPRING/SUMMER/FALL WINTER JUNE DEC JAN FEB APR JULY AUG SEPT OCT NOV MAR MAY

Figure 36: Whistler Transit Service Seasons and Ridership.

Source: GFI Farebox Data

WINTER

Between the peak winter months of December to April, the service levels are high to accommodate the influx of transit-dependent winter staff and visitors. In these winter months, the weekend (Friday-Sunday) and holiday (Canadian and US holiday Mondays as well as school winter holidays) service levels are greater than the weekday (Monday-Thursday) service levels to accommodate these peaks in travel demand.

SPRING, SUMMER AND FALL

Current service is based on current visitation patterns. Between the spring, summer, and fall months of May through November, weekday service levels are reduced to align with significantly decreased overall travel demand. An increase in active transportation use during these months is also observed to influence transit demand over these months. However, Whistler is seeing a longer and busier summer season, which could result in increased transit demand.

During the transition time between the two seasons, layers of service are often added to accommodate projected demand (*Early Winter Extra Service Ramp-Up* and *Late Winter Extra Service Ramp-Down*).

Tables 8 to 11 illustrate this seasonal variability, summarizing ridership on the fare-required transit routes from winter 2014/15 and summer 2014. These data have been intentionally collected in recent years in order to maximize efficiency in service planning for Whistler.

Note that the same level of detail has not historically been collected in the Squamish or The Pemberton Valley systems, though future growth could warrant increased data collection and analysis.

Table 8: Winter Weekday (Monday to Thursday) 2014/15 Service Characteristics, Whistler Transit.

Route	Daily Trips Operated	Daily Revenue Hours	Average Daily Passenger Boardings*	Daily Boardings per Revenue Hour*
Average				33.5
1 Valley Connector	183	112	3,876	35
2 Whistler				
Creek/Cheakamus	94	36	1,694	47
3 Rainbow/Emerald	50	20	504	25
6 Tapley's/Blueberry	34	12	326	28
7 Staff Housing**	27	6	359	59

^{*} All route level performance metrics derived from GFI farebox data collected with an 85 per cent assessed accuracy.

Source: GFI Farebox Data

^{**}In Winter 2014/15 from 9:00pm to 8:00am service was free with rides sponsored by local businesses which resulted increased ridership from previous years.

Table 9: Winter Weekend (Friday to Sunday) 2014/15 Service Characteristics, Whistler Transit.

Route	Daily Trips Operated Revenue Hours		Average Daily Passenger Boardings*	Daily Boardings per Revenue Hour*
Average				32.9
1 Valley Connector	197	112	4,017	34
2 Whistler				
Creek/Cheakamus	106	36	1,629	42
3 Rainbow Emerald	50	20	513	25
6 Tapley's/Blueberry	34	12	362	30
7 Staff Housing**	27	6	266	44

^{*} All route level performance metrics derived from GFI farebox data collected with an 85 per cent assessed accuracy.

Source: GFI Farebox Data

Table 10: Summer Weekday (Monday to Thursday) 2014 Service Characteristics, Whistler Transit.

Route	Daily Trips Operated	Daily Revenue Hours	Average Daily Passenger Boardings*	Daily Boardings per Revenue Hour*
Average				19
1 Valley Connector	181	89	1,906	21
2 Whistler				
Creek/Cheakamus	31	15	406	28
6 Tapley's/Blueberry	24	9	70	8
7 Staff Housing	27	6	67	11

^{*} All route level performance metrics derived from GFI farebox data collected with an 85 per cent assessed accuracy.

Source: GFI Farebox Data

^{**}In Winter 2014/15 from 9:00pm to 8:00am service was free with rides sponsored by local businesses which resulted increased ridership from previous years.

Table 11: Summer Weekend (Friday to Sunday) 2014 Service Characteristics, Whistler Transit.

Route	Daily Trips Operated	Daily Revenue Hours	Average Daily Passenger Boardings*	Daily Boardings per Revenue Hour*
Average				19
1 Valley Connector	181	89	1,975	22
2 Whistler Creek/Cheakamus	31	15	401	28
6 Tapley's/Blueberry	24	9	67	8
7 Staff Housing	27	6	76	13

^{*} All route level performance metrics derived from GFI farebox data collected with an 85 per cent assessed accuracy.

Source: GFI Farebox Data

FREE VILLAGE SHUTTLES

In 1991, BC Transit and the Resort Municipality of Whistler recommended a 'free fare zone' based on best practices gained from Vail and Aspen's transit systems which offer Free Skier Shuttles. The funding mechanism for this service was from an annual contribution from the Hotel Tax.

In the 1990s and early 2000s, the Free Village Shuttle routes carried approximately 50 per cent of all Whistler Transit System customers. Ridership in the fare free zone started with 250,000 annual customers in the early 1990s and peaked to 1,300,000 customers in the mid-2000s prior to the system-wide service reductions that took place in 2011.

The Free Village Shuttles in Whistler (Route 4 Marketplace, Route 5 Upper Village/Benchlands, and Route 8 Lost Lake) play a critical role in the Whistler transit network. The free shuttles are a critical part of the circulation of the Whistler Transit system, continually pumping people between the many activity centres and thus playing a major role in the economic vitality of the community. Today, the Free Village Shuttles are estimated to carry approximately 1,000,000 riders annually, representing 40 per cent of total Whistler Transit System customers. The Shuttles provide an essential service for visitors, employees and locals travelling around the Village.

The total ridership of the Free Village Shuttles between 2011 and 2015 is summarized in Table 12. This ridership is based on a revenue model; therefore all of the ridership for the free shuttles is combined together. Looking ahead, additional strategies are being developed to summarize the ridership on the Free Village Shuttle service on route-by-route basis.

Table 12: Whistler Free Village Shuttle Ridership, 2011-2015.

Vaar	Village Shuttle	TOTAL System	System	Free
Year	Customers	Ridership	Rides/Hour	Rides/Hour
2011/12	983,721	2,608,310	40.9	102.5
2012/13	913,089	2,388,950	40.4	93.3
2013/14	919,918	2,368,693	39.7	88.8
2014/15	960.007	2.404.139	38.6	92.7

Source: BC Transit

In the winter of 2014/15, a pilot project to offer free service on the Route 7 Staff Housing during certain time periods (late evening and early mornings) was conducted. The purpose of the pilot was to improve safety and accessibility for the residents living in Glacier Staff Housing area. This free service was provided through a cost sharing agreement between local businesses in Whistler. This pilot project greatly increased Average Daily Passenger Boardings and Boardings per Revenue Hour from Winter 2013/14. If ridership continues to be successful, this arrangement will be pursued to be implemented on a permanent basis.

Service Profile

As discussed, Whistler enjoys high frequency and span of transit service in its peak season from late-November to April. Service frequency decreases in the spring/summer/fall to reflect transit travel demand. Transit operates seven days per week, 365 days per year, 23 hours per day during winter.

Table 13: Whistler Transit Service Span by Neighbourhood and Season.

Neighbourhood	Routes	Winter Service Span	Routes	Spring/Summer/Fall Service Span
Emerald	1,3	5:30 a.m. – 3:00 a.m.	1	5:30 a.m. – 3:00 a.m.
Rainbow	1,3	5:30 a.m. – 3:00 a.m.	1	5:30 a.m. – 3:00 a.m.
Alpine	1,3	5:30 a.m. – 3:00 a.m.	1	5:30 a.m. – 3:00 a.m.
White Gold/Spruce Grove	3	peak hour service	-	No Service
Marketplace	4	7:00 a.m. – 9:00 p.m.	-	No Service
Upper Village/Benchlands	5	6:30 a.m. – 1:00 a.m.	5	9:30 a.m 1:00 a.m.
Nordic	1	5:30 a.m. – 3:00 a.m.	1	5:30 a.m. – 3:00 a.m.
Whistler Creek	1,2	5:30 a.m. – 3:00 a.m.	1,2	5:30 a.m. – 3:00 a.m.
Spring Creek	1	6:00 a.m. – 1:00 a.m.	1	8:30 a.m. – 11:30 p.m.
Function	1,2	5:30 a.m. – 3:00 a.m.	1,2	5:30 a.m. – 3:00 a.m.
Tamarisk	1	after midnight only	1	after midnight only
Cheakamus Crossing	1,2	5:30 a.m. – 3:00 a.m.	1,2	5:30 a.m. – 3:00 a.m.
Staff Housing	7	5:40 a.m. – 2:30 a.m.	7	6:15 a.m. – 2:30 a.m.
Tapley's/Blueberry	6	6:00 a.m midnight	6	6:30 a.m midnight
Lost Lake	-	No service	8	10:00 a.m. – 6:00 p.m.

Fares

Fares in Whistler vary by demographic and fare type.

Table 14: Whistler Transit Fare Structure.

	Cash	Tickets (10)	DayPASS	Monthly Pass	Seasons Pass (6 Month)	Seasons Pass (12 Month)			
Adult	\$2.50	\$22.50	\$7.00	\$65.00	\$330.00	\$585.00			
Seniors 65+ / Student	\$2.50	\$18.00	\$7.00	\$52.00	\$260.00	\$470.00			
Children 5 or under		FREE							

A paper transfer allows travel for the next connecting bus, but a transfer cannot be used for a return trip.

Passengers can transfer to the Pemberton Commuter Service with a The Pemberton Valley or Whistler Pass when the \$2.00 top-up fare is also paid. Passengers on the Pemberton Commuter can transfer onto the Whistler Transit System without an extra charge.

Six- and 12-month Seasons Passes are valid from the day of purchase.

A Family Travel Program is also in place in Whistler, allowing an adult customer (19+) using a valid Whistler Transit System Pass of any kind to bring up to three children (12-) on board for free. This program does not apply to cash fares or tickets. Children must board and alight at the same stops as the pass-carrying adult.

Fare product alternatives may be explored as the system and its ridership continues to grow. These options are discussed in Whistler's *Transit Future* chapter.

Fleet

Whistler Transit operates 25 Conventional heavy-duty buses, with 21 buses operating during the seasonal peaks. This ratio of operating-to-spare buses aligns with BC Transit's Fleet Maintenance requirements.

A heavy-duty bus in Whistler can transport up to 70 passengers, with 32 seats and three wheelchair seat positions.

Figure 37: Conventional Transit Bus.



Whistler's heavy-duty bus fleet is equipped with bike racks on the front of each vehicle that can accommodate up to two bikes per rack.

Figure 38: Bike Rack on Conventional Transit Bus.



Bike rack use on Whistler buses is high. Throughout the Transit Future Plan's Participation process, stakeholders expressed a need for increased bike capacity on buses, including racks that can accommodate wider bike tires.

Bus Stops

There are just over 200 bus stops in Whistler, with approximately 25 per cent of them with bus shelters. As part of their annual infrastructure capital program, the Resort Municipality of Whistler continues to install their own transit shelters at key stops located around the area.

Figures 39 and 40: Whistler Transit Shelters.





Bus Exchange

Today, the local and Regional Transit services in Whistler converge at the off-street Gondola Transit Exchange (GTEX) adjacent to Skiers Plaza, linking the transit system to Whistler Village and both Whistler and Blackcomb Mountains.

Figure 41: Gondola Transit Exchange in Whistler Village.



The exchange includes seven bus bays, which is suitable for existing operations. Future system growth will require expanded facilities. One prospective site has been identified by the RMOW within the scope of its *Gateways*, *Portals*, *Connections and Wayfinding Project*, and is also located within Whistler Village at the Gateway Loop. BC Transit supports exploring the relocation of some bus routes to Gateway Loop from GTEX, although maintaining a transit / walk connection to Skiers Plaza for lift users in all seasons is important. Therefore, rerouting buses to Gateway Loop could be seasonal, timespecific, and/or route-specific. BC Transit and the RMOW will continue to work together on this project.

Park & Ride

While no formal facility exists in Whistler or The Pemberton Valley today, the expansion of regional or interregional service will require the identification of a site or multiple sites. Formalized Park & Ride facilities can also deter transit passengers from parking in nearby neighbourhoods.

Operations and Maintenance Facility

The Whistler Transit Facility was completed in 2010 and is located north of Whistler Village. This facility was designed and built to support local and regional transit service requirements through 2050. The centre includes a maintenance and administration building with six maintenance bays, an automated bus wash, diesel fueling station and some covered parking. The design capacity of the Whistler Transit Facility is 50 heavy duty buses despite accommodating crush load capacities of up to 100 vehicles in the short term as was the case during the 2010 Olympic Winter Games.

Figure 42: Whistler Transit Centre.



Performance

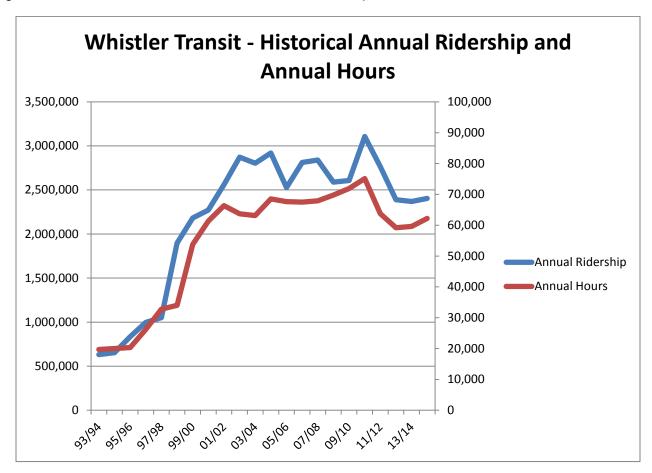
PERCEPTION OF TRANSIT IN WHISTLER

In BC Transit's 2015 customer Satisfaction Tracking survey, 74 per cent of people surveyed in Whistler said transit is "a very important part of the community". This is representative of Whistler's status as one of the top-performing systems in British Columbia. The development of the transit system aligns closely with the RMOW's commitment to environmental sustainability and its support of the preferred modes of transportation of walking, cycling, using transit, and carpooling.

PERFORMANCE OF TRANSIT IN WHISTLER

Ridership information in Whistler is collected and analyzed using magnetic swipe card data from the bus farebox and observational data from transit operators. In 2013/14, Whistler's transit ridership was 2,368,692, which is an increase from the previous year.

Figure 43: Whistler Conventional Transit Annual Ridership and Annual Hours.



Source: BC Transit IPS Actuals (1993-2014)

The Whistler Transit System has one of the highest productivities in the province, boasting an average of 40 passenger rides per service hour. This is due in part to the extensive schedule development work that is undertaken with each service season change each year.

Peer assessment typically involves comparing one community to other communities with similar population, annual service hours, and annual ridership. Benchmarking in this way can help convey the system's strengths and weaknesses, as outlined below. It is important to note that costs vary

significantly across the province due to capital investments and operating conditions (climate, topography and passenger loads) and personnel costs – which are often driven by local cost of living - and agreements.

Benchmarking Whistler against communities with similar populations can be misleading given Whistler's *population equivalent*. *Population equivalent* reflects Whistler's base population of about 10,000 in combination with its visitor and commuting employee population for a total population of about 28,800 in 2014.

Similarly, benchmarking Whistler Transit against other transit systems with similar ridership doesn't accurately illustrate Whistler's performance given its unique population. To remedy this, the Whistler system has been benchmarked here against a variety of communities in Table 15 below; some with similar population to Whistler's *population equivalent*, and some with similar annual ridership numbers.

Table 15: Whistler Conventional Transit Performance.

	Approximate Service Area Population	Annual Service Hours	Annual Ridership	Rides Per Hour	Cost Per Ride	Total Cost Per Hour*	Operating Cost Per Hou	 Net Local Cost Per Hour**	Annual Cost Recovery
Whistler	10,000^	59,619	2,368,692	39.7	\$4.06	\$161.37	\$139.62	\$22.78	27.1%
Fort St. John	29,739	11,058	100,575	9.1	\$17.74	\$161.31	\$147.98	\$78.26	7.2%
Squamish	18,000	12,021	248,371	21	\$6.85	\$141.43	\$129.07	\$58.64	14.4%
Kootenay Boundary	30,307	18,982	341,368	17.5	\$7.93	\$138.62	\$118.94	\$64.55	13.2%
Nelson	10,313	11,145	263,010	23.6	\$5.39	\$127.10	\$110.23	\$42.98	24.2%
Kamloops	80,000	106,192	3,421,960	32	\$3.73	\$120.13	\$102.97	\$35.20	29%

^{*}Total Cost Per Hour is Total System Cost divided by annual service hours

Table 15 illustrates that although Whistler is unique, it performs very strongly across BC Transit systems.

Higher operating costs in Whistler are attributable to its, extended hours of operation, operating environment (cold climate, variable topography, consistently heavy passenger loads over long-spanning operating hours) and reflect the high local cost of living for Whistler Transit employees.

^{**}Net local cost per hour is net cost after provincial contribution, revenue and external funding offsets have been considered ^Whistler Service Area permanent population estimated at 10,000, while the daily population equivalent is 28,000. Source: BC Transit IPS Actuals (2013/14)

Key Conclusions – Whistler Transit System

- The Whistler Transit System has established itself as one of the top-performing systems in the province. Continued success can be realized by prioritizing service optimization and gradual resource increases.
- Whistler continues to establish itself as an all-season recreation destination, inviting new
 populations to visit and live in Whistler at all times of year. Changes in snow production,
 seasonality in general, and related seasonal spikes in demand will continue as climate change
 impacts are realized throughout the Sea to Sky region. The Whistler Transit System will require
 agility and versatility in order to continue to serve its local and visiting populations.
- The Free Village Shuttles are a critical part of the circulation system of Whistler Village, continually pumping people between activity centres and thus playing a major role in the economic vitality of the community and to the success of the Whistler Transit System.
 Increasing review and analysis of these services is important to ensuring maximum efficiency.
- Whistler's transit infrastructure, vehicles, and facilities are well-equipped to accommodate growth in the system over the life of the Transit Future Plan.
- The Whistler Transit System is a unique but strong performer among peer transit systems in B.C.

Transit in the Pemberton Valley

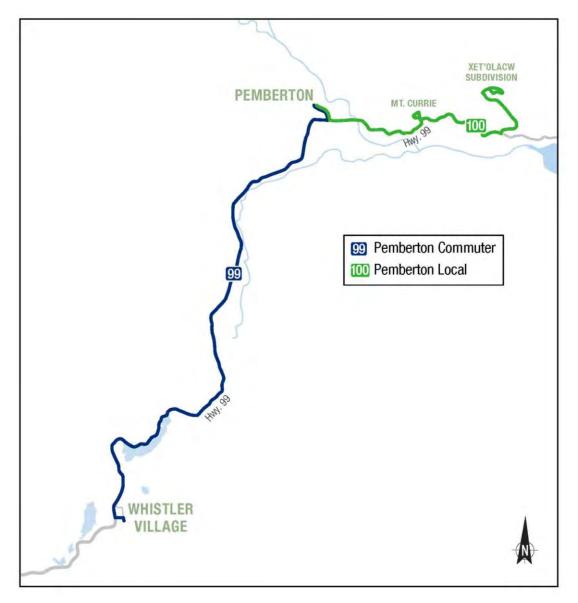
Established in 2000, the Pemberton Valley Transit System comprises two service types, described below. The system is operated by Whistler Transit Ltd. who subcontracts the delivery of local trips in The Pemberton Valley to a local taxi company.

Routes

The Pemberton Commuter (Route 99) operates four round-trips per day between the Village of Pemberton and Whistler Village.

The Local Pemberton service (Route 100) provides seven hours of service per day that links the Village of Pemberton with the Lil'wat Nation communities of Mt. Currie and Xet'olacw.

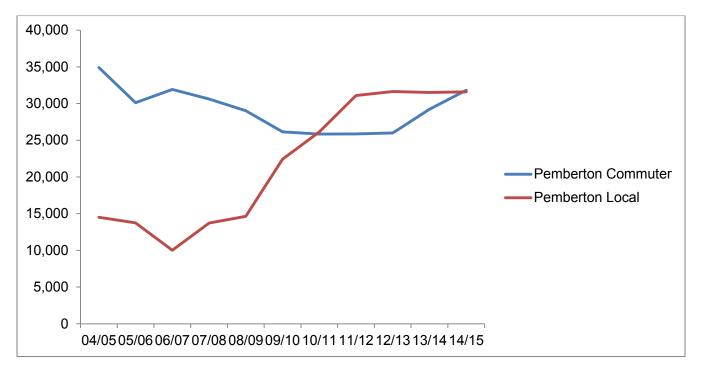
Figure 44: The Pemberton Valley Transit System, 2015.



Ridership

The Pemberton Local system's ridership has doubled in the last ten years, while the Pemberton Commuter's ridership has plateaued at just over 30,000 rides per year.

Figure 45: Pemberton Commuter & Pemberton Local Transit Annual Ridership and Annual Hours.



Significant latent demand has been observed both locally and regionally, meaning that expansions of these systems would likely yield continued ridership growth.

Service Profile

The Commuter Service provides four trips per direction per day.

Table 16: Pemberton Commuter Transit Service Profile, 2015.

Leave Whistler	Arrive Pemberton	Leave Pemberton	Arrive Whistler	
6:20 a.m.	6:57 a.m.	7:00 a.m.	7:37 a.m.	
7:40 a.m.	8:17 a.m.	8:20 a.m.	8:57 a.m.	
4:45 p.m.	5:22 p.m.	5:25 p.m.	6:02 p.m.	
6:05 p.m.	6:42 p.m.	6:45 p.m.	7:22 p.m.	

Local transit service in Pemberton is provided by Pemberton Taxi Ltd. on taxi vans that deliver local Pemberton transit service which operates service seven days per week, 365 days per year.

Table 17: Pemberton Local Transit Service Profile, 2015.

Pemberton	Mt. Currie	Xet'olacw Stop #1	Xet'olacw Stop #2	Mt. Currie	Pemberton	
5:57 a.m.	6:09 a.m.	6:24 a.m.	6:30 a.m.	6:45 a.m.	6:57 a.m.	
7:17 a.m.	7:29 a.m.	7:44 a.m.	7:50 a.m.	8:05 a.m.	8:17 a.m.	
11:25 a.m.	11:37 a.m.	11:52 a.m.	11:58 a.m.	12:13 a.m.	12:25 a.m.	
2:00 p.m.	2:12 p.m.	2:27 p.m.	2:33 p.m.	2:48 p.m.	3:00 p.m.	
3:55 p.m.	4:07 p.m.	4:22 p.m.	4:28 p.m.	4:43 p.m.	4:55 p.m.	
5:25 p.m.	5:37 p.m.	5:52 p.m.	5:58 p.m.	6:13 p.m.	6:25 p.m.	
6:45 p.m.	6:57 p.m.	7:12 p.m.	7:18 p.m.	7:33 p.m.	7:45 p.m.	

Fares

Fares vary by demographic and fare type in the Pemberton Valley.

Table 18: The Pemberton Valley Transit Fare Structure.

	Cash		Tickets	Tickets (10)		Monthly Pass		6-month Pass	Annual	Pass
	Commuter	Local	Commuter	Local	Commuter	Local	Commuter	Local	Commuter	Local
Adult	\$4.50	\$2.50	\$36	\$20	\$95	\$65	\$340	\$330	\$910	\$624
Seniors 65+	\$4	\$2	\$30	\$18	\$65	\$50	\$235	\$255	\$620	\$480
Student	\$4	\$2	\$30	\$18	\$65	\$50	\$235	\$255	\$620	\$480
Children 4 or under						FREE				

Passengers can transfer to the Pemberton Commuter Service with a The Pemberton Valley or Whistler Transit Pass when the \$2.00 top-up fare is also paid. Passengers on the Pemberton Commuter can transfer onto the Whistler Transit System without an extra charge.

Fleet

Whistler Transit Ltd. operates two Conventional, heavy-duty buses for the Pemberton Commuter Service.

These single-door buses can transport up to 67 total passengers (43 seated) between the Village of Pemberton and Whistler Village.

Figure 46: Single-Door Conventional Transit Bus.



The Commuter's heavy-duty bus fleet is equipped with bike racks on the front of each vehicle that can accommodate up to two bikes per rack.

Figure 47: Bike Rack on Conventional Transit Bus.



Bike rack use on Commuter buses is moderate. Throughout the Transit Future Plan's Participation process, stakeholders expressed a need for increased bike capacity on buses, including racks that can accommodate wider bike tires.

The Pemberton Local Transit service is delivered with private taxi vans.

Bus Stops

Currently, there are 21 bus stops in Pemberton, including the four that are used for the Commuter Service. Twelve of these stops include transit shelters, including the canopy at the train station.

Figure 48: Pemberton Bus Shelter.



While the Local system serves dedicated bus stops, Customers can also flag a bus to stop on designated roads due to the rural nature of this service.

Bus Exchange

There is no bus exchange in Pemberton today. Buses converge on the north side of Frontier Street near the AG Food store lot in downtown Pemberton.

On the Whistler end of the Pemberton Commuter service, buses converge at the off-street Gondola Transit Exchange (GTEX) adjacent to Skiers Plaza, linking the transit system to Whistler Village. This exchange is described in more detail in the *Transit in Whistler* section.

Park & Ride

While no formal facility exists in The Pemberton Valley today, the introduction of regional service of any kind and the continued growth of its Commuter Service will require the identification of an appropriate site or multiple sites that can be developed for this purpose. Formalized Park & Ride facilities can also deter transit passengers from parking in nearby neighbourhoods.

Operations and Maintenance Facility

The Pemberton Commuter Service shares the Whistler Transit Operations and Maintenance Facility, which was designed and built to accommodate transit service growth in the area to 2050.

Figure 49: Whistler Transit Centre.



Under its current operation, the Pemberton Local Transit service stores and maintains its own vehicles in Pemberton.

Performance

PERCEPTION OF TRANSIT IN THE PEMBERTON VALLEY

The Pemberton Valley Transit System is a valued asset in the Village and outlying areas. Demand for increased local service demonstrates that the system is valued in The Pemberton Valley. The regional service has proved popular among employees commuting to Whistler as well as residents destined for social activities, and demand for increased services has been heard throughout the Transit Future Plan. Pembertonians are very supportive of transit.

PERFORMANCE OF TRANSIT IN THE PEMBERTON VALLEY

Peer assessment typically involves comparing one community to other communities with similar population, annual service hours, and annual ridership. Benchmarking in this way can help convey the system's strengths and weaknesses, as outlined below. Operating costs vary significantly across the province due to operating conditions (climate, topography and passenger loads) and personnel costs - which are often driven by local cost of living - and agreements.

Pemberton Commuter Service

The Commuter service in Pemberton performs relatively well among its peers, with room for improvement as ridership increases with service hour expansion.

Table 19: Pemberton Commuter Performance.

	approximate service area population		annual ridership	rides per hour	cost per ride	Total cost per hour*	Operating Cost Per Hour	Net Local Cost Per Hour**	annual cost recovery
Pemberton Commuter (Whistler to Pemberton)	6,173	1,953	29,234	15	\$11.89	\$178.02	\$174.83	\$37.31	=
Cowichan Valley Connector (Duncan to Victoria)	82,200	4,524	86,294	19.1	\$11.44	\$218.40	\$65.48	\$22.96	46.5%
North Okanagan Connector (UBCO to Vernon)	55,135	3,756	92,272	24.6	\$6.19	\$151.99	\$85.90	\$53.19	14.7%

^{*}Total Cost Per Hour is Total System Cost divided by annual service hours

Source: BC Transit IPS Actuals (2013/14)

Pemberton Local Service

Since its inception of service, transit ridership on the local service has grown steadily. The service performs well among its peers, and performs well for its size and service area.

Table 20: Pemberton Local Performance.

	approximate service area population		annual ridership	rides per hour	cost per ride	Total cost per hour*	annual cost recovery
Pemberton Local	3,000	2,980	31,515	11	\$4.86	\$51.44	=
Okanagan - Similkameen	1,844	1,707	7,839	4.6	\$16.44	\$75.51	11.5%
Hazeltons Regional	3,524	2,568	13,994	5.5	\$16.76	\$91.22	12.7%

^{*}Total Cost Per Hour is Total System Cost divided by annual service hours

Source: BC Transit IPS Actuals (2013/14)

Key Conclusions - The Pemberton Valley Transit System

- Regional Transit in the Sea to Sky corridor today is limited to the Pemberton Commuter. The limited service frequency on this route yields strong ridership.
- Other regional service in the past has been well-utilized, and demand for service across the region and into neighbouring regions has been observed.
- The Pemberton Commuter performs well amongst its peer regional services, with room for improvement as the system expands.
- This facet of regional service is comfortably accommodated at the Whistler Transit Operations and Maintenance Facility. Future Regional and Interregional Transit service expansion will require additional vehicles and infrastructure, including bus stops with shelters, transit exchanges, and Park & Ride sites.
- It will be important to build on the successes of historical regional service when examining future opportunities for Regional and Interregional Transit service expansion in the Sea to Sky area.
- Demand for increased regional service across the Sea to Sky area has been observed, with transit access to Metro Vancouver and between Squamish, Whistler, and Pemberton being requested. Similarly, demand for increased coverage, span, and frequency of the Local Transit System has also been observed.
- Any expansion of the Local Transit System will require the identification of additional vehicles
 and facilities in Pemberton, including bus stops with shelters, a transit exchange, a Park & Ride
 site, and a local Operations and Maintenance Facility. No Operations and Maintenance Facility
 exists in the Pemberton Valley today, so expansion of the Local Transit System would require a
 significant amount of resources.

Sea to Sky Transit Future



Participation

The development of the Sea to Sky Transit Future Plan was highly collaborative and included BC Transit, the Squamish-Lillooet Regional District, the local governments of Squamish, Whistler, and Pemberton, Lil'wat First Nation, Squamish First Nation, Transit System staff and contractors from Squamish Transit, Whistler Transit, and The Pemberton Valley Transit, the public, and representatives from a wide array of stakeholder organizations.

The Participation process was designed to be inclusive, reaching riders and non-riders alike.

Partner Participation

Transit Future Plan partners and decision-makers in the Sea to Sky area were engaged continuously throughout the development of the plan. This included presentations, workshops, and in-person and phone meetings with:

- Squamish-Lillooet Regional District staff and Board Area Directors
- District of Squamish staff, Council, and various Committees of Council
- Resort Municipality of Whistler staff, Transit Management Advisory Committee, and Council
- Village of Pemberton staff and Council
- Lil'wat Nation staff
- Squamish Nation staff
- Provincial Government of British Columbia Members of the Legislative Assembly
- BC Transit staff

Ongoing communication and collaboration ensured alignment with strategic goals in the Sea to Sky area and its communities.

Community Participation

Members of the public were engaged over two phases in the Sea to Sky Transit Future Plan process to ensure that the final plan reflects the needs and priorities of the community.

METHODS

The two-phased Participation process for the Sea to Sky Transit Future Plan included a variety of methods, as described below.

Sea to Sky Project Website

Dedicated web pages were established for the duration of the Sea to Sky Transit Future Plan on the BC Transit website.¹

These pages provided information and materials for the Transit Future Plan process, as well as updates on opportunities for involvement.

http://bctransit.com/whistler/transit-future/sea-to-sky-transit-future-plan, and

http://bctransit.com/pemberton-valley/transit-future/sea-to-sky-transit-future-plan.

¹ http://bctransit.com/squamish/transit-future/sea-to-sky-transit-future-plan,

Advertising and Media

A variety of methods was used to advertise opportunities for getting involved in the Participation process. Print media for each phase of public engagement included press releases, advertisements in local papers, and posters at bus shelters and on-board buses. Digital media used to promote involvement in the Sea to Sky Transit Future Plan included posts on various social media channels by BC Transit and local and regional government partners.

Local media published a variety of stories in each phase, detailing the Participation process and outcomes.

Communication

The Participation process included ongoing communication with stakeholders and the public. People were also welcomed to submit questions and suggestions to the Transit Future Plan team via email, letter mail, or phone.

Survey

Surveys soliciting feedback in each phase were available in hard copy on in-service buses and at Transit Future Bus events. Identical electronic copies were hosted on the Sea to Sky Transit Future website, and were available on iPads at Transit Future Bus events.

Transit Future Bus Tour

The Transit Future Bus is a retrofitted Conventional-sized bus that BC Transit brings to communities across B.C. to promote the development of Transit Future Plans. In the Sea to Sky area, staff welcomed the public aboard the parked bus to get information and provide feedback through interactive displays. The bus also featured a kids' zone where kids were invited to draw pictures of future transit.



The Transit Future Bus visited the Sea to Sky region in March and December 2014, visiting Squamish, Squamish Nation, Whistler, Pemberton, and the Lil'wat Nation in Mt. Currie.



Stakeholder Workshops

Stakeholder workshops were hosted in Squamish, Whistler and Pemberton in each phase of public engagement, for a total of six workshops over the development of the Transit Future Plan.



These workshops included representatives from various organizations in each community and the region. Members of the public who expressed interest were also invited to attend. Content at these workshops was the same as the information BC Transit solicited feedback on from the general public. The purpose of these workshops was to collect more stakeholder- or user-specific information from people and organizations in the Sea to Sky area.

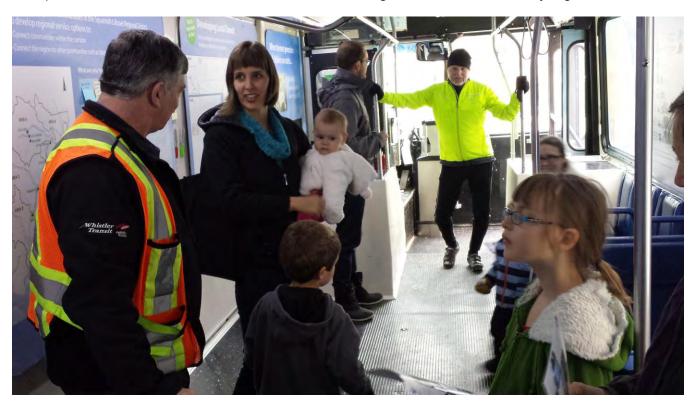
Table 21 includes highlights from the Transit Future Plan Participation process.

Engagement Activity	Participants		
Transit Future Plan webpage in 2014/15	80,000+ visitors		
Transit Future Bus	800+ visitors		
Surveys	500+ completed		
Key Stakeholder Workshops	100+ attendees		

PHASE 1 PROCESS: MARCH - APRIL 2014

Before Phase 1 began, a stakeholder database of nearly 150 people was built collaboratively between BC Transit and Transit Future Plan partners. This database grew as the Participation process moved forward.

In Phase 1, members of the public and key stakeholders were asked to provide information about their communities and their transit systems. A great deal of information about how people use the existing transit system was collected, and helped shape the development of the Local, Regional, and Interregional Transit Future networks discussed later in the Transit Future Plan. Predictably, the majority of survey respondents were transit users, with those respondents who do not use transit citing infrequent service as the number one reason for not using transit in the Sea to Sky region.



Key Participation Outcomes

Key insights gathered in Phase 1 include:

- 31 per cent of responses requested transit service to new areas, including:
 - Metro Vancouver (Downtown Vancouver, North Vancouver, YVR, Horseshoe Bay, Lions Bay)
 - Reinstatement of the Squamish-Whistler Commuter
 - o Summer service to Alice Lake, Shannon Falls, Paradise Valley, Stawamus Chief
 - D'Arcy

- 9 per cent of responses proposed new ideas to improve the passenger experience
 - Automated Stop Announcements
 - Lower fares / integrating fares with other costs such as ski hill passes
 - Fares based on distance travelled
 - Buses better suited to highway driving (comfort, speed)
 - Ski racks
 - o Better bike racks
 - Better schedule information posted at stops
 - Better sidewalks to stops
 - Garbage cans and recycling bins at stops
- 27 per cent of responses requested changes to the existing transit service, as described below:

Frequency

- Additional Pemberton trips (Local and Commuter)
- General frequency improvement requests across all systems
- Better frequency to Emerald Estates in Whistler
- More buses to Quest University in Squamish
- Better frequency to Function Junction in Whistler
- Improve service to Alpine Meadows in Whistler
- Better frequency to Staff Housing in Whistler

Service Span

- Later service to Pemberton from Whistler
- General requests for later service in Squamish and The Pemberton Valley systems
- Better Sunday service in Squamish
- Matching spring, summer, fall service to what is provided in winter in Whistler
- Later service for handyDART in Squamish
- Reguests for 24/7 service in Squamish
- Earlier service start in Squamish

Routes

- Route from Valleycliffe to Brackendale in Squamish
- More buses stopping in Tamarisk in Whistler
- More buses and stops into Spring Creek in Whistler
- Buses should service both Function Junction and Cheakamus in Whistler
- Direct service to Spring Creek from Whistler Village and to/from Function Junction and Cheakamus Crossing

Scheduling

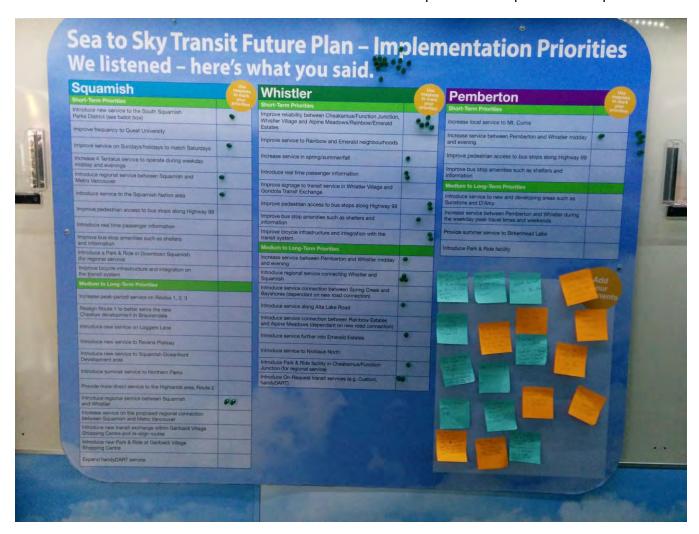
- Better schedule reliability across all systems
- Better connections between buses in Squamish and Whistler
- Schedule around work shift times within region

A significant amount of feedback on technology was heard throughout the Participation process. Technology and transit is discussed later in the *Transit Future Foundations* section.

All of the feedback collected in Phase 1 helped shape the Transit Future priorities that were presented for refinement in Phase 2.

PHASE 2 PROCESS: DECEMBER 2014 – JANUARY 2015

The feedback collected in Phase 1 about what people felt was and wasn't working in their transit systems helped shape the key consultation topics for Phase 2. In Phase 2, draft vision, goals, and Local, Regional and Interregional Transit networks were presented for feedback and collaborative refinement. People were also invited (online and in person) to add their own suggestions. Additionally, Phase 2 included information on the Transit Future Plan development and implementation process.



Developing inspirational statements for the Sea to Sky region that could capture the unique needs and desires of each community was a necessarily iterative process. The vision and goals were shaped with stakeholders and members of the public by adding words and ideas that would make the vision and goals meaningful and actionable. Stakeholders were able to hear what was important to their neighbours, which contributed to the Plan's focus on inclusion.



Similarly, people offered ideas about how and where to expand the Local, Regional and Interregional Transit networks, identifying gaps in the existing networks as well as areas for future expansion. These networks were developed iteratively over winter 2014.



Indicated by feedback collected on-board the Transit Future Bus, as well as at stakeholder workshops and online, people were invited to vote on the service and infrastructure options they felt were the most important, and on which timeline (e.g. priorities for immediate implementation, priorities for long-term implementation, etc.). The outcomes of this process are detailed in the following section.

KEY PARTICIPATION OUTCOMES

Sea to Sky Region

Options to expand Regional Transit service and introduce Interregional Transit service garnered significant positive feedback throughout the Participation process. Residents in Squamish, Whistler, and the Pemberton Valley advocated for reliable, frequent transit access between these three communities, as well as to Metro Vancouver. Tourists who visited the Transit Future Bus also expressed significant interest in Regional and Interregional Transit service for the Sea to Sky.

Providing real-time service information and using technology to enhance the passenger experience was also discussed widely for Regional and Interregional Transit options.



Squamish

The most popular short-term priority of the public for the Squamish area was by far an Interregional service to Metro Vancouver. Other short term priorities that were frequently selected included improved Sunday and holiday service, improved bicycle infrastructure and integration on the transit system, and improved frequency to Quest University.

The most popular medium- to long-term priority for Squamish was to increase the service on the proposed Interregional connection to Metro Vancouver once it is implemented. This was followed closely by the reintroduction of regional service to Whistler, demonstrating the importance of regional connections to Squamish area residents. Increasing service levels, improving directness on existing Local routes, and expanding handyDART service were also noted as top priorities.



Additional ideas that were shared as priorities for consideration in Squamish include:

- Service to new areas such as Cheekye, Highlands, Loggers Lane, Ravens Plateau, Squamish Oceanfront Development area
- Implementation of more *express* service (higher frequency service with fewer stops)
- Implementation of Wi-Fi on buses
- More youth-focused service to Local and regional recreation destinations on evenings and weekends
- Improving transit's image to attract more riders make transit cool by improving amenities and service
- Improving availability of fare products
- Improved capacity for bikes on buses (wider tire slots on racks, more carrying capacity), as well
 as making various infrastructure and operational changes to improve bike-bus integration
 (reserve-a-rack system on the bus, more bike-friendly amenities at bus stops and transit
 exchanges, etc.)

At the request of the District of Squamish, in 2014 BC Transit also presented a draft plan for the South Squamish Parks District pilot transit service, and collected feedback on this proposed pilot at the Transit Future Bus events and online. A good deal of support and interest was heard for the proposed pilot service, which could provide summer service from downtown Squamish to Shannon Falls Provincial Park, the Sea to Sky Gondola Basecamp, and Stawamus Chief Provincial Park. This option is described in more detail in Squamish's *Transit Future* chapter.

Whistler

The highest-ranking priority of the public in Whistler was to increase service in spring, summer and fall. Service is currently increased in winter to meet travel demand created by Whistler's seasonal population spike. Locals have requested that the same or similar levels of service be maintained year-round. Participants also indicated that the implementation of real-time information is of high importance. Various formats and ideas for this were shared. Improved service reliability continues to be a top priority for transit passengers in Whistler.

Other top priorities included:

- Improved / safer access to bus stops along the Sea to Sky Highway (lighting, dedicated / segregated pedestrian areas)
- Collaboration and integration with private bus operators to meet regional travel demand
- Availability of a seasons' transit pass linked with ski seasons' pass
- Improved capacity for bikes on buses (wider tire slots on racks, more carrying capacity), as well
 as making various infrastructure and operational changes to improve bike-bus integration
 (reserve-a-rack system on the bus, more bike-friendly amenities at bus stops and transit
 exchanges, etc.)



In the medium- to long-term, the top priority was the reintroduction of service connecting Whistler and Squamish, as well as a connection between Whistler and Metro Vancouver, highlighting the importance of regional connections to people in the Sea to Sky area.

The Pemberton Valley and Area

The short-term priorities in the Pemberton Valley all received similar levels of support from the public, with increased service between Pemberton and Whistler during the midday and evening being the most frequently-heard priority.

Likewise, in the medium to long-term, people's top priority was increased service between Pemberton and Whistler during weekday peak times and weekends.

Overall, improvements to passenger amenities such as pedestrian access, bus stop facilities, and the introduction of a Park & Ride received considerable interest.



Additional priority ideas from stakeholders and the public included:

- Service beyond the Village of Pemberton to D'Arcy (contingent on road infrastructure improvements coordinated between local, regional, and Provincial Governments as well as with First Nations)
- Improved capacity for bikes on buses (wider tire slots on racks, more carrying capacity), as well
 as making various infrastructure and operational changes to improve bike-bus integration
 (reserve-a-rack system on the bus, more bike-friendly amenities at bus stops and transit
 exchanges, etc.)

Outcomes of the Participation process have directly informed the service and infrastructure recommendations found in the Transit Future Plan chapters of this document.

A complete summary of the feedback collected in each Participation phase is included on BC Transit's Transit Future Plan webpages for Squamish, Whistler, and The Pemberton Valley.

Vision, Goals and Targets

The vision and goal statements for the Sea to Sky Transit Future Plan were developed by the people of the Sea to Sky region. These statements can function as a barometer, allowing the public and decision-makers in the Sea to Sky area to ask:

By making these changes, are we getting closer to achieving our collective

Transit Future vision and goals?

Vision

The vision statement is based on the overarching visions captured in existing strategic plans in the Sea to Sky area. Collaboration with stakeholders, the public, and government and First Nations partners has helped shape the vision through four different versions, with the final vision statement below representing what the Transit Future Plan aims to inspire:

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

Goal statements reflect the vision and represent the hoped-for outcomes of the Sea to Sky Transit Future Plan between now and 2040.

As with the development of the vision statement, drafting the goals was an iterative and collaborative process with stakeholders, the public, and government and First Nations partners. The goals have also been developed in consideration of overarching goals captured in local and regional planning documents such as the SLRD's Regional Growth Strategy and each community's Official Community Plan. The goals have been crafted to reflect the most commonly-heard themes; **Inclusive**, **Integrated**, **Safe**, **and Sustainable**.

By 2040, local and regional public transit networks in the Sea to Sky area are:

For everyone

- Accessible, reliable, and convenient for residents and visitors of all ages and abilities.
- Affordable for passengers and our governments.
- Adaptable able to meet the changing travel needs of our unique communities and our region.

Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling

- Planned and operated collaboratively to provide seamless access to other modes of transportation, regionally and locally.
- Linked to walking and cycling infrastructure, such as trails, sidewalks, and bike parking, making linked trips easy.

Safe

- For passengers before, during, and after their ride.
- Secure, with bus stops and exchanges designed and located with security and comfort in mind.
- For all road users.

Environmentally Sustainable

- An attractive transportation option, enabling our communities to shift transportation modes and decrease the proportion of trips made by Single Occupancy Vehicles.
- Efficient, ensuring schedules and vehicles match the community's needs.

Transit Mode Share Targets

Transit Mode Share is the percentage of all trips that are made by transit in a given community, and is typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall.

Setting transit mode share targets and identifying methods for achieving these targets is a goal of the B.C. Provincial Government per its aims to mitigate provincial contributions to climate change. In transportation, this relates directly to reducing greenhouse gas (GHG) emissions by making more trips by active and alternative transportation modes. Alternative transportation is thought of as almost any mode of transportation other than single-occupancy vehicle driving, and in the Sea to Sky region, is known as a suite of *preferred modes*.

With this in mind, it is important to acknowledge that increases in active transportation can lead to increases in transit use and thereby transit ridership. Similarly, decreases in driving can be viewed as opportunities to increase transit mode share. Ongoing coordination with relevant local, regional, and provincial transportation planning activities should be given in setting and achieving future transit mode share targets.



The 2008 Provincial Transit Plan (PTP) states that by 2030, 5 per cent of all trips in areas outside of Vancouver and Victoria should be made by transit. Communities in the Sea to Sky region have already cumulatively achieved this target. Implementation of the Transit Future Plan will help the Sea to Sky region's transit mode share continue to increase.

Considering local targets described in strategic plans was an important first step in establishing transit mode share targets for Squamish, Whistler, and Pemberton.

While setting ambitious targets can incent change and investment, balancing the desire to dramatically increase transit mode share within a community's resource realities is important.

To reflect each community's unique land use, travel behaviour, and existing transit use, separate transit mode share targets have been developed for Squamish, Whistler and Pemberton. Transit mode share targets have been modestly set, and are expressed incrementally between today and 2040.

Table 22: Sea to Sky Transit Mode Share Targets.

	Sea to Sky Region	Squamish	Whistler	Pemberton
2015 Transit Mode Share		1.3%	15%	1.5%
2020 Transit Mode Share Target	5% by 2030	2.5%	16%	2%
2025 Transit Mode Share Target		5%	20%*	4%
2040 Transit Mode Share Target		10%	25%*	6%

These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process.

Transit service and infrastructure improvements, marketing and communications actions, fare strategies, and transit-supportive land use planning can result in more people taking transit, helping to achieve these targets.

^{*}Long-term targets for Whistler will be defined in coordination with the RMOW's Transit Management Advisory Committee or its forthcoming Transportation Advisory Group.

Transit Future Foundations

These priorities and principles will guide the implementation of any of the transit service and infrastructure recommendations that follow in each community's *Transit Future* sections.

Collaboration

To guide the Sea to Sky Transit Future Plan from vision to reality, an ongoing dialogue between the Province, BC Transit, and Transit Future Plan partners is required. These parties can use this Plan:

- As a tool to communicate the vision for transit in the Sea to Sky region
- To identify where and in what order key transit investments will occur
- To inform the three year service planning process
- To work with partners on integrating transit plans and investments with other major infrastructure plans and projects
- To continue to develop Sea to Sky communities in an environmentally- and fiscally-sustainable, transit-oriented way, by ensuring that land development plans consider future transit plans

Marketing and Communications

Marketing falls within BC Transit's purview and is complemented by Partner and Transit Operating Company efforts at the community level.

Marketing transit is a much more complex task than traditional advertising because it is not just about selling a product. Rather, it's about changing perceptions and behaviours. By using marketing techniques that go beyond providing information, transit can be positioned as part of a family of healthy, socially responsible transportation choices and give people more incentives and tools to change their behaviour. This can result in ridership increases, and in turn, increased transit mode share in Sea to Sky communities.

In alignment with BC Transit's Strategic Plan and in response to Transit Future Plan stakeholders advocating to improve the image of transit in the Sea to Sky region, BC Transit is committed to working with partners and operating companies to leverage Marketing and Communications efforts to increase ridership and improve passenger experience.

Sustainability

BC Transit's vision is to connect people and communities to a more sustainable future. This includes fostering financial and environmental sustainability in the delivery of transit services. In alignment with the Sea to Sky Transit Future Plan's vision and goals, transit expansion in the Sea to Sky region should be affordable to governments and passengers, and should contribute to the overall goal of decreasing GHG emissions in the region. This will require incremental, strategic growth paired with continuous service optimization – the process by which transit service is monitored and allocated to where it is needed on an ongoing basis.

Sound Planning

In general, the following best practice principles should be considered in developing the Sea to Sky Transit Future:

- Easy-to-Use: Routes should be direct and straightforward, and service frequencies and schedules should be consistent on each route and during each time period, where possible. Transit routes should be as direct as possible in denser areas and between major activity centres. Service may be less direct within rural neighbourhoods to improve service area coverage.
- Attractive: Transit routes should connect residents to the local neighbourhood centre, and transit trips between neighbourhood centres should be able to be made with no more than one transfer.
- **Convenient:** In general, bus stops should be located in areas that are safe to board and alight passengers, ideally near intersections, to minimize walking distances to transit.
- **Integrated:** Future arterial and collector roads should be designed to accommodate transit stops and transit priority measures.
- **Legible:** customer information should be designed to be straightforward with simple route and schedule information.
- Accessible: People with mobility and cognitive impairments should be provided with a range of transit options, including handyDART service, taxi programs, and fully accessible Conventional transit vehicles and bus stop infrastructure.
- **Safe:** Transit infrastructure should be planned, designed, and constructed per CPTED (Crime Prevention through environmental Design), as well as local, provincial, national, and industry standards and guidelines.
- Comfortable: Assigning the right bus to the right route is an important part of delivering effective transit service. Bus types should be determined by assessing passenger loads during the peak hour of a given operating period. On routes where buses are full or overcrowded, consideration should be given to operating larger buses or increasing service frequency. On routes where a small bus would accommodate passenger loads at peak times, consideration should be given to operating a smaller bus and maintaining existing frequency.

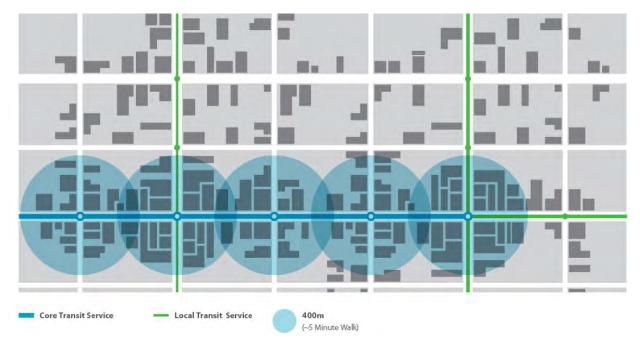
Similarly, ensuring that the right infrastructure is in place for customers is important. A bus stop can be implemented when demand is forecasted or observed, and a shelter should be considered for installation at a bus stop when any (or all) of the following criteria are met:

- The bus stop experiences a high volume of boardings
- The bus stop is a major connection point to other modes of transportation
- The installation of a transit shelter could encourage increased ridership
- Particular weather issues

Integrated Land Use and Transportation Planning

Transportation and land use planning must be integrated in order to best serve people, as illustrated in Figure 50.

Figure 50: Transit catchment areas.



Some examples of how integrated land use and transportation planning can be achieved in the Sea to Sky region include:

- Develop medium- to high-density residential areas (including in smaller and non-urban contexts, in order to be able to serve more people with transit more efficiently)
- **Develop non-residential density**: employment and other non-residential destinations can be much more efficiently served by transit when they are located together.
- **Develop mixed-use sites**: Combining people and amenities, especially in medium- and high densities, will enable efficient access by preferred modes of transportation like transit, walking, and cycling. Providing transit access to and from these concentrated areas can reduce single-occupancy vehicle dependence in the Sea to Sky region.
- Enable transit assessment of new developments: BC Transit encourages collaboration with local governments and other stakeholders in land use planning exercises to offer a multimodal transportation lens. To this end, BC Transit recommends that Whistler and Pemberton participate in BC Transit's Development Referral program, which enables the local government to send development or rezoning applications to BC Transit for transportation-focused review and comment.

As part of this referral process, BC Transit reviews the proposal and provides local government with comments on how the proposed development fits within the existing transit network, the outlook for future transit service to the development area, and comments on active transportation links or transit amenities that would make the development more transit-friendly. The District of Squamish currently participates in this program to good effect. More information on this program can be found by contacting <code>developmentreferrals@bctransit.com</code>.

Multimodal Integration

Communities in the Sea to Sky region aim to shift trips away from single occupancy vehicle driving to the preferred modes of walking, cycling, and using transit. Planning and design actions that can encourage multimodal transportation include ensuring that:

- Transit service connects to other transportation systems to allow passengers to conveniently connect to cycling and pedestrian networks, regional transit, ferry and rail passenger services, as well as custom transit services
- Transit routes are planned and designed to complement existing pedestrian and cycling
 infrastructure such as major walking paths or bike lanes, and likewise, new active transportation
 infrastructure is planned and designed to integrate with existing and planned transit routes
- Transit routes are planned and designed to serve areas that are difficult to access as a
 pedestrian or cyclist, such as areas with variable topography and steep grades
- Bike parking and/or storage is provided at transit facilities as well as on buses

Linking active transportation and transit is a key objective of the Transit Future Plan. BC Transit recommends collaboration with Transit Future Plan partners, transit operators, and key stakeholders across the Sea to Sky region to determine how best to combine preferred modes of transportation. Some examples of solutions that can be explored include:

- Improving pedestrian safety at and near bus stops along the Sea to Sky Highway
- Improving passenger comfort at bus stops and transit exchanges by providing amenities such as seating and climate protection
- Improving passengers' perception of safety at bus stops and transit exchanges by providing amenities such as lighting, information, closed-circuit television (CCTV), and emergency phones
- Implementing front-of-bus racks with wider tire slots and/or the ability to carry more than two bikes
- Implementing an online Request-a-Rack program for front-of-bus bike rack use
- Operating transit trips at specific times of day to allow bicycles on-board the bus (schedules can align with opening and closing times for major mountain biking lift operations in Whistler or for access to Quest University in the evenings).
- Amending existing safety guidelines to allow transit operators to allow additional bicycles onboard during off-peak periods so long as it deemed as safe for other passengers
- Retrofitting one or more special buses in summer by removing seating to allow on-board bike transport
- Undertaking data collection and analysis of bike rack use, both on buses and at transit facilities

Increasing Transit Service or Coverage

Before increasing transit service or coverage, and in advance of implementing the larger transit service and infrastructure recommendations in the Transit Future Plan, it is important to ensure that the existing transit systems are performing effectively.

Figure 51: Hierarchy of Transit System Investment.

Only when the bottom level is operating at a satisfactory rate should the next level be considered as an area for resource investment.

Priority order for consideration moves from bottom to top.

Expand transit service to new areas

Route- and system-level service standards and performance targets are met or exceeded

Buses are well-utilized, but aren't overcrowded, and transit is integrated with other modes of transportation

Transit service is reliable, safe, accessible and operates sustainably

Continuous Service Optimization

Implementing the Sea to Sky Transit Future Plan will be an incremental, and at times non-linear, process. Part of achieving the Transit Future Plan's vision, goals, and targets is dependent on continuous optimization of the transit system.

Service optimization includes assessing the existing system and finding qualitative and quantitative areas for improvement. Work can include reallocating resources from lower-performing routes to those that are higher performing, addressing service reliability and on-time performance, and enhancing the overall passenger experience.

This is captured in BC Transit's Annual Performance reporting, which provides a foundation for evidence-based decision-making about transit. All Transit Future Plan communities receive Annual Performance Summaries.

A key component of service optimization is achieving on-time performance, as discussed below.

ACHIEVING ON-TIME PERFORMANCE

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

For transit in the Sea to Sky region, the most common causes of service reliability issues are inclement weather and/or road conditions, traffic congestion, longer passenger boarding and alighting times, and insufficient scheduled running times.

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

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

Additional strategies to maintain and improve on-time performance include:

- Additional on-road supervision to monitor transit schedules
- The coordination of passenger loads to avoid poor departure spacing of buses and overcrowding
- When all-mode traffic volumes warrant it, the implementation of traffic signal priority and transitonly lanes or queue jump lanes at congested intersections can also help to reduce the variability in running times and balance headways to reduce the occurrence of bunches and gaps in service. Queue jump lanes enable buses to move to the head of intersections, and signal priority technology gives buses an advance, transit-only green light at intersections.

Technology and Transit

Technology presents tremendous opportunities to better engage and inform our customers, share best practices among employees and transit systems, reduce environmental impacts, and improve the efficiency and reliability of our services.

The public increasingly expects BC Transit to make use of the latest available technologies. Potential risks related to new technologies include costs associated with their implementation and the need to ensure that they are viable and compatible over the longer term.

In recognition of this reality, BC Transit is undertaking an *Information Technology Strategic Plan* to prioritize new technology investments and ensure that our future information systems are integrated, supported, and sustainable. Outcomes of the *Information Technology Strategic Plan* may benefit transit service delivery and passenger experience in the Sea to Sky region.

One example of BC Transit's commitment to developing new technologies is the use of *Smart Bus* technology. *Smart Bus* gathers information to assist transit agencies, and shares information outwardly to allow for improved communication and customer service. *Smart Bus* technology provides an integrated Intelligent Transportation System (ITS) on buses that may include some of the components in Table 23.

Today, BC Transit relies on various data collection methodologies to undertake continuous service optimization at the route- and system-levels. Sea to Sky communities could benefit from using these data collection and analysis tools throughout the life of the Transit Future Plan.

Table 23: Data Collection Methodologies at BC Transit.

Method / Device	What it Measures	Why it's Important	Notes
Automated Passenger Counter Data (APC) (High amount of Detail)	How many passengers board and alight a bus	Ridership information can influence stop locations, routing, vehicle selection, and scheduling	 Best tool for viewing ridership at the stop- and trip-level. Takes a representative sample over the course of several weeks / months to accurately estimate ridership. Passive system (requires no operator interaction).
Farebox Data (Medium amount of Detail)	 Records Farebox interactions Estimates how many passengers board a bus How these passengers pay 	Can build on ridership data and provide information on types of passengers, the usefulness of existing fare products, and future budgeting	 Counts swipes and tickets individually, ignores transfers and divides the cash by the full fare to estimate the number of cash passengers Cannot count people alighting Can be configured to allow the operator to record custom events (Fare Evasion, Transfer, etc.) Provides ridership data at the route- and systemlevel. Counts every single transaction/interaction with the farebox on equipped buses. Active System (requires operators to interact with the system).

Method / Device	What it Measures	Why it's Important	Notes
Automated Vehicle Locator Data (AVL) (High amount of Detail)	Where the bus is at any given time.	Provides transit passengers with real- time schedule information in the case of bus delays. Can assist in schedule refinement by identifying areas where delay is experienced.	 When merged with farebox or APC data, gives us the location of boardings alightings and farebox activity. Can be passive or active (Some systems require driver login).
Manual ridechecks	Anything that can be observed: Boardings Alightings Fare payment method Characteristics of passengers Operator performance Occasionally used to validate the performance of automated systems	Can provide information about passengers, fares, operators, and operating environment. Provides an opportunity for an inperson experience of a system in operation.	Even with electronic data collection systems, manual data collection is a useful validation tool.
Feedback from transit passengers, operators, stakeholders, and the general public	Can focus on any aspect of transit operation.	Commendations and concerns help BC Transit and the operating companies in the Sea to Sky region collaboratively, continuously improve service.	

Changes in technology are expected over the life of the Transit Future Plan, influencing costs, transit operations, environmental impacts and the passenger experience. Exploring technological advancements in vehicles, fuels, and in information gathering, analysis, and dissemination can positively impact transit ridership and operations. To this end, BC Transit is committed to working with Transit Future Plan partners to explore advancements in technology on an ongoing basis.

Transit Future Network

The Sea to Sky Transit Future Network has been designed with the passenger in mind, linking people to popular origins and destinations, aiming to provide a reasonable alternative to driving. The network builds upon the existing network's directness, reliability, and frequency, and has been created in consideration of current and planned land uses.

Transit Service Layers

The Transit Future Networks comprise five types of transit service. Together, the different layers of service create a comprehensive Transit Future Network to best meet the existing and future needs of communities in the Sea to Sky region.

Core Transit Network

Direct, frequent networks serve areas where higher travel demand is observed along key transportation corridors or arterial roads. These routes link people to major origins and destinations, often through multimodal exchanges or Park & Ride facilities. Stops are typically spaced 300 – 500m apart.

Local Transit Network

Local Transit Networks link people to work, school, basic neighbourhood amenities, and to the other network layers. Local Networks can sometimes overlap in segments with the Core Transit Networks, though they typically operate on collector or local roads. Stops are typically spaced 250 – 300m apart.

Also a part of the Local Transit Network, Dial-a-Ride or Paratransit can include on-demand service designed to provide transit service to low-density areas that cannot support fixed-route transit service. Some of the yellow shaded areas on the network maps labelled *Future Transit Expansion Area* may ultimately be served by Paratransit.

Custom Transit Network

handyDART

handyDART is a door-to-door service for Customers with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time. Providing this type of transit service is particularly important as people in the Sea to Sky region continue to age.

The handyDART service area encompasses residences and destinations within a 1.5 km distance from the existing fixed route systems. This service area definition draws from the Americans with Disabilities Act (ADA) legislation, which is commonly used as a technical source in Canada.

In addition to handyDART, other custom transit options may include Taxi Saver and Taxi Supplement for when the handyDART system is unavailable or at capacity.

Targeted Transit Network

Targeted Transit is a collection of transit services tailored to specific travel needs that cannot be met by the Conventional transit system. While no fixed route is identified, the transit service area is predefined. These include Regional and Interregional Transit networks.

REGIONAL TRANSIT NETWORK

Regional networks include public transit service *within* the Sea to Sky area. Regional transit service promotes local and regional economic development by linking Sea to Sky area residents and visitors to amenities, employment, and recreation in Squamish, Whistler, and the Pemberton Valley. Today, regional service connects Pemberton and Whistler. By 2040, frequency and span of this service will increase, and intraregional service between Squamish and Whistler will be reinstated.

INTERREGIONAL TRANSIT NETWORK

Interregional networks include public transit service *between* the Sea to Sky area and other regions, namely the Metro Vancouver region. Interregional Transit service will sustainably connect residents and visitors to Metro Vancouver, improving access to hubs like Vancouver International Airport and Horseshoe Bay Ferry Terminal.

Given that bus service to and within the area is already being offered by several Provincially-licensed private entities, public transit service does not need to replace private transportation services. Instead, a collaborative approach to regional and interregional bus service can be explored.

Phasing of the Sea to Sky's Regional Transit networks has not been definitively determined within the context of the Transit Future Plan.

Sections of regional service will be implemented and expanded based on travel demand, ridership, and continuous collection and analysis of other qualitative and quantitative data.

Figure 52: Sea to Sky Transit Future Regional and Interregional Networks. Regional & Interregional Transit Networks Current Regional Network Future Regional Network Future Interregional Network SQUAMISH To Metro Vancouver

Figure 53: Squamish Transit Future Network.

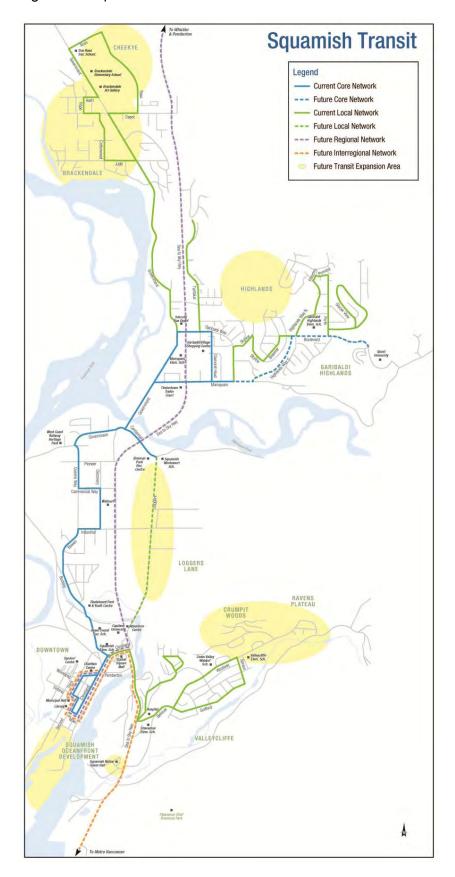


Figure 54: Whistler Transit Future Network.

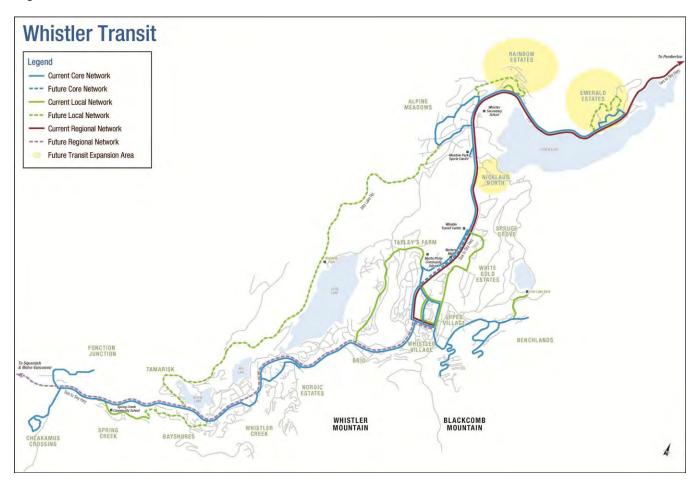
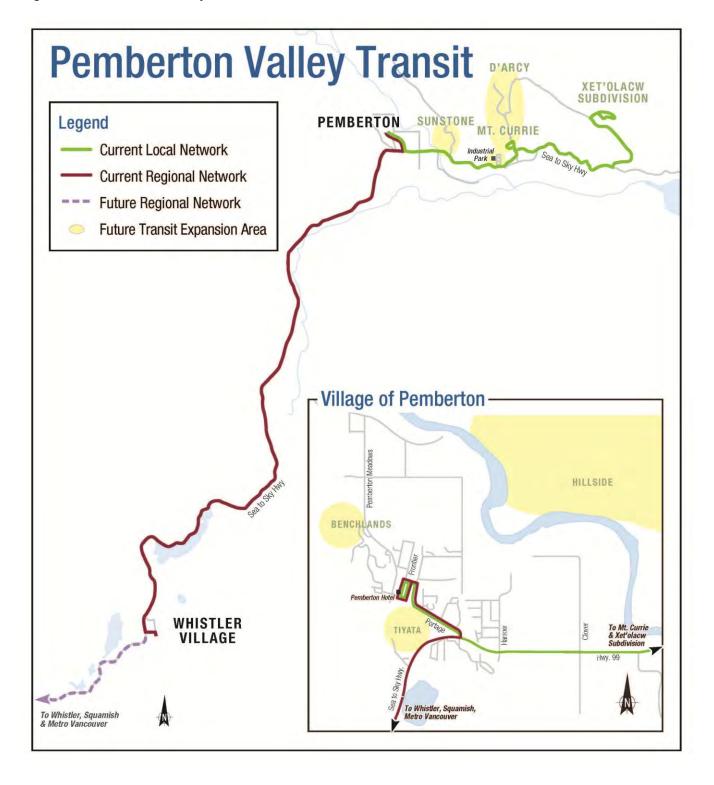


Figure 55: Pemberton Valley Transit Future Network.



Transit Future: Focus on the Sea to Sky Region

The Vision, Goals, and Transit Mode Share Targets outlined here guide the implementation of the Transit Future Plan. The service and infrastructure recommendations made later in this chapter align with these components and have been made to help achieve the Transit Future.

Vision

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

Transit systems in the Sea to Sky region will be:

- o For everyone
- Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling
- Safe
- o Environmentally Sustainable

Transit Mode Share Targets

The 2008 Provincial Transit Plan (PTP) states that by 2030, 5 per cent of all trips in areas outside of Vancouver and Victoria should be made by transit. Communities in the Sea to Sky region have already cumulatively achieved this target. Implementation of the Transit Future Plan will help the Sea to Sky area's transit mode share continue to increase.

Transit Future Network

Figure 56: Sea to Sky Transit Future Regional and Interregional Networks.



Note that the Transit Future network as envisioned here is not fixed – route numbers, route locations, and route operations are subject to change over the life of the Plan.

Regional networks include public transit service within the Sea to Sky region, linking the communities of Squamish, Whistler, and The Pemberton Valley.

Interregional networks include public transit service between the Sea to Sky region and other regions, namely the Metro Vancouver region.

By 2040, these networks will serve residents and visitors with frequent transit service seven days a week.

Network Service Standards: Frequency and Span

The success of the Regional and Interregional Transit Networks in the Sea to Sky region is not achieved by the service simply being implemented, as described in the Transit Future Foundations section of this Plan. Integrated and continuous planning, designing, monitoring, and optimizing of the transit network is required to achieve the Sea to Sky region's Transit Future. The monitoring and optimizing aspects of this work can be informed by tailored Service Standards that guide local governments and BC Transit staff in determining and managing community expectations regarding the level of transit service to be provided. Specifically, Service Standards for Regional Transit service outline the minimum acceptable span and frequency of transit service.

Span of service defines the operating hours that a route is in service. In general, regional services operate primarily during the peak periods, as this is when demand is highest. For the morning and afternoon peaks, the service should be designed to allow people to access typical employee start times in the destination communities.

As travel demand on transit services in the Sea to Sky region increases, the hours that transit operates should also increase, extending to off-peak periods including midday, evenings and weekends. Efficient, tailored service frequency and span meets demand when it is greatest, while also keeping operating costs in check.

BC Transit recommends the long term minimum Service Standards for Regional and Interregional Transit service be achieved over the life of the Transit Future Plan. These targets should be reexamined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 24: Sea to Sky Regional and Interregional Transit Service Standards.

Transit Service Type	Transit Service Description	Period	Minimum Transit Service Span	Minimum Transit Service Frequency
Regional	Regional networks include public transit service within the Sea to Sky region, linking the communities of Squamish, Whistler, and The Pemberton Valley.	Service of Saturday8:00 a.m.Service of Note that	ay 1. to 9:00 p.m. every 30-60 minute 1. to 6:00 p.m. every 60-120 minute 25 to and increase to	tes I may extend
Interregional	Interregional networks include public transit service between the Sea to Sky region and other regions, namely the Metro Vancouver region.	Service of Note that	liday n. to 5:00 p.m. every 60-120 minut t seasonal demand span and increase t	l may extend

Span of service extensions can be considered when the first and last hour of service has productivity greater than the average productivity on the entire route. Extensions of the span of service may also be triggered by seasonal fluctuations, or a major employer change in start or finish times.

Network Performance Guidelines

Performance Guidelines are unique evaluation tools that can be used to help plan new transit services, make adjustments to existing service, and measure how well the transit system is progressing towards achieving its goals. These guidelines will evolve with the growth of Regional and Interregional Transit services in the Sea to Sky region.

As a starting point, an approximate 10 per cent improvement over the baseline has been suggested here. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 25: Sea to Sky Regional and Interregional Transit Performance Guidelines.

Performance Measure	Definition	2014 Baseline (Regional)	2040 Target (Regional & Interregional)
Average rides per service hour	Measures the total volume of ridership as compared to the supply of transit service	15	17
Cost per passenger trip	Measures the average cost to provide service per passenger trip	\$11.89	\$10.75
Cost recovery	Measures the financial performance of the transit system, usually expressed in terms of total operating revenue after total operating expenses	-	30%

Trends will be monitored over time to determine if the system or routes are becoming more or less efficient.

Significant variance (+/-25%) from the target will place a route on an action list for further investigation, and will require more detailed analysis. For example, if efficiencies to the system are required, then routes that fall below the 25 per cent variance will be candidates for corrective action. Further, if expansion resources are available or resource re-allocation is being pursued, then routes that rise above the 25 per cent variance will be candidates for service improvement.

BC Transit will report on these performance measures annually to help guide planning decisions.

Sea to Sky Regional Transit Service and Infrastructure Recommendations

The recommendations in this section have been created and prioritized based on technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

Options do not represent all of the possible changes that could be made to the Regional and Interregional Transit systems in the region between today and 2040, but should serve as a starting point each time the systems undergo analysis or change. Recommendations vary in terms of required timelines, complexity, cost, and process, meaning that initiatives may not be undertaken linearly.

Efficiencies may be realized by developing partnerships with organizations providing existing regional and interregional bus service.

Phasing of regional and Interregional transit service options with local options has not been identified in this Plan. Regional and Interregional transit service options may be implemented at different times than the local transit service options that follow in the Squamish, Whistler, and Pemberton Valley chapters.

The realization of these recommendations and targets is contingent on:

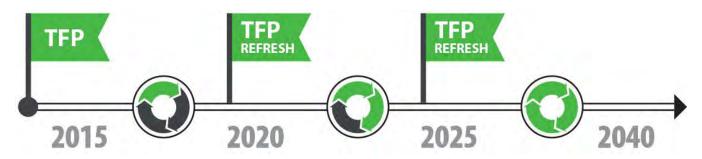
- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Note that any costs shown:

- Are approximate and are subject to change based on final operational and implementation details and timing
- Are based on 2014/15 Operating Costs
- Do not include provincial contribution to lease fees
- Do not include revenue offsets
- Do not include inflation

Transit Future Plan Refresh

Realizing the Sea to Sky Transit Future Plan requires a phased approach. Work undertaken will be evaluated every five years as part of BC Transit's Transit Future Plan Refresh process, as illustrated in Figure 58. Recommendations that have not been implemented will be re-examined, and new changes to the transit system can be explored. This Refresh also provides an opportunity to reflect collaboratively on lessons learned in the previous implementation phase.





Short Term - Explore Between 2015-2020

REGIONAL TRANSIT SYSTEM MANAGEMENT

R1. Undertake a Sea to Sky Corridor Transit Study

A corridor study can help determine detailed aspects of expanding regional and interregional Transit service, including phasing, funding, route alignment, key facility locations (stops, exchanges, Park & Ride sites, transit priority warrants), transit priority measures and continued stakeholder and community participation. This study will include the entire corridor (Metro Vancouver to the Pemberton Valley) and will be a collaborative exercise between BC Transit and all other participating partners, including relevant potential private sector partners.

R2. Explore the Development of a Sea to Sky Corridor Regional Governance Structure

Sea to Sky communities should explore the possibility of developing a regional governance structure to streamline the implementation of regional and interregional transit. This could enable more comprehensive system management and performance monitoring, and could involve establishing a Regional Transit Advisory Committee with an agreed-upon Terms of Reference and decision-making process.

The benefits of establishing some form of an integrated regional governance structure relates to adopting a more comprehensive and coordinated approach to transit planning and service delivery. Benefits which could potentially be achieved through regional cooperation and/or service integration for Regional and Interregional transit include:

Improved Rider Experience

- Potential fare integration and seamless transfers will provide a simple and more userfriendly environment
- With integration of transit systems, a comprehensive, simple and understandable zone based fare system could be developed
- Standardization of transit policies (e.g. transfers, free rides, service days, etc.) will reduce confusion and improve rider experience
- Coordinated marketing efforts could offer cost savings and effectively grow ridership

Operational Efficiencies

- Better integration of transit systems and routes in the region could enable more coordinated and direct trips
- o Integrated schedules will allow regional and local services to complement each other
- Fleet and vehicle maintenance facility optimization strategies could be pursued
- Cost savings could be converted into increased service levels
- Overall improved management of Local and Regional Transit Systems
- Explore the integration of existing service providers for economies of scale

Connections and transfers for Regional and Interregional transit can be coordinated. A coordinated approach would enable BC Transit and local governments, along with other partners, to plan for more comprehensive and integrated Regional and Interregional travel. Reassessing boundaries between transit systems could allow for:

- More direct trips to/between regional centres
- More connections between regional and local services
- Expanded service area
- Efficient scheduling and bus blocking: buses can be scheduled across the region as one system, resulting in direct trips and emphasizing transfer opportunities

Improved efficiencies will likely lead to increased demand and growth in Regional and Interregional transit ridership, which could lead to revenue growth.

TRANSIT SERVICE

The following service proposals include conceptual options for discussion purposes only. The feasibility of these options would be part of the process during the development of the Sea to Sky Transit Corridor Study (R1).

R3. Introduce weekday Interregional Transit service between Squamish and Metro Vancouver

Interregional Transit service would provide a low-emission travel option from the Sea to Sky area to Metro Vancouver and surrounding regions, boosting local and regional economic development and tourism. This transit connection would also link Sea to Sky residents to regional hubs such as Horseshoe Bay, the North Shore, downtown Vancouver, and YVR airport. Providing this interregional connection is a top priority of the public, stakeholders and local Partners.



The existing volume of travel between Squamish and Metro Vancouver is high and is continuing to grow. Implementing service along this corridor will vastly improve regional connections and also help reduce congestion along this corridor. This service is in high demand particularly by those commuting between Squamish and Metro Vancouver as well as those needing to access medical facilities, students travelling to post-secondary institutions and recreational destinations. The goal of this service is to be an attractive alternative to the private automobile by being competitive in travel time.

BC Transit recommends collaboration with Transit Future Plan partners, transit operators, and key stakeholders across the Sea to Sky region to undertake operational planning for this service. Operational planning includes bus route and bus stop planning, scheduling, and exploring partnerships for cost-sharing and service delivery. The detailed review of this service option should leverage the experience gained from recently introduced interregional connectors including the Fraser Valley Express and the Cowichan Valley Connector.

Coordination and analysis will need to be undertaken to determine phasing of this option with local implementation recommendations made for Squamish. While the recommendations are not mutually exclusive, resource availability will be a factor in implementation and phasing.

While variations of this service can be implemented later, the introductory service described here is based on the following assumptions:

- Introductory service includes weekday peak trips from 6:00 9:00 a.m. / 3:00 6:00 p.m. to primarily serve commuting passengers, especially from Squamish to Metro Vancouver.
- All bus stop locations, as well as start and end points in Squamish and Metro Vancouver would be determined through future detailed planning. To be competitive with the private automobile it

is recommended that the amount of bus stops be limited to improve the service's speed and efficiency.

- Service operates five days a week
- The service is integrated with Local Transit networks in Squamish as well as Metro Vancouver.

Approximate resources required to provide introductory transit service:

Initial High Level Estimate – Additional Annual Impacts					
R3: Introduce weekday Interregional Transit service between Squamish and Metro Vancouver					
Service Hours:	4,040	Passenger Revenue:	\$121,200		
Annual Ridership:					
Vehicles Required**: 3 Net Local Share of Costs: \$267,500					
		Provincial Share of Costs*:	\$237,900		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

R4. Introduce midday or evening Regional Transit service between Pemberton and Whistler

Travel demand on the Pemberton Commuter Service is growing continuously. There are currently four round trips per day on this service during the morning and afternoon periods that are designed specifically for commuters. Technical analysis and public engagement helped determine that expanding service in the midday and evening would improve access for recreation and tourism, shift employment, and access to amenities.

Increasing transit service span and frequency between Pemberton and Whistler can be achieved by adding two round trips during either the midday or evening on all day types. Additional analysis and consultation would take place prior to implementation to identify the ideal times for the expanded service.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts						
R4: Introduce midday or evening Regional Transit service between Whistler and Pemberton						
Service Hours:	1,100	Passenger Revenue:	\$27,300			
Annual Ridership:	Annual Ridership: 13,200 Total Cost*: \$176,500					
Vehicles Required**: 1 Net Local Share of Costs: \$85,000						
		Provincial Share of Costs*:	\$64,200			

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

TRANSIT INFRASTRUCTURE

R5. Establish a Park & Ride facility in downtown Squamish

To improve access to the proposed interregional connector between Squamish and Metro Vancouver, formalized Park & Ride facilities should be introduced along the corridor to encourage ridership. These Park & Ride facilities can include bike and car parking to encourage multimodal linked trips, and can help deter transit passengers from parking in nearby neighbourhoods.

R6. Examine existing transit exchanges to ensure that capacity is available for introduction of regional and interregional service

Depending on the preferred alignment of the new interregional service, the existing downtown Squamish transit exchange should be reviewed to ensure that adequate capacity is available. In addition, the customer and bus driver amenities should also be reviewed to ensure that it meets the short, medium and long term needs.

Since the routing alignment may also include service connections to Garibaldi Village, a potential transit exchange in this area should be considered to accommodate new service.

R7. Examine the impact of fleet increases to existing Transit Operations and Maintenance Facilities

Implementing any transit service recommendations in the Transit Future Plan may require new or expanded facilities in Squamish and/or Pemberton.

R8. Explore highway improvement measures on the Sea to Sky Highway at Britannia Beach

Improve highway safety and transit operations at this intersection by exploring congestion relief options.

Medium Term - Explore Between 2020-2025

TRANSIT SERVICE

Increase Interregional Transit service between Squamish and Metro Vancouver on weekdays and introduce service on weekends

As the ridership demand grows on the service linking Squamish and Metro Vancouver, it is important to expand the service to continue to attract new ridership. Increasing service frequency and span on weekdays and weekends is an important step toward improving the link between the Sea to Sky region to Metro Vancouver.



While variations of this service can be implemented later, this initial expansion is based on the following assumptions:

- Service is expanded on weekdays to provide frequency during the midday and evenings between 9:00am 3:00pm / 6:00 10:00pm
- Limited service is introduced on weekends, starting with four round trips per day, operating every two hours

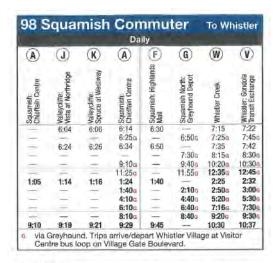
Reinstate Regional Transit service between Squamish and Whistler

On January 3, 2005, the Squamish-Whistler Commuter (Route 98) was implemented as a winter-only pilot project linking Squamish to Whistler.

The Squamish-Whistler Commuter pilot project was cost-shared between the District of Squamish and the Resort Municipality of Whistler until 2007/08. In April 2008 this service expanded to include year-round service in when Provincial Government funding became available. At this time, the RMOW committed to continue funding the pilot project for three years to the end of 2010.

A fare increase was implemented in 2010 to help offset rising operational costs, which impacted ridership, along with speculation about the stability of the service and future funding for it. The District of Squamish funded the local share of the service for six months beyond the RMOW's involvement, but ultimately the service ceased in 2011.

Figure 57: 98 Squamish-Whistler Commuter schedule, 2011.



ATTENTION: For up-to-date information on Greyhound schedules and fares, visit www.greyhound.ca or call Greyhound at 604-898-3914 Squamish, or 604-932-5031 Whistler.

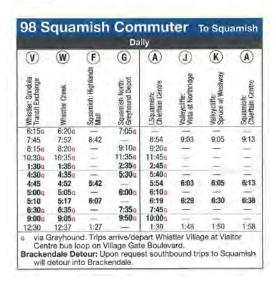
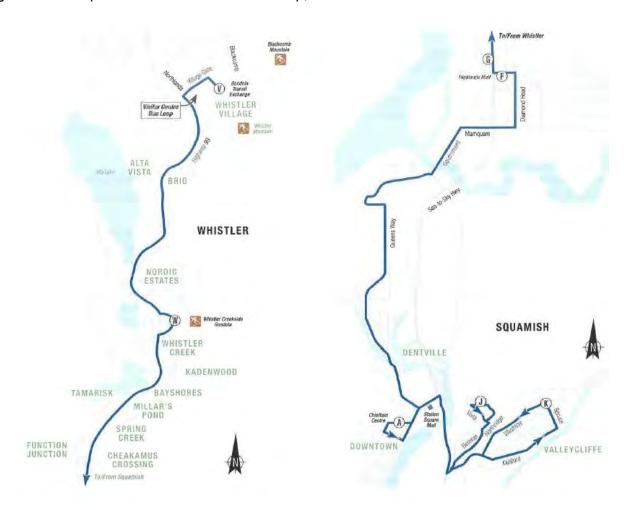


Figure 58: 98 Squamish-Whistler Commuter map, 2011.



Following the introduction of interregional service between Squamish and Metro Vancouver, there will be new incentive to reintroduce the Squamish-Whistler Commuter; linking all Sea to Sky communities to Metro Vancouver. The reintroduction of this transit service would provide transit access between Metro Vancouver, Squamish, Whistler, the Pemberton Valley and surrounding regions, boosting local and regional economic development and tourism, as well as providing improved access to employment, education, and healthcare. This connection will also link Sea to Sky residents to regional hubs such as Horseshoe Bay, the North Shore, downtown Vancouver, and the Vancouver International Airport. Providing interregional connections is a top priority of stakeholders, the public and local partners.



The existing volume of travel between Metro Vancouver, Squamish, and Whistler is observed to be high and is continuing to grow. Implementing public transit service along this corridor will help realize local, regional, and provincial benefits, and can help reduce GHG emissions and congestion along the Sea to Sky corridor. This service is in demand for recreation and tourism, and for local residents wanting to access amenities, medical facilities, employment, and post-secondary education. The connection between Squamish and Whistler is also important for Whistler residents to access the shopping centres in Squamish which offers retail options not available in Whistler.



While variations of this service can be implemented later, the introductory service described here is based on the following assumptions:

- Introductory service that closely matches what was provided between 2004-2011, focusing primarily on employee start and finish times.
- The service would operate between the major transit exchanges in Squamish and Whistler with direct connectivity to the service operating to Metro Vancouver. To be competitive with the private automobile, it is recommended that the amount of bus stops be limited to improve the service's trip duration and efficiency.
- Service operates seven days a week
- The service is integrated with transit networks in Squamish and Whistler, as well as service provided by TransLink
- Opportunities to interline the Squamish-Metro Vancouver service with this service would be pursued to provide more efficient and attractive service for customers

TRANSIT INFRASTRUCTURE

Identify sites and develop new Park & Ride and Transit Exchange Facilities

With the introduction of expanded service between Squamish and Metro Vancouver and the reintroduction of the Squamish-Whistler Commuter, the following infrastructure improvements should be considered:

- A second Park & Ride site in Squamish (Garibaldi Village)
- A Park & Ride site in Whistler (Cheakamus / Function Junction)
- A secondary Transit Exchange in Squamish (Garibaldi Village)
- Improved transit infrastructure at Gateway Loop in coordination with RMOW plans (Whistler Village)

Any additional corridor improvements or transit priority measures identified in the corridor study that are associated with these service introductions should also be pursued. Any of these capital facilities should be implemented in a phased approach between 2020-2025 that is informed by the service expansion, ridership on separate segments of the network, as well as resource availability.

Long Term - Explore Between 2025-2040

TRANSIT SERVICE

Sea to Sky communities can focus on the following long term Regional and Interregional Transit service and infrastructure recommendations:

- Continue to improve service frequency and extend service span on connections as demand on the corridor grows.
- Continue to improve local system service in each community to provide efficient, reliable and safe connectivity across the region.

Summary of Resource Requirements: Short-Term

Table 26 summarizes the short-term recommendations made in this chapter, and the estimated resources required to implement them.

Sea to Sky Transit Future Plan - Regional Transit Service Preliminary Estimated Additional Annual Impacts*								
Recommendation	Buses**	Additional total kms	Service Hours	Rides	Total Revenue	Total Costs	Net Local Share of Costs	BC Transit Share of Costs
				Transit S	Service			
R1. Undertake a Sea to S	ky Corrid	or Transit S	Study					
R2. Explore the Developm	ent of a	Sea to Sky	Corridor I	Regiona	Governan	ce Structure)	
R3. Introduce weekday Interregional Transit service between Squamish and Metro Vancouver	3	242,400	4,040	40,400	\$121,200	\$626,600	\$267,500	\$237,900
R4. Introduce midday or evening Regional Transit service between Pemberton and Whistler	1	66,000	1,100	13,200	\$27,300	\$176,500	\$85,000	\$64,200
	Transit Infrastructure							
R5. Establish a Park & Ri	R5. Establish a Park & Ride facility in downtown Squamish							
R6. Examine existing transit exchanges to ensure that capacity is available for introduction of regional and interregional service								
R7. Examine the impact of R8. Explore highway impre								Squamish and Pember

^{*}Based on 2014/15 AOA Operating Costs. Final costs may change based on final budgets and confirmation of final operational details.

These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated revenue is approximate and is based on high-level ridership estimates.

^{**}The vehicle requirements shown here appear feasible but will require confirmation by BC Transit Fleet department closer to implementation.

Transit Future: Focus on Squamish

The Vision, Goals, and Transit Mode Share Targets outlined here guide the implementation of the Transit Future Plan. The service and infrastructure recommendations made later in this chapter align with these components and have been made to help achieve the Transit Future.

Vision

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

Transit systems in the Sea to Sky region will be:

- For everyone
- Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling
- Safe
- o Environmentally Sustainable

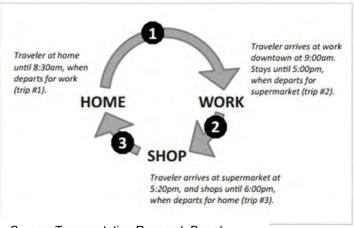
Transit Mode Share Targets

Transit Mode Share is the percentage of all trips that are made by transit in a given community, and is typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall.

Today, Squamish's transit mode share, or the percentage of all trips currently made in Squamish by transit, is 1.3 per cent. This is equal to about 266,000 transit passengers per year.

BC Transit has developed current and potential transit mode share calculations for Squamish based on:

- historical, current and projected population (from local strategic plans and BC Statistics population forecasts)
- Historical, current and projected travel data across all modes of transportation (assuming an average of 3 trips per person per day). For highlevel target-setting within the context of this Transit Future Plan, it is assumed that people in Sea to Sky communities will continue to make about the same number of trips per day and per year as they do today. Consider a trip as traveling from home to work. On average, people make 3 trips per day.



Source: Transportation Research Board – Activity-Based Travel Demand Models, 2015

• **Historical, current and projected travel data across transit** (based on transit ridership data from local operating companies)

In order to develop achievable, actionable targets for Squamish, transit mode share targets have been modestly set, and are expressed incrementally between today and 2040.

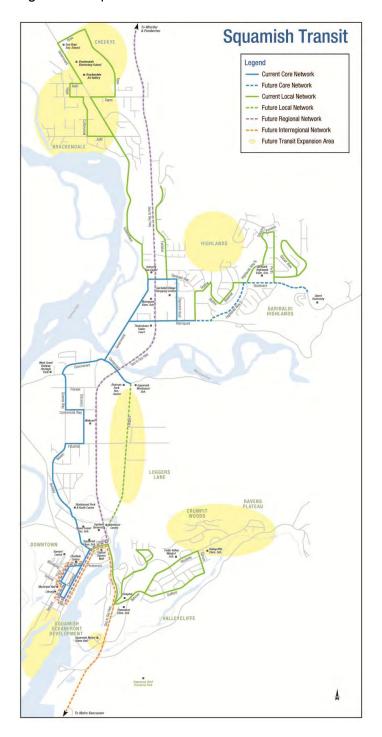
	Squamish
Current Transit Mode Share	1.3%
2020 Transit Mode Share Target	2.5%
2025 Transit Mode Share Target	5%
2040 Transit Mode Share Target	10%

This sets a target that by 2040, 10per cent of all trips made in Squamish will be made by transit. This 10per cent target can be achieved incrementally over the next 25 years, and can be reevaluated every five years as part of BC Transit's Transit Future Plan Refresh process. The sections that follow include transit service and infrastructure recommendations with an eye to achieving these targets.

The *Transit Future Foundations* chapter includes recommendations on how the existing transit mode share can increase without significantly expanding transit service hours or infrastructure. This can be achieved by implementing mechanisms for increasing existing capacity utilization on buses, such as marketing and communications actions, fare strategies, and transit-supportive land use planning.

Transit Future Network

Figure 59: Squamish Transit Future Network.



Core Transit Network – Links people to major destinations within Squamish, typically through downtown.

Local Transit Network – Links people to destinations within neighbourhoods, as well as to the other Transit Networks.

Targeted Transit Network – Links people to regional and Interregional destinations.

Custom Transit – provides transit service to people within 1.5 km of Squamish with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time.

Note that the Transit Future network as envisioned here is not fixed – route numbers, route locations, and route operations are subject to change over the life of the Plan.

Network Service Standards: Frequency and Span

The success of the Transit Future Network in Squamish is not achieved by the service simply being implemented, as described in the Transit Future Foundations section of this Plan. Integrated and continuous planning, designing, monitoring, and optimizing of the transit network is required to achieve Squamish's Transit Future. The monitoring and optimizing aspects of this work can be informed by tailored Service Standards that guide local governments and BC Transit staff in determining and managing community expectations regarding the level of transit service to be provided. Specifically, Service Standards for transit in Squamish outline the minimum acceptable span and frequency of transit service.

Span of service defines the operating hours that a route is in service. In general, services operate primarily during the peak periods, as this is when demand is highest. For the morning and afternoon peaks, the service should be designed to allow people to access typical employee start times in the area.

As travel demand on transit services in Squamish increases, the hours that transit operates should also increase, including in off-peak periods in the midday, on evenings and on weekends. Efficient, tailored service frequency and span meets demand when it is greatest, while also keeping operating costs in check.

BC Transit recommends the long term minimum Service Standards be achieved over the life of the Transit Future Plan. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 27: Squamish Transit Service Standards.

Transit Service Type	Transit Service Description	Existing Routes	Short Term Routes	Long Term Routes	Period	Minimum Transit Service Span	Minimum Transit Service Frequency
Core Transit	Links people to major destinations within Squamish, typically through	1	1, Quest University	1	Monday to Friday	6:30 am to 12:00 am	Peak: 20 minutes Base: 20 minutes
	downtown.				Saturday	8:00 am to 12:00 am	Base: 30 minutes
					Sunday and Holiday	6:30 am to 11:00 pm	Base: 30 minutes
Local Transit	Links people to destinations within neighbourhoods, as well as to the	2, 3, 4	2, 3, 4	2, 3, 4, Loggers Lane, Ravens Plateau, Squamish Oceanfront Development site,	Monday to Friday	6:30 am to 10:00 pm	Peak: 30-60 minutes Base: 60 minutes
	other Transit Networks.			Garibaldi Highlands, Brennan Park, Cheekye, North Squamish Parks District, Furry Creek, Britannia Beach, Squamish Nation	Saturday	8:00 am to 10:00 pm	Base: 60 minutes
					Sunday and Holiday	8:00 am to 10:00 pm	Base: 60 minutes
Custom Transit -	Provides transit service to people within 1.5 km of	-	-	-	Monday to Friday	8:00 am to 6:00pm	On demand
handyDART	Squamish with physical or cognitive				Saturday	Limited service, TBD	Limited service, TBD
	impairments who cannot independently use the Conventional transit system some or all of the time.				Sunday and Holiday	-	-

Span of service extensions can be considered when the first and last hour of service has productivity greater than the average productivity on the entire route. Extensions of the span of service may also be triggered by seasonal fluctuations, or a major employer change in start or finish times.

Network Performance Guidelines

Performance Guidelines are unique evaluation tools that can be used to help plan new transit services, make adjustments to existing service, and measure how well the transit system is progressing towards achieving its goals. The guidelines will evolve with the growth of transit service in Squamish.

As a starting point, an approximate 10 per cent improvement over the baseline has been suggested here. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 28: Squamish Transit Performance Guidelines.

Performance Measure	Definition	2014 Baseline	2040 Target
	System Lev	rel	
Average rides per service hour	Measures the total volume of ridership as compared to the supply of transit service	21	23
Cost per passenger trip	Measures the average cost to provide service per passenger trip	\$6.85	\$5.70
Cost recovery	Measures the financial performance of the transit system, usually expressed in terms of total operating revenue after total operating expenses	14.4%	16%
	Route Leve	el	
Average rides per service	Measures the total volume of ridership as	Core: 18	Core: 30
hour	compared to the supply of transit service	Local: 10	Local: 15
Average rides per trip	Measures the total number of people that board a vehicle on a	Detailed ridership count forthcoming	Core: 25
Average rides per trip	specific trip specific trip and route	in Fall 2015	Local: 15

Trends will be monitored over time to determine if the system or routes are becoming more or less efficient.

Significant variance (+/-25%) from the target will place a route on an action list for further investigation, and will require more detailed analysis. For example, if efficiencies to the system are required, then routes that fall below the 25 per cent variance will be candidates for corrective action. Further, if expansion resources are available or resource re-allocation is being pursued, then routes that rise above the 25 per cent variance will be candidates for service improvement.

BC Transit will report on these performance measures annually to help guide planning decisions.

Squamish Transit Service and Infrastructure Recommendations

The recommendations in this section have been created and prioritized based on technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

Options do not represent all of the possible changes that could be made to transit in Squamish between today and 2040, but should serve as a starting point each time the system undergoes analysis or change. Recommendations vary in terms of required timelines, complexity, cost, and process, meaning that initiatives may not be undertaken linearly.

Regional and Interregional transit service options are described in detail in the chapter titles *Transit Future: Focus on the Sea to Sky Region*. Phasing of regional and Interregional transit service options with local options has not been identified in this Plan. Regional and Interregional transit service options may be implemented at different times than the local transit service options that follow in this chapter. While Local, Regional, and Interregional recommendations are not mutually exclusive, resource availability will be a factor in implementation and phasing. Efficiencies may be realized by developing partnerships with organizations providing existing regional and interregional bus service.

The realization of these recommendations and targets is contingent on:

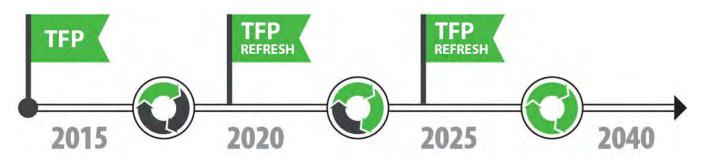
- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Note that any costs shown:

- Are approximate and are subject to change based on final operational and implementation details and timing
- Are based on 2014/15 Operating Costs
- Do not include provincial contribution to lease fees
- Do not include revenue offsets
- Do not include inflation

Transit Future Plan Refresh

Realizing the Sea to Sky Transit Future Plan requires a phased approach. Work undertaken will be evaluated every five years as part of BC Transit's Transit Future Plan Refresh process, as illustrated in Figure 61. Recommendations that have not been implemented will be re-examined, and new changes to the transit system can be explored. This Refresh also provides an opportunity to reflect collaboratively on lessons learned in the previous implementation phase.





Immediate Term - Explore Between 2015-2016

TRANSIT SERVICE

S1. Finalize Operational Plans for South Squamish Parks Pilot Transit Service

Shannon Falls Provincial Park, the Sea to Sky Gondola Basecamp, and Stawamus Chief Provincial Park are located within close proximity to one another and are about 60 km north of Vancouver and 2 km south of Squamish. This area is known as the South Squamish Parks District.

The multi-activity park sites are accessible year-round, with the seasonal peak occurring between May and October. The Parks District is currently accessible by private vehicle, on foot, by bike, and by over a dozen private bus transport companies who access the sites via the Sea to Sky Highway.

Building on the conceptual assessment of this pilot project undertaken by BC Transit in 2014, BC Transit recommends finalizing operational plans to introduce summer transit service connecting downtown Squamish to the South Squamish Parks District.

Figure 60: South Squamish Parks Pilot Service Route Map.



While variations of this service can be implemented later, the summer pilot described here is based on the assumption that the service would operate from 9:00 a.m. – 2:00 p.m., seven days per week from June – September.

Figure 61: South Squamish Parks Pilot Service Preliminary Schedule.

Downtown	Shannon Falls	Sea to Sky Gondola	Stawamus Chief	DT
6:15	6:23	6:27	6:30	6:39
9:00	9:08	9:12	9:15	9:24
9:30	9:38	9:42	9:45	9:54
10:00	10:08	10:12	10:15	10:24
10:30	10:38	10:42	10:45	10:54
11:00	11:08	11:12	11:15	11:24
11:30	11:38	11:42	11:45	11:54
12:00	12:08	12:12	12:15	12:24
12:30	12:38	12:42	12:45	12:54
13:00	13:08	13:12	13:15	13:24
13:30	13:38	13:42	13:45	13:54
14:00	14:08	14:12	14:15	14:54
18:34	18:42	18:46	18:49	18:58
19:04	19:12	19:16	19:19	19:28
19:34	19:42	19:46	19:49	19:59

Additional stops along the highway in the Squamish Nation area may also be added to improve access and connectivity to the area.

Approximate resources required to provide this transit service:

Initial High Level Estimate – Additional Annual Impacts						
S1. Finalize Operational Plans for South Squamish Parks Pilot Transit Service						
Service Hours:	1,100	Passenger Revenue:	\$7,300			
Annual Ridership:	Annual Ridership: 8,800 Total Cost*: \$129,500					
Vehicles Required**: 0 Net Local Share of Costs: \$61,800						
		Provincial Share of Costs*:	\$60,400			

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

Short Term - Explore Between 2015-2020

S2. Increase Sunday and Holiday transit service

Squamish Transit currently operates a reduced schedule on Sundays and Holidays. Access to employment, recreation, and shopping areas on Sundays and Holidays was identified as a priority to stakeholders and the public in Squamish, and can also benefit visitors to Squamish. Therefore, BC Transit recommends increasing transit service frequency and span on Sundays and holidays as follows:

- Introduce base level service between 8:00am and 10:00am
- Introduce improved service frequency between 11:00am to 7:00pm
- Introduce base level service between 7:00pm and 9:00pm

Table 29: Transit Service Increase.

Route	Existing Saturday Trips	Existing Sunday and Holiday Trips	Proposed Sunday and Holiday Trips
1 Brackendale	15	5	11
2 Highlands	15	5	11
3 Valleycliffe	15	4	10
Total	45	14	32

Note: combined trips are counted for both.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts					
S2: Increase Sunday and Holiday transit service					
Service Hours:	820	Passenger Revenue:	\$5,400		
Annual Ridership:	6,600 Total Cost*: \$117,400				
Vehicles Required**:	0 Net Local Share of Costs: \$57,200				
		Provincial Share of Costs*:	\$54,800		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

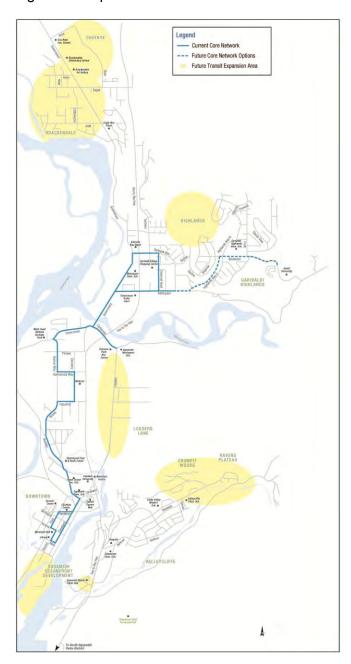
^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

S3a. Improve Core Transit Network service during off-peak periods between Garibaldi Village and Downtown Squamish

Garibaldi Village includes a retail shopping area that has become a regional destination. While the shopping area has generally developed in a car-oriented way, providing improved transit access to the area can foster a more people-oriented design approach as the area continues to grow.

To meet the travel demand to this area with transit, BC Transit recommends extending transit service on the Route 4 to the midday and evenings until 8:00 p.m. Coupled with other routes, this option would provide combined service every 20 minutes along the Core Transit corridor all day between Garibaldi Village and Downtown Squamish.

Figure 62: Squamish Transit Future Core Network.



Since this improvement requires another vehicle, this provides an opportunity to implement another project simultaneously to maximize the operational efficiency. A possible collaborative project is to improve service to Quest University. More information on this improvement is in the next section.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts						
S3a. Improve Core Transit Network service during off-peak periods between Garibaldi Village and Downtown Squamish						
Service Hours:	2,270	Passenger Revenue:	\$22,400			
Annual Ridership:	27,200	Total Cost*:	\$314,200			
Vehicles Required**:	1	Net Local Share of Costs:	\$163,300			
_		Provincial Share of Costs*:	\$128,500			

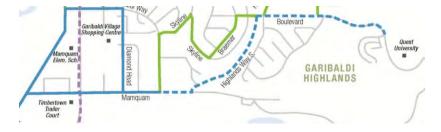
^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

S3b. Increase service on the Core Transit Network to improve access to Quest University Canada



Students, staff, faculty, and visitors to Quest University identified a need for improved transit access during the Sea to Sky Transit Future Plan Participation process. The Quest University campus is located at the end of a curvilinear road with a steep grade that can be difficult to walk and cycle on, so having direct, frequent, reliable transit access to the campus is important.



Currently, service is provided to Quest University by the Route 2 Highlands on select trips. The schedule summary below demonstrates that only 50 per cent of weekday Route 2 Highland trips are extended to Quest University.

Figure 63: Squamish Transit Route 2 Highlands Schedule, 2015.

2	ligh	land	ds				To	Highl	ands
Monday to Friday									
A	B	W	R	(C)	F	MD	Q)	(TB)	PP
Downtown: Chieffain Centre	Down bwn: Cleveland and Buckley	Discovery and Commercial (Walmart)	Brennan Park Rec Ctr	Government and Mamquam School	Garibaldi Village to Highlands	Mamquam and Diamond Head (Canadian Tire)	Quest University Canada	Thunder Bird Ridge and Glacier View	Perth and Pomona Way
-	-	-	-	_	-	7:18	-	7:24	7:27
7:55	7:59	-	_	8:04	8:07	-	8:13	8:18	8:21
9:05	9:09	9:13	9:17	9:22	9:25	9:27	_	9:33	9:36
10:15	10:19	10:23	10:27	10:32	10:35	10:37	-	10:43	10:46
11:15	11:19	11:23	11:27	11:32	11:35	11:37	-	11:43	11:46
12:15	12:19	12:23	12:27	12:32	12:35	12:37	12:43	12:48	12:51
1:15	1:19	1:23	1:27	1:32	1:35	1:37		1:43	1:46
2:15	2:19	2:23	2:27	2:32	2:35	2:37	-	2:43	2:46
3:18	3:22	3:26	3:30	3:35	3:38	3:40	-	3:46	3:49
3:57	4:01	4:05	4:09	4:14	4:17	4:19	4:25	4:30	4:33
4:40	4:44	4:48	4:52	4:57	5:00	5:02	5:08	5:13	5:16
5:40	5:44	5:48	5:52	5:57	6:00	6:02	_	6:08	6:11
6:10	6:14	6:18	6:22	_	6:30	6:32	6:38	6:43	6:46
6:40	6:44	6:48	6:52	_	7:00	7:02	7:08	7:13	7:16
8:25	8:29	8:33	8:37	-	8:45	8:47	_	8:53	8:56
10:05	10:09	10:13	10:17	-	10:25	10:27	10:33	10:38	10:41

This increase in transit service includes extending **all** existing weekday Route 2 trips to Quest University. This would significantly improve access to the University between the key activity centres around Squamish, and would also improve the consistency of the schedule for other users. With the additional vehicle being used for Recommendation S3a, this service expansion can be made in collaboration with that improvement to maximize the efficiency of the expansion vehicle.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts					
S3b: Increase service on the Core Transit Network to improve access to Quest University					
Service Hours:	1,160	Passenger Revenue:	\$9,600		
Annual Ridership:	11,600	Total Cost*:	\$136,600		
Vehicles Required**:	0	Net Local Share of Costs:	\$63,300		
		Provincial Share of Costs*:	\$63,700		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

S4. Implement a handyDART Registration Program

Providing handyDART service to Squamish residents who have a disability that prevents them from using the Conventional transit system some or all of the time is important. Maintaining this specialized level of service for the people who need it most while linking able passengers to the Conventional transit system can help achieve cost savings and improve efficiency of the entire Squamish Transit System.

To this end, BC Transit recommends implementing a handyDART Registration Program that includes an in-person assessment with a mobility coordinator (staffed by contracted third-party occupational therapists) in order to match the applicant's needs with the most appropriate type of transit services available.

The process takes into account an individual's travel needs in addition to their cognitive and physical abilities with regard to using Conventional transit services. Mobility coordinators will also inform applicants about the accessible transit options available in Squamish, assess their ability to travel safely, and ensure their mobility aids are appropriate for transport.

Implementing the handyDART Registration Program would not change travel for people who currently use handyDART, but would apply to new applicants to the system.

Approximate resources required to initiate this program for one year:

TOTAL COST*:	\$6,000
NET LOCAL SHARE OF COST*:	\$2,000

Final costs may change based on final budgets and confirmation of final Program details.

TRANSIT INFRASTRUCTURE

S5. Continue to improve transit customer facilities

Continued improvement and maintenance of transit facilities and on-street customer amenities is important for the successful operation and future growth of the transit system. Some improvements that have been identified include:

- a) Invest in on-street customer amenities such as transit shelters, customer information and benches. Implement bike parking at key stops and pedestrian-oriented lighting at transit stops.
- b) Improve transit wayfinding and customer connectivity on the street and online
- c) Improve universal accessibility of transit stops

Foundational concepts that can be applied to improving passenger experience are discussed in more detail in the Ongoing Initiatives section later in the Transit Future Plan.

S6. Examine the downtown exchange to ensure that capacity is available for service expansion

Depending on the preferred alignment of the new Interregional Transit service and any major expansion to the Squamish Transit System, the existing downtown Squamish transit exchange should be reviewed to ensure that adequate capacity is available. In addition, the customer and bus driver amenities should also be reviewed to ensure that they meet the short, medium and long term needs.

Since the routing alignment may also include service connections to Garibaldi Village, a potential transit exchange in this area should be considered to accommodate this new service.

S7. Examine the impact of fleet increases to existing Transit Operations and Maintenance Facility

Implementing any transit service recommendations in the Transit Future Plan may cause the existing facility to reach operational capacity.

Medium Term - Explore Between 2020-2025

TRANSIT SERVICE

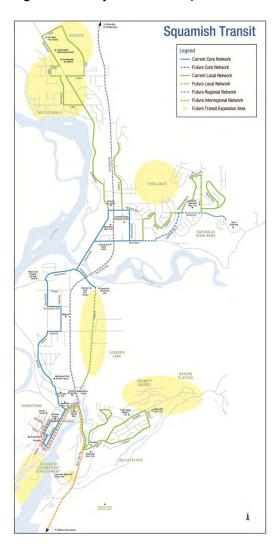
Service improvements on Core Transit Network to meet Service Standards

- Introduce weekend midday service on the Route 4, which is local in nature and provides the
 foundation for expansion to the ultimate Core Transit Network in Squamish. Enhancing the
 Route 4 to provide improved frequency between Garibaldi Village and downtown Squamish
 strengthens the Core Transit Network by improving the Local Transit Network.
- Expand service on the primary Routes 1 and 2 to provide 15 minute combined peak period frequency between Garibaldi Village and downtown Squamish, firmly establishing the Local and Core Transit Networks in Squamish.
- Provide limited late night service on Friday and Saturday until midnight on the Core Transit Network.

Introduce Local Transit service to developing areas

Squamish is growing and densifying, as shown in the yellow shaded areas in Figure 63.

Figure 64: Projected development areas in Squamish.



Serving new areas with transit is important to achieving Squamish's Transit Mode Share Target of 5 per cent by 2025. Possible candidates for Local Transit service expansion include:

- Cheekye
- Loggers Lane
- Ravens Plateau
- Squamish Oceanfront Development site
- Brennan Park

Service to these areas will initially be limited to introductory service levels, including weekday peak service operating approximately every hour.

Funding and implementation options, as well as route planning for these areas will be completed in the long term.

TRANSIT INFRASTRUCTURE

Introduce new bus stops for any expansion areas

Transit service expansion to new areas must be preceded by the implementation of bus stops and customer infrastructure such as seating, bike parking, and schedule information. Developing areas are subject to a review that considers these elements as part of BC Transit's Development Referral Program. It is recommended that the District of Squamish continues to participate in this Program.

Long Term - Explore Between 2025-2040

In the long term, the District of Squamish can also explore the following recommendations. These recommendations are made in light of technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

- Introduce new Local Transit service to select areas such as North Squamish Parks District,
 Furry Creek, Britannia Beach
- Reinstate Local Transit service to Squamish Nation area if it is not already served by Regional Transit
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows
- Continue to improve local system service to provide efficient, reliable and safe connectivity

Funding and implementation options, as well as route planning for these areas will be completed in the long term.

Summary of Resource Requirements: Short-Term

Table 30 summarizes the immediate- and short-term recommendations made in this chapter, and the estimated resources required to implement them.

Sea to Sky Transit Future Plan - Squamish								
	Р	reliminary E	Estimated	Addition	al Annual	Impacts*		
Recommendation	Buses**	Additional total kms	Service Hours	Rides	Total Revenue	Total Costs	Net Local Share of Costs	BC Transit Share of Costs
	Transit Service							
S1. Finalize Operational								
Plans for South Squamish Parks Pilot Transit Service	0	33,700	1,100	8,800	\$7,300	\$129,500	\$61,800	\$60,400
S2. Increase Sunday and Holiday transit service	0	25,100	820	6,600	\$5,400	\$117,400	\$57,200	\$54,800
S3a. Improve Core Transit Network service during off- peak periods between Garibaldi Village and Downtown Squamish	1	69,500	2,270	27,200	\$22,400	\$314,200	\$163,300	\$128,500
S3b. Increase service on the Core Transit Network to improve access to Quest University	0	35,500	1,160	11,600	\$9,600	\$136,600	\$63,300	\$63,700
S4. Implement a handyDART Registration Program						\$6,000	\$2,000	
Transit Infrastructure								
S5. Continue to improve transit customer facilities								
S6. Examine the downtown							•	
S7. Examine the impact of fleet expansion to Squamish Transit Operations and Maintenance Facility								

S7. Examine the impact of fleet expansion to Squamish Transit Operations and Maintenance Facility

These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated revenue is approximate and is based on high-level ridership estimates.

^{*}Based on 2014/15 AOA Operating Costs. Final costs may change based on final budgets and confirmation of final operational details.

^{**}The vehicle requirements shown here appear feasible but will require confirmation by BC Transit Fleet department closer to implementation.

Transit Future: Focus on Whistler

The Vision, Goals, and Transit Mode Share Targets outlined here guide the implementation of the Transit Future Plan. The service and infrastructure recommendations made later in this chapter align with these components and have been made to help achieve the Transit Future.

Vision

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

Transit systems in the Sea to Sky region will be:

- For everyone
- Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling
- Safe
- Environmentally Sustainable

Transit Mode Share Targets

Transit Mode Share is the percentage of all trips that are made by transit in a given community, and is typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall.

An important factor in calculating current transit mode share and projecting transit mode share targets is population. Whistler's population fluctuates seasonally, and so does its transit ridership. In reflection of this, the Resort Municipality of Whistler has developed a *population equivalent*. *Total population equivalent* is an estimate of the total population in Whistler on average at a given time during peak (winter) season. While Whistler's base population in 2014 was about 10,500, the RMOW estimates that the Population Equivalent in 2014 was about 28,800. This population equivalent can be considered in three subsets; the permanent population, one temporary population of visitors or tourists, and one semi-temporary population of seasonal workers who live in Whistler transiently.

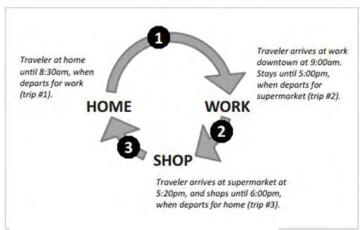
Today, Whistler serves nearly 2.5 million passengers per year. When Whistler's base population of about 10,500 is considered, the current transit mode share or the percentage of all trips made in Whistler by transit today is about 22 per cent.

In considering Whistler's *population equivalent* of about 28,800, or the population of Whistler at its peak, the current transit mode share or the percentage of all trips made in Whistler by transit today is about 8per cent.

The average of these two transit mode share calculations, or the averaged current transit mode share in Whistler, is 15 per cent, which is 1 per cent higher than the 2011 Census findings.

BC Transit has developed current and potential transit mode share calculations for Whistler based on:

- historical, current and projected population (from local strategic plans and BC Statistics
 population forecasts, in consideration of an averaged population to reflect the number of people
 using transit in Whistler on average)
- travel data across all modes of transportation (assuming an average of 3 trips per person per day). For high-level target-setting within the context of this Transit Future Plan, it is assumed that people in Sea to Sky communities will continue to make about the same number of trips per day and per year as they do today. Consider a trip as traveling from home to work. On average, people make 3 trips per day.



Source: Transportation Research Board – Activity-Based Travel Demand Models, 2015

 Historical, current and projected travel data across transit (based on transit ridership data from local operating companies)

In order to develop achievable, actionable targets for Whistler, transit mode share targets have been modestly set, and are expressed incrementally between today and 2040.

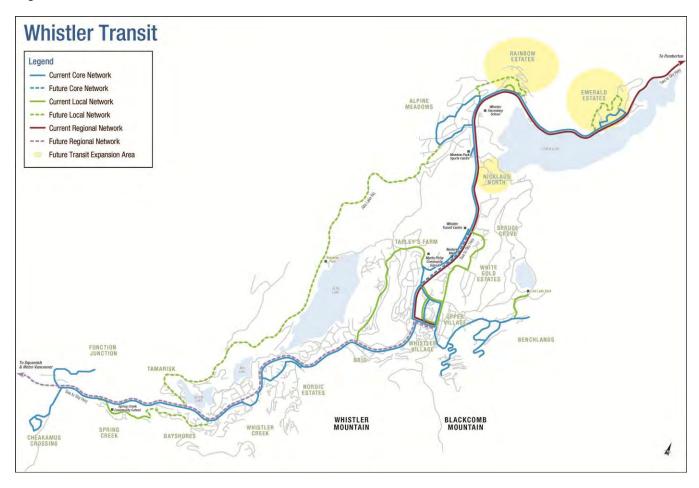
	Whistler
Current Transit Mode Share	15%
2020 Transit Mode Share Target	16%
2025 Transit Mode Share Target	20%*
2040 Transit Mode Share Target	25%*

^{*}This sets a target that by 2040, 25 per cent of all trips made in Whistler will be made by transit. This 25 per cent target can be achieved incrementally over the next 25 years, and can be reevaluated every five years as part of BC Transit's Transit Future Plan Refresh process, in coordination with the RMOW's Transit Management Advisory Committee (TMAC) or its forthcoming Transportation Advisory Group (TAG).

The *Transit Future Foundations* chapter includes recommendations on how the existing transit mode share can increase without significantly expanding transit service hours or infrastructure. This can be achieved by implementing mechanisms for increasing existing capacity utilization on buses, such as marketing and communications actions, fare strategies, and transit-supportive land use planning.

Transit Future Network

Figure 65: Whistler Transit Future Network.



Note that the Transit Future network as envisioned here is not fixed – route numbers, route locations, and route operations are subject to change over the life of the Plan.

Core Transit Network – Links people to major destinations within Whistler, typically through the Whistler Village.

Local Transit Network – Links people to destinations within neighbourhoods, as well as to the other Transit Networks.

Targeted Transit Network – Links people to regional and interregional destinations.

Custom Transit – provides transit service to people within 1.5 km of Whistler with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time.

Network Service Standards: Frequency and Span

The success of the Transit Future Network in Whistler is not achieved by the service simply being implemented, as described in the Transit Future Foundations section of this Plan. Integrated and continuous planning, designing, monitoring, and optimizing of the transit network is required to achieve Whistler's Transit Future. The monitoring and optimizing aspects of this work can be informed by tailored Service Standards that guide local governments and BC Transit staff in determining and managing community expectations regarding the level of transit service to be provided. Specifically, Service Standards for transit in Whistler outline the minimum acceptable span and frequency of transit service.

Span of service defines the operating hours that a route is in service. In the case of Whistler, transit service already operates 23 hours per day, seven days per week, so improving transit service can be limited to tailoring service by season and by neighbourhood.

BC Transit recommends the long term minimum Service Standards be achieved over the life of the Transit Future Plan. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 30: Whistler Transit Service Standards.

Transit Service Type	Transit Service Description	Existing Routes	Short Term Routes	Long Term Routes	Period	Minimum Transit Service Span	Minimum Transit Service Frequency
Core Transit	Links people to major destinations within Whistler,	1, 2, 3, 4, 5, 7, Nordic Estates, Nesters,	1, 2, 3, 4, 5, 7, Nordic Estates, Nesters,	1, 2, 3, 4, 5, 7, Nordic Estates, Nesters, Alpine Meadows,	Monday to Friday	5:30 am to 3:00am	Service every 15- 30 minutes
	typically through the Whistler Village.	Alpine Meadows, Emerald	Alpine Meadows, Emerald	Emerald Estates, Function Junction, Cheakamus	Saturday	5:30 am to 3:00am	Service every 15- 30 minutes
		Estates, Function Function, Junction, Cheakamus Crossing Cheakamus Crossing	Function Junction, Cheakamus	Crossing	Sunday and Holiday	5:30 am to 3:00am	Service every 15- 30 minutes
Local Transit	Links people to destinations within neighbourhoods,	1, 3, 6, 7, 8, Spring Creek, White Gold	1, 3, 6, 7, 8, Spring Creek, White Gold	Building on Existing: Rainbow Estates, Alta Lake Road,	Monday to Friday	6:30 am to Midnight	30-60 minutes
	as well as to the other Transit Spruce Spruce Grove, Scrove, Spruce Grove,	Spruce	Bayshores/Millar's Pond, Nicklaus North	Saturday	6:30 am to Midnight	30-60 minutes	
		Estates	Estates		Sunday and Holiday	6:30 am to Midnight	30-60 minutes
Custom Transit (currently N/A)	Provides transit service to people within 1.5 km of	-	-	-	Monday to Friday	8:00 am to 4:00 pm	On demand
	Whistler with physical or cognitive				Saturday	Limited service	On demand
	impairments who cannot independently use the Conventional transit system some or all of the time.				Sunday and Holiday	-	-

Span of service extensions can be considered when the first and last hour of service has productivity greater than the average productivity on the entire route. Extensions of the span of service may also be triggered by seasonal fluctuations, or a major employer change in start or finish times.

Network Performance Guidelines

Performance Guidelines are unique evaluation tools that can be used to help plan new transit services, make adjustments to existing service, and measure how well the transit system is progressing towards achieving its goals. These guidelines will evolve with the growth of transit service in Whistler.

As a starting point, an approximate 10 per cent improvement over the baseline has been suggested here. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 31: Whistler Transit Performance Guidelines.

Performance Measure	Definition	2014 Baseline	2040 Target
	System Le	vel	
Average rides per service hour	Measures the total volume of ridership as compared to the total capacity of transit service	39.7	44
Cost per passenger trip	Measures the average cost to provide service per passenger trip	\$4.06	\$3.65
Cost recovery	Measures the financial performance of the transit system, usually expressed in terms of total operating revenue after total operating expenses	27.1%	30%
	Route Lev	rel	
Average rides per	Average rides per service hour Measures the total volume of ridership as compared to the supply of transit service		Core: 40
service hour			Local: 25
	Measures the total number of people that board a vehicle on a	Plan. Targets have been developed based on best	Core: 30
Average rides per trip	specific trip specific trip and route	practices and other high-performing systems.	Local: 12

Trends will be monitored over time to determine if the system or routes are becoming more or less efficient.

Significant variance (+/-25%) from the target will place a route on an action list for further investigation, and will require more detailed analysis. For example, if efficiencies to the system are required, then routes that fall below the 25 per cent variance will be candidates for corrective action. Further, if expansion resources are available or resource re-allocation is being pursued, then routes that rise above the 25 per cent variance will be candidates for service improvement.

BC Transit will report on these performance measures annually to help guide planning decisions.

Whistler Transit Service and Infrastructure Recommendations

The recommendations in this section have been created and prioritized based on technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

Options do not represent all of the possible changes that could be made to transit in Whistler between today and 2040, but should serve as a starting point each time the system undergoes analysis or change. Recommendations vary in terms of required timelines, complexity, cost, and process, meaning that initiatives may not be undertaken linearly.

Regional and Interregional transit service options are described in detail in the chapter titles *Transit Future: Focus on the Sea to Sky Region*. Phasing of regional and Interregional transit service options with local options has not been identified in this Plan. Regional and Interregional transit service options may be implemented at different times than the local transit service options that follow in this chapter. While Local, Regional, and Interregional recommendations are not mutually exclusive, resource availability will be a factor in implementation and phasing. Efficiencies may be realized by developing partnerships with organizations providing existing regional and interregional bus service.

The realization of these recommendations and targets is contingent on:

- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Note that any costs shown:

- Are approximate and are subject to change based on final operational and implementation details and timing
- Are based on 2014/15 Operating Costs
- Do not include provincial contribution to lease fees
- Do not include revenue offsets
- Do not include inflation

Transit Future Plan Refresh

Realizing the Sea to Sky Transit Future Plan requires a phased approach. Work undertaken will be evaluated every five years as part of BC Transit's Transit Future Plan Refresh process. Recommendations that have not been implemented will be re-examined, and new changes to the transit system can be explored. This Refresh also provides an opportunity to reflect collaboratively on lessons learned in the previous implementation phase.





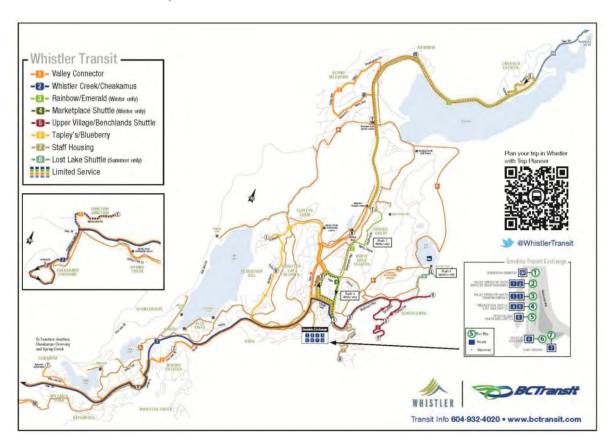
Immediate Term - Explore Between 2015-2016

TRANSIT SERVICE

W1. Improve the operational efficiency of Route 1 Valley Connector

In 2011, a review of the Whistler Transit System was completed, which resulted in a new route structure and modified service profile that aligned with both the needs of the Customers as well as the financial constraints of the municipality. One key outcome of this review was the introduction of the Route 1 Valley Connector. This route acts as the spine of Whistler's entire network, connecting the southern neighbourhoods with the northern neighbourhoods as well as providing access to the centralized Village. The Route 1 Valley Connector has become the busiest route in the transit system.

Figure 66: Whistler Transit Map.



One advantage of the existing route design is that the Valley Connector provides a one-ride / no-transfer service for many Customers travelling the north-south corridor. The other benefit of the current route design is that it creates some resource efficiency by linking trips ("interlining") the north service with the south service to the service provided on Route 2 Whistler Creek/Cheakamus and Route 3 Rainbow/Emerald.

In spite of these efficiencies, there are opportunities to further improve the design of the Route 1 to address on-time performance issues caused by the route's length and its multiple termini in south Whistler. These opportunities are supported by the data that has been collected since 2012. These opportunities include:

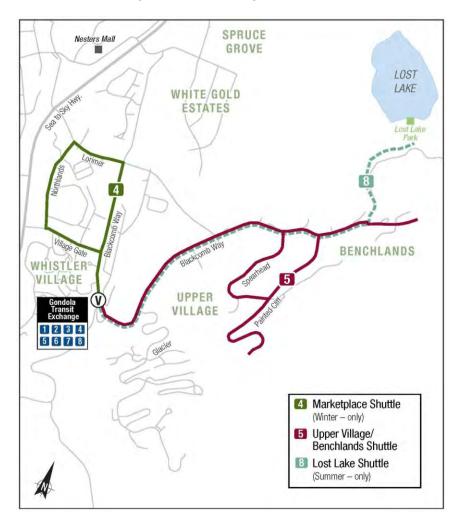
- Splitting the Route 1 Valley Connector into two separate routes during certain parts of the day, establishing the Core Transit Network in Whistler
- Reducing the number of termini in the south through potential routing, scheduling and infrastructure improvements

Ridership analysis indicates that splitting the Route 1 into two distinct routes could be valuable, since the majority of northbound and southbound customers disembark in Whistler Village on Village Gate Boulevard or at Gondola Transit Exchange.

BC Transit recommends collaborative review with the RMOW to improving the Route 1's efficiency per these proposed measures.

W2. Undertake an in-depth ridership analysis of the Free Village Shuttles and make any necessary adjustments or improvements

The Free Village Shuttles in Whistler (Route 4 Marketplace, Route 5 Upper Village / Benchlands, and Route 8 Lost Lake) play a critical role in the Whistler transit network. Responsible for close to 40 per cent of the ridership on the system, the Shuttles provide an essential service for visitors, employees and locals travelling around the Village.



It is recommended that a detailed review of the ridership on the Free Village Shuttles be undertaken to assess the performance of the service and determine whether additional resources should be invested. Additionally, the routings of the Village Shuttles should be reviewed to determine whether there are any opportunities for improvement of efficiency.

Opportunities for future expansion should also be considered based on the detailed analysis. Possible candidates based on consultation is extending the Route 4 Marketplace into the spring, summer and fall seasons and also improving the Route 5 Upper Village / Benchlands Shuttle during the afternoon peak during winters.

Short Term - Explore Between 2015-2020

TRANSIT SERVICE

W3. Increase service on the Core Transit Network during the Winter Season

With the majority of ridership taking place during the busy winter season, it is a priority to ensure that transit travel demand is being met for locals and visitors. BC Transit recommends increasing transit frequency during the busiest times of the Winter season on primary routes 1, 2, and the Winter-only Route 3, to strengthen the Core Transit Network and to continue to meet the growing demand. This increase in transit service is also beneficial given the lack of other viable preferred transportation options in winter weather.

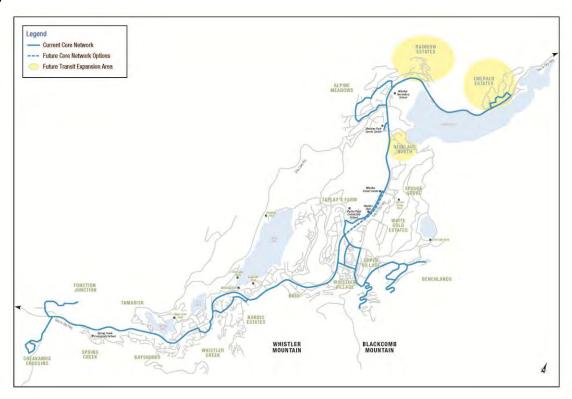


Figure 67: Whistler Transit Future Core Network.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts					
W3. Increase Service on the Core Transit Network during the Winter season					
Service Hours:	500	Passenger Revenue:	\$13,800		
Annual Ridership:	12,500	Total Cost*:	\$62,000		
Vehicles Required**:	0	Net Local Share of Costs:	\$19,300		
		Provincial Share of Costs*:	\$28,900		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

W4. Increase service on the Core Transit Network during the Spring, Summer and Fall Season

Today, transit service in Whistler is best in the winter to meet increased travel demand related to alpine tourism. Whistler is positioning itself as a year-round resort destination, and is home to over 10,000 year-round residents. Serving visiting and local populations in all seasons was heard as a top priority in the Sea to Sky Transit Future Plan's Participation process. BC Transit recommends increasing transit service frequency and span in the Spring, Summer, and Fall.

Approximate resources required to increase transit service:

Initial High Level Estimate – Additional Annual Impacts					
W4. Increase service on the Core Transit Network during the spring summer and fall					
Service Hours:	250	Passenger Revenue:	\$4,200		
Annual Ridership:	3,800	Total Cost*:	\$31,000		
Vehicles Required**:	0	Net Local Share of Costs:	\$12,300		
		Provincial Share of Costs*:	\$14,500		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

TRANSIT INFRASTRUCTURE

W5. Continue to improve transit customer facilities

Continued improvement and maintenance of transit facilities and on-street customer amenities is important for the successful operation and future growth of the transit system. Some improvements that have been identified include:

- a) Invest in on-street customer amenities such as transit shelters, customer information and benches. Implement ski racks and bike racks at key stops and pedestrian-oriented lighting at transit stops.
- b) In alignment with projects the RMOW is already undertaking, improve signage and wayfinding at and around the Gondola Transit Exchange. This should include information about how to access schedule and wayfinding information online.
- c) Improve universal accessibility of transit stops
- d) Introduce new southbound bus stop on the Sea to Sky Highway at Rainbow to improve service efficiency
- e) To improve safety conditions for Customers, relocate southbound bus stop at far side of Alta Lake Road to near side of Alta Lake Road. This will provide easier access via the crosswalks for customers.
- f) Explore opportunities to introduce a protected left hand turn lane from Whistler Road southbound onto the Sea to Sky Highway. Transit vehicles are regularly delayed at this intersection to wait for an appropriate northbound and southbound gap in highway traffic to make the southbound turn. These delays cause issues with on-time performance and reliability. The introduction of this protected left hand turn lane on southbound Sea to Sky Highway would alleviate these issues.

Foundational concepts that can be applied to improving passenger experience are discussed in more detail in the *Transit Future Foundations* section.

SUPPORTING TRANSIT IMPROVEMENTS

W6. Explore Opportunities to Improve the Fare Structure & Media

The economic sustainability of operating the existing transit system in Whistler, as well as expanding it, is in part dependent on passenger fare revenue. Transit should be attractive and affordable to a number of different passenger markets. While a diversity of fare products is currently available in Whistler, interest in introducing a ski season-related pass has been expressed. BC Transit recommends collaboration with Whistler Blackcomb to explore the feasibility of providing a seasons' transit pass linked with a Whistler Blackcomb ski seasons' pass.

SUPPORTING TRANSIT IMPROVEMENTS

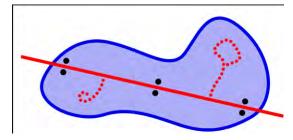
W7. Conduct feasibility assessment around the introduction of Custom transit services

Examining a suite of Custom transit options could benefit Whistler as the community ages and as travel needs in Whistler continue to diversify. It would also significantly benefit the population in Whistler who may not be able to use the fixed-route service because of a disability.

Custom transit is a collection of transit services tailored to specific travel needs that cannot be met by the Conventional transit system. These services include:

Flex-route transit: Like Conventional transit, flex-route buses follow a fixed route and fixed schedule.

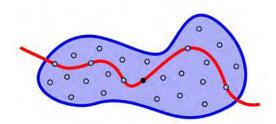
The difference is that buses can deviate from the route to pick up or drop off passengers at nearby locations, such as a house, child care center or employment site, for example. After completing the pickup or drop off, the bus returns to the bus route at the location where it deviated. A flex-route service is scheduled with extra time in the schedule to accommodate route deviations.



For the majority of users who do not require a deviation from the route, a flex-route service is no different than conventional transit. They board and alight at designated bus stops along the route, at scheduled times. For those who do require a route deviation, the only disadvantage of flex-route service is the need to call in advance to request a trip. Typically, customers are required to call at least one hour in advance.

Flex-routing could be particularly effective in low-density neighbourhoods.

Dial-a-Bus: These services also follow a fixed schedule, but buses do not follow a fixed route. Instead, drivers determine their own route as needed to pick up and drop off passengers who have requested service in advance. Buses may also stop at specific designated bus stops at scheduled times without the need for any advance requests for service. These bus stops are typically located at popular destinations such as shopping centres, community centres and downtown locations.



Some dial-a-bus services provide "door-to-door" service, while others pick up and drop off passengers at "request stops." Door-to-door service means passengers are picked up and dropped off at the curb in front of their home or destination. Request stops are designated bus stops located throughout an area; when a passenger requests a pick up, he or she walks to the nearest request stop to meet the bus. Returning passengers are dropped off at the request stop nearest their destination.

Dial-a-bus services operate on a fixed schedule, which means that travel times are limited to specific time periods during which a bus is scheduled to operate in the area.

Demand-Responsive: Unlike Conventional, Flex-route and Dial-a-Bus services which operate at fixed times, demand-responsive transit services such as handyDART operate only in response to requests for service. Service is provided only when and where it is requested. If no service is requested at a particular time or in a particular area, no service is provided.

- handyDART: A type of demand-responsive transit, handyDART is door-to-door service for customers with physical or cognitive impairments who cannot independently use the Conventional transit system some or all of the time.
 - **Taxi Saver** For times when the handyDART system is unavailable, the Taxi Saver Program provides registered handyDART passengers with subsidized taxi service, giving them the flexibility to coordinate their own trips.
 - Taxi Supplement Program The Taxi Supplement Program enables the



handyDART operator to book trips in taxis when the regular vehicle(s) is unavailable, either because of capacity issues or because the trip cannot be accommodated in a timely manner. In essence, the handyDART oerator becomes one large regular client to the taxi company, while in turn the vehicles of the taxi company act like extra vehicles to the handyDART operator. For instance, if a

passenger requests a trip when the handyDART vehicle is unavailable, Taxi Supplement enables the handyDART dispatcher to relay the passenger's name, pickup and drop off details to a participating taxi company. The taxi company then slots that passenger into their bookings for the day and picks up and drops off the passenger at the assigned locations and times. There may be restrictions on the use of this service including requirements for ride sharing and budget limitations.

Transit alternatives such as car- or van-pooling can also compliment Conventional transit.

Exploring the suitability of any of these options in the Whistler context would be of value.

Strategic partnerships with private industry or community groups can be beneficial in diversifying the existing transit system.

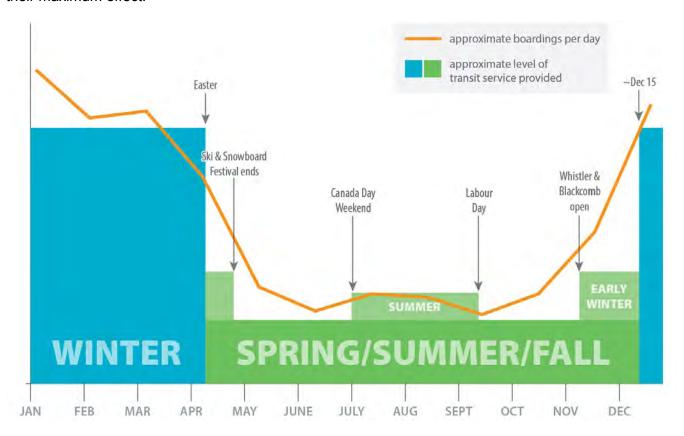
Medium Term – Explore Between 2020-2025

TRANSIT SERVICE

Continue to examine seasonal service trends and rebalance service levels if necessary

As Whistler continues to position itself as a year-round resort destination, and is home to over 10,000 year-round residents, spring, summer and fall ridership is expected to continue to increase. The impacts of climate change to the peak seasonal demand may also contribute to a shift in ridership patterns.

These seasonal ridership trends should be examined closely to ensure resources are being utilized at their maximum effect.



TRANSIT INFRASTRUCTURE

Introduce Transit Priority Measures / Improve Transit Operations

- Explore opportunities to introduce transit priority infrastructure from Whistler Village to Function
 Junction during peak periods. The traffic volumes along this section of the highway result in the
 highest levels of traffic, resulting in transit on-time performance issues. Transit priority measures
 could include queue jumpers, or high-occupancy vehicle or bus-only lanes. Introducing transit
 priority on this corridor would improve on-time performance and attract new ridership.
- Explore opportunities to introduce a protected left hand turn lane from Spring Creek Road southbound onto the Sea to Sky Highway, and/or introduce a pedestrian- or transit-actuated signal. This could eliminate the need for buses to truncate their route at Spring Creek, and could also facilitate implementing a southbound bus stop on the Sea to Sky Highway at Spring Creek.
- Explore opportunities to improve the left turn from Meadow Park Sports Centre to northbound Sea to Sky Highway to address increasing traffic volumes.

Continue to improve transit customer facilities

- Introduce new northbound bus stop on the Sea to Sky Highway at Rainbow to improve service efficiency
- Improve lighting at highway bus stops and crosswalks accessing bus stops between Whistler Village and Function Junction, and Whistler Village and Emerald Estates
- Continue to improve pedestrian infrastructure along the Sea to Sky Highway that directly accesses the bus stops

Transit service expansion to new areas must be preceded by the implementation of bus stops and customer infrastructure such as seating, bike parking, and schedule information. Developing areas are subject to a review that considers these elements as part of BC Transit's Development Referral Program. It is recommended that the RMOW participates in this Program.

Long Term - Explore Between 2025-2040

TRANSIT SERVICE

In the long term, the RMOW can also explore the following recommendations. These recommendations are made in light of technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

- Examine the feasibility of introducing Dial-a-Ride / Paratransit service to Alta Lake Road between Tamarisk and Alpine Meadows, Upper Nordic, and Upper Emerald
- Introduce Local Transit service connection between Rainbow Estates and Alpine Meadows (dependent on new road connection)
- Introduce Local Transit service connection between Spring Creek and Bayshores (dependent on new road connection)
- Explore the feasibility of introducing Local Transit or Paratransit service along Alta Lake Road and further into Emerald Estates with introductory service levels
- Explore the feasibility of introducing service to Whistler Olympic Park and Whistler Sliding Centre with some form of transit
- Continue to improve local system service to provide efficient, reliable and safe connectivity

Funding and implementation options, as well as route planning for these areas will be completed in the long term.

Summary of Resource Requirements: Short-Term

Table 32 summarizes the immediate- and short-term recommendations made in this chapter, and the estimated resources required to implement them.

Sea to Sky Transit Future Plan - Whistler								
	Pre	liminary Es	stimated	Addition		Impacts*		
Recommendation	Buses*	Additional total kms		Rides	Total Revenu	Total Costs	Net Local Share of Costs	BC Transit Share of Costs
			Trans	it Servic	e			
W1. Improve the operation	al efficie	ncy of Rou	te 1 Valle	ey Conne	ector			
W2. Undertake an in-depth or improvements	ridershi	p analysis	of the Fr	ee Villag	e Shuttles	and mak	e any necessar	y adjustments
W3. Increase Service on the Core Transit Network during the Winter Season	0	12,700	500	12,500	\$13,800	\$62,000	\$19,300	\$28,900
W4. Increase service on the Core Transit Network during the Spring, Summer, and Fall Season	0	6,400	250	3,800	\$4,200	\$31,000	\$12,300	\$14,500
Transit Infrastructure								
W5. Continue to improve transit customer facilities								
Supporting Transit Improvements								
W6. Explore Opportunities	to Impro	ve the Far	e Structu	ıre & Me	dia			
W7. Conduct feasibility as:	sessmer	nt around th	ne introd	uction of	Custom t	ransit ser	vices	

^{*}Based on 2014/15 AOA Operating Costs. Final costs may change based on final budgets and confirmation of final operational details.

These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated revenue is approximate and is based on high-level ridership estimates.

^{**}The vehicle requirements shown here appear feasible but will require confirmation by BC Transit Fleet department closer to implementation.

Transit Future: Focus on the Pemberton Valley

The Vision, Goals, and Transit Mode Share Targets outlined here guide the implementation of the Transit Future Plan. The service and infrastructure recommendations made later in this chapter align with these components and have been made to help achieve the Transit Future.

Vision

Sea to Sky communities are connected by efficient local and regional public transit networks that serve our unique climate, culture, and economy. Our transit system is safe, convenient, accessible, and reliable for residents and visitors of all ages and abilities.

Goals

Transit systems in the Sea to Sky region will be:

- For everyone
- Part of a multimodal transportation system that is integrated with other preferred transportation choices like walking, cycling, and carpooling
- Safe
- Environmentally Sustainable

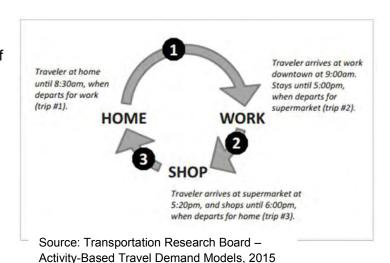
Transit Mode Share Targets

Transit Mode Share is the percentage of all trips that are made by transit in a given community, and is typically measured on an annual basis. Transit Mode Share is a representation of transit ridership overall.

Today, Pemberton's transit mode share, or the percentage of all trips currently made in Pemberton by transit, is 1.5per cent. This is equal to about 30,000 transit passengers per year.

BC Transit has developed current and potential transit mode share calculations for Pemberton based on:

- historical, current and projected population (from local strategic plans and BC Statistics population forecasts)
- Historical, current and projected travel data across all modes of transportation (assuming an average of 3 trips per person per day). For highlevel target-setting within the context of this Transit Future Plan, it is assumed that people in Sea to Sky communities will continue to make about the same number of trips per day and per year as they do today. Consider a trip as traveling from home to work. On average, people make 3 trips per day.



• **Historical, current and projected travel data across transit** (based on transit ridership data from local operating companies)

In order to develop achievable, actionable targets for Pemberton, transit mode share targets have been modestly set, and are expressed incrementally between today and 2040.

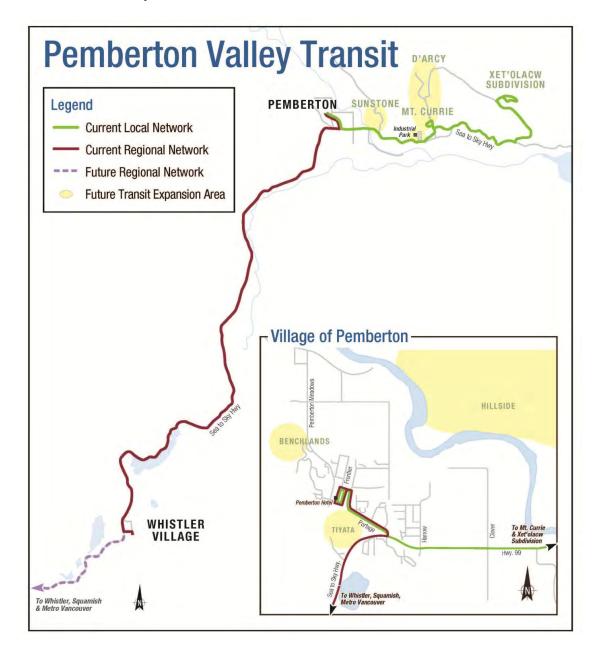
	Pemberton
Current Transit Mode Share	1.5%
2020 Transit Mode Share Target	2%
2025 Transit Mode Share Target	4%
2040 Transit Mode Share Target	6%

This sets a target that by 2040, 6per cent of all trips made in Pemberton will be made by transit. This 8per cent target can be achieved incrementally over the next 25 years, and can be reevaluated every five years as part of BC Transit's Transit Future Plan Refresh process. The sections that follow include transit service and infrastructure recommendations with an eye to achieving these targets.

The *Transit Future Foundations* chapter includes recommendations on how the existing transit mode share can increase without significantly expanding transit service hours or infrastructure. This can be achieved by implementing mechanisms for increasing existing capacity utilization on buses, such as marketing and communications actions, fare strategies, and transit-supportive land use planning.

Transit Future Network

Figure 68: Pemberton Valley Transit Future Network.



Note that the Transit Future network as envisioned here is not fixed – route numbers, route locations, and route operations are subject to change over the life of the Plan.

Local Transit Network – Links people to destinations within neighbourhoods, as well as to the other Transit Networks.

Targeted Transit Network – Links people to regional and interregional destinations.

Network Service Standards: Frequency and Span

The success of the Transit Future Network in Pemberton is not achieved by the service simply being implemented, as described in the Transit Future Foundations section of this Plan. Integrated and continuous planning, designing, monitoring, and optimizing of the transit network is required to achieve Pemberton's Transit Future. The monitoring and optimizing aspects of this work can be informed by tailored Service Standards that guide local governments and BC Transit staff in determining and managing community expectations regarding the level of transit service to be provided. Specifically, Service Standards for transit in Pemberton outline the minimum acceptable span and frequency of transit service.

Span of service defines the operating hours that a route is in service. In general, services operate primarily during the peak periods, as this is when demand is highest. For the morning and afternoon peaks, the service should be designed to allow people to access typical employee start times in the area.

As travel demand on transit services in Pemberton increases, the hours that transit operates should also increase, including in off-peak periods in the midday, on evenings and on weekends. Efficient, tailored service frequency and span meets demand when it is greatest, while also keeping operating costs in check.

BC Transit recommends the long term minimum Service Standards be achieved over the life of the Transit Future Plan. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 33: Pemberton Valley Transit Service Standards.

Transit Service Type	Transit Service Description	Existing Routes	Short Term Routes	Long Term Routes	Period	Minimum Transit Service Span	Minimum Transit Service Frequency
Local Transit	Links people to destinations within neighbourhoods, as well as to the other Transit Networks.		100	100, Benchlands, Tiyata, Hillside, Mt. Currie, D'Arcy/N'Quatqua, Sunstone,	Monday to Friday	6:00 am to 7:30 pm	60-120 minutes
		100			Saturday	6:00 am to 7:30 pm	60-120 minutes
			WedgeWoods	Sunday and Holiday	6:00 am to 7:30 pm	60-120 minutes	

Span of service extensions can be considered when the first and last hour of service has productivity greater than the average productivity on the entire route. Extensions of the span of service may also be triggered by seasonal fluctuations, or a major employer change in start or finish times.

Network Performance Guidelines

Performance Guidelines are unique evaluation tools that can be used to help plan new transit services, make adjustments to existing service, and measure how well the transit system is progressing towards achieving its goals. These guidelines will evolve with the growth of transit service in Pemberton.

As a starting point, an approximate 10 per cent improvement over the baseline has been suggested here. These targets should be re-examined and renewed every five years as part of the Transit Future Plan Refresh process described in the following section.

Table 34: Pemberton Valley Transit Performance Guidelines.

Performance Measure Definition		2014 Baseline	2040 Target			
Route Level (Local Transit Network)						
Average rides per service hour	Measures the total volume of ridership as compared to the total capacity of transit service	11	12			
Cost per passenger trip	Measures the average cost to provide service per passenger trip	\$4.86	\$4.37			
Cost recovery	Measures the financial performance of the transit system, usually expressed in terms of total operating revenue after total operating expenses	-	10%			
Average rides per trip	Measures the total number of people that board a vehicle on a specific trip specific trip and route	12	13			

Trends will be monitored over time to determine if the system or routes are becoming more or less efficient.

Significant variance (+/-25%) from the target will place a route on an action list for further investigation, and will require more detailed analysis. For example, if efficiencies to the system are required, then routes that fall below the 25 per cent variance will be candidates for corrective action. Further, if expansion resources are available or resource re-allocation is being pursued, then routes that rise above the 25 per cent variance will be candidates for service improvement.

BC Transit will report on these performance measures annually to help guide planning decisions.

Pemberton Transit Service and Infrastructure Recommendations

The recommendations in this section have been created and prioritized based on technical analysis and feedback from stakeholders, the public, and Transit Future Plan partners.

Options do not represent all of the possible changes that could be made to transit in Pemberton between today and 2040, but should serve as a starting point each time the system undergoes analysis or change. Recommendations vary in terms of required timelines, complexity, cost, and process, meaning that initiatives may not be undertaken linearly.

Regional and Interregional transit service options are described in detail in the chapter titles *Transit Future: Focus on the Sea to Sky Region*. Phasing of regional and Interregional transit service options with local options has not been identified in this Plan. Regional and Interregional transit service options may be implemented at different times than the local transit service options that follow in this chapter. While Local, Regional, and Interregional recommendations are not mutually exclusive, resource availability will be a factor in implementation and phasing. Efficiencies may be realized by developing partnerships with organizations providing existing regional and interregional bus service.

The realization of these recommendations and targets is contingent on:

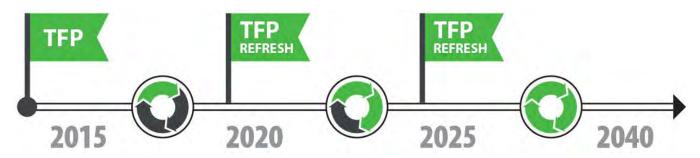
- The availability of local and provincial funding
- Community growth factors
- Phasing of major projects
- Service demand and emerging issues
- Opportunities for value added-partnerships
- Ongoing efforts to optimize service and ensure reliability and on-time performance

Note that any costs shown:

- Are approximate and are subject to change based on final operational and implementation details and timing
- Are based on 2014/15 Operating Costs
- Do not include provincial contribution to lease fees
- Do not include revenue offsets
- Do not include inflation

Transit Future Plan Refresh

Realizing the Sea to Sky Transit Future Plan requires a phased approach. Work undertaken will be evaluated every five years as part of BC Transit's Transit Future Plan Refresh process. Recommendations that have not been implemented will be re-examined, and new changes to the transit system can be explored. This Refresh also provides an opportunity to reflect collaboratively on lessons learned in the previous implementation phase.





Immediate Term - Explore Between 2015-2016

TRANSIT SERVICE

P1. Initiate a more detailed review of the financial and operational sustainability of the Pemberton Valley Transit System

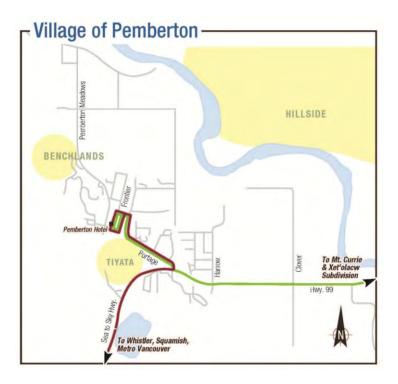
Prior to the initiation of any new projects or changes to the Pemberton Valley Transit System, it is recommended that the Local system undergo a more detailed review that focuses on its financial and operational sustainability for the short, medium and long terms. Recommendations from the previous The Pemberton Valley Service Review will be considered. This review will identify efficiencies in potential partnerships, and will examine existing fleet, facilities, and operations.

Short Term - Explore Between 2015-2020

TRANSIT SERVICE

P2. Introduce midday service on weekdays on the Local Transit Network

Throughout the Participation process, improved transit service in and around Pemberton was requested. Increasing the span and frequency of transit service to areas like Xet'olacw, Owl Ridge, and Reid Road will benefit local residents by providing increased access to recreation, employment, and commercial amenities.



Approximate resources required to improve transit service:

Initial High Level Estimate – Additional Annual Impacts						
P2: Introduce midday service on weekdays on the Local Transit Network						
Service Hours:	750		Passenger Revenue:	\$5,600		
Annual Ridership:	3,750		Total Cost*:	\$55,000		
Vehicles Required**:	TBD		Net Local Share of Costs:	\$25,000		
			Provincial Share of Costs*:	\$30,000		

^{*} Costs shown do not include Provincial contribution to Lease fees. Based on 2014/15 AOA Operating Cost. Final costs may change based on final budgets and confirmation of final operational details.

^{**} The vehicle requirements shown here appear feasible but would need to be confirmed by BC Transit's Fleet Standards department closer to the implementation date.

TRANSIT INFRASTRUCTURE

P3. Continue to improve transit customer facilities

Continued improvement and maintenance of transit facilities and on-street customer amenities throughout the Pemberton Valley is important for the successful operation and future growth of the transit system. Some improvements that have been identified include:

- Invest in on-street customer amenities such as transit shelters, customer information and benches. Implement bike parking at key stops and pedestrian-oriented lighting at transit stops.
- Improve transit wayfinding and customer connectivity on the street and online
- Improve universal accessibility of transit stops
- Improve ongoing maintenance of the existing shelters

Foundational concepts that can be applied to improving passenger experience are discussed in more detail in the Transit Future Foundations section of the Transit Future Plan.

Medium Term - Explore Between 2020-2025

TRANSIT SERVICE

The Pemberton Valley is poised to grow over the medium- and long terms of the life of the Transit Future Plan. Serving new areas with transit is important to achieving Pemberton's Transit Mode Share Target of 6 per cent by 2025. Possible candidates for Local Transit service expansion include:

- Benchlands
- Tiyata
- Hillside

Service to these areas will initially be limited to introductory service levels, including weekday peak service operating approximately every hour.

Funding and implementation options, as well as route planning for these areas will be completed in the long term.

TRANSIT INFRASTRUCTURE

Introduce new bus stops for any expansion areas

Transit service expansion to new areas must be preceded by the implementation of bus stops and customer infrastructure such as seating, bike parking, and schedule information. Developing areas are subject to a review that considers these elements as part of BC Transit's Development Referral Program. It is recommended that communities in The Pemberton Valley participate in this Program.

Long Term - Explore Between 2025-2040

TRANSIT SERVICE

- Improve / introduce Local Transit service to Mt. Currie, D'Arcy/N'Quatqua, Sunstone, and WedgeWoods with introductory levels of service
- If already in place, expand Local Transit service to service Benchlands, Tiyata and Hillside residential areas
- Continue to improve service frequency and extend service span on regional and interregional connections as demand on the corridor grows
- Continue to improve local system service to provide efficient, reliable and safe connectivity

Funding and implementation options, as well as route planning for these areas will be completed in the long term.

Summary of Resource Requirements: Short-Term

Table 35 summarizes the immediate- and short-term recommendations made in this chapter, and the estimated resources required to implement them.

Sea to Sky Transit Future Plan - Pemberton								
	Preliminary Estimated Additional Annual Impacts*							
							Net	ВС
Recommendation	Buses**	Additional	Service	Rides	Total	Total	Local	Transit
Recommendation	Duses	total kms	Hours	Riues	Revenue	Costs	Share of	Share of
							Costs	Costs
	Transit Service							
P1. Initiate a more	detailed re	eview of the fir	nancial and	d operation	nal sustain	ability of t	he Pembe	rton
P2. Introduce								
midday service on								
weekdays on the	TBD	TBD	750	3,750	\$5,625	\$60,000	\$25,161	\$29,214
Local Transit								
Network								
Transit Infrastructure								
P3. Continue to im	P3. Continue to improve transit customer facilities							

^{*}Based on 2014/15 AOA Operating Costs. Final costs may change based on final budgets and confirmation of final operational details.

These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated revenue is approximate and is based on high-level ridership estimates.

^{**}The vehicle requirements shown here appear feasible but will require confirmation by BC Transit Fleet department closer to implementation.

Toward the Sea to Sky Transit Future

Resource Requirements

Achieving the vision, goals, and targets captured in the Sea to Sky Transit Future will require capital and operating investments over the next 25 years.

Estimated resource requirements for the immediate- and short-term are detailed below. These costs have been rounded, and are expressed in 2014 annual dollars. Final costs, fleet requirements, and estimates are subject to change and will be refined prior to implementation. Estimated costs are based on 2014/15 AOA Budget. Final costs may change based on final budgets and confirmation of final operational details.

Resource Requirements for regional transit in the Sea to Sky area

At the regional level, an estimated **5,200 additional annual Conventional transit service hours and two additional buses** will be required to achieve the goals outlined to 2020. Implementing these options is estimated to require a total of **\$800,000**. Cost sharing between Sea to Sky communities can be determined through the regional governance development recommended earlier in the Transit Future Plan.

Capital investments for regional transit infrastructure include:

- Potential new or expanded transit exchanges
- New Park & Ride facility in downtown Squamish
- Potential new or expanded Transit Operations and Maintenance Facilities in Squamish and/or Pemberton
- Improvements to customer amenities at bus stops and the existing or new Squamish Transit Exchange
- New Sea to Sky Highway transit priority measures

Resource Requirements for local transit in Squamish

In Squamish, an estimated **5,350 additional annual Conventional and Custom transit service hours and one additional bus** will be required to achieve the goals outlined to 2020. Implementing these options is estimated to require a total of **\$700,000**.

Capital investments for transit infrastructure include:

- New or expanded transit exchange
- Potential new or expanded Transit Operations and Maintenance Facility
- Improvements to customer amenities at bus stops and at the Squamish Transit Exchange

Resource Requirements for local transit in Whistler

In Whistler, an estimated **750 additional annual Conventional transit service hours** will be required to achieve the goals outlined to 2020. This service hour increase is estimated to require a total of **\$90,000**.

No additional buses are required to implement the immediate- and short-term recommendations described in the Transit Future Plan for Whistler.

Capital investments for transit infrastructure include:

Improvements to customer amenities at bus stops and at Gondola Transit Exchange

Resource Requirements for transit in the Pemberton Valley

In The Pemberton Valley, an estimated **750 additional annual Conventional and Custom transit service hours** will be required to achieve the goals outlined to 2020. This service hour increase is estimated to require a total of **\$55,000**.

No additional buses are required to implement the immediate-term recommendations described in the Transit Future Plan for The Pemberton Valley, though additional vehicles may be required to introduce midday service on weekdays on the Local Transit Network.

Capital investments for transit infrastructure include:

Improvements to customer amenities at bus stops

Given the level of transit investment anticipated over the coming decades, the way in which transit is funded needs to be reviewed. BC Transit and its funding partners will need to work together to achieve stable and predictable funding sources beyond the existing funding mechanisms.

Existing Funding Sources

Under the BC Transit Act, local governments are responsible for determining the extent of transit service provided in their communities, and then funding their legislated share of the cost of this service.

Funding for transit services is generated from three main sources:

- **B.C. Provincial Government contributions** an average of 50 per cent.
- Local partners' contributions (local governments and First Nations) an average of 30 per cent. This can include partnerships with other local governments, area First Nations or third parties such as hotel associations or health authorities.
- Operations revenue (customer fares, advertising, investments, rental of excess owned transit
 fleet and facility space to third parties) an average of 20 per cent. An example of a third party
 operator currently renting transit infrastructure (office space, parking, and services) can be
 found at the Whistler Transit Centre. Revenues from this agreement are used to offset transit
 operating costs.

Locally-generated funding sources are described in more detail in the following section.

PROPERTY TAX

Property taxes are a common source of transit funding across Canada and offer a stable and predictable source of revenue.

The SLRD does not collect property taxes directly. Rather, taxes are collected by the member municipalities of Squamish, Whistler, Pemberton, and unincorporated areas based on property assessment values. Locally, transit costs are funded through a general fund. Regional District operations, which may include transit in the future, are funded through requisitions from member municipalities and unincorporated areas.

PASSENGER FARES

As discussed in the *Transit In* chapters of the Sea to Sky Transit Future Plan, passenger fare rates and products vary across Sea to Sky transit systems. Fares are set by local governments based on recommendations from BC Transit, as well as fare guidelines that consider comparable fare structures of peer transit systems and other local revenue sources.

The value of transit service must be priced appropriately compared with the costs of transportation alternatives, and fare discounts should not erode fare revenues or service levels.²

ADVERTISING

Advertising is a small but stable source of funding on Sea to Sky transit systems, generating less than one per cent of total annual revenue.

Advertising on BC Transit buses across the province is currently managed by a third-party contractor, with an emphasis on conventional bus advertising. Today, only Squamish Transit engages in exterior fleet advertising. The RMOW manages interior bus advertising on the Whistler Transit System fleet.

² http://www.cutaactu.ca/en/public-transit/publicaffairs/resources/CUTA_Alternative_Funding_Report_May_2015.pdf

COMMERCIAL REVENUE SOURCES

The BC Transit Act identifies commercial ventures as one of the elements that form the core of BC Transit's business. As such, BC Transit regularly examines new ways to generate revenue that will support improved transit services without increasing demands on local taxpayers.

The Whistler Transit Centre (the Operations and Maintenance Facility in Whistler) currently generates additional revenue by reallocating some of its excess space to a third-party coach line company requiring office space, secure parking, and other services.

MUNICIPAL AND REGIONAL DISTRICT TAX (MRDT)

The Municipal and Regional District Tax (MRDT) is administered under the Provincial Sales Tax Act. The MRDT is an additional 2 per cent tax added to the Provincial Sales Tax portion of an accommodations invoice. The 2 per cent is returned to the host municipality monthly based on the monthly remittances from the accommodations sector to the Province. Increasing this tax to three per cent has been discussed in recent years, and would require provincial legislation. Although this tax is also collected in all communities around the Province, the Resort Municipality of Whistler is currently the only community in BC that allocates a portion of this funding for transit services. This allocation has been in place since 1991 when the Whistler Transit System first offered the Free Village Shuttle services modeled on free transit services offered in ski resorts in the US.

Potential Future Supplementary Funding Sources

EXPANSION OF EXISTING FUNDING SOURCES

Continued Participation in various Funding Programs

Sea to Sky communities may benefit from participating in regional, provincial, federal and community-level grants and funding programs (such as the MRDT) to secure capital and/or operating funds.

Property Tax

Some jurisdictions in British Columbia, such as Victoria and Vancouver, have a dedicated transit levy within the property tax fund.

Exploring future funding options through property tax funds in the Sea to Sky area could contribute to future expansion of transit overall. This could even include a Community Pass system where every household in a neighbourhood contributed more in their property taxes for unlimited access to transit.

Passenger Fares

Before considering supplementary funding mechanisms, it is important that transit systems optimize fare revenue. An effective fare strategy should meet the needs of the community while remaining affordable to the user and to the community as a whole. In addition, it should also support the ridership targets set out in the Transit Future Plan. The strategy could also include a vendor and product review, exploring options for online fare sales as well as new fare media.

Table 36: Fare structure review and revision dates in Sea to Sky Transit Systems.

Transit System	Last Fare Review & Recommendations Prepared	Last Fare Change
Squamish	April 2012	September 2008
Whistler	May 2013	December 2013
The Pemberton Valley	December 2010	December 2010

Fare revisions in Sea to Sky transit systems could contribute to future expansion of transit in the Sea to Sky region through potential increased revenue.

Commercial Revenue Sources

Depending on local market demand and the capacity of local facilities, additional opportunities to support third-party commercial initiatives may be possible over the life of the Transit Future Plan.

BC Transit continues to work with its local government partners to identify opportunities to leverage existing assets and products to generate incremental revenue.

EXPLORATION OF ALTERNATIVE FUNDING SOURCES

Alternative funding mechanisms have been identified in other jurisdictions across Canada as a means to supplement local contributions to fund transit.

The following table outlines a range of options that are applicable on a regional scale in British Columbia, not focusing on applicability at the local level. This regional outlook aligns with potential

efficiencies that could be realized by changes in governance where regional and interregional transit is concerned. It is important to note that several of these options are not feasible under current regulations, thereby requiring legislative changes and/or Provincial government approval. These funds may be used to offset capital and/or operating costs. For objectivity, table entries are organized alphabetically.

Table 37: Potential Alternative Funding / Revenue Sources for Transit in British Columbia.

Alternative Funding Source	Description	Key Observations
Auto Insurance Tax	Fee paid by vehicle owners through auto insurance payments	Requires Provincial legislation, as it represents additional taxes. Public acceptance is generally mixed. Additional revenue raised is likely to be limited.
Carbon Tax	Tax levied on carbon dioxide emissions from fuel consumption for transportation and other purposes	A carbon tax is currently implemented in British Columbia as a revenue-neutral mechanism, where funds generated are used to reduce other taxes (e.g. income tax). ³ Under this model, this tax would be unlikely to be used to directly support transit funding in the region.
Crowdfunding	Funds raised through the collection of contributions from the general public	Best suited for funding discrete projects, trials, or ideas; can be geographically sourced e.g.: local community association crowdfunds bus shelter and bench installation.
Development Cost Charges	A special charge on new development within the transit service area	Most effective in cities that are experiencing a great deal of concentrated growth. May generate additional revenue, but the amount is likely to be limited and unpredictable given development patterns in the Sea to Sky corridor. If only applied near transit exchanges, high development fees could discourage Transit Oriented Development.
Driver's Licence Tax	Tax levied on drivers upon the issuing or renewal of their driver's license	Requires Provincial legislation, as it represents additional taxes. Revenue generation is likely low given the residential population of the region, though additional data on the number of driver's license holders in the region is needed to substantiate this observation.

³ <u>http://www.fin.gov.bc.ca/tbs/tp/climate/tax_cuts.htm</u>

Alternative Funding Source	Description	Key Observations
Fuel Tax	Tax levied on fuel sales within the region to be used for transit	Requires Provincial legislation, as it represents additional taxes. Offers a potentially stable and strong revenue source, and can contribute to behaviour change and modal shifts. At the time of implementation, Provincial fiscal contributions to transit were also decreased in Victoria and Vancouver, so a gross gain in total revenue is not necessarily guaranteed.
Highway Toll / Cordon Charge	Toll on drivers entering or exiting a zone or region	Requires Provincial legislation. While revenue-generating potential is high, the costs of implementing tolling infrastructure and technology are generally high. May also be sensitive due to the perceived <i>shadow toll</i> on the Sea to Sky Highway ⁴ and the unavailability of an alternative direct road route into the Sea to Sky region. Likely to face political opposition due to the importance of tourism to the region.
Hotel and Accommodation Levy	Hotel tax charged along with accommodation fees	The Municipal and Regional District Tax (MRDT) is administered under the Sales Tax Act. The MRDT is an additional two per cent tax added to the Provincial Sales Tax portion of an accommodations invoice. The two per cent is returned to the host municipality monthly based on the monthly remittances from the accommodations sector to the Province. Increasing this tax to three per cent has been discussed in recent years, and would require provincial legislation. Although this tax is also collected in all communities around the Province, the Resort Municipality of Whistler is currently the only community in BC that allocates a portion of this funding for transit services. This allocation has been in place since 1991 when the Whistler Transit System first offered the Free Village Shuttle services modeled on free transit services offered in ski resorts in the US.

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 $^{^{4}\,\}underline{http://www.theglobeandmail.com/news/british-columbia/government-accused-of-shadow-toll-on-sea-to-sky-\underline{highway/article4348915/}$

Alternative Funding Source	Description	Key Observations
Parking Sales Levy	A tax levied on paid parking transactions as additional sales tax	Generally easy to implement, however these levies often face public opposition. In the Sea to Sky region this tax is likely to generate modest revenue as there is very user pay parking. May require Provincial Legislation.
Sales Tax	A special sales tax within the transit service area	Despite the potential to generate significant and stable revenues, public acceptance is low and this funding source is not widely used in Canada due to generally already-high sales taxes. May require Provincial Legislation.
Third Party Revenue Contributions/Partnerships	Funds raised through the collection of contributions from private industry	Funding directed towards a particular transit service. Examples are: a free event shuttle, making an existing service fare free for a particular time of day or on an event day or a season. This could offset farebox revenue and make a designated route free for customers (currently a pilot project is underway in Whistler where funding has been raised to make Route 7 free from 8pm to 8am during the winter season). Could be explored on a regional scale for Sea to Sky communities for a particular transit service.
Utility Levy	A special transit levy to all utility accounts in the region	Potential revenues are moderate and stable. Currently used in Metro Vancouver. Public acceptance is generally mixed. May require Provincial Legislation.
Vehicle Registration Levy	An additional levy on top of existing registration fees for vehicles registered in the region.	Requires Provincial legislation. Public perception is generally mixed. More data on the number of registered vehicles in the Sea to Sky region would improve the understanding of this option.

BC Transit will support local governments, where possible, in pursuing funding sources deemed to be their priority both at a local and regional level.

As noted earlier in the Transit Future Plan, Sea to Sky communities should explore the possibility of developing a regional governance structure to streamline the funding and implementation of Regional and Interregional transit. This could enable more comprehensive system management and performance monitoring, and could involve establishing some form of a Regional Transit Advisory Committee with an agreed-upon Terms of Reference and decision-making process. Formalizing these efforts is a necessary first step to funding and implementing the Transit Future Plan.

Keys to Success

To guide the plan from vision to reality will require an on-going dialogue between the Province, BC Transit and the local partners on transportation policy, funding and the connection between land use and transit planning.

The Transit Future Plan builds upon previous plans (the Regional Growth Strategy, Official Community Plans, and Transportation Plans) and will be used to communicate the vision and direction for transit in the Sea to Sky region.

Other steps required to ensure the success of the plan include integrating the transit strategy into other municipal projects, supporting travel demand management measures, transit oriented development and transit supportive land use practices.

Service Planning, Implementation and Evaluation Cycle



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

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

How will BC Transit and the Sea to Sky regional partners use this plan?

- As a tool to communicate the vision for transit to partners, stakeholders, and the public.
- To identify where and in what order key transit investments will occur.
- To strategically move projects through the capital planning process.
- To inform the three year service planning process.
- To work with partners on integrating transit plans and investments with other major infrastructure plans and projects.
- To respond to planning and development proposals.

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

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

Glossary

Accessible, Universal	Transit vehicle or infrastructure that can be accessed by anyone,
Accessibility	regardless of their physical, sensory, or cognitive abilities.
Conventional Transit	A transit service using regularly scheduled, "fixed route" vehicles
	(operating according to published route maps and timetables).
Cost Recovery	A measure of the financial performance of the transit system usually
•	expressed in terms of total operating revenue/total operating
	expense.
Custom Transit	Door-to-door transit service for those persons whose physical
	disability prevents them from using conventional transit service.
Greenhouse Gas	Greenhouse gas emissions (GHGs) refer to human-made emissions
Emissions	of four gases attributed to global warming and climate change -
	carbon dioxide, methane, nitrous oxide, and ozone.
Mode Share	Mode share describes the percentage of travelers using a particular
	transportation mode.
Paratransit	A general name for a class of transportation service offering a more
	flexible and personalized service than conventional fixed-route transit
	but not including private, exclusive use systems such as private car,
	exclusive ride taxi or chartered bus. Includes systems such as a dial-
	a-bus, shared-ride taxi and subscription bus services.
Park & Ride	A multimodal transportation and parking facility where travelers can
	transfer from walking, cycling, or driving to transit.
Revenue Hours	The total number of scheduled hours that a transit vehicle is available
	for passenger service.
•	

Ridership	A measure of the number of passengers using public transit.
Single Occupant	A privately operated vehicle whose only occupant is the driver.
Vehicle (SOV)	



REPORT TO COUNCIL

Date: November 17, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Wendy Olsson, Executive Assistant

Subject: Village of Pemberton Bullying, Harassment and Discrimination Policy

PURPOSE

The purpose of this report is to present to Council for adoption the amended Bullying, Harassment and Discrimination Policy.

BACKGROUND

In 2001, Village Council adopted and implemented a Harassment Policy in order to have a policy in place to address situations in which harassment may be at issue. In 2008, this policy was updated to include the procedure to follow if a complaint should be made. In addition all staff and Council participated in a two hour workshop which focused on how to identify harassment and the tools to ensure it does not occur.

As of November 1, 2013, WorkSafeBC approved amendments to the requirements of Section 115(2) (e) of the Workers Compensation Act to include Policy D3-115-2, which outlines Employer, Supervisor and Worker duties regarding Bullying and Harassment in the workplace. The amendment included the requirement for an Employer to take steps to prevent workplace Bullying and Harassment, implement procedures for workers to report incidents and define how the Employer will deal with incidents and conduct investigations. To view Policy D3-115-2, click on the link below:

http://www2.worksafebc.com/Publications/OHSRegulation/GuidelinesWorkersCompensationAct.asp#SectionNumber:G-D3-115_1-3

As a result of these legislated amendments, Staff undertook a review of the Village's Harassment Policy and prepared a revised Policy in order to bring it in alignment with the new legislation. The amended Policy was presented at the Committee of the Whole Meeting No. 139, held Tuesday, November 3, 2105 for consideration and the following resolution was passed:

Moved/Seconded

THAT the Committee of the Whole recommend to Council adopt the Bullying, Harassment and Discrimination Policy with the inclusion of clarification on the application of the Workers Compensation Act to elected officials and on the responsibility for investigations.

CARRIED

Regular Council Meeting No. 1412 Village of Pemberton Bullying, Harassment and Discrimination Policy Tuesday, November 17, 2015 Page 2 of 4

DISCUSSION & COMMENTS

In February of 2015, Council underwent a Strategic Priorities Session and established Strategic directions for the year. The development of an Employee Manual was one of the items included in the 2015 Strategic Priorities as adopted by Council on May 19, 2015. A Policy which addresses the Village's position on Bullying and Harassment and the associated expectations of all Employees, aligns directly with the operational strategy in the creation of an Employee Manual.

As noted above, the amended Policy was reviewed by the Committee of the Whole on November 3rd, 2015. The Committee requested additional information regarding the application of *Workers Compensation Act* (the *Act*) to elected officials, as well as who would be responsible for undertaking investigations under the proposed policy and how they are qualified.

Elected officials are excluded under the *Act* as they are considered neither an employee nor employer under WorkSafeBC legislation. However, as an employer, the Village has an obligation to take all steps to ensure that bullying, harassment and discrimination are minimized or prevented in the workplace.

This obligation applies to interactions between elected officials and local government employees. Elected officials must not engage in bullying, harassment or discrimination as they may be seen as acting on behalf of the employer in some circumstances, and they would constitute a 'person' as defined by WorkSafeBC, below:

"By a person"

The definition encompasses behaviour engaged in by a person that a worker may encounter at the workplace, such as clients, customers, members of the public, etc. While employers and supervisors may not have direct control over the behaviour of such non-workers, it is important to acknowledge that employers must implement procedures to ensure bullying and harassing behaviour from non-workers is prevented or minimized, and appropriately addressed if such behaviour should occur.

If both the complainant and respondent are elected officials, then both are excluded from the *Act*. This means that any redress for bullying, harassment and discrimination would have to go through the Courts.

Regarding the qualification of those parties responsible for conducting investigations, the Village will ensure that all relevant parties receive training in incident investigation as soon as practicable. A training session will be conducted once the policy is approved. This training may either be facilitated in-house or by an external consultant.

COMMUNICATIONS

The required communications component will be undertaken upon approval of the Policy:

• As per Section 115(2) (e) of the *Act*, Policy D3-115-2, the Policy and its requirements will be communicated to all Employees, Council Members, Contractors and Volunteers (Employees).

Regular Council Meeting No. 1412 Village of Pemberton Bullying, Harassment and Discrimination Policy Tuesday, November 17, 2015 Page 3 of 4

- Notice will also be provided through internal communications such as the Staff ENEWS.
- The Policy will be communicated in conjunction with the implementation of the Employee Manual as part of the induction process of new Employees.
- The Employee Manual will be a living document subject to change as per operational requirements and regular review; should there be any changes to the Bullying and Harassment Policy said changes will be communicated to all Employees.

LEGAL CONSIDERATIONS

Effective November 1, 2013, the *Workers Compensation Act* was amended to include Policy D3-115-2, requiring that all Employers to develop a policy statement with respect to workplace bullying and harassment.

Implementation of this Policy incorporates the amendments made to the *Workers Compensation Act* and reduces exposure to the high human and financial costs of:

- WorkSafeBC Penalties for non-compliance with legislation
- WorkSafeBC Mental Health Claims
- Legal proceedings resulting from a complaint under the Human Rights Code

The amended policy as drafted was referred to the Village's legal counsel for review. The Village has received confirmation that the policy meets WorkSafeBC Policy and Amendments.

A representative of the Ministry of Labour Employers' Advisers Office has confirmed that as an employer, the Village has a duty to implement procedures to ensure bullying and harassing behaviour from non-workers who interact with employees, including, in the case of local government employees, elected officials, is prevented or minimized.

IMPACT ON BUDGET & STAFFING

There are no impacts to the budget as the update of this policy was completed in-house.

An orientation and training workshop on the Policy and its requirements will be conducted once the policy is approved. Additionally, training will be conducted regarding investigation of complaints for those responsible for investigations under the Policy.

This training may either be facilitated in-house or by an external consultant. Should a consultant be retained, the cost would be up to \$2,500. The CAO will determine the best option for training within the confines of budget.

INTERDEPARTMENTAL IMPACT & APPROVAL

The above noted project will not impact the day to day operations of the Village.

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IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

A review of this policy has no impact on other jurisdictions.

ALTERNATIVE OPTIONS

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

The approval of the Bullying, Harassment and Discrimination Policy falls within Village's Strategic Priority Two of Good Governance: The Village is committed to citizen engagement, being an open and accountable government, and fiscal responsibility. Additionally, a Policy expressing the Village's commitment to a workplace which places high importance on the well-being of its staff aligns with the Village's Strategic Priority Four of Social Responsibility, recognizing the benefits of healthy and engaged citizens.

RECOMMENDATIONS

THAT the Bullying, Harassment and Discrimination Policy be adopted by Council.

Attachments:

Appendix A – Bullying, Harassment and Discrimination Policy Appendix B – Bullying, Harassment and Discrimination Policy – Tracked changes

Wendy Olsson

Executive Assistant

CHIEF ADMINISTRATIVE OFFICER REVIEW & MANAGER

Nikki Gilmore, Chief Administrative Officer

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Bullying, Harassment and Discrimination Policy

Department:	Village of Pemberton	Procedure No.:	
Sub-department:	Office of the CAO	Created By:	Original Unknown
Approved By:	Council	Amended By:	Wendy Olsson
Approved Date:	2001	Amendment:	2

PURPOSE OF POLICY

The Village of Pemberton (the Village) is committed to maintaining a healthy work environment that respects and supports the dignity of all employees. The purpose of this Policy is to outline the procedures for preventing, reporting, investigating and resolving complaints of Bullying, Harassment and Discrimination in the workplace.

This Policy will serve as a replacement to the Harassment Policy adopted and implemented by Village Council in 2001 and subsequently updated in 2008. With the amendments to WorkSafeBC Legislation relating to Bullying and Harassment, it has been deemed necessary to update the Policy and bring forward amendments for Council's approval.

SCOPE

This Policy applies to everyone performing work for the Village and/or interacting with Village Staff for the purpose of work including Employees, Council Members, Contractors and Volunteers (Employees). This Policy applies to all Village worksites. It also applies at all employment-related functions which occur during or outside working hours.

REFERENCES

- BC Human Rights Code
- Workers Compensation Act (the Act)
- Village of Pemberton Code of Conduct (September 4, 2007)
- Village of Pemberton Social Media Policy (PER 004 March 3, 2015)

DEFINITIONS

Bullying and Harassment includes any inappropriate conduct or comment, be it verbal or written (including via social media or other electronic means), by a person towards an Employee that the person knew or reasonably ought to have known would cause that Employee to be humiliated or intimidated, or any other form of unwelcome verbal or physical behaviour which by a reasonable standard would be expected to cause insecurity, discomfort, offence or humiliation to an Employee or group of Employees, and



has the purpose or effect of interfering with an employee's work performance or creating an intimidating, hostile or offensive work environment.

Bullying and Harassment does not include any reasonable action taken by or on behalf of the Village relating to the management and direction of Employees or the place of employment.

Bullying and Harassment includes, but is not limited to, such things as:

- words, gestures, actions or practical jokes, the natural consequence of which is to humiliate, ridicule, insult or degrade;
- threats or intimidation;
- physical assault; or
- persistent rudeness, bullying, taunting, patronizing behaviour, yelling, spreading malicious rumours, or other conduct which adversely affects working conditions or work performance.

Discrimination means discrimination in employment based on a person's sex, race, colour, ancestry, place of origin, political belief, religion, marital status, family status, physical or mental disability, sexual orientation, age, or criminal conviction which is unrelated to the person's employment.

POLICY

Bullying, Harassment and Discrimination is unacceptable and will not be tolerated by the Village of Pemberton. Bullying, Harassment and Discrimination, retaliation against any person for reporting said behaviours, or interference in a complaint will be treated seriously, and may result in discipline up to and including dismissal. Management and Employees have the following responsibilities in cooperation with this Policy:

Management must:

- Take steps to prevent where possible, or otherwise minimize, Bullying, Harassment and Discrimination,
- Make all Employees aware of this Policy, the procedures set out herein, the Policy purpose and the steps being taken by the Village to prevent where possible, or otherwise minimize, incidents of Discrimination or Bullying and Harassment,
- Provide training to Employees to help them fulfill their responsibilities under this Policy,
- Ensure all parties responsible for conducting investigations are trained and qualified,
- Maintain the confidentiality of any information received during the course of a complaint or investigation process under this Policy,

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- Not engage in retaliation against any individual who files a complaint or participates in an investigation under this Policy,
- Review this Policy and the procedures set out herein on a proactive basis, adding any additional prohibited behaviours as identified and;
- Review this Policy on an annual basis.

Employees must:

- Avoid engaging in any conduct that constitutes Discrimination or Bullying and Harassment;
- Report if Discrimination or Bullying and Harassment is observed or experienced;
- Cooperate with all aspects of the investigation process;
- Maintain the confidentiality of any information received during the course of a complaint or investigation process under this Policy;
- Not engage in retaliation against any individual who files a complaint or participates in an investigation under this Policy, and;
- Apply and comply with this Policy and the procedures set out herein.

PROCEDURE

If you are victim to or witness Bullying, Harassment and/or Discrimination, both informal and formal procedures for resolution exist.

Informal Resolution

An individual who believes that he or she is experiencing or observing Bullying and Harassment or Discrimination in the workplace may:

- If comfortable doing so, inform the other individual that their conduct is unwelcome and contrary to this Policy, and request that they cease the offending behaviour immediately;
- If the conversation does not result in a satisfactory resolution or if the individual does not wish to speak to the other person directly, contact the Chief Administrative Officer (CAO)* for assistance in discussing concerns with the other person;
- Review with the CAO the option of mediation between the two parties by the CAO or other neutral party as designated by the CAO.

The informal complaint resolution process outlined above is not mandatory.

Formal Complaint Resolution

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^{*} Where the complaint is directed against the CAO, the individual will consult the Mayor for assistance.



If a complaint is not resolved informally, the individual who believes he or she has experienced Bullying and Harassment or Discrimination (the Complainant) may wish to make a formal complaint.

The Complainant will submit the complaint orally or in writing to the CAO or, where the CAO is named in the complaint, to the Mayor. Unless exceptional circumstances exist, a formal complaint must be brought within six (6) months of the most recent incident alleged to constitute Bullying and Harassment or Discrimination.

All complaints will be taken seriously, and will be dealt with fairly and promptly, using the investigation process set out below in this Policy.

Investigation Process

If the subject matter of a complaint fits within the definition of Bullying and Harassment or Discrimination it will be investigated. Investigations will be unbiased, thorough, complete, and conducted in as expedient a manner as practicable upon receipt of the formal complaint. Where appropriate, the CAO or Mayor can appoint a designate which can be either a member of staff or an external third party to conduct or support the investigation.

For the purposes of the investigation, formal complaints cannot be pursued anonymously; the identity of the Complainant and the nature of the complaint shall be made known to the individual alleged to have engaged in Bullying and Harassment or Discrimination (the Respondent). The Respondent shall be provided the opportunity to explain his or her behaviour and to have such explanations properly considered in the investigation process.

Investigations will involve reviewing all relevant documentation and conducting in-person interviews with the Complainant, the Respondent, and any other applicable witnesses. Statements provided during interviews will be documented.

All documentation considered during, and resulting from, the investigation of a complaint will be treated as strictly confidential for the purposes of any applications made under the Freedom of Information and Protection of Privacy Act.

The Investigator will submit a report to the CAO or as appropriate, Council, with conclusions as to whether the evidence supports or does not support the allegations of Bullying and Harassment or Discrimination and, if applicable, recommendations for a remedy or resolution. The report will remain strictly confidential, and the parties will be provided with a summary of the findings in the report by the CAO or their designate.

Remedies

Where a finding of Bullying and Harassment or Discrimination is made following an investigation, the Village will, as soon as is reasonably practicable, take appropriate remedial or disciplinary action against the Employee who violated this Policy. This action may include education and training, modification of policies/procedures, or disciplinary

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action up to and including dismissal with just cause. A copy of the complaint and the outcome of the investigation, including any action to be taken, will be filed in the Respondent's personnel file.

Where the investigation results in a finding that the complaint of Bullying and Harassment or Discrimination has not been proven, no record of the complaint shall be kept in the Respondent's personnel file.

The parties to the complaint will be informed of the outcome of the investigation and, where appropriate, the nature of any remedial or disciplinary action.

The Village will keep a written record of investigations as part of their due diligence as an organization. If the complaint was deemed to be unfounded, the investigation will not be referred to in any future complaints against the Respondent. Subject to disclosure which is required by law or is necessary to investigate or resolve a complaint, the Village will make every effort to keep confidential any information pertaining to the complaint.

Malicious Complaints

If a complaint is demonstrated to have been brought for frivolous or malicious purposes with the intent to cause harm, appropriate disciplinary action may be taken against the Complainant. A complaint that is simply unsubstantiated or that has been brought in error, but was made in good faith, is not considered a malicious complaint.

Withdrawal of Complaint

At any time during the investigation, the Complainant may choose to withdraw his or her complaint without penalty so long as the complaint was filed in good faith.

Notwithstanding this right, if in the opinion of the CAO (or their designate), the circumstances warrant the continuation of the complaint process, they may do so unilaterally.

For further clarification surrounding this Policy, please contact your Manager or Supervisor.

Mike Richman	Nikki Gilmore
Mayor	Chief Administrative Officer
Village of Pemberton	Village of Pemberton





Bullying, Harassment and Discrimination Policy

Department:	Village of Pemberton	Procedure No.:	
Sub-department:	Office of the CAO	Created By:	Original Unknown
Approved By:	Council	Amended By:	Wendy Olsson
Approved Date:	2001	Amendment:	2

PURPOSE OF POLICY

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insecurity, discomfort, offence or humiliation to an Employee or group of Employees, and has the purpose or effect of interfering with an employee's work performance or creating an intimidating, hostile or offensive work environment.

Bullying and Harassment does not include any reasonable action taken by or on behalf of the Village relating to the management and direction of Employees or the place of employment.

Bullying and Harassment includes, but is not limited to, such things as:

- words, gestures, actions or practical jokes, the natural consequence of which is to humiliate, ridicule, insult or degrade;
- threats or intimidation;
- physical assault; or
- persistent rudeness, bullying, taunting, patronizing behaviour, yelling, spreading malicious rumours, or other conduct which adversely affects working conditions or work performance.

Discrimination means discrimination in employment based on a person's sex, race, colour, ancestry, place of origin, political belief, religion, marital status, family status, physical or mental disability, sexual orientation, age, or criminal conviction which is unrelated to the person's employment.

POLICY

Bullying, Harassment and Discrimination is unacceptable and will not be tolerated by the Village of Pemberton. Bullying, Harassment and Discrimination, retaliation against any person for reporting said behaviours, or interference in a complaint will be treated seriously, and may result in discipline up to and including dismissal. Management and Employees have the following responsibilities in cooperation with this Policy:

Management must:

- Take steps to prevent where possible, or otherwise minimize, Bullying, Harassment and Discrimination,
- Make all Employees aware of this Policy, the procedures set out herein, the Policy purpose and the steps being taken by the Village to prevent where possible, or otherwise minimize, incidents of Discrimination or Bullying and Harassment,
- Provide training to Employees to help them fulfill their responsibilities under this Policy,
- Ensure all parties responsible for conducting investigations are trained and qualified,



- Maintain the confidentiality of any information received during the course of a complaint or investigation process under this Policy,
- Not engage in retaliation against any individual who files a complaint or participates in an investigation under this Policy,
- Review this Policy and the procedures set out herein on a proactive basis, adding any additional prohibited behaviours as identified and;
- Review this Policy on an annual basis.

Employees must:

- Avoid engaging in any conduct that constitutes Discrimination or Bullying and Harassment;
- Report if Discrimination or Bullying and Harassment is observed or experienced;
- Cooperate with all aspects of the investigation process;
- Maintain the confidentiality of any information received during the course of a complaint or investigation process under this Policy;
- Not engage in retaliation against any individual who files a complaint or participates in an investigation under this Policy, and;
- Apply and comply with this Policy and the procedures set out herein.

PROCEDURE

If you are victim to or witness Bullying, Harassment and/or Discrimination, both informal and formal procedures for resolution exist.

Informal Resolution

An individual who believes that he or she is experiencing or observing Bullying and Harassment or Discrimination in the workplace may:

- If comfortable doing so, inform the other individual that their conduct is unwelcome and contrary to this Policy, and request that they cease the offending behaviour immediately;
- If the conversation does not result in a satisfactory resolution or if the individual does not wish to speak to the other person directly, contact the Chief Administrative Officer (CAO)* for assistance in discussing concerns with the other person;
- Review with the CAO the option of mediation between the two parties by the CAO or other neutral party as designated by the CAO.

The informal complaint resolution process outlined above is not mandatory.

Formal Complaint Resolution

Department:	Village of Pemberton	Procedure No.:	Page: 3 of 5
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^{*} Where the complaint is directed against the CAO, the individual will consult the Mayor for assistance.



If a complaint is not resolved informally, the individual who believes he or she has experienced Bullying and Harassment or Discrimination (the Complainant) may wish to make a formal complaint.

The Complainant will submit the complaint orally or in writing to the CAO or, where the CAO is named in the complaint, to the Mayor. Unless exceptional circumstances exist, a formal complaint must be brought within six (6) months of the most recent incident alleged to constitute Bullying and Harassment or Discrimination.

All complaints will be taken seriously, and will be dealt with fairly and promptly, using the investigation process set out below in this Policy.

Investigation Process

If the subject matter of a complaint fits within the definition of Bullying and Harassment or Discrimination it will be investigated. Investigations will be unbiased, thorough, complete, and conducted in as expedient a manner as practicable upon receipt of the formal complaint. Where appropriate, the CAO or Mayor can appoint a designate which can be either a member of staff or an external third party to conduct or support the investigation.

For the purposes of the investigation, formal complaints cannot be pursued anonymously; the identity of the Complainant and the nature of the complaint shall be made known to the individual alleged to have engaged in Bullying and Harassment or Discrimination (the Respondent). The Respondent shall be provided the opportunity to explain his or her behaviour and to have such explanations properly considered in the investigation process.

Investigations will involve reviewing all relevant documentation and conducting in-person interviews with the Complainant, the Respondent, and any other applicable witnesses. Statements provided during interviews will be documented.

All documentation considered during, and resulting from, the investigation of a complaint will be treated as strictly confidential for the purposes of any applications made under the Freedom of Information and Protection of Privacy Act.

The Investigator will submit a report to the CAO or as appropriate, Council, with conclusions as to whether the evidence supports or does not support the allegations of Bullying and Harassment or Discrimination and, if applicable, recommendations for a remedy or resolution. The report will remain strictly confidential, and the parties will be provided with a summary of the findings in the report by the CAO or their designate.

Remedies

Where a finding of Bullying and Harassment or Discrimination is made following an investigation, the Village will, as soon as is reasonably practicable, take appropriate remedial or disciplinary action against the Employee who violated this Policy. This action may include education and training, modification of policies/procedures, or disciplinary

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action up to and including dismissal with just cause. A copy of the complaint and the outcome of the investigation, including any action to be taken, will be filed in the Respondent's personnel file.

Where the investigation results in a finding that the complaint of Bullying and Harassment or Discrimination has not been proven, no record of the complaint shall be kept in the Respondent's personnel file.

The parties to the complaint will be informed of the outcome of the investigation and, where appropriate, the nature of any remedial or disciplinary action.

The Village will keep a written record of investigations as part of their due diligence as an organization. If the complaint was deemed to be unfounded, the investigation will not be referred to in any future complaints against the Respondent. Subject to disclosure which is required by law or is necessary to investigate or resolve a complaint, the Village will make every effort to keep confidential any information pertaining to the complaint.

Malicious Complaints

If a complaint is demonstrated to have been brought for frivolous or malicious purposes with the intent to cause harm, appropriate disciplinary action may be taken against the Complainant. A complaint that is simply unsubstantiated or that has been brought in error, but was made in good faith, is not considered a malicious complaint.

Withdrawal of Complaint

At any time during the investigation, the Complainant may choose to withdraw his or her complaint without penalty so long as the complaint was filed in good faith.

Notwithstanding this right, if in the opinion of the CAO (or their designate), the circumstances warrant the continuation of the complaint process, they may do so unilaterally.

For further clarification surrounding this Policy, please contact your Manager or Supervisor.

Mike Richman	Nikki Gilmore
Mayor Village of Pemberton	Chief Administrative Officer Village of Pemberton



REPORT TO COUNCIL

Date: November 17, 2015

To: Council

From: Nikki Gilmore, Chief Administrative Officer

Subject: Banking Resolution and MFA Authority Resolution –

Authorized Signatories

PURPOSE

The purpose of this report is to update and include Councillor Craddock on the Village of Pemberton authorized signatories for the Bank of Nova Scotia (BNS), the Toronto Dominion (TD) Bank and Municipal Finance Authority (MFA).

BACKGROUND

After each election or by-election, the Village is required to update the list of those members of Council that are authorized to sign cheques on behalf of the Village. The Village currently has accounts with the BNS, the TD and MFA that require updating. The Village concluded the By-Election on Saturday, November 7, 2015 to elect one (1) council member, and will be swearing in Mr. Ted Craddock as the fifth member of Council at today's Regular Meeting.

It is Village policy that in order to provide surety and ensure that the management of funds are properly safeguarded, the Chief Administrative Officer and the Mayor are the primary signers on all cheques sent out by the Village. In the absence of the CAO, the Manager of Finance and Administrative Services or the Manager of Corporate & Legislative Services, has the authority to sign the cheques and in the absence of the Mayor, a member of Council will be called upon to sign.

Cheque runs are done on a bi-weekly basis and all cheques are typically prepared for signature by Thursday and sent out on Friday.

DISCUSSION & COMMENTS

This section is not applicable

COMMUNICATIONS

Once the addition of Mr. Craddock as a signing authority is confirmed by resolution, notice will be provided to each organization with the updated signing authorities.

LEGAL CONSIDERATIONS

There are no legal, legislative or regulatory considerations.

IMPACT ON BUDGET & STAFFING

There are no impacts to the budget or staff hours for consideration.

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INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts for consideration.

ALTERNATIVE OPTIONS

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

There are no governance considerations at this time.

RECOMMENDATIONS

THAT Mr. Ted Craddock be named as an elected official signing authority on the Village of Pemberton TD Bank account (s);

AND THAT Mr. Ted Craddock be named as an elected official signing authority on the Village of Pemberton Scotiabank account (s);

AND THAT Mr. Ted Craddock be named as a signing authority on all authorizations from Municipal Finance Authority by the Village of Pemberton.

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore, Chief Administrative Officer



REPORT TO COUNCIL

Date: November 17, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Sheena Fraser, Chief Election Officer/Manager of Corporate & Legislative

Services

Subject: 2015 Village of Pemberton Local Government By-Election Results

PURPOSE

To submit the declaration of the official election results for the 2015 Village of Pemberton local government By-Election.

BACKGROUND

On Saturday, November 7, 2015 the local government By-Election was held. Section 148 of the *Local Government Act* requires that, within thirty (30) days after the declaration of the official election results under section 136, the Chief Election Officer submit a report of the election results to the local government. The official results were declared on Thursday, November 12, 2015.

DISCUSSION & COMMENTS

The Official Ballot Accounts reporting the results of the 2015 General Local Government By-Election are attached (Appendix A).

A total of 247 (or 13%) of the eligible electorate participated in the 2015 By-Election, which included three (3) non-resident property electors. This is lower than the 2014 General Election in which voter turnout was 705 (or 37%); however, it is not uncommon that voter participation is reduced in circumstances of By-Elections.

The Village held two advanced voting opportunities (October 28, 2015 and November 4, 2015) and undertook some advertising of the By-Election beyond the legislated requirement. This included advertising in the local papers, ENEWS reminders of advanced and general voting opportunities, Facebook and blog posts and the strategic placement of the Village sandwich board reminding residents of voting day opportunities.

The Village also hosted a Candidate Information Session to provide an overview of the new legislation introduced in 2014 respecting election campaign financing as well the role and responsibility of Council.

COMMUNICATIONS

Section 136 of the *Local Government Act* requires that the Chief Election Officer must declare the results of the election before 4pm on the fourth day following the close of general voting. In

Regular Council Meeting No.1412 2015 Village of Pemberton Election Results Tuesday, November 17, 2015 Page 2 of 3

this regard, the Declaration of Official Election Results was made at 4 pm on Thursday, November 12, 2015, at the Village Office.

Section 149 (1) of the *Local Government Act* requires that after elected candidates have taken the oath of office the names of the elected officials must be submitted to the Queens Printer Gazette for publication. The name of the newly elected Council member will be published in the November 19, 2015, edition of The Gazette.

There are no further communications required respecting the official election results.

LEGAL CONSIDERATIONS

This report of election results for the 2015 local government By-Election meets with the legislative requirements as set out in the *Local Government Act* as noted above.

IMPACT ON BUDGET & STAFFING

The total 2015 budget for the By-Election was established at \$15,000 and as the Village had not budgeted for an election in 2015 funds had to be secured from other sources. To address this, at the Regular Meeting No. 1404, held September 1, 2015, Council approved the allocation of funds as per the resolution below:

Moved/Seconded

THAT the funds to facilitate the holding of the 2015 By-election be allocated as follows:

- \$ 3,000 from Councillor Remuneration
- \$12,000 from Community Initiative and Opportunity Fund **CARRIED**

The funds from Councillor remuneration, in the amount of \$3,000, are the savings realized due to the unexpended funds in the remuneration budget as a result of former Councillor Molinaro's resignation which took effect September 1, 2015. As well, Council approved the allocation of the remainder of the funds (\$12,000) left in the 2015 Community Initiative & Opportunity Fund budget which had not be expended as commitments to organizations have been made for this year.

Staff worked diligently to keep the costs associated with the holding of the By-Election limited and made cost savings a priority given that the Village had not budgeted for a By-Election in 2015. At this time, approximately \$6,500 has been expended to cover costs associated with design, printing, advertising, training, staffing (excluding the Chief Election Officer), supplies, room rental (election day), meals for election staff and other sundry expenses. Holding the Candidate Information Session and Advanced Voting Days at the Village Office, reducing the number of election staff, adjusting advertising (ie: size of ad, doubling up information, black and white rather than colour) and savings on room rentals at the Pemberton Community Centre by using a Room B as opposed to the Great Hall, all contributed to keeping the cost of the By-Election down.

As such, given that not all the funds were required, Staff recommends that any unexpended funds from the Community Initiative & Opportunity Funds be re-allocated back to the 2015 Community Initiative & Opportunity Fund budget.

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INTERDEPARTMENTAL IMPACT & APPROVAL

Financial administration of the By-Election will be incorporated into the daily routine of the Finance Department and can be accommodated.

Lena Martin, Manager of Finance & Administration

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

Presentation of this report and receipt of the By-Election results has no impact on other jurisdictions.

ALTERNATIVE OPTIONS

Lena Waite

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

Facilitating a local government By-Election and reporting on the outcome of the election meets with Strategic Priority Two: Good Governance whereby the Village is committed to citizen engagement, being an open and accountable government and fiscal responsibility. It also meets with Strategic Priority Three: Excellence in Service by delivering the highest quality municipal service within the scope of our resources.

RECOMMENDATIONS

Recommendation One:

THAT the report from the Chief Election Officer providing the results of the 2015 By-Election be received.

Recommendation Two:

THAT any unexpended funds allocated from the 2015 Community Initiative & Opportunity Fund to facilitate the 2015 By-Election be transferred back to the Community Initiative & Opportunity Fund budget.

Attachments:

Appendix A - Official Ballot Accounts

Luca Faser

Sheena Fraser, Chief Election Officer/ Manager of Corporate & Legislative Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore, Chief Administrative Officer

VILLAGE OF PEMBERTON

BALLOT ACCOUNT - BY-ELECTION 2015

General Voting - Pemberton Community Centre, 7390 Cottonwood Street
November 7, 2015
and
Advanced Voting – Village of Pemberton Office, 7400 Prospect Street
October 28th & November 4th, 2015

Office of Councillor

Number of valid votes cast:

BALSAMO-LACK, Jasper

CRADDOCK, Ted

(1)	Number of ballots received for use (see Note 1)			900
(2)	Ballots without objection	246	_	
(3)	Ballots accepted subject to objection under s.130		_	
(4)	Ballots rejected without objection	1	_	
(5)	Ballots rejected subject to objection under s.130	_Ø	-	
(6)	Spoiled ballots that were replaced under s.118	**************************************		
(7)	Number of ballots given to the electors (2+3+4+5+6)		248	
			(, , ,)	
(8)	Unused ballots (see Note 2)		652	

Chief Flection Officer

THIS FORM MUST BE COMPLETED IN DUPLICATE.
Place one copy in the ballot box and return one copy to the Chief Election Officer

(9) Number of ballots not accounted for

(10) **TOTAL** (7+8+9)

Note 1: If you have combined ballots from another of the same type of voting opportunity, include the number of ballots that were received for use at that voting opportunity. (LGA s.127)

No. 1 & No. 10 must agree

Note 2: If you have combined ballots from another of the same type of voting opportunity, include the number of unused ballots from that voting opportunity. (LGA s.127)



REPORT TO COUNCIL

Date: November 17, 2014

To: Nikki Gilmore, Chief Administrative Officer

From: Sheena Fraser, Manager of Corporate & Legislative Services

Subject: 2016 Committee Appointments

PURPOSE

The purpose of this report is to present to Council the list of committee and Board appointments and to confirm appointments of a Village Council representative(s).

BACKGROUND

Each year, in November or early December, Council reviews the Committee Appointment list and makes revisions if necessary, as several organizations in which the Village participates require that the appointment be made by resolution of Council. Council is also required to establish and confirm the schedule for Acting Mayor in the event of the Mayor's absence.

DISCUSSION & COMMENTS

Appointment of Acting Mayor:

Pursuant to Section 130 (1) of the *Community Charter* and Section 11 of the Council Procedure Bylaw No. 788, 2015 Council must by December "designate Councillors to serve on a rotating basis as the member responsible for acting in the place of the Mayor when the Mayor is absent or otherwise unable to act or when the office of Mayor is vacant".

Traditionally the Village has established a three month rotation which begins in December each year as follows:

- December, January, February
- March, April, May
- June, July, August
- September, October, November

This appointment schedule has usually been established based on alphabetical order except in the case whereby a member of Council knows in advance that they would be unable to fulfill the role of Acting Mayor. When reviewing the appointment to Acting Mayor schedule, Council members may wish to consider vacation and work schedules that may impact their ability to fulfill Acting Mayor responsibilities during a specific period of the year.

Appointment to Committees:

Pursuant to Section 52 (b) the Mayor is an ex-officio member of all Village of Pemberton Committees and is entitled to vote on any matter before a Committee. Although any Council member is entitled and welcome to attend a committee meeting section 52 (a) of the Council

Regular Council Meeting No. 1412 Tuesday, November 17, 2015 2016 Committee Appointments Page 2 of 6

Procedure Bylaw No 788, 2015 notes that a Councillor is not entitled to vote on a question if they are not a member of that specific committee.

Standing Committees:

Section 141 of the Community Charter establishes that:

- (1) The mayor must establish standing committees for matters the mayor considers would be better dealt with by committee and must appoint persons to those committees.
- (2) At least half of the members of a standing committee must be council members.
- (3) Subject to subsection (2), persons who are not council members may be appointed to a standing committee.

As per Section 45 (a) and (b) of the Council Procedure Bylaw No. 788, 2015, the role of a Standing Committee is to consider, inquire into, report and make recommendations to Council about the following matters:

- Matters that are related to the general subject indicated by the title of the Committee
- Matters that are assigned by Council
- Matters that are assigned by the Mayor

A Standing Committee must report and make recommendations to Council at a time requested by the Council or Mayor or if a time is not specified at the next Council meeting. A Standing Committee usually facilitates work done on an ongoing basis.

The Village currently has one Standing Committee established as the Finance Committee; however, given that in the past there has been an interest on the part of all members of Council to attend and participate at Finance Committee meetings, Council may wish to consider dissolving the Finance Committee as a Standing Committee and holding Committee of the Whole – Finance meetings in order to allow all members of Council to participate If it should be determined that Committee of the Whole Finance is a better forum to facilitate budget review and discussions the Finance Standing Committee will need to be dissolved by resolution of Council.

Select Committee:

Section 142 of the *Community Charter* establishes that:

- (1) A council may establish and appoint a select committee to consider or inquire into any matter and to report its findings and opinion to the council.
- (2) At least one member of a select committee must be a council member.
- (3) Subject to subsection (2), persons who are not council members may be appointed to a select committee.

As per Section 46 of the Council Procedure Bylaw noted above, the role of a Select Committee is to consider, inquire into, report and make recommendations to Council about the matters referred to the Committee by Council. Similar to a Standing Committee, a Select Committee must report and make recommendations to Council at the next Council meeting unless Council specifies a different date and time. A Select Committee will often be established to deal with a specific matter usually within a specific period of time.

Regular Council Meeting No. 1412 Tuesday, November 17, 2015 2016 Committee Appointments Page 3 of 6

At this time, the Village currently does not have any Select Committees established.

Committee Established by Bylaw:

Emergency Planning & Operations Committee:

The Village of Pemberton Emergency Measures Bylaw No. 539, 2004 establishes that the Village must have an Emergency Planning & Operations Committee. The role of the Committee is to facilitate emergency preparedness, response and recovery measures for the Village of Pemberton. Membership on the Committee as established in the bylaw includes one member of Council, the CAO, Emergency Program Coordinator, Departments heads or their designate and other members that Council may determine. The meeting schedule is determined by the Committee.

Working Committees:

A working Committee is a staff facilitated committee that may be established by the CAO or another organization to which a member of Councillor or Staff or both may represent the Village or Council acting as a liaison between the Committee and Council. At this time, the Village has one working committee:

Community Infrastructure Partnership Program (CIPP) Committee:

In 2015, the Village of Pemberton and Lil'wat Nation began participating in the Community Infrastructure Partnership Program (CIPP). The CIPP committee is facilitated by the Federation of Canadian Municipalities (FCM) and focuses on the negotiation of water and fire service agreements between the two governments. The Village has appointed two members of Council (one as an alternate) and the CAO as representatives to the CIPP Committee. Meetings are scheduled at the discretion of the Committee. It should be noted that the support provided by the FCM will come to an end in the early part of 2016.

Community Committee

A Community Committee may be a committee that is established by another organization or has been established by a group to bring together groups or individuals to work on a specific issue or undertake a project of some form. This is not a committee of Council but rather a Committee on which the Village has been invited to participate. In this regard, the Village participates on one Community Committee:

Pemberton Music Festival Community Fund (PMFCF) Committee:

The Pemberton Music Festival Community Fund Committee was established in February of 2015. The role of the Committee is to review grant funding applications and determine the allocation of the funds each year. This is not a Village Committee; however, the Village does provide administrative support to the PMFCF Committee. The Village has appointed two members of Council to this Committee. The PMFCF Committee meets once in the Spring and once in the Fall of each year to establish funding priorities and to determine funding recipients.

Regular Council Meeting No. 1412 Tuesday, November 17, 2015 2016 Committee Appointments Page 4 of 6

Joint Committees (Intergovernmental):

The Village of Pemberton participates in the Winds of Change Committee which is a Joint Committee with Lil'wat Nation and the SLRD of which the membership is made up of not only elected officials but also members of community groups. The Winds of Change Committee recently completed an evaluation of the 2009 – 2014 five year strategic plan and is considering next steps for the future of the Committee.

Administration of the Committee has traditionally alternated between the Village of Pemberton and Lil'wat Nation and is currently overseen by Lil'wat Nation. The Village appoints a member of Council and an alternate. The CAO and the Executive Assistant provide staff support.

Although this Committee has not been active since the presentation of the Evaluation in the spring, it is recommended that Council appoint a member and alternate in anticipation that the work of the Committee may resume in some form.

Board Appointments:

Squamish Lillooet Regional District:

The Village of Pemberton is represented on the Squamish Lillooet Regional District Board and committees affiliated with the work of the SLRD. The SLRD Board meets on the fourth Wednesday of the month and the PVUS Committee meets monthly on the 2nd Monday of the month or on a schedule determined by the Committee.

Pemberton Lillooet Treaty Advisory Committee (PLTAC):

The Village must appoint two representatives to the Pemberton Lillooet Treaty Advisory Committee (PLTAC), which is a committee of the Regional District. The mandate of the PLTAC is to ensure that local government interests are represented in the treaties being negotiated in the Pemberton-Lillooet Regional District under the BC Treaty Commission (BCTC) process¹. The PLTAC has not met in the past year but it is anticipated that there may be work for the Committee to do in 2016 and beyond. The meeting schedule is based on a need to call a meeting and is coordinated by the SLRD.

Pemberton & District Library Board:

The Village of Pemberton is represented at the Library Board by a member of Council. The Library Board meets on the 3rd Tuesday of each month at 7pm in the Library with the exception of July and August Trustees are required to attend a minimum of six (6) meetings a year and each meeting lasts on average 1 - 1.5 hours.

Association Membership:

Municipal Insurance Association of BC:

The Village is a member of the Municipal Insurance Association of BC (MIABC). As such, the Village must appoint two members of Council (one voting and one non-voting member) to represent the Village at the MIABC Annual General Meeting, which is held each year during the Union of British Columbia Municipalities meeting in September.

¹ Pemberton-Lillooet Treaty Advisory Committee – Interests in Treaty Making – Draft3, December, 2006

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<u>Liaison to other entities (committees/boards):</u>

In 2009, as a means of developing and supporting cooperation between jurisdictions and organizations, Council determined it would be productive to have a member of Council attend open meetings of other committee's or organizations to act as a liaison between Village Council and that group/organization. In the past, Council members have fulfilled this by attending meetings of the Pemberton Valley Dyking District (PVDD), Pemberton Valley Trails Association (PVTA) (if no one on Council was already a member of the organization) and the SHE/PSS Parent Advisory Committees. Liaison with other groups/committees and organizations has also been dependent on interest on the part of members of Council or based on whether or not there is significant community activity facilitated by a group.

Last year Council established liaison representation to the following:

- Pemberton Valley Dyking District
- Pemberton Valley Trails Association
- Recreation Advisory Committee
- SLRD Agricultural Advisory Committee

COMMUNICATIONS

Once appointments have been made by resolution of Council, notice will be provided to each organization or group advising who the Village representative will be and providing contact information as appropriate.

The Committee appointment list will be posted on the Village website and Committee appointments will be added to each Council member's biography.

LEGAL CONSIDERATIONS

Establishing Committees and appointing representatives to Committees meets with legislation outlined in the *Community Charter* as noted above and the *Village of Pemberton Council Procedure Bylaw*.

IMPACT ON BUDGET & STAFFING

This report was done in-house and is incorporated as part of the regular routine of the Corporate & Legislative Services Department.

INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts to facilitate the committee appointments.

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

The appointment of members of Council to Committee's, joint Committees or Boards of other jurisdictions is not uncommon and supports intergovernmental relations.

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ALTERNATIVE OPTIONS

There are no alternative options for consideration.

POTENTIAL GOVERNANCE CONSIDERATIONS

This initiative supports the Village's Strategic Plan, particularly the Village's commitment to Theme Two: Good Government to "being an open and accountable government".

RECOMMENDATIONS

THAT Council confirm appointments for 2016;

AND THAT Council provide direction with respect to the Standing Committee on Finance.

Attachments:

Appendix A – 2016 Proposed Committee List

Sheena Fraser

Suena Faser

Manager of Corporate & Legislative Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore, Chief Administrative Officer

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2016 VILLAGE OF PEMBERTON COMMITTEES

(approved by Council -Meeting No.)

Committee of the Whole

Chair - Mayor or Acting Mayor

Council & CAO

Finance

Public Works/Parks

Governance

Airport Fire

Recreation

Policy

Other member/ **Chair/Council** Staff/Others **Alternate** Rep

Emergency Planning & Operations Committee

Jennie Helmer

CAO

Emergency Prog. Co. Fire Chief Mgr. Fin & Admin Mgr, Ops & DS

STANDING COMMITTEE

Finance Committee

Jennie Helmer

Karen Ross

Mgr, Finance & Admin

WORKING COMMITTEE

Community Infrastructure Partnership Program (CIPP)

Karen Ross

Jennie Helmer

Mgr, Ops & DS

COMMUNITY COMMITTEE

Pemberton Music Festival Community Fund Committee

(PMFCF)

Ted Craddock

Karen Ross

JOINT COMMITTEES (Intergovernmental)

Winds of Change (WoC)

James Linklater

Mike Richman (Alt)

CAO

BOARD APPOINTMENTS

Squamish Lillooet Regional District (SLRD)

Mike Richman

Karen Ross (Alt)

Squamish Lillooet Regional Hospital Board

Pemberton Lillooet Treaty Advisory (PLTAC)

Mike Richman James Linklater Karen Ross (Alt) Karen Ross

CAO Mgr, Fin. & Admin

Pemberton Valley Utilities & Services Committee (PVUS)

Mike Richman

James Linklater

Pemberton District Library Board

James Linklater

Karen Ross (Alt)

Municipal Insurance Association of BC (MIABC)

Ted Craddock

Karen Ross

LIAISON to other Committee's/Boards

Pemberton Valley Dyking District

Ted Craddock

Agricultural Advisory Committee (SLRD)

Jennie Helmer

Recreation Advisory Committee (SLRD)

Karen Ross

Pemberton Valley Trails Association

Jennie Helmer

ACTING MAYOR

December, January, February March, April, May June, July, August September, October, November Jennie Helmer James Linklater Karen Ross Ted Craddock

Mayor is ex officio member of all committees. Chair is in **Bold** if one has been established. All Councilors are welcome to attend any committee meetings. Village of Pemberton

Regular Council Meeting No. 1412 Tuesday, November 17, 2015 Page 266 of 463



REPORT TO COUNCIL

Date: November 17, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Sheena Fraser, Manager of Corporate & Legislative Services

Subject: Alternative Approval Process

Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015

PURPOSE

To request authorization to undertake an Alternative Approval Process (AAP) to receive the assent of the electorate to borrow \$533,536 through the Village of Pemberton Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015.

BACKGROUND

At the Regular Meeting of Council No. 1405, held Tuesday, September 15, 2015, Council considered First, Second and Third Readings of the Village of Pemberton Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 and the following resolution was passed:

Moved/Seconded

THAT Village of Pemberton Fire Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015, receive First, Second and Third Reading.

CARRIED OPPOSED: Councillor Helmer

The Bylaw, as certified at Third Reading, along with background reports was submitted to the Ministry of Community, Sport and Cultural Development for review and approval by the Inspector of Municipalities on November 2, 2015 (Appendix A). In this regard, the Village has received statutory authorization to proceed with the next steps and seek approval of the electorate via an Alternative Approval Process.

In order to borrow funds over a period longer than five (5) years, Municipalities are required to seek approval of the electorate through an Alternative Approval Process (AAP) or assent of the electorate by Referendum. Both processes provide the electors an opportunity to indicate whether Council may or may not proceed with the borrowing bylaw.

An AAP establishes an Elector Response Form (ERF), which may be picked up at the Village Office or downloaded from the Village website. This is a form that an elector may sign if they are in opposition of the bylaw. The form is attached as Appendix B. The number of responses required to oppose the bylaw is calculated as 10% of the eligible voters within the Municipality as reported in the most current Census. An APP is much less expensive to facilitate than a Referendum.

It is recommended that for the purposes of the Triple Combination Pumper Truck Loan Authorization the Village seeks the approval of the electorate through the AAP process.

Regular Council Meeting No.1412 Tuesday, November 17, 2015 Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 Alternative Approval Process Page 2 of 6

Schedule to meet MFA Spring Debenture Intake

To undertake the process for long term borrowing with the Municipal Finance Authority (MFA) through an Alternative Approval Process a municipality must follow a process as set out in the *Community Charter (CC)* and/or *Local Government Act (LGA)*. The Village has completed steps one and two and has received the Statutory Approval from the Inspector of Municipalities as noted in the table below:

Descri	ption of Activity	Section	Estimated Timelines
1.	Municipal Loan Authorization Bylaw – initial three readings	Community Charter Section 179	September 15, 2015 (Regular Council Meeting)
2.	Submission to Ministry of Community Services (MCS) for review and approval by Inspector of Municipalities	Community Charter Section 179	September 28 th , 2015 (anticipate 14 days)
3.	Receipt of Statutory Approval from the Inspector of Municipalities		November 2, 2015

Initially, it was hoped that the Statutory Approval of the Bylaw would be received from the Inspector of Municipalities in October in order to enable the Alternative Approval Process to be completed in November or in early December. Unfortunately, due to delays in receiving this approval from the Inspector, the Village has had to delay the holding of the AAP. This in turn may have impacted the Village's ability to meet the February 26, 2016 deadline for the Spring 2016 Debenture Intake (Appendix C).

That said, Staff has reviewed the legislation and determined that there is a chance this could be accomplished if the AAP was held over December with a closing date of Tuesday, December 29th. (See Option One below). This would require the Village to hold a Special Council Meeting on Wednesday, December 30th and would also be dependent on both the Inspector of Municipalities agreeable to reviewing and returning the bylaw in under ten (10) days and the Squamish Lillooet Regional District facilitating the adoption of the bylaw at a Special Board Meeting in early January, 2016.

Should it be determined that it is not feasible to meet the 2016 Spring Debenture Intake there is the alternative to hold the AAP in January with completion in May. This option, which is not recommended, has been provided as Appendix D. This will ensure that the borrowing bylaw is in place for the 2016 Fall Debenture Intake which takes place in September but will require the Village to bring forward an Interim Borrowing Bylaw to cover the difference.

Regardless of the timing selected above to meet the MFA Intake, Staff have been advised that the current pricing on the truck will be held until November 20, 2015; after that date, the price will increase by \$50,000 due to the exchange rate and additional cost attributed to the next year (2017) chassis coming out, as is common practice in vehicle manufacturing industry. One alternative is to place the order in advance of the AAP to hold the price, however, if the AAP fails, the Village will be required to pay a \$15,000 penalty.

The following is a table of two alternative timelines to meet the Spring or Fall MFA intakes that consider giving the Bylaw fourth and final reading on December 30, 2015:

De	scription of Activity	Timelines Option One	Timelines Option Two	
		(Spring Borrowing Intake)	(Fall Borrowing Intake)	
		AAP Deadline: December 29, 2015	AAP Deadline: December 29, 2015	
4.	After receipt of approval from Inspector, carry out AAP:	2000m20, 2010	20, 2010	
•	Report to Council to establish AAP date	November 17, 2015	November 17, 2015	
•	Place ads in paper (CC Section 94)	November 19 th & 26 th , 2015	November 19 th & 26 th , 2015	
•	Have response forms available at Village Office and on the website	Thursday, November 26, 2015	Thursday, November 26, 2015	
	Process runs for a least	thirty (30) days from day after the la	st advertisement	
5.	Alternative Approval Process Closes	Tuesday, December 29, 2015	Tuesday, December 29, 2015	
6.	Receive results from AAP process and adoption of loan authorization bylaw	Wednesday, December 30, 2015 (Special Council Meeting)	Wednesday, December 30, 2015 (Special Council Meeting)	
	One (1) Month Quashing Period (LGA Section 262)			
7.	Quashing Period Ends	Monday, February 1, 2016	Monday, February 1, 2016	
8.	Application to MCS for a Certificate of Approval (<i>LGA</i> Section 1022)	Tuesday, February 2, 2016 (anticipate 7 – 10 days)	Tuesday, February 2, 2016 (anticipate 7 – 10 days)	
9.	Municipal Security Issuing Resolution passed & sent to the Regional District (Community Charter Section 122)	Friday, February 12, 2016 (Special Council Meeting) With a request for the SLRD to hold a Special Board Meeting on the same day to consider the Security Issuing Bylaw.	Tuesday, February 16, 2016 (Regular Council Meeting)	
10.	Regional District to prepare and issue Security Issuing Bylaw (all reading done in one meeting) Community Charter Section 182	Friday, February 12, 2106 (Special SLRD Board Meeting)	Wednesday, February 24, 2016 (Regular SLRD Board Meeting)	
	Ten (10) day quashing period			
11.	Regional District to seek Inspector of Municipalities' Certificate of Approval	Wednesday, February 24, 2016 (To meet MFA Intake Spring Deadline of February 26, 2016)	Wednesday, March 9, 2016 (Does not meet MFA Intake Spring Deadline of February 26, 2016)	
	Information to MFA for Spring Debenture and Issuance of Funds			

Regular Council Meeting No.1412 Tuesday, November 17, 2015 Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 Alternative Approval Process Page 4 of 6

DISCUSSION

At this time, the Village is undertaking step four (4) of the process, which as per Section 86 of the *Community Charter* requires that, Council:

- a) Establish the deadline for receipt of elector responses (at least thirty (30) days after the second publication of Notice)
- b) Establish the Elector Response Forms (ERF); and
- c) Make a fair determination of the total number of electors to which the approval process applies (in this case, the entire municipality)

a) Deadline for receipt of Elector Responses

If Council approves the AAP at this meeting, the second publication of the Notice will be issued in the Pique Newsmagazine on Thursday, November 26, 2015. As such, the deadline for receipt of elector responses will be set as Tuesday, December 29, 2015 taking into consideration the requirements for the calculation of time as established in the *Interpretation Act*.

b) Elector Response Forms (ERF)

Appendix B is the proposed "Alternative Approval Elector Response Form". The Form will be made available at the Village Office and on the Village website. Upon completion, electors who do not wish Council to proceed with the adoption of the Triple Combination Pumper Truck Authorization Bylaw No. 795, 2015, the ERF can be returned to the Village of Pemberton Corporate Officer by delivery, facsimile or email by Tuesday, December 29, 2105 at 4PM. Additional information defining resident and non-resident electors is provided.

c) Number of Electors

Section 86 of the *Community Charter* states that Council "must make a fair determination of the total number of electors of the area to which the approval process applies". As the entire Village is included as part of Loan Authorization Bylaw No. 795, 2015, the total number of electors must be those within the entire municipality. According to the 2011 Census, the number for eligible voters has been determined as 1900 (Appendix F). Ten percent (10%) of 1900 (or 190) elector response forms would be required to be received for Loan Authorization Bylaw No. 795, 2015 to be deemed to have not received approval of the electors.

COMMUNICATIONS

As per Section 94 of the *Community Charter*, Notice to the Public will be issued on the dates set out in the table above. Notice will also be provided on the Village's Blog and Website, at the Village Public Notice boards, the Village's Facebook Page and via the ENEWS.

LEGAL CONSIDERATIONS

There are no legal considerations at this time. The holding of an Alternative Approval Process meets with the legislation as set out in the *Local Government Act* and the *Community Charter*.

Regular Council Meeting No.1412 Tuesday, November 17, 2015 Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 Alternative Approval Process Page 5 of 6

IMPACT ON BUDGET & STAFFING

There will be costs associated with the administration of running the AAP and those will be absorbed in-house.

The advertising costs associated with the AAP are expected to be approximately \$1000.

As mentioned above, the current pricing on the truck will be held until November 20, 2015; after that date, the price will increase by \$50,000 due to the exchange rate and additional cost attributed to the next year (2017) chassis coming out, as is common practice in vehicle manufacturing industry. One alternative is to place the order in advance of the AAP to hold the price, however, if the AAP fails, the Village will be required to pay a \$15,000 penalty. These additional costs have not been included in the overall price of the new Pumper Truck, nor in the Loan Authorization Bylaw No. 795, 2015, which identifies the maximum borrowing amount to be \$533,536. These additional costs will either need to be allocated from other sources or Third Reading of the Bylaw will need to be rescinded and re-read with the updated figures, then sent back to the Inspector of Municipalities for re-approval.

INTERDEPARTMENTAL IMPACT & APPROVAL

The remaining steps in completing the AAP will be facilitated by the Office of the CAO, the Finance Department and Corporate and Legislative Services. This initiative will be incorporated into the daily routine and yearly work plan of all departments.

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

The holding the Alternative Approval Process to seek the approval of the electorate to borrow funds to purchase a new Triple Combination Pumper Truck for the Fire Department does not have any impact on the Region or neighbouring jurisdictions.

ALTERNATIVE OPTIONS

There are no recommended alternative options at this time.

POTENTIAL GOVERNANCE CONSIDERATIONS

Undertaking an Alternative Approval Process to seek the assent of the electorate for the Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 meets with Strategic Theme Two: Good Governance being an open and accountable government and to fiscal responsibility and is in alignment with the 2015 – 2019 Five Year Financial Plan Bylaw No. 783, 2015 as adopted May 5, 2015.

RECOMMENDATION

THAT Council proceed with an Alternative Approval Process to borrow funds to purchase a new Triple Combination Pumper Truck for the Village of Pemberton Fire Department;

AND THAT Council establish Tuesday, December 29, at 4:00 p.m. as the deadline for receipt of elector response forms from electors not wanting Council to proceed with the adoption of Bylaw No 795, 2015;

AND THAT Council establish the Elector Response Form as shown on Appendix B;

AND THAT Council determine the total number of electors as 1900 for which the alternative approval process applies as shown on Appendix F.

Regular Council Meeting No.1412 Tuesday, November 17, 2015 Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 Alternative Approval Process Page 6 of 6

Attachments:

Appendix A: Statutory Approval from Inspector of Municipalities

Appendix B: Electoral Response Form

Appendix C: MFABC Spring 2016 Borrowing Information, dated November 9, 2015.

Appendix D: AAP – Alternative Dates for January

Appendix E: Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015

Appendix F: Determination of Total Number of Electors

Sheena Fraser

Sueva Faser

Manager of Corporate & Legislative Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore

Chief Administrative Officer

ch Silme



Appendix A



NOV 0 3 2015

Chief Administrative Officer Village of Pemberton Box 100 Pemberton BC V0N 2L0

Re: Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015

Enclosed is one copy of the above bylaw approved under the provisions of section 179 of the *Community Charter* (Charter). Pursuant to section 180 of the Charter, Council may now proceed with the approval of the electors by the alternative approval process in accordance with section 86 of the Charter.

Notice of an alternative approval process must be published in accordance with section 94 (public notice) of the Charter. Council must establish the deadline for receiving elector responses, which must be at least 30 days after the second publication of the notice.

Note: the date of the last newspaper publication or last issuance of notice by alternative means and the deadline date are not counted.

Council may proceed with the adoption of the bylaw unless, by the deadline, at least 10% of the electors of the area indicate that the council must obtain the assent of the electors before proceeding.

Upon expiration of the statutory quashing period, which extends for one month commencing after the date of adoption, application may be made by way of the enclosed forms for a Certificate of Approval; only one completed copy of the bylaw and a copy of the notice is required.

.../2



In addition, if the proposed borrowing will cause an increase in fees, charges or taxes, we recommend that a separate notice or press release be made briefly outlining the need for the increase. An example of how the increase will affect the average residential user and property owner should be included in the notice and placed on a page in the newspaper read by the greatest number of readers and not under the legal section. This notice will serve to keep the residents informed.

Sincerely,

Arielle Guetta Advisory Officer



Statutory Approval

Under the pro	ovisions of section _	179
of the	Community Charter	
I hereby appr	ove Bylaw No	795
of the	Village of Pember	rton
a copy of whi	ich is attached hereto	
	Dated this	2 day
	of	Nov , 2015
v	Deputy Inspe	ctor of Municipalities

VILLAGE OF PEMBERTON

BYLAW No. 795, 2015

Triple Combination Pumper Truck Loan Authorization Bylaw

Being a By-law to authorize the borrowin Combination Pumper Truck.	g of the cost of purchasing	one (1) new Triple
WHEREAS it is deemed necessary to im Pemberton;	prove fire protection servic	ing within the Village of
AND WHEREAS the estimated cost of princidental thereto is the sum of \$533,536 this bylaw;	urchasing a new fire truck i of which \$533,536 is the a	ncluding expenses mount of debt created by
NOW THEREFORE, the Council of the Vas follows:	ʻillage of Pemberton in ope	n meeting assembled enacts
 The Council is hereby empowered ar be carried out the purchase of the fire Fire Trucks on file in the municipal of therewith for the benefit of the proper the generality of the foregoing: 	e truck in accordance with t ffice and to do all things ne	he quote from Fort Garry cessary in connection
a) To borrow upon the cr	edit of the Municipality a su	m not exceeding \$533,536.
2. The maximum term for which debents bylaw is twenty(20) years.	ures may be issued to secu	re the debt created by this
3. This bylaw may be cited as "Triple Co No. 795, 2015".	ombination Pumper Truck L	oan Authorization Bylaw
READ A FIRST TIME this 15 th day of Sep	otember, 2015.	
READ A SECOND TIME this 15 th day of	September, 2015.	
READ A THIRD TIME this 15 th day of Se	ptember, 2015.	
APPROVED BY THE INSPECTOR OF N	IUNICIPALITIES this	day of, 2015.
APPROVAL OF THE ELECTORS RECE	IVED this day of	, 2015.
ADOPTED this day of,		
	·	This is to certify that this is a true and correct copy of Village of Pemberton Sylaw No. 45, 30 as at Third Reading at Cosnell et Meeting No. 1405. hold LUSCAY, September 15, 3015 Corporate Officer
Mike Richman Mayor	Sheena Fraser Corporate Officer	



Box 100 | 7400 Prospect Street Pemberton BC V0N 2L0 P: 604.894.6135 | F: 604.894.6136 Email: admin@pemberton.ca

Website: www.pemberton.ca

ALTERNATIVE APPROVAL ELECTOR RESPONSE FORM

A resident elector must:

- 1. Be a Canadian Citizen
- 2. Be an individual who is age eighteen (18) or older
- 3. Have been a resident of BC for a least the past six (6) months
- 4. Have been a Village of Pemberton resident for a least the last 30 days
- 5. Not be disqualified by the *Local Government Act* or any other enactment from voting in an election of otherwise disqualified by law

A non-resident property elector must:

- 1. Not be entitled to register as a resident elector
- 2. Be a Canadian Citizen
- 3. Be and individual who is age eighteen (18) or older
- 4. Have been a resident of BC for a least the past six (6) months
- 5. Have been a registered property owner with the Village of Pemberton for at least the last thirty (30) days
- 6. Must not be disqualified by the *Local Government Act* or any other enactment form voting in an election or otherwise disqualified by law.

The undersigned elector of the Village of Pemberton hereby petitions the Council of the Village of Pemberton not to proceed with the adoption of "Village of Pemberton Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015" being a bylaw authorizing the borrowing of \$533,536, the estimated cost of the Village's contribution towards the purchase of the truck.

Elector's Full Name (print – no initials)	Residential Address	Property Address (for non-resident electors only)	Signature of Elector

I am an elector of the Village of Pemberton. By my signature, I hereby indicate that Council **should not** proceed with the adoption of the Village of Pemberton Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015 unless that bylaw is approved by approval of the electors. Loan Authorization Bylaw No. 795, 2015 will be deemed to have received the approval of the electors unless Alternative Approval Elector Response Forms petitioning against the bylaw have been received from ten (10) percent of the eligible electors of the Village of Pemberton.

A person who presents an Alternative Approval Elector Response Form to another person for signing must not knowingly make any false or misleading statements about the proposed bylaw.

Use one Alternative Approval Elector Response Form for each elector.

DEADLINE FOR RECEIPT OF SIGNED FORMS is **Tuesday**, **December 29**, **2015 at 4:00pm** (postmarks not accepted) to:

Village of Pemberton, Attention: Corporate Officer PO Box 100 | 7400 Prospect Street Pemberton, BC VON 2L0





Municipal Finance Authority of BC

November 09, 2015

To: Regional District Finance Officers & Corporate Administrators

Municipal Finance Officers & Corporate Administrators

Regional Hospital District Finance Officers & Corporate Administrators

Re: Spring 2016 Borrowing Information

MFA's next meeting to approve borrowing requests for the Spring 2016 Long Term Borrowing session will be <u>March 31, 2016</u>. All Regional Districts must have their application for Certificate(s) of Approval (C of A) on their security issuing bylaws (SI) to the Ministry of Community, Sport and Cultural Development (MCSCD) by <u>February 26, 2016</u>.

Municipalities

For a municipality to be included in the Spring Borrowing, it must apply to its Regional District by way of a Municipal Security Issuing Resolution (MSIR). In order for the Regional District to have sufficient time to make the deadline, please check with your Regional District for their application cut off dates. A certified copy of the MSIR should be emailed to finance@mfa.bc.ca.

Please note that once you go forward to security issuing through your Regional District, you **WILL** be included in the upcoming issue. If you change your mind about your request you must notify the MFA and your Regional District of any changes prior to the February 26, 2016 deadline to ensure the request can be stopped prior to funding.

Regional Districts

As noted previously, the deadline for your submission to the MCSCD for C of A(s) on your Regional District SI Bylaw(s) is *February 26, 2016*. Please remember that there is a 10 day quashing period after the date of adoption on an SI Bylaw (LGA Section 262) before you can apply for a C of A. Please refer to section 25 (4) of the Interpretation Act (i.e. count 12 days from date of adoption before applying for a C of A).

For Regional Districts borrowing on their own behalf, your LA Bylaw(s), SI Bylaw(s) and accompanying C of A's will be forwarded to the MFA directly from the Ministry. Please advise us of your intent to borrow in this session by emailing finance@mfa.bc.ca with details of your request. This will ensure that your request is not overlooked.

Please note once you have submitted a SI Bylaw for a C of A, it will automatically be included in the upcoming issue. If you have a SI Bylaw that you do not want to be funded, you MUST contact the MFA prior to the February 26, 2016 deadline or the request WILL BE FUNDED.

Regional Hospital Districts

The deadline for requesting long term debt for Regional Hospital Districts is <u>February 26, 2016</u>. Remember to forward your completed RHD Liability Certificates with each Capital Bylaw request. Request forms and certificates are available on our website at http://www.mfa.bc.ca, under Resources/Processes and Forms.



January, 2016 AAP

Description of Activity	Fall Borrowing Intake	
	AAP Deadline: February 15, 2015	
After receipt of approval from Inspector, carry out AAP:		
Report to Council to establish AAP date	November 17, 2015	
Place ads in paper (CC Section 94)	Thursday, January 7 th & 14 th , 2016	
Have response forms available at Village Office and on the website	Thursday, January 14, 2016	
Process runs for at least thirty (30) days from	day after the last advertisement.	
AAP Closes	Monday, February 15, 2016	
Receive results from AAP process and adoption of loan authorization bylaw	Tuesday, February 16, 2016 (Regular Council Meeting based on current meeting schedule)	
One (1) Month Quashing Period (LGA Section 262)		
Quashing Period Ends	Friday, March 18, 2016	
Application to MCS for a Certificate of Approval (<i>LGA</i> Section 1022)	Monday, March 21, 2016 (anticipate 7 – 10 days)	
Municipal Security Issuing Resolution passed & sent to the Regional District (Community Charter Section 122)	Tuesday, April 19, 2016	
Regional District to prepare and issue Security Issuing Bylaw (all reading done in one meeting) Community Charter Section 182	Wednesday, April 27, 2016 (SLRD Board Meeting based on current meeting schedule)	
Ten (10) Day Quashing Period		
Regional District to seek Inspector of Municipalities' Certificate of Approval	Monday, May 9, 2016	

Appendix E

VILLAGE OF PEMBERTON

BYLAW No. 795, 2015

Triple Combination Pumper Truck Loan Authorization Bylaw

Being a By-law to authorize the borrowing of the cost of purchasing one (1) new Triple Combination Pumper Truck.

WHEREAS it is deemed necessary to improve fire protection servicing within the Village of Pemberton;

AND WHEREAS the estimated cost of purchasing a new fire truck including expenses incidental thereto is the sum of \$533,536 of which \$533,536 is the amount of debt created by this bylaw;

NOW THEREFORE, the Council of the Village of Pemberton in open meeting assembled enacts as follows:

- The Council is hereby empowered and authorized to undertake and carry out, or cause to be carried out the purchase of the fire truck in accordance with the quote from Fort Garry Fire Trucks on file in the municipal office and to do all things necessary in connection therewith for the benefit of the properties with the Village of Pemberton and without limiting the generality of the foregoing:
 - a) To borrow upon the credit of the Municipality a sum not exceeding \$533,536.
- 2. The maximum term for which debentures may be issued to secure the debt created by this bylaw is twenty(20) years.
- 3. This bylaw may be cited as "Triple Combination Pumper Truck Loan Authorization Bylaw No. 795, 2015".

READ A FIRST TIME this 15 th day of Se	eptember, 2015.
READ A SECOND TIME this 15 th day of	September, 2015.
READ A THIRD TIME this 15 th day of Se	eptember, 2015.
APPROVED BY THE INSPECTOR OF I	MUNICIPALITIES this 2 nd day of November, 2015.
APPROVAL OF THE ELECTORS RECE	EIVED this day of, 2015.
ADOPTED this day of	, 2015.
Mike Richman	Sheena Fraser

Corporate Officer

Mayor



Determination of Total Number of Electors

Under section 86 (3) (c) of the *Community Charter*, Council of the Village of Pemberton is required to make a fair determination of the total number of electors of the municipality to establish the threshold which must be set for the use of the alternative approval process contained in the Community Charter.

- The population in the 2011 Census indicates that the Village of Pemberton's population was 2,369.
- The 2011 Census data showing population broken down by age category indicates as at 2011 the population fifteen (15) years and over was 1885.
- Based on the fact that those who were fourteen (14) years of age in 2011 will be eligible voting age as of 2015, the fair determination of eligible electors in the Village of Pemberton is 1900.

Sheena Fraser

Manager of Corporate & Legislative Services

November 13, 2015

Suena Faser



REPORT TO COUNCIL

Date: November 17, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Lisa Pedrini, Village Planner

Subject: Draft SLRD Solid Waste and Resource Management Plan

PURPOSE

The purpose of this report is to present Council with an update on the SLRD Draft Solid Waste and Resource Management Plan (SWRMP) process and provide recommendations on Stage 2 Report (Draft SWRMP).

BACKGROUND

The provincial *Environmental Management Act* requires that all regional districts prepare and submit a solid waste management plan to the Ministry of Environment. The objective is to have all solid waste facilities and programs, whether owned by the regional district, private firms, or municipalities, operate in accordance with an approved plan. An approved plan contains goals and encourages actions that allow local governments to adhere to a plan through education, programming, service options, and policies.

The Squamish Lillooet Regional District (SLRD) began updating its 2007 Solid Waste Management Plan in 2013. The intention for the new plan is to provide a region-wide vision for solid waste management across the SLRD for the next 10-20 years. The updated Plan is meant to link solid waste management goals, infrastructure and services with the other regional programs, plans and strategies. The Plan is also intended to recognize that materials referred to as "solid waste" are resources that have value, and their value needs to be considered, hence the expanded name of the plan now includes the word 'resource' (i.e., Solid Waste and Resource Management Plan or SWRMP).

The process the SLRD has undertaken for updating the plan has been divided over two stages or phases. The first stage resulted in a Stage 1 report, the purpose of which was to provide a snapshot on the current state of affairs with respect to:

- the per capita disposal rate;
- the characterization of landfilled waste:
- current operations at all facilities in the SLRD, municipalities, and FN communities;
- educational programs offered;
- applicable policies, plans, and other guiding documents; and
- progress on the implementation of the 2007 plan.

Regular Council Meeting No.1412 Draft SLRD Solid Waste and Resource Management Plan Tuesday, November 17, 2015 Page 2 of 8

The Stage 1 Report can be found on the SLRD website here: http://www.slrd.bc.ca/sites/default/files/pdfs/UES/recycling-composting-solidwaste/SWRMP/SLRD%20Stage%201%20report_FINAL_16April_2014%281%29.pdf

The second stage included a range of activities to identify and assess various waste management options in the region, including a public consultation program to obtain input on the Plan. As part of the consultation, two Regional Plan Advisory Committees were formed, one for the north (Gold Bridge to Lillooet) and one for the south (Furry Creek to Pemberton). Both the North & South Plan Advisory Committees (AC's) included public, local government and technical representatives.

The Northern and Southern Plan AC's developed the Stage 2 Report (draft SWRMP) based on information presented in the Stage 1 report. In general the desire was to create a closed loop, or circular, economy with no byproducts that couldn't be reused locally in some form. In order to meet that vision there needs to be a change in mindset, behaviors, and a commitment to meeting or exceeding provincial guidelines and regulations.

The Village of Pemberton has been providing input into the new SLRD Solid Waste & Resource Management Plan via its participation on the Southern Plan AC since 2013. The former Manager of Development Services (Caroline Lamont) and a member of the Development Services Department (James Abrams) previously represented the Village on the committee until January, 2015, at which time the Village Planner and the CAO became the Village's representatives.

At a combined North and South AC meeting held March 30th, 2015 the Stage 2 report (the draft SWRMP) was reviewed by the AC members, including expected capital and operating costs to fund the proposed initiatives. Municipal representatives in attendance requested that the SLRD provide Councils with an indication of the cost implications to each of the municipalities as a result of the actions listed in the Plan (e.g. tax requisition increase, tipping fee increase, etc.).

On June 26th, 2015 the Village received correspondence dated June 24, 2015 from the Chair of the SLRD Board informing Mayor and Council of the SWRMP update process to date, including a draft of the Plan for the Village's perusal and an explanation of the next steps. This letter is attached as **Appendix A**. At that point the Village was notified that public consultation was going to be undertaken across the region, including a proposed series of "trash talk" events in each municipality.

At the Regular Council Meeting No. 1401, held Tuesday, July 7, 2015, Council received the June 24th correspondence from SLRD Chair Crompton regarding the Solid Waste & Resource Management Plan update and public consultation plan and passed the following resolution:

Moved/Seconded

THAT the correspondence from SLRD Chair Crompton, dated June 24, 2015, regarding the Solid Waste & Resource Management Plan update be referred to staff for information.

CARRIED

On Friday July 24th 2015, SLRD staff held the Pemberton based consultation event at the Pemberton Farmer's Market from 3:00pm to 6:00pm. On July 31st, 2015 SLRD staff invited the

Regular Council Meeting No.1412 Draft SLRD Solid Waste and Resource Management Plan Tuesday, November 17, 2015 Page 3 of 8

Village CAO and Planner and a few other local stakeholders to participate in a discussion on Pemberton/Area C long-term solid waste planning meeting to consider options for expanding, relocating and potentially amalgamating the recycling and bottle return facilities to increase convenience and usage.

Next, the SLRD gave presentations to all Member Municipality Councils to formally request their feedback. Pemberton's presentation took place at the Committee of the Whole (CoW) Meeting No. 138, held October 20th, 2015, when Marc Sole, SLRD Utilities and Environmental Services Coordinator and Janis Netzel, SLRD Director of Utilities and Environmental Services gave a Power Point presentation (attached as **Appendix B**) informing Village Council on the Solid Waste and Resource Management Update. The presentation updated the CoW on the process and informed them that the public consultation process had been completed. The SLRD requested comments from the Village of Pemberton by November 3rd 2015.

Upon a request from staff, the SLRD granted the Village an extension to the 17th of November to receive and incorporate any feedback that the VoP may have regarding the SWRMP draft.

HIGHLIGHTS FROM THE STAGE 2 REPORT (DRAFT PLAN)

The following are some highlights from the Stage 2 Report (Draft SWRMP):

Long Term Vision

- Ultimate goal is Zero Waste all discards are regarded as resources
- To the greatest extent possible, there resources are used locally, thereby moving the SLRD toward a closed-loop economy
- The System to manage discards is financially self-sustaining
- Citizens are actively engaged in behaviours that reflect the waste management hierarchy of *reduce* before *reuse* before *recycle*
- Until the region has achieved Zero Waste, the infrastructure to manage residual¹ waste meets or exceeds provincial guidelines and regulatory requirements

Key Diversion Initiatives

- A residential food scraps reduction campaign
- Industrial, Commercial, Institutional (ICI)/multi-family communications strategy;
- Tourist accommodation communication strategy
- Re-Build-It facilities in Pemberton and Lillooet
- Curbside collection services in Pemberton and Electoral Area C

Targets

• The Draft Plan's target states a diversion rate of 63% but the Plan is more interested in reducing the per capita disposal rate from 541 to 350 kg/person/year

• The desire is to have at least 75% of the population actively engaged in organic waste diversion, which meets provincial goals

¹ Residual = anything and everything that cannot considered as a resource i.e., it is not recyclable, reusable, compostable, etc. Residual is Garbage.

Regular Council Meeting No.1412 Draft SLRD Solid Waste and Resource Management Plan Tuesday, November 17, 2015 Page 4 of 8

• 75 % is the measurement goal used by Ministry of the Environment (MOE) for that Ministry's Stewardship Programs

Stage 2 Report Focus

- The focus of the Draft Plan includes collaboration between the SLRD, member municipalities, and First Nations to align services, policies, strategies, and bylaws. (This would include having different governments take the lead on projects that align with the Plan's goals, such as the RMOW's Three (3) -stream Bylaw for commercial and multifamily residences)
- The focus also aims to improve communication such as the SLRD's launching of the new solid waste and resource management brand and logo, as well as implementing the 2014 communications strategy²
- Focus on improved use of existing services, such as the District of Squamish's curbside collection of organics program
- A major focus on increased educational awareness, and a move from 'awareness to action based behaviors' through diversion campaigns, increased services, and the reduction of barriers for residents to reduce, reuse, and recycle

Regional Budget Implications

- Regional budget implications include implementing the Solid Waste and Resource Management Plan - Communications Strategy. A portion of this covers the contract position of Solid Waste and Resource Management Communications Coordinator (Brooke Carere) plus any purchases or incentives, such as kitchen catchers, prizes, banners, and advertising. Currently the Communications Coordinator contract is for one year but the Plan calls for this position to exist for 5 years
- There has been no tax requisition since 2009 from the SLRD as a large reserve was created that the SLRD have been working off for the past 6 years
- Currently, the reserve fund is covering the cost of the Plan Update. The Plan Update will
 cost approximately \$150,000 which is more than covered by the previous years' surplus
 (reserve fund). Building back up the reserve fund, in order to start preparing for the next
 10 20 year update, needs to be included in budget considerations at some point in the
 future
- Expansion of Zero Waste workshops includes expanding the current school program to community events, such as Whistler's Crankworx, as the tourism industry's garbage is addressed in the Draft Plan
- A waste composition study to assess progress and better identify reduction opportunities is proposed to be started in 2018
- The Draft Plan proposes the creation of a fund to combat illegal dumping
- The Draft Plan Budget also includes an annual amount of \$5,000 to be available to support zero waste initiatives based on applications from community groups for funding.

² http://www.slrd.bc.ca/inside-slrd/current-projects-initiatives/solid-waste-and-resource-management-plan-communications-strategy

A revenue increase may be required to cover any new plan initiatives starting in 2017 noted in the Draft. There is no funding identified in the current regional services budget towards any new capital infrastructure (like a Pemberton Re-Build-it) or to fund operations for any SLRD owned transfer stations or landfills. There may be an opportunity to fund these capital plans with the remaining reserve surplus.

Municipal Specific Actions

 There is an expectation that all municipal governments continue to commit to participating in a Plan Monitoring Committee, support (and implement, where possible) the SWRMP Communications Strategy, and participate in a working group to develop and assess long-term disposal options for the region

<u>Village of Pemberton Specific Actions</u>

- Specific actions that the Village has been asked to commit to in the plan include:
 - o Participation in the long term planning for the Pemberton Transfer Station;
 - o Further investigation into the costs and barriers of a curbside collection program.
 - Opening of a ReBuild It Centre in the Village Boundaries

Resort Municipality of Whistler Specific Actions

- Specific actions the RMOW has been asked to commit to in the plan include:
 - Commitment to the approval of the bylaw to make collection of recyclables and organics from commercial and multi-family buildings mandatory.

District of Squamish Specific Actions

- Specific actions the DoS has been asked to commit to in the plan include:
 - o Continuation of the push for the vertical expansion of the Squamish Landfill.

District of Lillooet Specific Actions

- Specific actions the District of Lillooet has been asked to commit to in the plan include:
 - Consideration of residential curbside collection for recycling and yard waste;
 - Investigate the possibility of financial incentives to divert yard waste to the composting facility at the landfill; and
 - Support of the establishment of a Re-Build-It Center.

DISCUSSION AND COMMENTS

The Manager of Finance and Administration and the Village Planner met with the SLRD Utilities and Environmental Services Coordinator on November 10, 2015 in order to understand the

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financial impacts of the Village's support for the Draft SWRMP. It was explained that the SLRD SWRMP is a high-level, non-binding document that outlines overarching guidelines that the regional district and its member municipalities will follow in order to reduce and manage solid waste. It is essentially a "wish-list" of actions to be taken and behaviours to be supported in order to achieve the ultimate goal of Zero Waste.

That being said, the estimated staff time to implement certain initiatives contained in the Plan are basic estimates that the Village of Pemberton is neither bound to implement, nor held accountable if not achieved within a certain time-frame or at all.

More consultation will take place between the SLRD and the member municipalities on the timing, means and financial impacts of implementation. It should be noted that the plan is meant to be very flexible, and that costs provided in the plan are estimated in 2015 dollars and may not reflect actual costs at the time of implementation.

Funding for these new initiatives may come from a myriad of sources including but not limited to; tax requisition, fees and charges, and resource revenues (recycling revenues). The tax implication required after the surplus has been exhausted will not be determinable until the new processes and budget have been adopted.

COMMUNICATIONS

No communications are required at this time.

LEGAL CONSIDERATIONS

There are no legal, legislative or regulatory considerations at this time.

IMPACT ON BUDGET & STAFFING

Participating in the SLRD SWRMP update as a member of the Southern Plan Advisory Committee is a component of the day to day operations undertaken by the Operations & Development Services Department and the Office of the CAO.

Depending on the direction the Village takes and the aspects of the Plan that the Village eventually implements, there will be potential for operational impacts on Public Works, Finance and Administration. Those impacts are unknown at this time, but staff will bring forward more information when it comes closer to decision-making on which initiatives the Village will be supporting and implementing.

INTERDEPARTMENTAL IMPACT & APPROVAL

There were minimal interdepartmental impacts of reviewing the SLRD SWRMP, as this item received review by the Finance Department and the CAO.

Nikki Gilmore, Chief Administrative Officer

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Regular Council Meeting No.1412 Draft SLRD Solid Waste and Resource Management Plan Tuesday, November 17, 2015 Page 7 of 8

Lena Martin.

Manager of Finance & Administration

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

The Village's support for the Draft Plan helps move forward the creation of the Final SWRM Plan closer to adoption. Village staff has been participating on the Advisory Committee since the inception of the project, and have been involved in the creation of this draft along with other stakeholders.

ALTERNATIVE OPTIONS

There are no alternative options at this time.

POTENTIAL GOVERNANCE CONSIDERATIONS

Participating in the SLRD SWRMP Update is consistent with the Strategic Plan Priority 3: Excellence in Service through the continuation of delivering quality municipal services by participating in regional initiatives.

RECOMMENDATION

THAT the Draft Solid Waste and Resource Management Plan report be received for information:

AND THAT the Village inform the SLRD that it supports the Vision and Strategies contained in the Stage 2 Report (SLRD Draft Solid Waste and Resource Management Plan) in principle;

AND THAT any items identifying the Village of Pemberton with the responsibility for implementing, including public consultation, shall be managed and facilitated by the Village;

AND THAT any capital improvements (i.e., Re-Build It Centre) or implementation of shared services (i.e. curbside collection) be operated and managed by the Village.

Attachments:

Appendix A – Letter from SLRD dated June 24, 2015 re: SWRMP Update

Appendix B – PPT presentation from Oct 20, 2015

Appendix C – SLRD Stage 2 Report

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Line De debei

Lisa Pedrini, Village Planner

MANAGER OF OPERATIONS AND DEVELOPMENT SERVICES REVIEW

Tim Harris,

Manager of Operations and Development Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore,

Chief Administrative Officer





Box 219, 1350 Aster Street, Pemberton, BC V0N 2L0 Ph. 604-894-6371, 800-298-7753 F: 604-894-6526 info@slrd.bc.ca www.slrd.bc.ca

June 24, 2015

Village of Pemberton Mayor and Councillors Box 100 Pemberton, BC V0N2L0

Dear Pemberton Mayor and Councillors,

As you may be aware, the Squamish-Lillooet Regional District is currently updating its Solid Waste and Resource Management Plan (SWRMP, the "plan"). Our next steps include public consultation across the region, including in the Village of Pemberton, and as such we are informing all the member municipalities of the process to date, and what is coming in the near future.

Background on the Solid Waste and Resource Management Plan:

The plan update, required periodically by the BC Ministry of Environment, was commenced in mid-2013 by analysing the current state of solid waste throughout the SLRD in the Stage 1 Report. The report detailed:

- Waste composition data amounts and types of waste, recyclables and organics across different population areas. Notably, organics comprised around 40% of all waste produced within the region.
- Current and varying infrastructure across the region, and changes that had occurred in infrastructure and services since the 2007 SWMP.
- Current statue of goals/targets from the 2007 SWMP. A change of the title to "Solid Waste and Resource Management Plan" for this update reflected that waste can no longer be seen merely as a throwaway, but is a valuable resource as well.

Since late 2013 two plan update Advisory Committees (AC) – one for the south of the region and one for the north – have been meeting regularly. The ACs guide the SWRMP update process and advise on their respective knowledge/opinions of solid waste in their area. The committees are comprised of representatives from member municipalities, the SLRD Board, local business, commercial operations, first nations, charity organisations and the public. The Village of Pemberton's representative is Lisa Pedrini with James Abrams previously representing.

Initially, the AC meetings gave feedback on solid waste priorities, challenges and opportunities, plans for solid waste diversion, disposal and other relevant topics. A shortlist of priorities was developed from the AC meetings and narrowed down at later AC meetings. At the most recent, combined North and South AC meeting, the Stage 2 report (attached; the draft SWRMP) including expected capital and operating costs to fund the proposed initiatives, was presented and any amendments required were requested from members.

Summary of SWRMP update:

Overall, the SWRMP update differs from the 2007 SWMP through a focus on more consistency between member municipalities and the SLRD, wider collaboration with all interested parties and a focus on communications as the vehicle to achieve the long-term solid waste targets outlined in the updated SWRMP.

The targets of the updated plan are to achieve the average municipal solid waste disposal rate of 350 kg per capita by 2020 (down from 525 kg in 2012). This target is achievable by implementing the diversion tactics outlined in the plan. The second goal is for 75% of the SLRD population to have easy access to organics recycling. As previously mentioned, organics comprise around 40% of the waste stream and achieving this goal will help facilitate achieving the first target.

Public Consultation and Next Steps:

The plan will be taken to the public for feedback through "trash talk" style events in each municipality, scaled to reflect the level of involvement of interested partners. "Trash Talk" events will be more than an SWRMP consultation - they will give information on a broad range of solid waste topics, for example the recycling programs that are offered at the Pemberton Transfer Station. A public consultation event at the farmers market, for example, could involve the SLRD, municipal and commercial partners offering recycling and composting advice and obtaining feedback on the SWRMP update.

Once public consultation is complete, comments will be synthesised and a draft SWRMP will be brought to the SLRD Board for approval or amendment. Once approved by the Board, the final document will be formally sent to each member municipality requesting letters of support. The final plan can then be submitted to the BC Ministry of Environment.

Yours Sincerely,

Jack Crompton,

Chair, Squamish-Lillooet Regional District



SOLID WASTE AND RESOURCE MANAGEMENT PLAN

Presentation of Draft Report





Janis Netzel, P.Ene Director of Utilities and Environmental Services

THE UPDATE PROCESS

- RFP PROCESS
- CREATION OF ADVISORY COMMITTEES
- STAGE 1 REPORT
- TECHNICAL MEMORANDUMS
- STAGE 2 REPORT
- COMMUNITY CONSULTATION/COMMENT PERIOD
- BOARD APPROVAL
- MINISTRY OF ENVIRONMENT APPROVAL



HIGHLIGHTS FROM STAGE 1 REPORT

- Landfilled waste composition in Region: 43% organics, 30% residual, 27% recyclables.
- Per capita landfilled waste is 541 kg/year = 27,000 tonnes of waste landfilled per year.
- 43% diversion rate in the SLRD.
- Current state of affairs on education, communication, recycling, composting, stewardship (EPR's), re-use-its/re-build-its and reduction programming/services.
- Overview of First Nations collection and disposal operations/facilities.
- Identified solid waste management goals/plans contained in other guiding documents such as OCP's, RGS, sustainability plans, and other solid waste strategies.
- Discussed the implementation status of the 2007 plan.



HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN)

LONG TERM VISION

- Ultimate goal is for all our discards to be regarded as resources.
- To the greatest extent possible, these resources will be used locally, thereby moving the SLRD towards a closed loop economy.
- The system to manage discards is self-sustaining.
- Citizens are actively engaged in behaviors that reflect the waste management hierarchy (reduce before reuse before recycle....).
- Infrastructure used to manage residual waste meets or exceeds provincial guidelines and regulatory requirements.



HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) **PLAN TARGETS**

- Increase diversion to 63% and reduce per capita disposal rate to 350 kg/year by 2020.
- 75% of SLRD's population will be actively engaged in organic waste diversion by 2020.



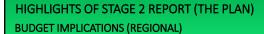
HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) **PLAN FOCUS**

- Collaboration between stakeholders including policy alignment.
- Improved Communication moving from awareness to action.
- Improved use of existing recycling and composting services.
- · Putting more emphasis on reduction.



HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) **BUDGET IMPLICATIONS (REGIONAL)**

- Implementation of the Communications Strategy and Diversion Campaigns is estimated at \$30,000 \$43,000 per year (2016-2020).
- Proposed Reserve Fund contributions to pay for studies and future plan updates (\$20,000 per year starting 2016).
- Expansion of the Zero Waste Workshops from 20 to 30 per year (\$5,000 increase over current budget, starting in 2017).
- Waste composition study in 2018 (\$30,000 estimated funding will be from the Reserve Fund).
- Illegal Dumping Fund (\$10,000 per year starting in 2017).
- Funding for local zero waste initiatives (\$5,000 per year starting in 2017).



- Current operating budget for the Regional SWMP function comes from the Regional District Solid Waste Cost Recovery Bylaw No. 976-2005 which currently recovers \$4.50 per tonne for all landfill destined waste generated in the Region.
- No tax requisition since 2009.
- Revenue increases to cover new Plan initiatives needed in 2018 either by requisition or an amendment to Bylaw No. 976-2005.



Starting in 2018, the amount of additional revenue to cover the SWM Regional function is estimated at \$100,000 per year; \$20,000 (2020) to \$50,000 (2017) are from initiatives in this plan.

HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) **VILLAGE OF PEMBERTON SPECIFIC ACTIONS**

- Continued participation on the Plan Monitoring Committee.
- · Continued support of the Communication Strategy.
- · Continued participation in long term planning for the Pemberton Transfer Station.
- · Investigation into the costs/barriers of curbside
- Participation in a working group to develop/assess



long-term disposal options for the Region.

HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) **BUDGET IMPLICATIONS (VoP)**

- Continued participation on the Plan Monitoring Committee (20-25 hours per year) VoP
- Continued support of the Communication Strategy (30-50 hours per year) VoP
- Participation in a working group to develop/assess long-term disposal options for the Region (10 hours per year).
- Continued participation in long term planning for the Pemberton Transfer Station (10-15 hours per year, each SLRD and VoP staff).
- Construction of a Re-Build-it Center (estimated at \$30,000 paid out of Transfer Station Service budget).



 Investigation into 2 or 3 stream curbside collection (paid) out of Transfer Station Service budget).

HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) COMMUNITY CONSULTATION (VoP)

• Let's Talk Trash events were held at the Farmer's Market and at the Pemberton Transfer Station.



HIGHLIGHTS OF STAGE 2 REPORT (THE PLAN) COMMUNITY CONSULTATION (VoP)

- Paper surveys completed by residents at events as well as an online survey.
- Gathered feedback on food scrap collection, curbside organics, recycling, and garbage pickup, utilization of a Re-Build-It Center, and sourcing of waste management information.
 - 47% of respondents are already collecting food scraps for composting. 31% would like to start collecting food scraps.
 - · Most respondents were supportive of curbside collection:
 - Organics: 55% in favour.
 - Recycling: 68% in favour.
 - Garbage: 60% in favour.
 - 82% of respondents would use a Re-Build-It Center.



NEXT STEPS

- PRESENTATION OF STAGE 2 DRAFT REPORT TO MUNICIPAL COUNCILS
- INCORPORATE COUNCIL & COMMUNITY CONSULTATION COMMENTS INTO THE REPORT
- ADIVISORY COMMITTEE TO REVIEW FINAL DRAFT AND RECOMMEND SENDING IT TO THE SLRD BOARD FOR APPROVAL
- SLRD BOARD APPROVAL
- MINISTRY OF ENVIRONMENT APPROVAL







DRAFT SOLID WASTE AND RESOURCE MANAGEMENT PLAN— STAGE 2 REPORT FOR CONSULTATION





Submitted to:

Squamish-Lillooet Regional District Box 219, 1350 Aster Street Pemberton, BC VON 2L0

Submitted by:

Todd Baker, P.Eng Senior Environmental Engineer Morrison Hershfield Ltd. Suite 310, 4321 Still Creek Drive Burnaby, BC, V5C 6S7

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Tel: 604 – 454-0402 Fax: 604 – 454-0403

Project No. 5130801.00 23 February, 2015 m:\proj\5130801\00\stage 2 development\rpt1-2015-02-25-slrd final draft plan.docx





February 24, 2015

Meredith Gee Squamish-Lillooet Regional District Box 219, 1350 Aster Street Pemberton, BC VON 2L0

Re: Solid Waste and Resource Management Plan Update 2015 – Stage 2 Report

Dear Ms. Gee,

Morrison Hershfield, in association with Maura Walker and Associates, is pleased to submit the Stage 2 Report of the Solid Waste and Resource Management Plan. This report is the culmination of a series of meetings with the Solid Waste Management Plan Advisory Committee and describes the options recommended by the Committee for inclusion in the new Solid Waste and Resource Management Plan.

This is a draft document prepared for review by the Solid Waste and Resource Management Plan Advisory Committee. Upon their review and feedback, the content of this report will be ready for community and stakeholder consultation, subject to Board approval to undertake consultation.

Regards,

Morrison Hershfield Limited

Todd Baker, P.Eng Senior Environmental Engineer

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APPENDIX B: FACILITY AUTHORIZATION PROCESS

APPENDIX C: PLAN MONITORING ADVISORY COMMITTEE TERMS OF REFERENCE

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GLOSSARY

C&D waste	Waste materials generated at construction, renovation and demolition projects
Disposal	Landfilling
Diversion	Activities that divert waste materials away from disposal as garbage to alternatives such as recycling or composting. Does not include combustion of garbage to product energy.
DOL	District of Lillooet
DOS	District of Squamish
Generation	The sum of all materials discarded that require management as solid waste, including garbage, recycling, and organic waste. Does not include organic waste composted at home.
ICI	Industrial, commercial and institutional (does not include heavy industry)
MOE	BC Ministry of Environment
organic waste/organics	kitchen scraps, food waste, yard and garden waste
RMOW	Resort Municipality of Whistler
SLRD	Squamish-Lillooet Regional District
SWRMP	Solid Waste and Resource Management Plan
Plan	Solid Waste and Resource Management Plan
SWRMP AC	Solid Waste and Resource Management Plan Advisory Committee
VOP	Village of Pemberton

EXECUTIVE SUMMARY

Over the past two years, Squamish-Lillooet Regional District (SLRD) has engaged in a process to update the 2007 Solid Waste and Resource Management Plan to reflect current and future waste management needs. The process to update the Plan is being conducted in three stages. The first stage involved reviewing of the current solid waste management system. The second stage involved reviewing options to address the region's future solid waste management needs and the selection of preferred management options. This document is the result of the Stage 2 process and presents the proposed options for the updated Solid Waste and Resource Management Plan (SWRMP). This Stage 2 report is considered a draft version of the updated Plan.

As part of the planning process, a long term vision for solid waste management in the SLRD was established that encompasses the following:

- 1. The ultimate goal is zero waste all of our discards are regarded as resources.
- 2. To the greatest extent possible, these resources are used locally, thereby moving the SLRD towards a closed-loop economy.
- 3. The system to manage discards is financially self-sustaining. Embedded in this goal is to have the cost to purchase a product include the cost of re-resourcing it at the end of its useful life.
- 4. Citizens are actively engaged in behaviours that reflect the waste management hierarchy (i.e. reduce before reuse before recycle...).
- 5. Until we have achieved zero waste, the infrastructure to manage residual waste meets or exceeds provincial guidelines and regulatory requirements.

Waste composition studies indicate that there is still a significant quantity of disposed waste that can be recycled or managed through composting or similar methods. It is estimated that up to 43% of the disposed waste stream is compostable organics, while plastic and paper make up an additional 25% of the landfilled waste stream. The proposed initiatives described in this report target the recyclable and compostable components of the waste stream. Upon full implementation, these initiatives have the potential to reduce the amount of waste sent to landfill from the current estimate of 525 kg per person to 347 kg per person, a reduction of 34%.

The key diversion initiatives being proposed include:

- a residential food scraps reduction campaign;
- ICI / multi-family communications strategy;
- tourist accommodation communication strategy;
- Re-Build It facilities in Pemberton and Lillooet; and
- curbside collection services in Pemberton and surrounding area.

The other key component of this planning process has been establishing long term residual waste disposal capacity. There is a lack of long term disposal capacity in the region. Whistler currently sends its waste to a privately-owned landfill in Washington State. The District of Squamish landfill is nearing capacity and expansion options are currently under consideration. In the short-term, the District intends to expand the landfill vertically to gain an additional 13-14 years of capacity. A long-term option is to expand the site horizontally; although this option has a number of technical hurdles to overcome. If the horizontal expansion becomes possible, the Squamish Landfill could be designated as a regional landfill and would be able to receive waste from all of the southern corridor communities. A working group of municipal, SLRD and First Nation representatives will be established to collectively consider long term residual waste management options.

The implementation schedule for the new Plan is 2015 to 2020. Estimated additional operating costs to the SLRD range from \$20,000 to \$55,000, as shown in the table below. Capital expenditures are anticipated for the

establishment of two Re-Build It centres and the provision of new curbside collection services. The capital cost to expand the Squamish Landfill will be the responsibility of the District of Squamish.

Implementation of New Initiatives	2015	2016	2017	2018	2019	2020
Estimated new operating costs	\$ 55,000	\$ 35,500	\$ 50,000	\$ 41,000	\$ 37,000	\$ 20,000

The implementation of the new Plan will be overseen by the Plan Monitoring Advisory Committee. They will report to the SLRD Board on an annual basis on the Plan's progress and effectiveness.

1. INTRODUCTION

In British Columbia, each regional district is mandated by the Provincial Environmental Management Act to develop a Solid Waste and Resource Management Plan that provides a long term vision for solid waste management, including waste diversion and disposal activities. Plans are updated on a regular basis to ensure that the plan reflects the current needs of the regional district, as well as current market conditions, technologies and regulations.

Over the past two years, Squamish-Lillooet Regional District (SLRD) has engaged in a process to update the 2007 Plan to reflect current and future waste management needs. The process to update the Plan is being conducted in three stages. The first stage involved reviewing of the current solid waste management system. The Stage 1 Report can be found on SLRD's website.¹

The second stage involved reviewing options to address the region's future solid waste management needs and the selection of preferred management options. This document is the result of the Stage 2 process and presents the proposed options for the updated Solid Waste and Resource Management Plan (SWRMP). This Stage 2 report is considered a draft version of the SWRMP.

Two advisory committees, established for both the South (Furry Creek to Pemberton) and the North (Gold Bridge to Lillooet) areas of the region, provided input on the technical reports prepared during Stages 1 and 2. Both advisory committees have public, local government and technical representation and are collectively referred to as the Solid Waste and Resource Management Plan Advisory Committee (SWRMP AC).

The third and final stage involves community consultation to obtain input on the selected options presented in this draft SWRMP.

The planning process and the development of this report have been undertaken in accordance with the BC Ministry of Environment (MoE) document entitled "Guide to the Preparation of Regional Solid Waste Management Plans by Regional District" (BC MoE, 1994).

1.1 LONG TERM VISION

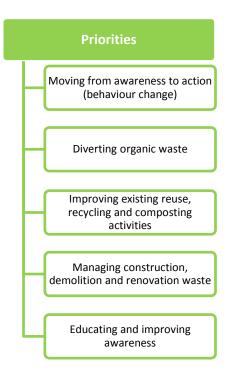
A long-term vision for the SWRMP was developed by the SWRMP AC during Stage 1 of the planning process. The initiatives described in this document are intended to move the SLRD towards this vision:

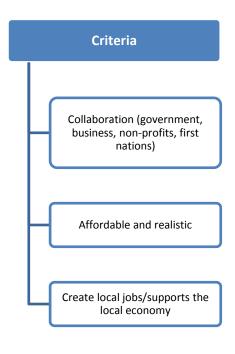
- 1. The ultimate goal is zero waste all of our discards are regarded a resources.
- 2. To the greatest extent possible, these resources are used locally, thereby moving the SLRD towards a closed-loop economy.
- 3. The system to manage discards is financially self-sustaining. Embedded in this goal is to have the cost to purchase a product include the cost of managing it at the end of its useful life.
- 4. Citizens are actively engaged in behaviours that reflect the waste management hierarchy (i.e. reduce before reuse before recycle...).
- 5. Until we have achieved zero waste, the infrastructure to manage residual waste meets or exceeds provincial guidelines and regulatory requirements.

 $^{^{1}}$ http://www.slrd.bc.ca/inside-slrd/current-projects-initiatives/solid-waste-and-resource-management-plan

1.2 OBJECTIVES

At the initial meeting of the SWRMP AC, an exercise was conducted to help define the priorities (key issues) for the planning process. During this exercise, the committee also identified criteria that they felt are important to include in the consideration of options for managing solid waste. The priorities and criteria are:





2. PLAN AREA AND DEMOGRAPHICS

The plan area shown in Figure 2-1 includes four incorporated municipalities and four unincorporated electoral areas, including:

- District of Squamish (DOS);
- Resort Municipality of Whistler (RMOW);
- Village of Pemberton (VOP);
- District of Lillooet (DOL);
- Electoral Area A (Gold Bridge, Bralorne and area);
- Electoral Area B (Yalakom, Bridge River, Seton/ Tsal'álh, Texas Creek, Fountain Valley, Pavilion);
- Electoral Area C (Pemberton Meadows, Mt. Currie D'Arcy corridor, Whistler-Pemberton Corridor (excluding municipalities);
- Electoral Area D (Furry Creek, Britannia, Upper Squamish, Upper Cheakamus, Ring Creek, Pinecrest/Black Tusk).

First Nations within in the SLRD include the Xwisten (Bridge River), Tsal'álh (Seton Lake), Sekw'elw'as (Cayoose Creek), T'itq'et (Lillooet), Ts'kw'aylaxw (Pavilion), Xaxli'p (Fountain), N'Quatqua, Lytton, Lil'wat (Mt. Currie), and Squamish peoples. Thirty-six reserves are located in the region, with a total on-reserve population of 3,275 persons in 2011². Lil'wat Reserve 6 has the largest population, with over 1,300 people. Seven other reserves have populations of 100-300 persons. All other reserves have populations of under 100 persons, with the smallest having five or fewer residents.



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² Statistics Canada, 2011 Census.



Figure 2-1: Plan Area

2.1 POPULATION

Table 2-1 provides a breakdown of the permanent population of the SLRD for 2011 (based on the 2011 Census) and estimated for 2012 to 2014.

Table 2-1: Population Data for the Service Areas within the SLRD

JURISDICTION	2011 POPULATION DATA	2012 POPULATION DATA	2013 POPULATION DATA	2014 Population Data
Lillooet	2,324	2,337	2,335	2,344
Pemberton	2,485	2,513	2,579	2,601
Squamish	17,727	18,377	18,789	19,294
Whistler	10,333	10,409	10,194	10,447
Unincorporated Areas	6,644	6,982	6,970	6,810
Squamish-Lillooet TOTAL	39,513	40,618	40,867	41,496

Source: British Columbia Regional District and Municipal Population Estimates
Prepared by: BC Stats, Ministry of Labour, Citizens' Services and Open Government
http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx

Whistler receives over two million visitors every year with large seasonal variation in the resident population. Therefore the RMOW calculates an equivalent adjusted population figure to account for the impact of the visiting population on amenities and services. In 2011, the adjusted population number for Whistler was 26,132³, which would increase the overall SLRD population to 55,312 for 2011 (an increase of 40%).

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³ Combination of BC Stats and Tourism Whistler equivalent population estimates.

3. CHARACTERIZATION OF THE CURRENT WASTE STREAM

This section provides estimates of the current composition of the SLRD's waste and the quantity of waste disposed and recycled. Additional information is presented in the Stage 1 report. The data presented in this section is from 2012 and represents the most recent data available when the Stage 1 report was prepared.

3.1 WASTE GENERATION, DIVERSION AND DISPOSAL ESTIMATES

The SLRD has tracked its waste disposal rate for many years. Figure 3-1 shows the per capita quantity of waste disposed in the SLRD from 2001 to 2012. The amount of waste disposed is typically driven by two factors: the range of diversion opportunities, such as recycling and composting, available to the population and the level of regional economic activity. In 2012, the disposal rate was 541 kg per capita.

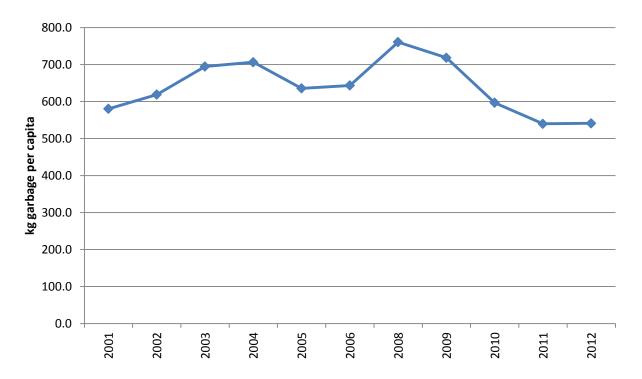


Figure 3-1: SLRD per Capita Waste Disposed (2001 – 2012)

Table 3-1 provides a summary of the estimated waste disposal and waste diversion quantities recorded at the different disposal facilities and for the various methods of diversion. The table presents disposal data for garbage disposed at landfills. The quantities exclude garbage disposed of in landfills on First Nations Reserves (believed to be a relatively small quantity) and biosolids because they are not considered solid waste.

Table 3-1: Disposal and Diversion Estimates (2012)

Disposal and Diversion	Estimated Tonnes (2012)
Disposal	
Squamish Landfill	11,692
Rabanco Regional Landfill via Whistler Transfer Station	12,795
Lillooet Landfill	2,479
Total disposal	26,966
Diversion	
Squamish curbside recycling program	936
Squamish other recycling + composting	5,525
Recycling at Whistler Transfer Station	1,698
Whistler other recycling	5,109
Whistler Composting Facility	2,510
Whistler Re-Use-It Center	309
Whistler Re-Build-It Centre	221
Pemberton Transfer Station Recycling	294
Lillooet Landfill Recycling (includes tonnes from Gold Bridge Transfer Station)	196
Devine Transfer Station Recycling	7
Extended Producer Responsibility Programs (estimated)	3,339
Total diversion	20,144
Total waste generation (disposal + diversion)	47,110
2012 Diversion rate (diversion/waste generation)	43%

The disposal data is based on scale data from SLRD and member municipality disposal facilities. Not all recycling and diversion activities have available data, so the estimated total diversion is considered to be conservative. Based on SLRD's estimated disposal and diversion quantities, the region achieved a diversion rate of 43% in 2012.

3.2 COMPOSITION OF WASTE DISPOSED

The composition of the SLRD landfilled waste is estimated based upon several information sources including a regional waste composition study conducted by Dillon Consulting in 2012 as part of the Regional Composting Feasibility Study⁴ and municipal data available for RMOW.

The purpose of the 2012 regional waste composition study was to estimate the proportion of potentially compostable organic materials in the garbage currently being landfilled. The study separated the garbage into 3 main categories: organics, recyclables, and residual waste. The organics waste stream was further broken down into: backyard compostable food, non-backyard compostable food, yard waste, and non-food organic. Table 3-2 shows the composition of the waste received at four different disposal locations separated by source. Figure 3-2 illustrates how the garbage is broken into the three primary categories (organics, recyclables, and residual waste).

Table 3-2: SLRD's Estimated Waste Composition at Four Disposal Locations shown as % by Weight (2012)

Location	Source	Food - Backyard Compostable	Food -Non Backyard Compostable	Yard Waste	Non Food Organic	Total Organics	Recyclables	Residuals
Squamish	Residential garbage	22	16	12	5	56	13	32
	Mixed Commercial garbage	11	26	0	8	44	24	32
Whistler	Residential garbage	16	14	5	4	39	23	38
	Commercial - Ski Resort Housing garbage	13	13	1	4	31	39	30
	Commercial - Grocery Store garbage	7	47	0	2	56	21	23
Lillooet	Residential garbage	10	11	9	3	34	21	46
	First Nations garbage	16	25	2	6	49	25	25
	Mixed Commercial garbage	11	10	1	5	27	58	15
Gold Bridge	Mixed Residential & Commercial garbage	16	26	2	7	52	21	27

⁴ Dillon Consulting, Regional Composting Feasibility Study, Final Report, July, 2013.

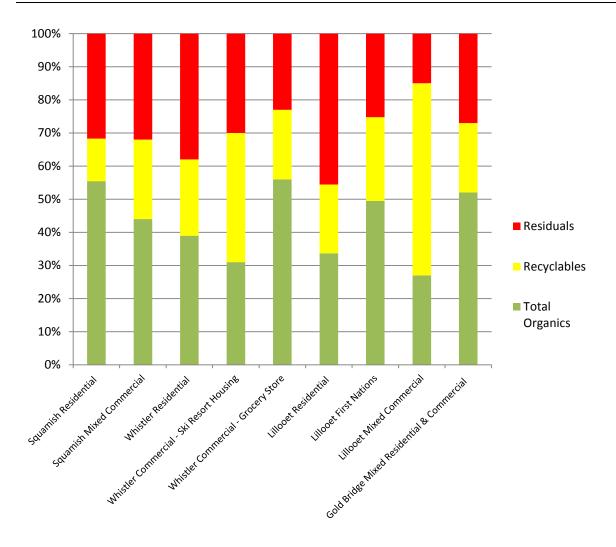


Figure 3-2: 2012 Estimated Waste Composition shown as the Proportion of Organics, Recyclables and Residual Waste (% by Weight)

The largest components disposed, by weight, are organic waste (average of 43% across sources), residual waste (30%) and recyclables (27%). The waste composition results were based on a one-week sort and do not represent seasonal variations in a waste stream.

To obtain additional insight into the potential composition of the waste currently sent to landfill, the results of a 2012 waste composition study conducted for the Regional District of North Okanagan (RDNO) were also considered. The RDNO is a combination of rural areas and smaller towns, similar to SLRD (with the exception of Whistler). As a result, the waste composition data from the RDNO is considered to have reasonable application for the SLRD's purpose. The RDNO's study provides a breakdown of the main waste composition categories, as shown in Figure 3-3. The RDNO study indicates that compostable organics constitute the highest percentage of waste landfilled (43%); and plastic and paper constituted the second highest percentage (13% and 12% respectively). Collectively, these three waste categories constituted at least 71 % of the residential waste stream⁵.

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⁵ TRI Environmental Consulting Inc., 2012 Solid Waste Composition Study for Regional District of North Okanagan.

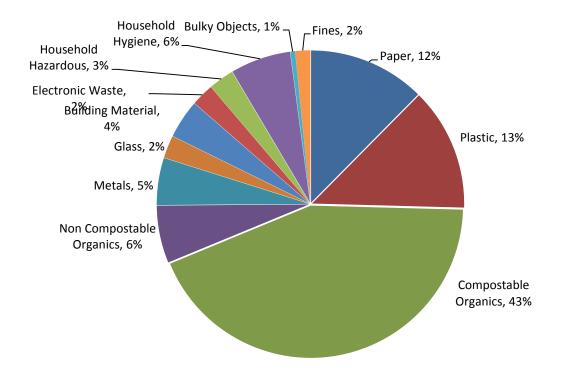


Figure 3-3: Waste Composition of Regional District Similar to the SLRD

3.2.1 RMOW Waste Composition

The RMOW has a unique demographic; it is a tourism community with a fluctuating population. The type and amount of waste produced in the municipality varies with number of visitors throughout the different seasons of the year. RMOW has conducted a variety of waste composition studies in 2004, 2010, 2011, and most recently in 2012. These studies indicated that the largest components of garbage disposed in Whistler are: compostables (25%), paper products (17%), wood waste (16%), plastics (8%) and metal (8%). The RMOW's 2013 Solid Waste Strategy states that 41% of Whistler's garbage could be diverted to the compost facility, and another 40% could be recycled.

⁶ RMOW, Whistler Solid Waste Management Strategy, 2013.

4. EXISTING WASTE MANAGEMENT SYSTEM

The following sections provide a brief outline of the SLRD's existing solid waste management system. A detailed description of the system is included in the *Solid Waste and Resource Management Plan Stage 1 Report* available on the SLRD website.

Education and Promotion: The SLRD and member municipalities participate in educating residents and businesses about proper waste management. A range of waste management-related promotion and education programs are used to support all solid waste services. The SLRD provides financial support to the Recycling Council of BC (RCBC). RCBC provides a toll-free Recycling Hotline and an on-line searchable database called "Recyclepedia" that provides residents with information on waste management programs in the region.

In addition to the SLRD's initiatives, private and non-profit organizations in the region also engage in education and promotion activities to increase waste diversion.

Reduction and Reuse Programs: Across the SLRD communities there are several reduction efforts targeting edible unwanted food, the use of plastic bags, bottled water, and encouraging green purchasing and green building. Free stores are operated at the Pemberton, Gold Bridge and Devine transfer stations, as well as at the Lillooet landfill. There are also a number of commercial and non-profit stores in the region focused on reuse, repair or rental of equipment.



Extended Producer Responsibility Programs: The SLRD is a member of the BC Product Stewardship Council, a body that advocates on behalf of local government for effective product stewardship programs. SLRD staff has also engaged in consultation and discussions with stewardship programs in their plan development process. A wide range of EPR products are collected and recovered under the regulated programs. In addition, there are also voluntary programs operating in the SLRD, targeting things like bike tubes, obsolete agricultural pesticide, fridges, and old vehicles.

Back Yard Composting: The SLRD operated a residential composter distribution program, however this program ended due to lack of participation and the availability of composters at local retailers. Backyard composting is not widely encouraged in the SLRD due to concerns with attracting bears into residential areas. Some municipalities have addressed the issue in their bylaws.



Recyclables Collection: Curbside recycling collection is provided to single-family homes in Squamish, Furry Creek, Britannia Beach and on Squamish Nation's reserve lands. For residents in the rest of the SLRD, there are recycling, drop off facilities available in Squamish, Whistler, Pemberton, Lillooet, Devine and Gold Bridge.

In Squamish, Pemberton and Whistler, owners of multifamily buildings and industrial, commercial and institutional (ICI) buildings can arrange for recycling collection via private collection service providers.

Compost Collection: Squamish residents receive seasonal curbside yard waste collection. Drop off facilities (available all year around) are available for yard waste in Squamish, Whistler, Pemberton and Lillooet. Britannia Beach and Furry Creek have seasonal drop off sites for yard waste. The ICI sector and multi-family buildings can arrange for their private collection service providers to collect organics in Squamish, Pemberton and Whistler.

Garbage collection: Curbside garbage collection is currently provided to residents in Squamish (municipal service), Lillooet (municipal service), Furry Creek and Britannia Beach (SLRD service), and on Squamish Nation reserve lands (Squamish Nation service). Private collection companies are available to provide residential garbage collection service on a subscription basis in Pemberton, Pinecrest and Whistler. Residents in other communities in the region and in rural areas self-haul their garbage to a transfer station, landfill or Whistler depot.

In Squamish, Pemberton, Whistler and Lillooet, multi-family and ICI buildings must hire a private garbage collection service.

Processing facilities for recyclables and compost: There are two Materials Recovery Facilities (MRFs) in the SLRD for sorting, processing and marketing of recyclables. The SLRD owns one at the Lillooet Landfill, which is operated by a private contractor. The other MRF is privately owned in Squamish.

There are two composting facilities located within the Region; a municipal facility in Whistler and a privately owned facility in Pemberton (Sea-to-Sky Soils). The SLRD recently established a yard waste composting capacity at the Lillooet Landfill.

Construction, demolition and land clearing waste management: Efforts have been made to encourage separation of the reusable and recyclable portions of construction and demolition (C&D) waste generated in the region. There are two C&D waste sorting and processing areas: one next to the Squamish Landfill, and the other at the Whistler Transfer Station. Source separation is encouraged through differential tipping fees charged at Squamish Landfill, Whistler Transfer Station, Lillooet Landfill and Gold Bridge Transfer Station.

Clean wood waste (i.e. untreated wood) is accepted at the Whistler Transfer Station, the Squamish Landfill and the Lillooet Landfill, where it is chipped for use in composting.

Source-separated scrap metal, cardboard and gypsum are collected and stored for recycling at all local government solid waste facilities in the SLRD (Lillooet, Pemberton, Squamish, and Whistler).

Land-clearing waste refers to tree waste, including trunks and stumps that are generated as a result of clearing land for development. In the SLRD, land-clearing waste is generally managed by grinding wood waste to incorporate into the soil, or for other uses such as composting or hog fuel.



Recovery and Residual Waste Management: Resource

recovery means the extraction and utilization of materials and energy from the waste stream. None of the landfills within the Region are capturing landfill gas for energy recovery. Whistler's composting facility is recovering waste heat from the composting process and it is used to heat the compost operations building. Whistler is currently investigating the business case for producing biofuel from its current composting operation as a product for sale in addition, or as an alternative to, compost, which is the current saleable product.

Residual waste is the portion of the solid waste stream that is not managed through recycling, composting and/or recovery activities. It is commonly referred to as "garbage".

There are four publicly owned transfer stations operating in the region; the Whistler, Pemberton, Devine and Gold Bridge transfer stations. In addition, there are two depots located in Whistler, where residential garbage can be dropped off at no cost. Garbage can also be dropped off at Carney's Waste Systems in Squamish.

There are two operating landfills in the SLRD, the Squamish Landfill and the Lillooet Landfill. The planned closure date for the Squamish Landfill is 2018⁷, however there is potential to expand the site to accommodate for waste disposal until 2059⁸. Since the closure of the Whistler Landfill, garbage from the Whistler transfer station and depots has been compacted and transported to Roosevelt Regional Landfill (also known as Rabanco) in Washington State, US.

First Nations are responsible for providing their own waste management systems, as regulated under the federal *Indian Reserve Waste Disposal Regulations*. In the SLRD, some communities have their own landfills, while others contract with commercially available collection and disposal services or they self-haul to SLRD or municipal facilities.

⁷ Conestoga Rovers Associates, Lifespan Analysis Update - District of Squamish Landfill, 2013.

⁸ Sperling Hansen Associates, Squamish Landfill Lifespan Analysis and Recommended Operational Improvements, 2011.

5. A PROPOSED NEW PLAN FOR THE SLRD

The proposed components of the new plan focus on:

- Improving communication and collaboration. The new plan incorporates the recommendations of the SLRD Solid Waste and Resource Management Strategic Communications Plan that was approved by the SLRD Board in October 2014;
- Improving the use of existing recycling and composting services;
- Putting more emphasis on reduction (i.e. not creating waste that needs to be "managed"); and
- Identifying the process to establish long-term disposal capacity for District of Squamish, as well as the communities that use the DOS landfill for disposal.

The sections of the Plan are presented as follows:

- Communications
- Reduction and reuse
- Extended producer responsibility
- Waste diversion through policy
- Residential waste management
- Commercial and multi-family waste management
- Organic waste management
- Construction and demolition waste management
- Landclearing waste management
- Resource recovery
- Residual waste management
- Illegal dumping
- Wildlife and waste management
- Land use planning
- Authority over waste management activities in the SLRD
- Plan Implementation
- Plan targets
- Monitoring and measurement
- Plan flexibility

A summary of the proposed new initiatives is presented at the end of each section. For each new initiative, the summary table includes information under the following headings:

- Responsibility indicating which organization(s) will be responsible to implement the initiative;
- Implementation indicating the year(s) in which the initiative will be implemented;
- Estimated staffing requirements indicating the estimated hours of SLRD staff time on an annual basis that the initiative will require;
- Estimated capital cost referring to estimated SLRD capital expenditure requirements; and
- Estimated operating cost referring to estimated SLRD operating expenditure requirements.

6. COMMUNICATIONS

During the first stage of this planning process, the top priorities for updating the Solid Waste and Resource Management Plan were identified. Some of these priorities relate to communications, specifically:

- Moving from awareness to action (behaviour change)
- Improving on existing reuse, recycling and composting activities
- Educating and improving awareness.

Consequently, many of the new initiatives in this plan are focused on communications. In October 2014, the Regional Board approved the Solid Waste and Resource Management Strategic Communications Plan prepared by Ecoinspire. The Strategic Communications Plan is intended to meet the waste reduction and diversion communications needs of the SLRD over the next five years by:

- Building on existing organizational objectives and strengths of the SLRD and partner organizations;
- Providing a unifying brand that harmonizes waste reduction efforts across the region;
- > Focusing on proven audience-focused social marketing technique and behavioral change science;
- Identifying specific belief, behavior, and knowledge objectives, and a practical action plan to achieve them; and
- Creating an approach that can be replicated to solve other social, environmental or economic challenges.

The Strategic Communications Plan provides detailed information on the process and mechanisms for developing and implementing a successful communications plan and is included in Appendix A for reference. Implementing the Strategic Communications Plan will ensure that the waste reduction and diversion goals identified in the SLRD SWRMP (current and updated versions), as well as the waste reduction and diversion goals of member municipalities, are achieved sooner and with longer lasting effects.

Communication and education are critical support mechanisms to successful waste diversion. The SLRD already provides 20 workshops per year to schools throughout the SLRD and conducts an Earth Day event. Additionally, the SLRD has provided funding to AWARE's Zero Waste Station at the Whistler Farmers Market and there is on-line information provided by the SLRD, member municipalities, recycling collection companies and local environmental organizations.

To enhance current communication initiatives, improve on waste diversion programs and support new diversion actions, the following communications initiatives are proposed:

- 1. The SLRD and member municipalities incorporate community based social marketing (CBSM) into solid waste management endeavors with a significant focus on behaviour change. CBSM is an approach to program promotion and education that encourages high rates of effective participation and long-term behavior change. As outlined in the Strategic Communications Plan, a CBSM plan should include 6 strategic phases (refer to Appendix A for details on each of these phases):
 - Analysis
 - Strategy development
 - Program and communication design
 - Pretesting
 - Implementation
 - Evaluation

- 2. Develop a Communications Strategy focused on reducing food scraps in waste from single-family homes. This will be the first communications strategy developed under the new SWRMP. The approach and tools used in this strategy are intended to be used for future strategies. It is anticipated that these campaigns could be a collaborative effort by SLRD, Squamish, Whistler, Pemberton, Lillooet, First Nations, and possibly other stakeholders.
- 3. Establish a mechanism for sharing, standardizing and coordinating communication and education efforts amongst organizations involved in providing waste management services, such as an annual strategic communications planning session. The SLRD would facilitate this collaboration of Squamish, Whistler, Pemberton, Lillooet, First Nations, and other

stakeholders as appropriate. Through doing so, the desired outcomes can be harmonized and efficiencies improved.

Love this place. Reduce your waste.

- Implement the logo and tagline "Love this place. Reduce your waste" developed for SLRD solid waste communications (part of the Communication Strategy).
- 5. Develop a communications strategy for ICI and multi-family properties to improve the performance of recycling and organic waste diversion.
- 6. Develop a communications strategy for tourist accommodations to improve the performance of recycling and organic waste diversion.
- 7. Coordinate local government efforts to establish internal zero waste programs, so that the SLRD and member municipalities can lead by example. See the ICI and Multi-family section for more information on this initiative.
- 8. Expand the SLRD's zero waste workshops beyond schools to other public venues.
- 9. Encourage and support "bear smart" backyard composting.
- 10. Increase public awareness of EPR take back programs available in the SLRD.
- 11. Promote construction and demolition waste reuse and recycling opportunities.

Table 6-1 below summarizes the proposed new communication initiatives and resource requirements such as staffing and financial implications. An initiative not listed below indicates that there are no anticipated resource requirements.

Table 6-1: Summary of proposed Communications initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Incorporate community- based social marketing into major campaigns	SLRD, municipalities	2015 onwards	included under individual initiatives	included under individual initiatives	included under individual initiatives
Residential food scraps reduction campaign	SLRD, municipalities	2015-2017	1000	\$ -	\$ 66,000 over 3 yrs
ICI and multi-family communication strategy	SLRD, municipalities	2017-2018	1000	\$ -	\$ 30,000 over 2 yrs
Tourist accommodation communication strategy	Whistler, Squamish	2019-2020	500	\$ -	\$ 20,000 over 2 yrs

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Construction & demolition communication strategy	SLRD, municipalities	2019-2020	500	\$ -	\$ 15,000 over 2 yrs
Coordination of local governments' internal zero waste initiatives	SLRD, municipalities	2015 -2016	40	\$ 0	\$ 1000 over 2 yrs
Expansion of zero waste workshops	SLRD, municipalities	2015 onwards	0	\$ -	\$ 5,000 annually
Beat Smart backyard composting	SLRD, municipalities	2015 onwards	20	\$ -	\$ 1,000 every 3 rd year
EPR awareness	SLRD, municipalities	2015 onwards	20	\$ -	\$ 1,000 every 3 rd year
Promote local construction and demolition waste reuse/recycling opportunities	SLRD, municipalities	2015 onwards	40	\$ -	\$ 1,000 every 3 rd year

7. REDUCTION AND REUSE

Reduction and reuse initiatives prevent waste from entering the waste management system resulting in conservation of resources. Although reduction and reuse initiatives are at the top of the waste management hierarchy, historically solid waste management strategies have not focused on these initiatives. As noted in the previous sections, one of the priorities for this planning process is improving on existing reuse, recycling and composting activities.

Real change will ultimately have to be driven from the consumer level. This can be driven by consumer demand for more durable goods, and also through increased consciousness regarding what and how much we consume. The SLRD and member municipalities can support a change in mindset through encouraging the reuse of goods before they become waste. This is currently being done through:

- Whistler's Reuse It and Rebuild It Centres
- Squamish's Reuse It Fair
- Free stores at the all SLRD transfer stations (Pemberton, Gold Bridge, Devine) and the Lillooet Landfill

In addition, there are other reuse opportunities in the SLRD available through non-profit initiatives such as Squamish ReBuild and Pemberton Re-Use-It, consignment and thrift stores, on-line services such as Facebook, Craigslist and Kijiji, and many rental, repair and maintenance shops.

The SLRD and member municipalities could enhance their support of the "reduce and reuse" mindset shift through undertaking the following proposed activities:

- Develop campaigns to encourage reduction and reuse behavior. These campaigns are discussed in the Communications section. The initial focus would be on reducing the amount of food scraps in residential waste.
- 2. Establish a Re-Build-It Centre type of facility in Pemberton where usable construction, demolition and renovation discards can be stored for reuse.
- 3. Establish a Re-Build-It Centre type of facility at Lillooet Landfill.
- 4. Encourage bear smart backyard composting.
- 5. Establish a fund to foster local zero waste initiatives that would be administered by the SLRD. It is anticipated that applications for funding would be received and reviewed on an annual basis by the Plan Monitoring Advisory Committee (see Section 23 for additional information on this committee). The committee would collaborate on establishing criteria for eligibility for funding.

Table 7-1 below summarizes the proposed new reduction and reuse initiatives and their associated resource requirements such as staffing and finances. Resource requirements for bear smart composting have been included under Communications.

Table 7-1: Summary of proposed new reduction and reuse initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Campaigns to encourage reduction and reuse behavior		Incorporated in	to Communicatio	n Initiatives	
Re-Build-It Centre type of facility in Pemberton	SLRD	2017	40	\$ -	to be determined
Re-Build-It Centre type of facility at Lillooet Landfill	SLRD	2018	60	\$ 15,000	to be determined
Bear smart backyard composting	Incorporated into Communication Initiatives				
Fund for local zero waste initiatives	SLRD	2017	15	\$ -	\$ 5,000 annually

8. WASTE DIVERSION THROUGH POLICY

Two policy approaches to encouraging diversion were explored during this planning process: variable tipping fees and disposal bans.

Variable tipping fees refers to the application of different disposal rates for different types of waste at landfills and transfer stations. For example, in the SLRD, tipping fees on recyclable and compostable materials are generally lower than the tipping fee for garbage. Additionally, loads of garbage that contain an excessive amount of recyclables can be charged a tipping fee higher than the one for regular garbage. Variable tipping fees act as a financial incentive to source-separate these types of materials from the regular garbage. This is particularly effective for businesses and construction/demolition projects.

Although variable tipping fees are in effect throughout the SLRD, how they are applied varies from facility to facility. It is proposed that the SLRD and member municipalities begin to use variable tipping fees to target the same waste types for source-separation (based on the availability of local alternatives) so that the policy is more consistent throughout the region. Waste types that could be considered include:

- Cardboard
- Metal
- Yard waste
- Food waste
- Clean wood waste
- Drywall
- Products covered under an Extended Producer Responsibility (EPR) program

A similar policy approach involves banning specific materials from disposal. Disposal bans are typically implemented using a bylaw that specifies which waste materials must be collected separately from garbage for the purpose of recycling or composting. Bans are also used to prohibit hazardous materials from entering landfills. They are enforced at the point where garbage is deposited at a landfill or transfer station and non-compliance with the bylaw results in the deliverer of the garbage being ticketed or having a surcharge placed on the tipping fee.

It is proposed that disposal bans, which are not currently a policy tool used by in the SLRD, will only be implemented if variable tipping fees are not as effective at achieving the desired diversion behaviours. Some exceptions are anticipated when a specific waste stream is determined to warrant the establishment of a disposal ban prior to determining if variable tipping fees would be effective. To this end, it is also proposed that landfill bans on most EPR products be established when and where local collection services are available for those products. The specific list of EPR products to be banned from garbage will be determined through collaborative dialogue between SLRD and the municipalities of Squamish and Whistler. This initiative is discussed further in the next section on EPR (Section 9).

Creating greater consistency in terms of disposal policies throughout the southern part of the SLRD will require that local government representatives meet on a regular basis (at least annually) to review existing policies and consider opportunities to enhance the effectiveness of their policies. Table 8-1 lists the proposed new policy initiatives and their implications.

Table 8-1: Summary of proposed new waste diversion policy initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Establish regionally consistent tipping fee categories	SLRD, Whistler, Squamish. Coordinated by SLRD.	2016	10 hrs annually for collaboration and revisions to tipping fee schedule	\$ -	\$ -

9. EXTENDED PRODUCER RESPONSIBILITY

Use of Extended Producer Responsibility (EPR) as a policy tool aims to shift the responsibility for end-of-life management of products (physically and economically) to the producer and away from municipalities to create an incentive for producers to include environmental considerations in design of products. EPR programs in BC are mandated by Recycling Regulation 449/2004, under the Environmental Management Act. The regulation requires producers of the designated products to develop a program for their collection and recovery of materials and to consult stakeholders (including local governments) when developing their plans. The Ministry of Environment, who is responsible for the regulation, requires the product stewards to file annual reports on the materials collected and recovered, and to breakdown collection volumes by regional district where possible.

Table 9-1 lists the current EPR programs in BC. Most of these programs operated "take back" programs where consumers can return the used product to a depot or to the retailers. In the SLRD, several EPR programs have arranged for municipal and SLRD landfills and transfer stations to operate as take-back depots. It is proposed that local governments continue to provide EPR take-back services, as needed, to ensure local access to these programs by residents. Local government participation may be dependent on the level of cost recovery that is offered by the EPR program to the SLRD or member municipality to provide the service.

Table 9-1: Current EPR programs in BC

PRODUCT CATEGORY	Program(s)			
Antifreeze, Used Lubricating Oil, Filters and Containers	BC Used Oil Management Association			
Beverage Containers	Encorp (non-alcoholic and wine, spirits, coolers and import beer in non-refillable containers)			
	Brewers Distributed Limited (fillable and canned beer)			
Electronics and Electrical	Call2Recycle (batteries and cell phones)			
	Canadian Wireless and Telecommunications Association (CWTA) (batteries and cell phones)			
	Electronics Products Recycling Association (EPRA) (electronics: Computers, televisions, audio-visual, medical equipment, office equipment)			
	LightRecycle (lamps and lighting equipment)			
	Major Appliance Recycling Roundtable (MARR) (large appliances)			
	Outdoor Power Equipment Institute (OPEI) (Outdoor Power Equipment)			
	Canadian Electric Stewardship Association (CESA) (small appliances, power tools, sports and exercise equipment, hobby, craft)			
	AlarmRecycle (smoke and carbon monoxide alarms)			
	Switch the 'Stat (thermostats)			
	Canadian Brandowner Residual Stewardship Corporation (toys –electric and electronic)			
Lead Acid Batteries	Canadian Battery Association			
	Interstate Battery System			
Packaging and Printed Paper (residential)	Multi-Material BC			
Paint and Solvents and Flammable Liquids, Gasoline and Pesticides	Product Care			
Pharmaceuticals	Health Product Stewardship Association			
Tires	Tire Stewardship BC			

The SLRD is a member of the BC Product Stewardship Council (BPPSC), a body that advocates on behalf of local government for effective product stewardship programs. As a member of BCPSC, it is proposed that SLRD:

- Liaise with member municipalities to share information on the outcomes of the BCPSC meetings and provide information on other EPR-related initiatives.
- Encourage BCPSC to invite First Nations to participate on the Council.

SLRD staff also engage in consultation with stewardship programs in their plan development process, and advocates that these programs provide reasonable service levels for the SLRD.

To reinforce that EPR products are a private sector responsibility and they should not be landfilled in the SLRD, it is proposed that specific EPR products should be added to the list of materials that are banned from disposal as garbage. This ban would be implemented at landfills and transfer stations only when a take-back program for the targeted EPR products is locally available. A list of EPR products that could be banned from landfilling includes:

- Lead-acid batteries
- Appliances
- Paints and solvents
- Pesticides
- Household batteries single use and rechargeable

- Electronics
- Motor oil and filters
- Pharmaceuticals
- Tires

During the planning process, it was noted that more awareness of the breadth of EPR programs and drop off locations is needed. It is proposed that SLRD and municipal staff work with the product stewardships organizations to support increased awareness throughout the SLRD as part of the overall Communications strategy discussed in Section 6.

Table 9-2 below summarizes the proposed new EPR related initiatives and their associated resource requirements such as staffing and finances.

Table 9-2: Summary of the proposed new EPR related initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Landfill bans on specified EPR materials/products	SLRD, Squamish, Whistler	2016	40 hrs for bylaw revision and communications	\$ -	\$ -
Increase awareness of EPR programs and services		Incorporated i	nto Communication Initia	tives	

10. RESIDENTIAL WASTE MANAGEMENT

This section describes collection services provided by local government to residents, including the collection of garbage, recyclables and compostable waste. Residential services *currently* provided in the SLRD include:

District of Squamish Door-to-door collection of garbage, recycling and seasonal yard waste

(curbside food waste to be collected with yard waste starting in 2015)

Resort Municipality of

Whistler

Depot-based collection of garbage, recycling and food waste

District of Lillooet Door-to-door collection of garbage

SLRD Door-to-door collection of garbage and recycling in Britannia and Furry Creek

Drop off facilities for seasonal collection of yard waste in Britannia and Furry

Creek

Depot-based collection of garbage, recycling and food waste in Pemberton

Depot-based collection of garbage, recycling and yard waste in Lillooet

Depot-based collection of garbage and recycling for Electoral Areas A, B and C

Note that the services above do not include collection services for multi-family buildings. For the purposes of waste collection, multi-family buildings are treated as commercial buildings. Refer to Section 11 for a list of actions related to commercial and multi-family buildings.

In addition to maintaining the current residential waste collection system, the following initiatives are proposed:

- Implement curbside collection services in Pemberton and surrounding area. This process will begin with community consultation to determine the community's support for a collection service, the possible breadth of the service (garbage and/or recycling and/or organic waste collection) and the collection protocols (e.g. types of collection containers, frequency of collection). If there is support for a curbside service, it is expected that the service requirements for the Pemberton transfer station may be reduced and that there will be costs savings associated with operating the transfer station.
- Assess the provision of curbside recycling and yard waste collection services in Lillooet. It is proposed that the District of Lillooet undertake an assessment of the cost-benefit of adding curbside recycling and yard waste collection to their existing curbside collection service (currently for garbage only). One of the considerations for implementing this service may be the availability of funding for the recycling service through Multi-Material BC or other producer responsibility organization.

These initiatives are intended to achieve following objectives:

- To reduce the amount of residential garbage sent to landfill
- To provide services and incentives that encourage diversion of recyclable and compostable discards

Table 10-1 below summarizes the proposed new residential waste initiatives and their associated resource requirements such as staffing and finances.

Table 10-1: Proposed Residential Waste Management Initiatives

New Residential Initiatives	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Curbside collection services in Pemberton and surrounding area					
a. Community consultation	SLRD and Pemberton	2015	80	\$ -	\$ 2,500
b. Implementation	SLRD or Pemberton	2016	150	\$ -	\$ 10,000
c. On-going collection service	SLRD or Pemberton	2017	40	to be determined	to be determined
Assess provision of curbside recycling and / or yard waste collection services in Lillooet	Lillooet	2016	20	\$ -	\$ -

11. COMMERCIAL AND MULTI-FAMILY WASTE MANAGEMENT

Throughout the SLRD, private collection companies are contracted to collect their garbage, recycling and organic waste from commercial, institutional and multi-family residential buildings. During Stage 1 of the planning process, it was noted that in communities where recycling and organic waste collection services are offered, not all businesses and multi-family buildings subscribe to these services. Waste composition data presented in the Stage 1 report indicates the 24% of Squamish's commercial garbage is recyclable, 39% of Whistler's ski resort accommodation garbage is recyclable, and 21% of commercial grocery store garbage is recyclable. This data indicates that there is a significant opportunity to increase diversion by improving the use of existing recycling services.

Current local government approaches to encouraging recycling and composting in commercial and multi-family settings include:

- Variable tipping fees at disposal facilities in Squamish, Whistler and the SLRD to encourage support sourceseparation and diversion (discussed in Section 8);
- Allowing small multi-family and commercial waste generators in Squamish to participate in the residential curbside collection service on a voluntary basis; and
- Implementing a bylaw in Whistler that makes recycling and organics collection from all multi-family and commercial buildings mandatory (the collection service will continue to be provided by private waste collection companies).

In addition to these approaches, the following initiatives are proposed:

- 1. Develop a communications plan for the multi-family residential and commercial sectors to increase diversion of recyclable and compostable waste. This initiative is part of the Communication strategy described in Section 6. Possible initiatives to be considered include:
 - Implementation of a bylaw similar to Whistler's mandatory bylaw in other areas of the SLRD.
 - Like Squamish, allow small multi-family and commercial waste generators to participate in residential curbside recycling and organic waste collection service, where these services exist.
- 2. Improve recycling at tourist accommodations. This initiative would require the development of a communications strategy using community-based social marketing principles and is incorporated into the Communications initiatives described in Section 6.
- 3. Improve recycling and waste minimization at events. This initiative would include the development of common Event Guidelines that could be used as a template by local governments in the SLRD, as well as requiring the organizers of large events to submit a Solid Waste and Resource Management Plan for large events.
- 4. Require new multi-family and commercial developments (and significant re-developments and renovations) to design for 3 stream waste management (garbage, recycling, composting) storage and collection. It is proposed that the SLRD could coordinate the development of model bylaw language that could be used by the municipalities and would allow for greater consistency across the region.
- 5. Local governments should provide leadership to the ICI sector lead by working together to implement internal zero waste initiatives and procurement policies that support the waste minimization and diversion. This collaborative effort will be coordinated by the SLRD and is considered to be part of the broader communications strategy described in Section 6.

These proposed initiatives are intended to meet the following objectives:

- Moving from awareness to action (behaviour change)
- Increasing the diversion of organic waste



Improving on existing reuse, recycling and composting activities.

Table 11-1 below summarizes the proposed new commercial and multi-family initiatives and resource requirements such as staffing and financial implications.

Table 11-1: Proposed New Commercial and Multi-Family Waste Management Initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Commercial and multi- family communications plan	In	corporated into Co	mmunication Ini	tiatives	
Improve recycling at tourist accommodations	In	corporated into Co	mmunication Ini	tiatives	
Recycling and waste minimization at events	SLRD, municipalities. Coordinated by Whistler.	2016 - ongoing	20 to coordinate in Yr 1. 10 hrs/yr for each local government to implement and maintain	\$ -	\$ 1,000
Require new developments to design for 3 stream waste management	SLRD, municipalities. SLRD to coordinate.	2016 - ongoing	40 hrs to coordinate in Yr 1. 20 hrs for each local government to implement	\$ -	\$ 2,000
Local government leadership	In	corporated into Co	mmunication Ini	tiatives	

12. ORGANIC WASTE MANAGEMENT

There has already been significant investment in organics processing facilities in Whistler (the Whistler composting facility), Pemberton (Sea to Sky Soils) and the yard waste composting facility at the Lillooet landfill. In addition, there are a range of collection services in place:

- Food waste drop offs in Whistler, Squamish and Pemberton.
- Seasonal curbside yard waste collection in Squamish.
- Yard waste drop offs in Squamish, Whistler, and Lillooet (Note: there is a private depot in Pemberton).
- Seasonal yard waste drop off in Britannia Beach and Furry Creek
- Curbside kitchen scraps collection in Squamish (starting in 2015).

However, the SLRD waste composition data presented in the Stage 1 report indicates that, by weight, organic waste (primarily food) remains a significant component of what is currently landfilled. Consequently, establishing mechanisms to capture organic waste for other purposes (e.g. compost, energy) has the greatest potential for waste diversion and has been identified as a priority for the updated SWRMP.

The following proposed initiatives are intended to maximize the diversion of organic waste:

- Investigate the potential for curbside food scraps and yard waste collection for Pemberton and the surrounding area. See the Residential waste management chapter (Section 10) for more details on this proposed initiative.
- Assess the potential for curbside yard waste collection for Lillooet. See the Residential waste management chapter (Section 10) for more details on this proposed initiative.
- Consider the use of financial incentives (e.g. variable tipping fees) to encourage the diversion of yard waste to local yard waste depots and composting sites, help protect air quality and, at the same time, encourage residents to remove excess woody debris around their home. This initiative can be incorporated into the variable tipping fee coordination initiative described in the Policy section (Section 9).

Table 12-1 summarizes the proposed new organic waste management initiatives and resource requirements such as staffing and financial implications.

Table 12-1: Proposed New Organic Waste Management Initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST			
Investigate organic waste collection in Pemberton	Inco	Incorporated into Residential Waste Management Initiatives						
Assess yard waste collection in Lillooet	Inco	Incorporated into Residential Waste Management Initiatives						
Financial incentives to encourage diversion of yard waste		Incorporated in	to Policy Initiative	<u>2</u> S				

13. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

Waste generated by construction, demolition and renovation projects includes a wide variety of waste materials, including cardboard, plastic, metal and wood. A large portion of the waste is typically reusable, recyclable or can be used as hog fuel in accordance with MoE legislation, regulations and requirements, and therefore this waste stream represents a significant opportunity for waste diversion. The quantity of construction, demolition and renovation waste generated is quite variable compared to other waste streams as it tends to be directly linked with the level of local economic activity.

Local governments encourage separation of the reusable and recyclable portions of construction and demolition (C&D) waste generated in the region, including:

- Applying variable tipping fees;
- Supporting non-profit building material reuse centres in Whistler and Squamish; and
- Recovering of clean wood waste from mixed loads of C&D waste at the Whistler transfer station.

In addition to maintaining these activities, the following new initiatives are proposed:

- Establish a Re-Build-It Centre type of facility in Pemberton and Lillooet. These initiatives are described under the Reduce & Reuse section
- Actively promote local C&D waste reuse and recycling opportunities
- Establish a communications plan targeting the construction, demolition and renovation industry that would reduce the amount of C&D waste sent to landfill. Coordinated by the SLRD, possible components of this plan could include:
 - Establishing a mechanism requiring large construction projects to commit to reusing and/or recycling their C&D waste materials as a condition of receiving a building/demolition/renovation permit;
 - Reviewing and revising permitting processes to reduce barriers to deconstruction and/or the complete re-use of a building at a different location (i.e. house moving); and
 - Establishing a 3Rs education and information program focused on construction, demolition and renovation contractors.

Table 13-1 summarizes the proposed new C&D waste management initiatives.

Table 13-1: Proposed New C&D Management Initiatives

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST			
Establish a Re-Build-It Centre type of facility in Pemberton and Lillooet		Incorporated into Reduction and Reuse Initiatives						
Promote local C&D waste reuse and recycling opportunities		Incorporated into Communication Initiatives						
Establish a communications plan targeting the C&D industry		Incorporated into	Communication Ir	iitiatives				

14. LANDCLEARING WASTE MANAGEMENT

Landclearing waste refers to tree waste, including trunks and stumps that are generated as a result of clearing land for development. In the SLRD, land-clearing waste is generally managed in one of the following manners:

- A grinder is brought to the site that was cleared and the ground wood waste is left on-site and incorporated into the soil;
- The wood waste is hauled to a wood waste management site that will grind the wood waste for a subsequent use (composting, hog fuel, etc.);
- At the Lillooet Landfill it is collected bi-annually brush is chipped and large woody debris is burned or landfilled; and
- At the Gold Bridge Transfer Station it is accepted for fire reduction programs and burned by the Ministry of Forests, Lands and Natural Resources.

In recent years, there has been an emphasis on regularly clearing woody debris from around homes and other buildings to mitigate the risk and spread of forest fires. As a result, residents are encouraged to burn this debris or deliver it to a local facility. Information on burning safely and the Open Burning Smoke Control Regulation are promoted to the public.

There are no new initiatives associated with landclearing waste management proposed for the new solid waste management plan.

15. RESOURCE RECOVERY

One of the guiding principles of this Plan is zero waste – that is, to ultimately regard all of our material discards as resources. To this end, resource recovery technologies involve the extraction and utilization of materials and/or energy from the residual waste stream prior to disposal and can provide an opportunity to maximize the use of the resources embedded in residual waste.

Resource recovery technologies such as mixed waste processing and waste-to-energy were reviewed during this process but determined to be unfeasible at this time because the region has insufficient residual waste to make these technologies economically viable. Consequently, it is proposed that the SLRD (in a facilitator role) and member municipalities continue to:

- Follow the developments in other regions (e.g. Metro Vancouver and Fraser Valley Regional District) that are exploring resource recovery options assess new opportunities as they arise or become cost-effective for lower tonnages, and
- Consider out-of-region waste-to-energy and mixed waste materials recovery facilities (mixed waste MRFs) as
 potential future solutions for managing a portion of the region's residual waste stream, as long as these
 options do not compromise local waste diversion initiatives.

There are no new services or initiatives associated with resource recovery proposed at this point in time.

16. RESIDUAL WASTE MANAGEMENT

Residual waste is the portion of municipal solid waste that remains after the diversion of materials destined for reuse, recycling, composting or resource recovery. The long-term vision for solid waste management in the SLRD is to establish infrastructure to manage residual waste that addresses the following issues:

- Establishing long term residual waste disposal capacity for Squamish,
- Developing strategies to meet the Regions' long term disposal needs for residual waste, and
- Continued regulatory compliance at all residual waste management facilities.

Residual waste is currently received at several transfer stations and landfills within the Region, as outlined in Table 16-1.

Table 16-1 - Summary of Garbage Receiving Facilities in the SLRD

Location	Services Area(s)	DESTINATION OF RESIDUAL WASTE RECEIVED
Squamish Landfill	Squamish, Pemberton and Areas C,D	Squamish Landfill
Whistler Transfer Station	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill (Washington)
Whistler Function Junction Depot	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill via Whistler Transfer Station
Whistler Nester's Depot	Whistler, Pemberton and Areas C,D	Rabanco Regional Landfill via Whistler Transfer Station
Pemberton Transfer Station	Pemberton and Area C	Squamish Landfill
Lillooet Landfill	Lillooet and Area A,B	Lillooet Landfill
Devine Transfer Station	Area C	Squamish Landfill
Gold Bridge Transfer Station	Area A	Lillooet Landfill

Currently, all regional facilities meet provincial guidelines and regulatory requirements.

In order to ensure sustained landfill capacity and continued regulatory compliance at all residual waste management facilities, the following activities are proposed:

- Expand Squamish Landfill to increase the capacity of the landfill. Within the current disposal management operations, the DOS landfill has 4 years of capacity remaining. An expansion can include a number of steps:
 - a) Expand the landfill laterally to the east. This expansion would provide Squamish with up to 46 years of additional landfill life. However, it may be several years before it is determined whether the lateral expansion is a viable option. For example Squamish needs to consult with Squamish First Nation. This option is also dependent on other expansion options, as described below.
 - b) Expand the landfill vertically on their existing site by constructing retaining walls at the base of the existing landfill that allow the landfill to be built higher (i.e. a vertical expansion). This option has received approval-in-principle by Squamish Council. This could gain 13-14 years of additional capacity and would only accommodate the needs of current users (i.e. primarily Squamish). Whistler would continue to export their solid waste out of the region.

- c) If the Squamish Landfill receives approval to expand laterally, Squamish, with support from Whistler, Pemberton and SLRD should review the opportunity to designate the Squamish Landfill as a regional landfill. Whistler has indicated their intent to send their waste to the Squamish Landfill on the condition that the site meets BC Landfill Criteria guidelines and that the cost of using the disposal facility is cost competitive with out-of-region options.
- 2. Establish a working group made up of SLRD, Whistler and Squamish staff with the responsibility of evaluating residual waste management options and reporting to councils and the SLRD Board. This group would continually evaluate in and out of region options for shared disposal services including waste transfer. The group would work closely with First Nations communities and Aboriginal Affairs and Northern Development Canada to manage residual waste cooperatively. Objectives of the group would include lowering residual waste management costs for all and establishing secure long term options for the region.
 - If a lateral expansion of the Squamish Landfill appears unlikely, SLRD, Whistler, Squamish and affected First Nations need to evaluate long term in and out of region options for shared services. In order to move waste to an out-of-region waste management facility, a large-scale transfer station would need to be constructed either at the landfill or another location within Squamish.
- 3. Evaluate the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria, once the Criteria are finalized. This initiative would be conducted by a qualified consultant.

Table 16-2 details the implications of these recommendations.

Table 16-2: Proposed Residual Waste Initiatives

NEW RESIDUAL WASTE MANAGEMENT INITIATIVES	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST	ESTIMATED OPERATING COST
Expand Squamish Landfill	Squamish	To be determined if approvals are granted	0 (only DOS staffing required)	\$ -	\$ -
Establish a working group with the responsibility of evaluating residual waste management options	SLRD, and member municipalities	2016	20	\$ -	\$ -
Evaluate the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria	SLRD	To commence once the Criteria are finalized	20	\$ -	\$ 15,000 for assessment

17. ILLEGAL DUMPING

Illegal dumping is an issue in many areas of the SLRD, as it is across BC. Although quantities are not significant, illegally dumped waste in the bush and in alleyways is unsightly and can, on occasion, be an environmental hazard. Cleaning up illegal dump sites can also be a costly endeavor for both public and private landowners.

The SLRD and member municipalities regularly support organizations that undertake clean-ups of illegal dump sites or litter. There are bylaws in place throughout the SLRD prohibiting illegal dumping but enforcement is challenging. Consequently, it is proposed that a region-wide illegal dumping strategy be developed that can better harness the collective resources available in the region. The development of this strategy could be led by the SLRD but it is anticipated that the following stakeholders may also get involved:

- Municipalities
- Forestry companies
- Back-country user groups (mountain bikers, fishermen, etc.)
- First Nations
- BC Hydro
- Ministry of Environment Conservation officers

This strategy may include the following actions:

- a. Conduct a survey to determine the most common materials illegally discarded and the most frequent locations, providing a basis for types of materials and "hot spots" on which to build an education campaign and clean-up program;
- b. Conduct targeted outreach campaigns if/when specific "problem" groups can be identified;
- c. Establish a reporting mechanism where residents and outdoor groups can report dumping location, to be targeted for contracted / volunteer cleanup;
- d. Post signs at frequent illegal dumping sites to educate about reporting and prosecuting dumpers; and
- e. Establish enforcement capacity.

Table 17-1 outlines the estimated timing and resource requirements to establish and implement a regional illegal dumping strategy.

Table 17-1: Proposed New Initiatives to Prevent Illegal Dumping

New Initiative	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	ESTIMATED CAPITAL COST		IMATED
Regional Illegal Dumping Strategy	SLRD, municipalities		200	\$	0	\$ -
Survey		2017	20	\$	0	\$ 10,000
Campaign		2018	100	\$	0	\$ 10,000
Signage		2018	20	\$	0	\$ 10,000
Enforcement		2018	to be determined	\$	0	o be ermined

18. WILDLIFE AND WASTE MANAGEMENT

The SLRD is home to a large population of bears that are integral to the local ecosystem. Having a solid waste management system that minimizes the potential for human-bear conflict is a priority for all local governments and wildlife conservation groups in the area. Currently, local government have the following strategies and bylaws in place to mitigate the potential of wildlife-human conflict associated with solid waste:

- Support to local wildlife awareness groups that encourage citizens to be Bear Smart;
- Design and maintain all solid waste management facilities that receive food waste (e.g. landfills, transfer stations and composting facilities) such that they do not allow access by bears;
- Ensure that all litter containers are animal-proof; and
- Require commercial garbage and organic waste containers that contain bear attractants (e.g. food and grease) to be animal-proof. Note: this requirement is in place for all municipalities but not the SLRD.

It is proposed that the SLRD also mandate that commercial garbage and organic waste containers that contain bear attractants (e.g. food and grease) be animal-proof, so that all areas of the SLRD have the same requirement. It is also proposed that each local government ensure that their bylaw is enforced in this regard.

Table 18-1 outlines the estimated timing and resource requirements for SLRD to establish or amend a bylaw to require commercial garbage and organic waste containers that contain bear attractants to be animal-proofed.

Table 18-1: Proposed New Wildlife Management Initiative

New Wildlife Management Initiatives	RESPONSIBILITY	IMPLEMENTATION	ESTIMATED STAFFING REQUIREMENTS (HRS/YR)	AFFING CAPITAL IREMENTS COST	
Require commercial collection containers to be animal-proof in electoral areas	SLRD	2016	20	\$ -	\$ -
Enforce animal-proofing bylaw requirements	SLRD, municipalities	2016	to be determined	\$ -	\$ -

19. LAND USE PLANNING

Waste management facilities, including recycling, composting and disposal facilities are essential elements of a waste management system. The siting and operation of these facilities should be undertaken in conjunction with long-range community planning at the local government level to protect the environment and minimize the potential for future land use conflicts.

All of the municipal and electoral area Official Community Plans (OCPs) make specific reference to solid waste management and indicate an intention to reduce the amount of waste sent to landfill through the promotion of recycling and composting. Only the Whistler OCP makes specific reference to facilitating EPR facilities (take back depots) in land use decisions.

To ensure that there is a suitable land base available to support the solid waste related goals and initiatives laid out in this plan, as well as in other SLRD and municipal planning documents, it is proposed that municipal and SLRD solid waste staff collaborate with their organization's planning staff to:

- Consider the need for dedicated zoning for waste management facilities;
- Ensure that land use planning decisions do not compromise the viability of existing or planned waste management facilities;
- Ensure that long-range planning tools like OCPs identify and preserve lands for future waste management facilities; and
- Recognize the need for an appropriate land base available to accommodate the shift to EPR take-back programs, which operate like reverse retail and require convenient access in order to be successful.

20. AUTHORITY OVER WASTE MANAGEMENT ACTIVITIES IN THE SLRD

For the purposes of implementing an approved SWRMP, Section 25 of the BC Environmental Management Act contains provisions for Regional Districts to assert authority over the establishment and operation of solid waste management facilities and haulers by regional districts.

The SLRD's current Plan includes a process to authorize new facilities that are not authorized within the Plan. This process is intended to ensure that new facilities in the SLRD support the objectives of the Plan and do not undermine the SLRD's or member municipalities' capacity to operate the programs and infrastructure described in the Plan.

During this planning process, other options to assert authority over facilities and haulers, such as licensing and codes of practice, were examined. It was concluded that these forms of regulatory control were not required at this time but may be required in the future. In the interim, it is proposed that:

- As tipping fees in the region increase to cover capital and operating costs, the development of a waste stream
 management licensing system and/or flow control bylaw be considered to ensure that waste generated in the
 region is managed at authorized facilities; and
- The SLRD and member municipalities regularly monitor the level of waste export to determine if there is a need to establish a bylaw mechanism to regulate where waste generated in the SLRD can be delivered.

It is also proposed that the current process to authorize new facilities, as presented in Appendix B, be maintained and that all applicants for the development of waste management facilities within the boundaries of the SLRD (including within municipal boundaries) referred to the SLRD for consideration under the authorization process. This includes all facilities intending to handle municipal solid waste, including recycling and composting facilities. Facilities that will not be subject to this authorization process include:

- EPR facilities established by product stewardship organizations;
- Municipal solid waste management facilities; and
- Facilities established to refurbish and/or sell used goods, such as thrift stores and repair shops.

Currently authorized facilities include:

- District of Squamish Landfill;
- Lillooet Landfill;
- Lillooet Materials Recovery Facility (at the Lillooet Landfill);
- Resort Municipality of Whistler Transfer Station;
- Resort Municipality of Whistler Composting Facility (at the Whistler transfer station);
- Nesters and Function Junction Depots (Whistler);
- Gold Bridge Transfer Station;
- Devine Transfer Station;
- Pemberton Transfer Station;
- Carney's Materials Recovery Facility; and
- Sea to Sky Soils.

The SLRD anticipates reviewing the fee schedule associated with facility authorization to ensure that there is better cost recovery for the staff resources required to manage the authorization process.

21. PLAN IMPLEMENTATION

21.1 ESTIMATED DIVERSION

Table 21-1 shows the estimated diversion that can be achieved if all of the initiatives proposed in this document are implemented. By diverting more waste materials to reuse, recycling and composting, the SLRD can reduce the amount of garbage sent to disposal from 526 kg per capita (2012) to 348 kg per capita. Accordingly, this would increase the diversion rate from 43% to 62%.

Table 21-1: Estimated Diversion

Disposal and Diversion	ESTIMATED TONNES (2012)	IMPACT OF NEW DIVERSION
Total disposal	26,966	17,833
Total diversion	20,144	29,276
Total waste generation (disposal + diversion)	47,110	47,110
Diversion rate (diversion/waste generation)	43%	62%
Per capita disposal rate	526 kg	348 kg

21.2 PROPOSED IMPLEMENTATION SCHEDULE AND COSTS

Table 21-2 shows the proposed timing for implementation of the new initiatives described in the previous chapters as well as the estimated annual operating cost for each year, by initiative. The annual financial implications to the SLRD from 2015 to 2020 are provided on the bottom line of the table. As shown, the annual cost of the new initiatives ranges from a high of \$71,000 in 2018 to a low of \$20,000 in 2020. It is possible that the cost of some initiatives may be mitigated through contributions from municipalities and First Nations as a result of collaboration efforts.

Table 21-2: Proposed Implementation Schedule and Estimated Costs

New Initiatives	2015	2016	2017	2018	2019	2020		
Communications								
Residential Food Scraps Reduction Campaign	\$ 46,000	\$ 10,000	\$ 10,000					
ICI and multi-family communication strategy			\$ 20,000	\$ 10,000				
Tourist accommodation communications strategy					\$ 15,000	\$ 5,000		
Construction, demolition and renovation contractor communication strategy					\$ 10,000	\$ 5,000		
Expansion of zero waste workshops	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000		

New Initiatives	2015	2016	2017	2018	2019	2020
Coordination of local governments' internal zero waste initiatives	\$ 500	\$ 500				
Bear Smart backyard composting	\$ 1,000			\$ 1,000		
EPR awareness		\$ 1,000			\$ 1,000	
Promote local C&D waste diversion opportunities		\$ 1,000			\$ 1,000	
Reduction and Reuse						
Establish a Re-Build-It Centre type of facility in Pemberton				cost to be a	letermined	
Establish a Re-Build-It Centre type of facility at Lillooet Landfill				cost to be determined		
Fund for local zero waste initiatives			\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000
Extended Producer Responsibility						
Landfill bans on specified EPR materials/products						
Policy Initiatives						
Establish more consistent tipping fee categories						
Residential Waste Services						
Curbside collection services in Pemberton area						
Community consultation	\$ 2,500					
Implementation		if approved				
On-going collection service				cost to be a	letermined	
Assess curbside recycling/yard waste collection in Lillooet						
Commercial and Multi-Family Waste So	ervices					
Require recycling and waste minimization at events		\$ 1,000				
Require new developments to design for 3 stream waste management		\$ 2,000				
Residual Waste Management						
Assess Lillooet Landfill's compliance with new BC Landfill Criteria		\$ 15,000				
Illegal Dumping						
Illegal Dumping Strategy						
Survey			\$ 10,000			

New Initiatives	2015	2016	2017	2018	2019	2020
Campaign				\$ 10,000		
Signage				\$ 10,000		
Enforcement				cost	to be determ	ined
Wildlife Management						
Mandatory animal-proof commercial collection containers						
Monitoring and Measurement						
Waste composition study				\$ 30,000		
Estimated new operating costs	\$ 55,000	\$ 35,500	\$ 50,000	\$ 71,000	\$ 37,000	\$ 20,000

Capital costs associated with the proposed initiatives are limited to the following:

- Establishing a Re-Build-It Centre at the Lillooet Landfill; estimated to be \$15,000;
- Establishing a Re-Build-It Centre for Pemberton; the costs for this facility are to be determined and will be dependent on where the facility is located and who owns/operates it;
- Curbside collection containers for Pemberton; the costs to provide containers will be determined based on the extent of services provided (if collection services are implemented subsequent to community consultation);
- The expansion of the Squamish Landfill; these costs will be borne by the District of Squamish; and
- Based on the evaluation of the requirements for the Lillooet Landfill to remain compliant with new BC Landfill Criteria, upgrades may be required (capital costs to be determined).

21.3 STAFFING IMPLICATIONS

Table 21-3 shows the SLRD staffing implications by initiative and annually. All hours shown in the table below are associated with new initiatives and are expected to require staff resources in excess of the resources currently allocated to solid waste management. This table does not include staff resource implications for the municipalities or First Nations to undertake or collaborate in the initiatives proposed in this report.

Table 21-3: SLRD Staffing Implications by Initiative and Annually

New Initiatives	2015	2016	2017	2018	2019	2020
Communications						
Residential Food Scraps Reduction Campaign	500	1000	200			
ICI and multi-family communication strategy			1000	500		
Tourist accommodation communications strategy					500	250

New Initiatives	2015	2016	2017	2018	2019	2020
Construction, demolition and renovation contractor communication strategy					500	250
Expansion of zero waste workshops						
Coordination of local governments' internal zero waste initiatives	40	40				
Beat Smart backyard composting	20	20	20	20	20	20
EPR awareness	20	20	20	20	20	20
Promote local C&D waste diversion opportunities	40	20	20	20	20	20
Reduction and Reuse						
Establish a Re-Build-It Centre type of facility in Pemberton			40	40	20	20
Establish a Re-Build-It Centre type of facility at Lillooet Landfill				60	20	20
Fund for local zero waste initiatives			15	15	15	15
Policy Initiatives						
Establish more consistent tipping fee categories		10	10	10	10	10
Extended Producer Responsibility						
Landfill bans on specified EPR materials/products		40				
Residential Waste Services						
Curbside collection services in Pemberton area						
Community consultation	80					
Implementation						
On-going collection service			to be determined			
Assess curbside recycling/yard waste collection in Lillooet		20				
Commercial and Multi-Family Waste Servi	i-Family Waste Services					
Require recycling and waste minimization at events		10	10	10	10	10
Require new developments to design for 3 stream waste management		40	40			

New Initiatives	2015	2016	2017	2018	2019	2020
Residual Waste Management						
Assess Lillooet Landfill's compliance with new BC Landfill Criteria		20				
Illegal Dumping						
Illegal Dumping Strategy						
Survey			20			
Campaign				100		
Signage				20		
Enforcement		to be			e determined	
Wildlife Management						
Mandatory animal-proof commercial collection containers		20				
Enforce animal-proofing requirements in bylaw		to be determine			rd	
Monitoring and Measurement						
Waste composition study				20		
Estimated new operating costs	700	1260	1395	835	1135	635

21.4 COST RECOVERY

Cost recovery mechanisms that will be utilized to fund the Plan's implementation include:

User rates,

Sponsorship, and

Tipping fees,

Grants.

Taxation,

In general, user-pay and market-based incentives, such as tipping fees and user fees for curbside collection services, will be applied to the provision of solid waste services wherever possible. Where an initiative provides a global benefit, such as campaigns to encourage waste reduction and diversion or the clean-up of illegal dump sites, cost recovery through taxation may be applied. As appropriate, opportunities for sponsorship and grants will be utilized to assist in the funding of programs.

22. PLAN TARGETS

The BC Ministry of Environment has established service plan targets for solid waste management that they can only achieve through the actions of BC regional district and municipalities that have direct responsibility for managing solid waste programs and infrastructure. It was recommended by the Advisory Committee that the targets for this plan align with the Ministry's ⁹. As a result, the following two targets are proposed:

1. The SLRD achieve an average municipal solid waste disposal rate of 350 kilograms per capita by 2020.

As presented in Section 23, upon full implementation, the initiatives proposed in this plan are expect to achieve a per capita disposal rate of 347 kg per capita (down from 525 kg in 2012), indicating that the target is achievable but that the work laid out in this plan needs to be undertaken in order for it to be achieved.

2. That 75% of SLRD's population is actively engaged in organic waste diversion.

The Province has identified organics diversion as one of the largest opportunities to achieve a significant reduction in the amount of waste disposed (by weight). Organics diversion is also a priority in this Plan, with several initiatives focused on enhancing organic waste diversion, particularly in the southern corridor where there are two composting facilities in operation. Based on 2011 census data, this target could be achieved by ensuring that the communities of Squamish, Whistler and Pemberton are actively engaged in organic waste diversion – these communities alone represent 77% of the SLRD population, as shown in the table below.

Census Area	% of SLRD Population ¹⁰		
Lillooet	6%		
Pemberton	6%		
Squamish	45%	-	77%
Whistler	26%		
First Nations Reserves	9%		
Squamish-Lillooet A	1%		
Squamish-Lillooet B	1%		
Squamish-Lillooet C	5%		
Squamish-Lillooet D	2%		
Squamish-Lillooet	100%		

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⁹ The MOE's service plan targets are: Per capita municipal solid waste disposal of 350 kg per person) and 75% of BC's population covered by an organics disposal ban by 2020. Because disposal bans are not part of the proposed initiatives in the updated plan, the target related to organic waste has been modified to achieve the same objective (organic waste diversion).

 $^{^{10}\} http://www.bcstats.gov.bc.ca/StatisticsBySubject/Census/2011Census/PopulationHousing/MunicipalitiesByRegionalDistrict.aspx$

23. MONITORING AND MEASUREMENT

Upon completion of this updated solid waste management plan, the Plan Monitoring Advisory Committee (PMAC) will resume. PMAC monitors the implementation of the Solid Waste and Resource Management Plan and reports directly to the Regional Board.

Plan Monitoring Advisory Committee members:

- Review and become familiar with the Solid Waste Management Plan;
- Review and become familiar with the existing solid waste management system in the SLRD;
- Identify methodologies to be employed in the monitoring and evaluation of the Plan's implementation;
- Monitor the implementation of the Plan and annually report to the Board on the effectiveness of the SWRMP at achieving its objectives; and
- Make recommendations to increase the effectiveness of the Plan or the solid waste management system.

The committee membership strives to have a broad representation of interests including the following:

- Local government/public works representatives from municipalities within the SLRD (4 members)
- SLRD staff (2 members)
- First Nations representatives within the SLRD (4 members)
- Members at Large Interested members of the public, including local environmental groups and recycling organizations, owners and operators of private waste facilities, commercial and institutional solid waste generators, haulers and operators. (6 members, representing at least 3 electoral areas).

The Committee consists of a minimum of 7 and a maximum of 16 members. Terms of reference for PMAC are provided in Appendix C.

23.1 MEASURING PROGRESS

Progress towards the targets presented in Section 22 will be assessed on an annual basis.

Per capita disposal will be measured using the aggregate quantity of municipal solid waste sent to disposal at SLRD and municipal disposal facilities for landfilling. This quantity (in tonnes) will be divided by the estimated or known population as defined by BC Stats Census data and population projections.

To measure the percentage of population actively engaged in organic waste diversion, the Plan Monitoring Advisory Committee will assess which communities have implemented initiatives to support full organics diversion (yard waste and food waste diversion from the ICI and residential sectors), which may include some or all of the following:

- Implementing variable tipping fees that act as an incentive to source-separate organic waste;
- Implementing bylaws that require source-separation of organic waste at businesses;
- Providing collection services (curbside or depot) for residential organic waste;
- Ensuring the availability of commercial organic waste collection services; and
- Providing or supporting organic waste processing infrastructure.

Using BC Stats Census data and population projections for each municipality and electoral area, the percent of the SLRD actively engaged in organic waste diversion can be estimated.

23.2 On-Going Monitoring And Evaluation

A significant focus of this plan is on using community-based social marketing to help achieve a significant and sustained reduction in the amount of waste sent to landfill. Using a CBSM approach includes on-going measurement and evaluation of the communication initiatives to ensure that they are meeting their intended objectives. As each communication strategy is implemented, a combination of qualitative and quantitative evaluation criteria will be established to measure the effectiveness of the program and identify if there is a need to modify or enhance the program based on results.

In 2018, a waste composition study that assesses what is being landfilled is proposed. This study will identify how much of what is being landfilled in 2018 could be composted, recycled or managed through an EPR program.

24. PLAN FLEXIBILITY

Costs provided in this plan are estimated in 2015 dollars and may not reflect actual costs at the time of implementation. In addition, the initiatives described in this plan are based upon knowledge of the waste management system and regulations in place in 2015 that may or may not be in place in the future. As a result, initiatives described in this report may undergo further assessment, including an assessment of costs and continued community support, by the Plan Monitoring Advisory Committee and/or the SLRD Board prior to implementation.

The Plan's implementation schedule is intended to be flexible to allow for changes in priorities and available funding. Notwithstanding, the contents of this Plan are subject to legal requirements and, as a result, guidance and the direction from the Ministry of Environment will be sought in regards to the level of flexibility, as appropriate.

25. NEXT STEPS IN THE PLANNING PROCESS

This report is represents the culmination of the Stage 2 planning process and describes the broad approach for the future of solid waste management in the SLRD as well as proposes several new initiatives for inclusion in an updated Solid Waste and Resource Management Plan for the SLRD.

Upon approval by the Board, this report will be taken out for public and stakeholder consultation with the intention of obtaining feedback what is being proposed. That feedback will be considered by the Solid Waste and Resource Management Plan Advisory Committee, SLRD and municipal staff, consultants and the SLRD Board prior to preparing the updated plan. Revisions to what is proposed in this report may result from the input received during the consultation process.

The new (2015) SLRD Solid Waste and Resource Management Plan will be subject to Board approval and then will be forwarded to the Minister of the Environment for provincial approval.

APPENDIX A:

Solid Waste and Resource Management Strategic Communications Plan

Squamish-Lillooet Regional District

Solid Waste & Resource Management Strategic Communications Plan

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In collaboration with:

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August 2014



EXECUTIVE SUMMARY

The Squamish-Lillooet Regional District (SLRD) has committed to updating solid waste reduction goals and implementing an action plan to achieve them. This requires a strategic communications plan to assist in achieving these goals. Apart from the moral imperative of reducing and diverting waste, provincial waste reduction targets, significant landfill management costs, and growing resident and visitor populations are additional factors driving the urgent need for regional leadership.

The SLRD is unique with both concentrated and dispersed populations, urban and rural cultures, and small-town service and international tourism industries. To ensure lasting support for the waste reduction communications strategy outlined in this document, the design process was inclusive and collaborative, and has in many ways prepared a strong foundation for ongoing strategic partnerships. In addition to the SLRD itself, many stakeholders play a role in communicating about solid waste, from member municipalities like Lillooet, Squamish, Pemberton and Whistler, to First Nations communities, service providers, and non-profit groups like AWARE, Squamish CAN and Whistler Community Services Society.

Before developing new materials or creating a communications strategy, a detailed analysis of existing SLRD and partner organization waste reduction communications materials was conducted. Nearly all of the existing resources were focused on raising general public awareness, and communications messages were inconsistent in design and delivery. The final strategy provides logical, research-based online and print communications tools, recognizing and supporting different audiences at different stages of change. Most importantly, the strategy is not about raising awareness; it is designed to remove specific barriers to targeted waste reduction goals, and provides creative and dynamic promotional materials to motivate action.

This strategy will meet the waste reduction and diversion communications needs of the SLRD over the next five years by:

- Building on existing organizational objectives and strengths of the SLRD and partner organizations;
- Providing a unifying brand that harmonizes waste reduction efforts across the region;
- Focusing on proven audience-focused social marketing technique and behavioral change science;
- Identifying specific belief, behavior, and knowledge objectives, and a practical action plan to achieve them;
- Creating an approach that can be replicated to solve other social, environmental or economic challenges.

Implementation of the strategy will require ongoing organizational leadership and commitment to regional partner collaboration. A modest implementation budget is included in the plan which includes both ongoing management costs as well as one-time investments to modernize outdated communications infrastructure, such as consistent signage and effective print materials. Success metrics and evaluation tools are also included, and partnership roles are suggested.

Significant progress on waste reduction in the SLRD requires a combination of organizational structural change and grassroots public engagement. The communications strategy provides a detailed outline of how to begin, progress, and assess progress in both realms. By combining best practices in solid waste reduction, governance, public engagement, and behaviour change, the final strategy has prepared the SLRD to become a role model for regional governments across North America. Implementing an approach that is innovative and visionary requires political courage, but there are meaningful rewards: reduced waste, fostering a culture of conservation, lasting public support, and continuous improvement in sustainable waste management.



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List of Acronyms ENGO –Environmental Non-Governmental Organization	
EPR –Extended Producer Responsibility	
FAQ –Frequently Asked Questions	
ICI –Institutional, Commercial and Industrial, a sector used to categorize sources of municipal solid waste	
MMBC –Multi Material BC, a new stewardship program for packaging and printed paper	
PEST –Political, Economic, Social and Technological	
PSA –Public Service Announcement	
Q & A –Question and Answer document	
RCBC –Recycling Council of BC	
RMOW –Resort Municipality of Whistler	



SLRD –Squamish-Lillooet Regional District

SWMP –Solid Waste Management Plan

SWOT -Strengths, Weaknesses, Opportunities and Threats

SWRMP -Solid Waste and Resource Management Plan

ZW –Zero Waste

Glossary

Audience: the part of the general public interested in a source of information. This can be further segmented into primary and secondary target audiences as well as intermediaries (people or groups that can act as a conduit for information) and influencers (people or groups that are perceived as trusted sources of information).

Brand: a brand consists of a name, logo, slogan, term, design or any combination of these elements used to identify a product, service or organization.

Branding: is a marketing strategy that can be used to create a readily recognizable image that is associated with a product, service or organization through consistent and repetitive use in all elements of advertising and promotion including: logos, slogans, colour schemes, advertising, print materials, web sites, correspondence tools (email signatures, letterhead, voice mail), signage, messaging and spokespersons.

Collateral Material: visual materials used to support a program or service, such as brochures, signs, websites and displays.

Communications Channels: ways to disseminate information, used primarily in this plan to describe ways to reach the target audiences such as through the media or personal contact.

Communication Tools: specific, proven communication tactics that can be used to communicate, such as an enewsletter (sent via email) or paid newspaper advertising.

Social Marketing: A research-based marketing system in the social sciences that demonstrates behaviour change is most effectively achieved through initiatives delivered at the community level focusing on removing barriers to an activity while simultaneously enhancing the activities' benefits. It emphasizes direct contact among community members and uses a set of approaches which have been identified as being particularly effective in fostering behavioural change.

Media Release: used to announce newsworthy items to the media, a media release (also known as a news or press release) consists of one or two pages that are emailed to media outlets potentially resulting in a news or feature story. Media releases are written to cover the 5W's (who, what, when, where, why) plus, 'why is this important. Timely, well-written news releases can also serve to strengthen relationships with local media and increase positive media coverage.

Public Service Announcement (PSA): similar to media releases, a "PSA" is typically shorter, about one paragraph, and consists of a brief and timely announcement sent to local media. PSAs can result in free publicity provided by radio stations, newspapers, and local television stations to promote current events in the community.



1 PLAN GOALS AND OBJECTIVES

1.1 Introduction

The purpose of this document is to provide the Squamish-Lillooet Regional District (SLRD) with a practical road map to improve regional communications capacity for sustainable resource management of solid waste and materials. This document will provide the rationale behind the recommendations. Research from the resource management and social marketing fields was reviewed and combined to develop an action plan that takes into consideration current opportunities and constraints and should be updated and refreshed by the SLRD as the first programs and projects are completed and new behaviours are targeted.

The plan is intended to:

- Base recommendations for the campaign on a review of existing research to ensure the best approach
- Incorporate best practices in communications and social marketing
- Identify future research requirements
- **Provide a detailed Implementation Plan** that identifies tasks and timelines for an initial program and that can be used as a template for future campaigns
- Design strategies to meet the intent of the SLRD solid waste management plans and budget for communications.

The plan provides direction in key areas that include:

- Building public awareness about the SLRDs waste reduction programs and strengthening stakeholder relationships
- Undertaking communication and community-based social marketing strategies and tactics for the launch
 of new programs and ongoing communication for the reduction of SLRD's solid waste.

The plan should be considered a "living document" to be updated as necessary by the SLRD, with aspects that may change to include new information gleaned from research and program evaluations. Changes can be made to better inform program strategies and tactics. As a living document, it is flexible and can be adjusted to meet changing conditions and availability of resources and help provide direction for decisions about future programs.

1.2 Goals & Objectives

There are overarching waste reduction and diversion goals flowing from the SLRD SWRMP update process. While specific targets are yet to be determined, the communications strategy will advance their progress. The communications strategy is grounded on the following mix of knowledge, belief, and behaviour objectives, and an overall vision for the SLRD to be seen as a key source of information, inspiration, and integration of resources that help the region and all its stakeholders to achieve Zero Waste.

Social transformation is a long-term process that requires persistence and commitment. Behaviour change is challenging to measure, and we caution the tendency to draw correlations between planned interventions and observed changes in public behaviour. Most social marketing programs target a 5% rate change within 2-3 years based on focused and consistent communications programming. To ensure that we engage the target audiences at



various stages along the behaviour change spectrum, the communications strategy incorporates tactics that meet all of the following objectives:

Knowledge Objectives

What do our target audiences need to learn?

- Waste reduction and diversion options and services in their community
- Community waste reduction targets and progress towards them
- Social, environmental, ecological and economic impacts of inappropriate resource management
- How to improve their participation in waste reduction and diversion
- Personalized benefits of reducing household waste

Belief Objectives

What do our target audiences need to feel?

- Inspired to help achieve the community waste reduction and diversion goals
- Convinced that other people "just like them" are already reducing waste
- Impacts of resource management on their values (i.e. community economic benefit, environmental health, peer belonging)
- It is easy to find out what they need to know
- Their actions make a difference

Behaviour Objectives

What do our target audiences need to do?

- Initiate and sustain waste reduction and diversion systems
- Reduce the amount of materials that flow through households and businesses
- Put the correct materials in the correct bins
- Motivate and inspire others to improve their waste reduction, material reuse, and waste diversion efforts

These objectives have been applied to all sections of the communications strategy, and have corresponding evaluation metrics suggested in Implementation and Evaluation Section 7.

2 ANALYSIS OF CURRENT SITUATION

2.1 Overview

The first step of any strategic communications plan is to evaluate existing communications materials which may be leveraged for future value. The methodology included compiling and assessing SLRD print and online materials, and interviews with key SLRD stakeholders. Best practices in social marketing were applied to the research materials to determine which tools and messages predispose (inform), enable (support behaviour change) and reinforce (reward) behaviour change. The purposes of the SLRD communications tools used to date were also identified, and suggestions made as to where the information gaps may have been in the past (see Table 2.1). Communications materials were also evaluated to determine the intended target audience.



This initial research identified a number of areas for increased efficiency in the delivery of waste reduction and diversion communications across the SLRD. The background analysis has indicated that nearly all resources are focused on raising awareness, or providing information, and that the intended audience is primarily residential. These findings indicate that there is a need for future online and print communications tools to recognize and support different audiences at different stages of change. For example, target audience segments may include: rural/urban communities, small private sector, large public sector, etc. By segmenting audiences, the SLRD can more effectively remove barriers to change and include relevant motivating messaging. Behavioural change science demonstrates greater results will emerge from a coordinated and strategic approach, where all stakeholders work collaboratively to shift current unsustainable waste management norms (Weinreich, Nedra: Hands-On Social Marketing second edition, 2011).

Beyond coordination of communications, the SLRD is poised to provide a stronger leadership role while also delivering practical support for municipal waste reduction services as required. The member municipalities have indicated that there is a strong willingness to collaborate on regional Zero Waste programs and they would welcome greater consistency in both structure (public policy) and communication (public engagement). Most municipalities appear to have similar priorities and specific requests for regional government leadership. Further, the SLRD Solid Waste & Resource Management Plan (SWRMP) Advisory Committee process has created an expectation that the SLRD is already moving towards an expanded waste reduction and diversion leadership role. In addition, at the provincial level, the new Multi Material BC¹ program has generated a "teachable moment" for the public, and created a deeper need for collaboration across the region. Finally, there is a move towards greater collaboration with First Nations in this next version of the SWRMP which could allow for stronger communications on solid waste reduction with all residents and businesses within the SLRD boundaries.

Analysis of current communications tools both within the SLRD and stakeholder organizations, combined with key stakeholder interviews, have revealed a number of practical opportunities. The following list of recommendations will be outlined in detail throughout this report.

- Successful waste reduction programs are simple to understand, and the benefits of participation are easily
 visible and meaningful to the target public audience. Similarly, specific and time-sensitive calls-to-action
 are most effective.
- Consistent messaging across the SLRD, whilst respecting the diverse range of audiences, will create greater
 public awareness and engagement opportunities. Connecting more deeply to existing complementary
 waste reduction campaigns promoted across BC will help to build a new waste reduction norm.
- Communications tools needs to serve a clear purpose along the behaviour change spectrum, and should be intended to reach a specified target audience (i.e. introduce a service and identify benefits to audience; remove barriers to action and provide incentives; reward participation).
- Zero Waste values are an important foundation to any communications efforts, however, the messaging
 that may be most effective with target audiences needs to be tailored to meet their needs; "Zero Waste"
 may be best incorporated into the guiding sustainable resource management public policies.

¹ Multi Material BC or MMBC is a new extended producer responsibility programs in BC responsible for reducing and recycling packaging and printed paper.



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2.2 Support for Solid Waste Reduction Communications within the SLRD

The SLRD's focus on waste reduction and minimization is supported by many regional and municipal strategies and studies. Some of these also note communications-related aspects. Details on these guiding policy and program documents are provided below.

The SLRD Regional Growth Strategy encourages Zero Waste, reuse and recycling, living within the limits imposed by natural systems and reducing our dependence on non-renewable resources. Directions are to strive towards Zero Waste by implementing a strategy to reduce solid waste and to promote public education on various environmental topics. The SLRD Integrated Sustainability Plan also "encourages Zero Waste, reuse and recycling." Key waste communications-related actions include developing a Zero Waste Communications Plan, encouraging reduction and diversion, reuse it stores and EPR, and supporting composting in a manner that reduces bear conflicts. The SLRD Energy Task Force report also advocates for becoming a Zero Waste community and the need for providing clear information on waste reduction as well as feedback on waste.

Some community-specific plans also match the SLRD solid waste vision. The Whistler 2020 sustainability plan included significant community involvement in its development and Whistler committed to a Zero Waste goal. Descriptions of Success included advocating for Zero Waste and providing education. For Lillooet, the OCP notes the need to work with the SLRD and provincial governments on waste reduction, reuse, recycling and education initiatives and most OCPs in the region refer to waste reduction as a goal. In the 2010 Squamish Solid Waste Strategy, goals for Squamish include engaging the community in solid waste decision-making and reducing waste. The Whistler Solid Waste Strategy recommended embedding Zero Waste in the plans, actions and culture of Whistler; providing promotion and education for existing systems, prevention and compost options as well as for special events; and using Zero Waste stations. The Lil'Wat Nation community land use plan of September 2009 identified the goals of maximising disposal site life through the 3Rs diversion, and increasing environmental awareness throughout the community to achieve these goals.

The existing SLRD Solid Waste Management Plan (SWMP) also has some recommendations relating to communications: developing a communications plan, updating the website, designing and updating SLRD print media, community and events outreach, delivering a school program, and supporting the Recycling Council of BC's hotline and promotion. There are also specific tasks that require promotion or work with a specific sector to change certain behaviours. Through the update process for the SWMP, new actions, target sectors and specified behaviours will be identified.

2.3 Existing SLRD Communication Materials for Waste Reduction and Diversion

A review was conducted of all known SLRD samples of print material and online promotion. The materials reviewed are described below in Table 2-1. Each item was reviewed for intended target audience, material purpose, and the stage of behaviour change desired. In general, the resources seemed intended to reach broad public audiences who were already likely to engage in waste reduction activities. Ideally, resources support various stages of change from early contemplation (inform and predispose), to preparation (enable and remove barriers to action) to reinforcement (maintenance of desired new behaviours) (Savelson et al., 2007).



Table 2-1 SLRD Communications Resources Reviewed

Material	Target Audience	Purpose of Material	Stage of Change	Recommended Action
The Smart Gardener Brochure (2011)	Residents across SLRD	Enable gardening without chemicals	Enable	Make available as a download from backyard composting section of SLRD website
The Dirt on Indoor Composting Brochure (2011)	Residents across SLRD	Start and maintain vermicomposter	Enable	Make available as a download from backyard composting section of SLRD website. Check aspects on Whistler with the RMOW.
The Dirt on Compost -Home Composting (2011)	Residents across SLRD	Start and maintain back yard composter	Enable	Discontinue as information on Whistler incorrect. Can use other content on website
Compost Your Food Waste & Support Local Food Brochure (2013?)	Residents across the SLRD, likely mainly Pemberton	Increase organic waste diversion to Pemberton Transfer Station	Enable	Discontinue
5 Simple Steps in Making Compost in Bear Country (2011)	Residents in Squamish	Start and maintain backyard composter	Enable	Make available as a download from backyard composting section of SLRD website
Asbestos Control Program Brochure (2011)	Residents across SLRD	Safe handling of asbestos	Predispose	Adapt and integrate content into hazardous waste section of SLRD website
Devine Recycling Brochure (2011)	Residents in Devine	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
Pemberton Recycling Brochure (2014)	Residents in Pemberton	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
Lillooet Recycling Brochure (2011)	Residents in Lillooet	Promote recycling	Predispose	Adapt content to fit in updated SLRD brochure template
RMOW Recycling Info <u>Online</u>	Residents in Whistler	Promote recycling	Predispose	RMOW to integrate new SLRD branding. Provide link to RMOW website from SLRD website
RMOW Composting Info Online	Residents in Whistler	Promote composting	Predispose	RMOW to integrate new SLRD branding. Provide link to RMOW website from SLRD website
Whistler2020 Metrics <u>Online</u> and iCitizen 2013 <u>Online</u>	Residents in Whistler	Update on waste reduction progress	Reinforce	Do not provide link unless updated
Sea to Sky Eco Guide	Residents in	Broad waste	Enable	Make available as a download



	Squamish	reduction ideas and resources		from the Reduce page of the SLRD website	
Squamish CAN recycling info	Residents of Squamish	Promote recycling	Enable	Request that CAN incorporate updated info from Carney's	
Carney's <u>Recycling</u> and <u>Composting</u> info online	Residents across SLRD, mainly Squamish and Whistler	Promote recycling and composting	Enable	Carney's to integrate new SLRD branding. Provide link	
Got Hazardous Waste? flyer	Residents of Lillooet	Responsible disposal of hazards	Enable	Adapt and integrate content into hazardous waste section of SLRD website	
Food Scraps Drop Spot flyer	Residents of Pemberton	Participation in community composting	Predispose	Adapt and integrate into future waste diversion theme campaign	
Pumpkin Drop flyers	Residents in Pemberton and Whistler (and beyond?)	Responsible disposal of organic waste	Enable	Adapt and integrate into future waste diversion theme campaign	
Creating a cleaner Lil'Wat	Lil'Wat community members	Promote recycling and inform of waste services	Enable	Adapt content to fit in updated SLRD brochure template	

2.4 Stakeholder Interviews

To further inform our understanding of the current context for the SLRD, interviews were conducted with waste reduction leaders in member municipalities to gather insights into their current and future programs. Table 2-2 outlines the details of the interviews, including a topline summary of identified collaboration opportunities.

Table 2-2 Waste Reduction Stakeholders Interviewed

Name	Organization	Future Waste Projects	Collaboration Opportunity
Rod Macleod	Director of Engineering, District of Squamish	Curbside organic pick up	Improve public education programming
James Hallisey	Solid Waste Services Manager, Resort Municipality of Whistler	Multi-resident organic pick up	Provide consistency in tipping fees, PR campaigns
Steve Hohner	Manager of Public Works, District of Lillooet	Numerous attempts to interview: recommend follow up by SLRD	TBD
Linda Kelly-Smith	Chair, Zero Waste at Squamish Climate Action Network	Curbside organic pick up	Provide consistent branding of waste reduction signage/bins
Caroline Lamont	Development, Village of Pemberton	Improve public understanding of local	Improve collaboration on local communications projects



		reduction services	
Pat Taylor	Operations Manager, Carney's Waste	Construction waste and organic waste diversion	Share costs/benefits of waste reduction with municipal leaders
Claire Ruddy	Executive Director, AWARE	Increase composting	Share broader provincial resources to increase efficiency
Graham Haywood	Lil'wat Nation	Waste diversion education: improved compliance with diversion	Share best practices in public education + by law enforcement + collaboration on communication
Heidi Lessman	SLRD Zero Waste Educator	Waste reduction and diversion education in SLRD schools	Start Zero Waste volunteer team for schools and workplaces
Kara Sockett	Gold Bridge Transfer Station operator	Expanded EPR program to collect more electronics + other recyclables	Increase funding to support better infrastructure + staff

2.5 Communications Material and Interview Analysis

Strategic themes:

- Most materials are designed to support single-family residences with their own transportation within
 individual SLRD member municipalities, though some were relevant to all municipalities in the SLRD. This
 distinction was not always clear, and this often made the message confusing.
- Most composting materials enable behaviour: they work well for audiences who are already motivated and
 informed. At least half the resources reviewed promote backyard composting which assumes an existing
 strong commitment to waste reduction. The stage of change for the intended audience of these materials
 is assumed to already be active; the value of the material is unclear.
- Most recycling materials predispose behaviour: they are more focused on informing a broad audience, but don't resolve barriers that a particular segment may be facing. The stage of change for the intended audience of these materials is primarily preparation, awareness and information.
- Most materials reference 5-10 external organizations for additional information: this is overwhelming from an audience perspective and challenging to ensure all are accurate (in fact, a quick review of RCBC information pertinent to the SLRD found broken links back to the municipal websites.)

Communications material gaps:

- Develop playful introductory material: consistent with social marketing best practices, include resources
 that predispose an audience to learn more (as necessary). The current introductory material isn't
 particularly captivating (unusual, funny, or special that inspire people to learn more or share with their
 social networks).
- Create interactive online resources: comment boards, themed regional campaigns, and engaged citizen support. Dynamic online materials will reinforce new positive social norms because they can actively help to remove barriers to change.



- Recognize success: develop communications that celebrate progress and community leadership on the journey to Zero Waste. Find opportunities to demonstrate the "new normal" of waste reduction.
- Provide feedback on progress: increase transparency of waste reduction targets and provide public updates on improvements and regression. Whistler2020 may serve as an example.
- Include materials for different types of audiences: multi-family residences, institutional, or commercial settings. This requires further investigation into potential barriers to change for specific target audiences.

Print materials:

- Design, including graphics and taglines, vary between materials which decreases their impact
- Not clear where print materials are meant to be displayed or who they are targeting
- Uneven degree of information detail for both recycling and composting
- Some included a "neighboring community" alternative, some did not
- Some included motivating information (such as waste reduction benefits), some did not

2.6 PEST and SWOT

At this stage of the communications strategy process, it is useful to consider external influences, including current Political, Economic, Social and Technological (PEST) issues, as well as internal factors related to organizational Strengths, Weaknesses, Opportunities and Threats (SWOT). Our analysis finds the following factors relevant to communications strategy design:

Political:

- Multi-Material British Columbia (MMBC) current changes: may result in some public confusion
- Unclear about when and how the province will advance commercial waste reduction (such as through ensuring extended producer responsibility for packaging and printed paper in the institutional, commercial and industrial sector)
- Timeline also not clearly defined for roll out of other new EPR programs such as carpet, textiles etc.
- Fall election with new four year term
- Potential change in Board members which may change the level of support for regional communications waste reduction and division strategies
- Challenges facing the roles and responsibilities between First Nations, the Aboriginal Affairs and Northern Development Canada (AANDC) and Provincial agencies.

Economic:

- Seasonality/weather issues: waste reduction issues vary over the calendar year in the SLRD. Likely more difficult to get as much public participation in waste reduction over the winter months
- Limitations for curbside collection programs given sparse or intermittent population, snow fall, and wildlife
 issues; requires more active use of depots which require added personal responsibility for supporting
 diversion efforts
- Huge variability in economic trends across the region
- Additional costs to provide consistent level of service across the region
- Recycling Council of BC support for SLRD: potential opportunity for increased collaboration

Social:

Mainly small towns, close communities: both within mainstream communities and First Nations land



- Outdoor/connected to nature culture
- New commitment to collaboration across member municipalities
- First Nations more engaged in solid waste planning
- Young demographic across the SLRD, and often transient in some member municipalities

Technological:

- New interactivity of SLRD site
- Variety of trucking and composting bin options
- Social media channels are already well used in some member municipalities

Strengths

- Networks of member municipalities and citizen advisory committees
- Local community champions + strong NGO leaders
- Committed SLRD staff
- Strong CAO support
- Strong SLRD support
- New and improved website
- Progress by member municipalities on waste reduction

Weaknesses

- Time: no allocated staff person to implement communications strategy
- Municipal waste reduction work is happening independently and not leveraging the potential of collaboration
- Currently no staff person dedicated to leading the solid waste communications in partnership with stakeholders
- Not sure what kinds of information and media people across the region access

Opportunities and Threats are represented in the PEST Analysis above.

2.7 Literature Review

2.7.1 Social Marketing

For the SLRD to communicate effectively there are certain elements that will be required as tools with which to base the programs. These include a brand for solid waste, a website for residents and businesses to find information, a clear structure and mandate, and staff and resources to implement the recommendations. Once these key aspects have been arranged, then the SLRD will be ready to start implementing focused social marketing programs. These programs can also use the existing resources that the SLRD has developed such as the partnerships for Zero Waste stations at events and the school program (note that these programs should incorporate new SLRD waste reduction branding). Further, participation in community events will be important in communities that are less engaged online (i.e. more northern areas of the SLRD). Offline engagement (face-to-face



marketing) is an important way to make the message more meaningful and memorable (see Appendix J for a list of potential events).

A key component of social marketing is to conduct audience research to gain a clear understanding of how the target audience perceives the program or services available. Specifically, social marketing seeks to research what barriers people may have to take action, and what benefits may motivate them to action. The shift from associating discarded materials with garbage requires thinking of these discards as a resource that needs consideration and allocation. The messaging and its delivery must be deliberate in the way it frames the resource management issue; how people think about materials and waste is as important as how they manage it in their homes and communities.

The messaging and tactics will incorporate emerging best practices in behaviour change science, including:

- Social currency: an opportunity to look good with peers
- Triggers: something that is top of mind
- Story: an idea that is worth sharing

The target audience is crucial in providing direction on the perceived barriers and benefits that key stakeholders have with respect to the desired behaviours, such as collecting food scraps at home for deposit at a depot. Barrier identification helped to develop mitigation strategies, including specific messaging recommendations. The communications tools identified in the implementation plan help to reinforce the desired behaviour we seek to foster, creating new "norms" of what is socially acceptable waste management. Testimonials are effective in creating these new norms of behaviour (McKenzie-Mohr, 2011) and the focus group conducted in the development of this plan also indicated the desire to hear stories of how people reduced their waste or managed their own food scraps collection or composting system (the results of the focus group are outlined in Appendix G). Highlighting that the desired behaviour is already being done by a majority of the audience can help build norms and support communications (Goldstein et al. 2008), as fear of acting alone can be a key barrier to behaviour change (Hoggan and Associates, 2006).

Developing visual cues, or "prompts" for the desirable behaviour, will help to develop a positive automatic response or "trigger" for action. Prompts work best when close in space and time to the desired behaviour, such as a sign in a parking lot to reminding people to bring in their reusable bags. Commitment is another important aspect, where asking for a visible public and durable commitment, such as a person's pledge or agreement to carry out the action that you are promoting, has shown to increase the likelihood of this behaviour occurring (McKenzie-Mohr, 2011). Developing positive waste reduction behaviour requires the communication of relevant benefits, or incentives to take action. Incentives can be used when motivation for the behaviour is low. They should be positive, visible and paired with the behaviour but as the behaviour can stop when incentives are removed, they are best used for short-term behaviour change. Finally, feedback is important and another aspect requested by the focus group. A successful education program needs goal setting and sharing the information with stakeholders (Sheely & Dingle, 2003). It is best to combine feedback with positive approval (McKenzie-Mohr, 2011).

Personal contact is a key way to communicate messages and overcome barriers (Mackenzie-Mohr, 2011). Deeper forms of engagement can occur when waste reduction staff engages with participants as well as with each other. Home visits, workshops, or booths at events can all be ways of engaging the audience in discussions. Campaigns



that have a wide range of interventions and approaches tend to be more successful than information alone (Mackenzie-Mohr, 2011).

2.7.2 Communications Channels

With regard to making use of the best communication channels, there are some parallels that can be drawn from other programs with similar goals to change attitudes, increase knowledge and create new behavioural patterns.

A study on how household actions can reduce carbon emissions in the US indicated that a multi-faceted approach was most effective in influencing behaviour change. The report cites interventions that combine a variety of tactics including policy, appeals, mass media, information and informal social influences among others which were felt to be most effective. It was reported that this varied approach could potentially account for a 20% decrease in household direct emissions (Dietz et al, 2009). This finding, to use a variety of communication materials and channels, is not unique in communication planning and will be incorporated into the strategy.

In the 2009 Ipsos Reid survey on awareness of stewardship programs, two key information sources included the Internet, particularly in the Lower Mainland and on Vancouver Island, and local governments. For rural BC, some studies suggest that media habits are slightly different. Statistics Canada and the Canadian Internet Project indicate that while Internet use in rural Canada, including BC, is on the increase, it is still markedly less than more urban areas. Taking this into account, other channels and media will be considered. For example, the 2009 ComBase survey of community newspaper use shows 75% of British Columbians are reading their community newspapers on a regular basis (read the last four issues).

While Internet use has been high among the younger age bracket for some time (Statistics Canada, 2003), Internet use is on the increase across all age brackets including seniors: according to the Canadian Internet Project, more than half of Canadians over 60 use the Internet on a regular basis. Ipsos Reid data shows that Canadians are spending more time online that watching TV: 18.1 hours per week online compared with 16.9 hours watching television.

With the ever-increasing use of the Internet comes the opportunity to leverage social media sites, such as Facebook, used by 65% of British Columbians (Zinc and Dufferin, 2009). The same survey reports that this represents 83% of those aged 18-34, 59% of those 35-54, and 49% of those 55 and up. Interestingly, the fastest growing segment on Facebook is 55-65 year-old females (InsideFacebook.com). What's important about including social media, not just for advertising purposes, is also the opportunity to leverage "friends and family" communications as more trusted sources of information on social media sites, like Facebook (Gupta, 2009). In a 2008 Pollara survey, 80% reported they were more likely to consider buying products recommended by friends, and "word-of-mouth", continues to be a strong and persuasive communication channel (Ketchum, 2009). While most of the SLRD has mobile coverage and access to the Internet, some more rural areas still do not have service.

In addition, good news stories in one media are often picked up by others, expanding audience reach. In addition, working collaboratively with other organizations, such as AWARE, Squamish CAN and RCBC, offers opportunities to use their promotional channels to spread the word. Member municipalities will play a key role in spreading the word through their channels as a known source for recycling and solid waste information. Service providers like Carney's, Sea to Sky Soils and others also have their own communications channels in addition to the numerous Extender Producer Responsibility (EPR) programs.



The recommended strategy identifies various online tools to leverage partner resources. The plan also provides offline tactics, recognizing that not all community members across the SLRD access resources online. Further, sustainable waste reduction habits will be most effectively replicated if they are publically modelled; public and private sector spaces in communities across the region offer ongoing public education opportunities.

2.8 SLRD Context

The SLRD SWMP targets served as the guide for developing the recommended approach in this strategy. It also takes into account the new Multi Material BC program for packaging and printed paper, the update process for the Solid Waste and Resource management Plan, and the development of a communications plan for the SLRD as a whole. Ultimately, the communications design and promotional distribution are intended to encourage critical thinking when accessing or obtaining material goods (i.e. "Do I really need this?"), but to reduce number of assumptions required by the end user at the point of discarding materials (i.e. "Where do I put this can? What does this sign mean?").

Effective programs help to develop an automatic response to communications prompts because the target audience can easily shift behaviour without needing to pause and reflect on which choice is most appropriate. Further, social marketing research indicates that creating a new social norm requires a multi-faceted suite of objectives, identifying meaningful behavioural, knowledge, and belief targets to achieve change. These are outlined in detail in the Goals and Objectives Section.

Many communications programs focus mainly on providing information as opposed to developing a social marketing strategy, as evident with past SLRD and member municipality efforts. While this communications strategy identifies numerous public education tools, it also incorporates tools that enable change by removing barriers and increasing motivation, and rewards change by providing feedback and recognition. Most important, the entire strategy – including the messaging, illustration, and promotional tactics – was tested in a focus group (results in Appendix G), and the communications materials were adjusted to meet their expressed needs.

3 TARGET AUDIENCE AND STAKEHOLDER IDENTIFICATION

Considering the wide variety of existing communications messages and platforms currently in place in communities across the SLRD, this approach recognizes the unique assets of stakeholders across the region and integrates existing messaging as much as possible. Creating a unifying look-and-feel as well as a source for information for waste reduction and diversion in the SLRD will advance the regional, municipal, and local NGO objectives as well as possibly those of some EPR programs and some local First Nations. The proposed communications messages, partner organizational structure, and collaborative implementation will simplify reaching waste reduction and diversion targets, developing promotional tactics, and administering the logistics for everyone involved. Simplification is critical from an audience perspective, and it will also unlock limited resources now tied up in inefficient systems.

Audiences and stakeholders are those critical to the success of the SLRD's Solid Waste reduction programs. Stakeholders will have an interest in or concern with a given initiative. They may be integral to the program, such as decision-makers targeted to ensure effective support or residents or businesses targeted in order to influence behaviour, or they may be secondary. Audiences will be a subset of stakeholders. A list of potential stakeholders is listed in Appendix D but additional ones may be included depending on the focus of a program.



Audiences are described as internal and external depending on their relationship to the SLRD, and as primary and secondary audiences or influencers, depending on their level of importance with respect to message delivery. Each audience may have its own set of specific objectives, strategies, tactics, and key messages designed to ensure the message delivered is pertinent to that audience.

It is important to note that there are additional audiences who were consulted throughout the planning process but who have not yet been assigned a formal role in the collaborative implementation of the strategy. First Nations communities across the SLRD are critical stakeholders, and encouraging their active engagement in waste reduction and diversion efforts will help to identify unique barriers and motivating factors. Insights into the challenges and opportunities for waste reduction and diversion in First Nations communities have emerged through the SLRD SWMP Advisory Committee process, such as peer-to-peer influence available through the small and tightly woven communities and emerging sustainability leadership from First Nations youth.

3.1 Segmentation Process

Determining the target audience requires careful analysis of a number of criteria. The ultimate goal is to determine "targets of risk", those people who are most likely to engage in the problem behaviour, and "targets of opportunity", those people who are easier to reach or influence. The goal is to prioritize high risk and high opportunity segments, and to define them as narrowly as possible within the available resources. For the purpose of the first phase of this plan, an evaluation of numerous public segments was conducted using the tool shown in Appendix C to identify the target audience. This resulted in selecting mainly urban, single-family home residents as the priority group within the SLRD to reach with updated messaging and communications tools to assist them in reducing and diverting food scraps. The Target Audience Segmentation tool in Appendix C should be used in developing each new reduction/diversion theme program to prioritize the target audience, which could include businesses, institutions, multifamily homes, and others.

3.2 Insight into Audiences and Waste Reduction

In addition to the demographic information presented in Appendix E, some other research shows insight into waste reduction behaviours:

Composting Information from Statistics Canada (2011)

- 61% of Canadian households had participated in some form of composting by 2011 (up 38% since 1994),
 45% composted kitchen waste
- Of the those composting kitchen waste, 60% used a curbside collection system, 41% composted at home and 5% had taken it to a depot or some other practice (some people report more than one system)
- Over 50% of households in single or detached dwellings and 22% of those in apartments composted kitchen waste
- Reasons not to compost include: not having a bin, no access to municipal program, concern attracting
 wildlife to compost bin, takes too much time, takes too much space, not sure what to compost,
 inconvenient and pickup too infrequent.
- There is a clear correlation between educational attainment, household income and composting of kitchen and/or yard waste
- When all other factors were held constant, percentages of households involved in curbside composting far outweighed those who composted at a depot or a compost pile



McAllister Opinion Research (McAllister, personal communication based on research conducted in BC and Canada)

- In 2011 82% of BC residents were personally concerned about environmental problems and this was reflected in both rural and small cities as well as urban areas. The highest rates were for women under 35 (91%), then women over 35 and men over 35 and the lowest rates for men under 35 (75%).
- When asked to rank environmental issues, resource depletion ranked 47/100, global warming at 45 and waste disposal as 41/100 (the three highest ranked issues were water quality- 62, then air quality -53, then toxic chemicals at 48).
- When ranking the environmental performance in 2011, municipal governments were ranked positively and were seen as superior to provincial governments, federal government and private industry, though less positively than their peak in the mid-90s
- The majority of Canadians buy green saying they had organic food, environmentally friendly products and energy efficient devices in their house or planned to buy them in the next year.
- In a 2011 online survey of BC residents, women were more likely to be the most motivated to recycle (56% versus 41% for men)
- Recyclers that were keener tended to be connected to their community, vote, own a vehicle, have higher income, not worry about money, be aged 45-64, live in detached or semi-detached homes, were often asked for advice, disliked shopping and to some degree were in smaller 2-person households.
- Those least likely to recycle are men under 25, those who like shopping and those not connected to the community.
- When asked about how much effort groups were putting into recycling, people felt they were putting in the right amount of effort themselves (52%; 34% said more than enough) but felt consumers generally (48%), governments (54%) and manufacturers (64%) were not doing enough (and were doing the right amount at 42%, 36% and 29% respectively).
- When asked about what they wanted to know about recycling, they noted knowing where to bring items, what happens to them, benefits (similar to the focus group results for this project)
- Recycling program features that mattered to people a lot were that depots take other kinds of material at the same location (71%) (i.e. one stop dropping) and that it was convenient.
- The top ranked benefits of recycling were reducing toxics to landfill, soil and groundwater (75%), needing less energy when recycled materials are used (62%), reduction in air and water pollutants (58%) and reducing greenhouse gas emissions (55%).
- When presented with facts about the benefits of recycling, women preferred facts on the savings of waste, energy, GHGs and raw materials where men looked at the financial and economic benefits (including job facts) Women also liked ones that were easy to visualize, appealed to their values around good quality of life, improving human health, reducing toxicity, and protecting the environment. Waste diversion from landfill resonated for both men and women.

3.3 Single Family Residence Profile

The audience segmentation exercise conducted with the SLRD prioritized single-family homes as the initial target audience to influence with the first reduction/diversion theme (compostable organics). There are 14,995 households in the SLRD as of the 2011 census (see Appendix E for more details), 31.7% of which are multifamily buildings (apartments and row houses) and 68.3% are single-family homes (including duplexes, mobile homes and other forms). English is nearly universally spoken so there is no need to translate communications materials into other languages. Further, people who identify as actively recycling materials may be most likely to begin collecting food scraps. This could be useful for future communications efforts from transfer station staff (see Appendix H).



3.4 Future Recommended Target Audiences

The target audience segmentation revealed that the next two top segments were urban multi-family residences and the institutional, commercial and industrial sector (ICI). These two target audience segments will require a different approach than the one developed for the urban single family resident target audience, because they experience different barriers and motivations. While the overall branding should be retained, the reduction/diversion theme messaging will need to be adapted to meet their communications needs.

At the focus group, these two target audiences also emerged as the groups with the greatest behaviour risk and influence opportunity. It may be especially beneficial to pursue the ICI segment in the near future because of the added promotional opportunities available through meaningful partnerships. Providing SLRD waste reduction materials at relevant point-of-sale retail environments (i.e. at grocery stores and/or restaurants during a targeted organics waste reduction/diversion campaign) could significantly increase its impact. However, without genuine support from those private sector partners, including active participation in the communications campaign, the residential target audience would likely overlook the print collateral.

3.4.1 ICI

Across the SLRD, most local residents also work in their home community or within a neighboring community. This expanded connection to the region offers a tremendous opportunity to influence a broader cross section of the community. It also provides a practical avenue for those who are already actively engaged in waste reduction at home to act as leaders and behaviour change role models when they go to work.

Further segmentation of this sector would be recommended, such as: public education institutions; public health institutions; light industry/building and manufacturing; small/medium sized private sector businesses in the service industry; small/medium sized private sector businesses in the retail industry; foodservices, accommodations, etc.

3.4.2 Multi-Family

Across the SLRD, the number of multi-family residences has grown from 13.7% of occupied dwellings in 2006 to 16.0% in 2011 (Statistics Canada census 2006 & 2011). While many strata complexes have rudimentary recycling systems in place, very few have incorporated a holistic approach to waste reduction. At the same time, the demographic profile of multi-family residents includes people who are often younger and likely more connected to environmental stewardship messaging.

3.5 Marketing Mix

While the communication needs of this group will vary across the region due to cultural differences and the availability of waste diversion services, the following marketing mix outlines the foundation underlying the dynamic engagement details in the Section 6 Promotional Tools further below. Social marketing is grounded on an audience-focused communications strategy, where the product (core benefits) and price (critical barriers) are well understood and are taken into consideration in every aspect of the promotion.



The following list of "P's" has been developed with organic waste reduction and diversion as the theme; this template could be applied to all future waste reduction/diversion themes to ensure the final promotional tools are audience-focused.

Profile

Snapshot of the target audience demographic:

- Women over 35
- Connected to their community; more likely to vote
- Own a vehicle
- Have higher income
- Live in detached or semi-detached homes
- Were often asked for advice
- Disliked shopping
- To some degree were in smaller 2-person households
- Actively use English language social media tools
- Access to organics diversion options through transfer station drop off
- Often report "time" as major barrier to changing behaviour
- Feel connected to nature and the land, enjoy time recreating outside

Product

Motivators for primary public audience to reduce waste:

- Feeling of being in line with values
- Meeting their personal responsibility
- Sense that this is "doable"
- Saving money (personally if reduced tipping fees and through taxes if extended life of landfills)
- Social norms –seeing that others are doing this too
- Feeling positive reward from contributing to community waste goals
- Behaviour becoming a habit

Price

Barriers to primary public audience to reduce waste:

- Lack of obvious connection to personal values
- Time investment in establishing new reduction/diversion systems at home
- Initial disconnect to new position of waste as a resource, rather than garbage
- Discomfort with handling of household waste; yuck factor; concern over potential for smell
- Higher costs or no direct cost savings to most users
- Inconvenience
- Time constraints due to hours of operation for drop off depots, or time to drive the distance
- Challenges for those without vehicles
- Consumer culture and advertising to buy new

Place

Location of promotional tools:

SLRD website, with links from municipal and service provider websites



- Transfer Stations signage across the SLRD
- Transfer Stations, Landfill distribution of flyers
- Community streetscape waste diversion bins across the SLRD
- Member municipality and service provider social media channels
- Point of sale/decision locations such as grocery stores, restaurants, garden centres, etc.

4 RECOMMENDED STRATEGY

4.1 Communications Strategy Phases

For ease of organization, the strategy has been divided into six strategic phases described below. Each phase identifies measurable objectives and outcomes. Objectives are SMART: specific, measurable, achievable, realistic and timely. The purpose and outcomes associated with each phase identify the key behaviours targeted (e.g. going to a depot to bring collected food scraps) and specific desired outcomes (e.g. decrease in total waste, decrease in percentage of food scraps in waste). The program phases reflect the order of expected work during the process.

This strategy will outline details for a specific reduction/diversion theme and target audience, which has been selected as the first one to implement based on input from the SWRMP update process and an audience segmentation exercise. However, the intention is that once this program has been implemented, evaluated, and has reached a maintenance stage, staff resources can then be directed to developing the next reduction/diversion theme program or incorporating additional audience segments, such as the ICI as recommended. This next program could include initiatives identified by the SLRD and regional partners, depending on the greatest needs and opportunities. Numerous suggestions have been identified through the SLRD Solid Waste and Resource Management Plan update process. Suggestions are outlined in Appendix B.

The first specific program that will be outlined in the strategy, and which can be used as an example for future programs, is to reduce food scraps in waste from urban single-family home residents. However the basic tools, messaging, visuals, and suggested campaigns will be flexible enough to meet other target audience needs (i.e. institutional, commercial, multi-family residential, etc.). Implementing the communications strategy will ensure that the waste reduction and diversion goals identified in the SLRD SWMP (current and updated versions), as well as the waste reduction and diversion goals of member municipalities, are achieved sooner and with longer lasting effects. By leveraging existing resources, the SLRD can harmonize desired outcomes and improve efficiencies. Perhaps most important, increasing collaboration will produce a more positive user experience.

The Implementation Plan and Evaluation in Section 7 and Action Plan in Appendix H outline recommendations on how best to execute the plan, including a timeline, budget estimates, and objective evaluation criteria.

4.1.1 Phase 1: Develop the Social Marketing Plan

Social marketing usually consists of six stages, each of which involves several different types of activities. The social marketing method will serve as the foundation for the phases that follow, and the method stages are outlined here:

Stage 1 Purpose: Analysis



- Prioritize the problem behaviour: choose one of the waste reduction and diversion options identified in the SWMP background research through a collaborative stakeholder-driven process (i.e. involve member municipalities, service providers, and key partners from the beginning).
- Identify priority target audience to reduce problem behaviour using a structured segmentation process (see Appendix C), and supported through primary and secondary research (i.e. existing materials, focus groups, surveys, etc.).
- Determine what the barriers and benefits to performing the behaviour would be for the audience.

Stage 2 Purpose: Strategy Development

- Develop a social marketing strategy that forms the foundation on which the rest of the communication program is built to influence the target audience. The strategy is developed to address the barriers and benefits identified in Stage 1.
- Incorporate existing organizational assets and begin to establish necessary resources, such as funding sources and strategic partnerships.

Stage 3 Purpose: Program and Communication Design

- Develop messaging based on key program objectives.
- Create any new promotional communications materials necessary and establish new partnerships.

Stage 4 Purpose: Pretesting

- Understand target audience barriers and motivations for reducing problem behaviour. This can be done by holding a focus group with the target audience in conjunction with using existing research.
- Pilot strategy in two or three locations and adjust as necessary.

Stage 5 Purpose: Implementation

- Roll out across the region and measure effectiveness.
- Monitor program to allow for adaptation as necessary.

Stage 6 Purpose: Evaluation

- Report against progress in achieving identified objectives with all stakeholders, including target audience to increase transparency and long-term engagement in the process.
- Use a combination of qualitative and quantitative evaluation criteria.

4.1.2 Phase 2: Develop Tools

This phase involves developing tools that will be needed to implement a program; building on Stage 3 (program & communication design) recommendations in Phase 1 above (developing the social marketing plan). Initially, it will also include the development of standard tools that can be used for all SLRD programs which partners should use wherever possible. This includes a website, standards for signage, standards for bin colours and labels, a brand and logo, distribution lists for sending information to different stakeholder groups, and standard messaging. In some cases, these tools may also include ones that are not directly communications-related but address a barrier noted by the target audience (for example, the need to change hours of operation or provide kitchen catchers).



Purpose: All internal and external decision makers and opinion leaders are made aware of the new tools. Where suitable, they are encouraged to link their websites to SLRD website for solid waste reduction and diversion information. Opportunities for co-branding can be explored.

Outcome: Internal and external decision makers are prepared for the solid waste information requests.

Outcome: Member municipalities, service providers and ENGOs website link to the SLRD Solid Waste webpages.

Outcome: SLRD communications for solid waste use the brand and standard messaging.

4.1.3 Phase 3: Program Notification

Purpose: All internal and external decision makers and opinion leaders are notified of the program's progress and launch date by (insert date).

Outcome: Internal and external decision makers and opinion leaders are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with internal and external decision makers and opinion leaders.

Purpose: All external program partners are notified of the program's progress and launch date by (insert date).

Outcome: Service delivery is coordinated between existing service providers and the SLRD.

Outcome: Program partners / service providers are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with external program partners / service providers.

4.1.4 Phase 4: Program Announcement

The program is launched during this phase. Stages 4 and 5 of Phase 1 Social Marketing strategy above are expressed in Phases 4 and 5.

Purpose: Notify all stakeholders of program commencement including messages about how to "find depot near you", smart storage, and transport. (The purpose will be tailored to the specific program.)

Outcome: Stakeholders are aware of program commencement and know where to find information about the program.

Purpose: Prepare internal audiences and external program partners for public information requests prior to program announcement.

Outcome: Program partners provide consistent and correct information to potential program users.



4.1.5 Phase 5: Program Promotion

Purpose: Increase public participation in the priority waste diversion or reduction project.

Outcome: Target audience actively uses the SLRD waste diversion services available or adopts the desired behaviours.

Outcome: SLRD waste volumes decrease.

4.1.6 Phase 6: Evaluation and Ongoing Communication

Purpose: This phase focuses on measuring the effectiveness of the program and the development of ways to improve it as well as strategies for ongoing communication and evaluation. Phase 6 corresponds with Stage 6 of Phase 1 Social Marketing strategy above.

Outcome: Meet SLRD waste reduction or diversion goals determined by the SLRD SWMP process or a subgoal developed in the program development process.

Outcome: Identify if there is a need to modify or enhance the program based on results.

5 BRANDING & MESSAGING

The brand developed for SLRD solid waste communications includes an umbrella graphic and tag line. While we explored integrating Zero Waste messaging, the focus group research clearly recommended use of the term "Zero Waste" for policy and direction but not for primary public messaging until there is a higher level of acceptance and understanding of the term.

The final icon can be found in Appendix L, which has tremendous application potential in various public spaces across the region. The final tagline, "Love this place. Reduce your waste" can be incorporated into waste reduction/diversion theme messaging (see below).

5.1 Guidelines for Developing Reduction/Diversion Theme Messaging

Advancing waste reduction in the SLRD will be most successful if the waste reduction communications efforts can be narrowed to a single diversion theme at a time, targeting a single (or narrowly defined) target audience. Allowing each waste diversion theme to have its own "flavour" will help to keep the original brand fresh and interesting for target audiences. Specific messaging will be most effective if it includes the following elements:

- Easy to remember: Short, clear, concise and without jargon or technical language
- Proof of impact: tangible feedback shared often
- Congruence with love of place: the way we take care of our community needs to align with what we tell other people about where we live
- Explain the need: what's the connection to the bigger impact
- Make it personal: what's in it for me
- · Create a local analogy or story: something we do here because we believe in the long term benefit
- Empowering to do the right thing: my actions make a difference
- Something unexpected: catch and hold attention



- Positive norm: It's what most people here do already; include public opinion statistics
- Local environmental benefit (i.e. habitat protection), and global environmental benefit (i.e. climate change)

5.2 Food Scraps Reduction Messaging – A Working Example

The focus group research indicated that people perceive food scraps collection as much more challenging and time consuming than recycling. Participants also indicated that food scraps collection is a behaviour taken by individuals who are already highly successful in other aspects of waste reduction.

Messaging will be most successful it dispels some myths about food scraps collection that have become barriers to action; if it provides communication that affirms existing environmentally aware identity; and if it shares motivating information that is emotional and surprising.

A sample design is shown below.



Some facts that may reinforce messaging are:



- The majority of Canadian households already participate in composting activities (up 38% since 1994);
 collecting food scraps and bringing them to the depot means that you're on the winning team
- Canadians throw away 90kg of food per person per year (Chapman, 2011) which is 40% of our food supply,
 51% of which comes from homes (CBC, 2012)
- Wasted food represents wasted resources that went into producing the food: land clearing, energy, fertilizer, pesticides, fuel for transport and equipment and water
- Key reasons for wasting food are buying too much food, buying more perishable products, not eating food based on what needs to be used first, cleaning out cupboards, food hygiene reasons and dates on food labels, making too much food and dislike of the taste of food (especially by children) (Brook Lyndhurst, 2007)
- Organics in the landfill produce methane, a powerful greenhouse gas

6 PROMOTIONAL TOOLS

There are a variety of promotional communications tools and channels that can be used to advance waste reduction goals. These may be standard ones used as a base for multiple programs or ones only used for specific programs. Some will be created and then remain relatively static, while others may be more dynamic and change frequently or be one-time events.

It is important to note that using tools developed and tested by other local governments can save resources. There is a website, www.3Rs.ca, developed by Metro Vancouver and others promoting waste reduction that allows users to take the tools that have been developed and brand them with their own information as well as share their own. There are also some standardized signs that they are encouraging communities across Canada to use so that it becomes easier for all residents to recognize them.

Common tools are noted below as well as dynamic ones that engage the audience more directly:

Depots

Signage for materials should be standardized. For packaging and printed paper, it is meant to complement new MMBC signs; intended to "translate" service provider and provincial program details with an over-arching simple call to action. (Consider attendant training and approach, may wish to start with fun and educational, recommend clear bags, make them be seen as a way to fast track to Zero Waste rather than police).

Streetscape Bins

New decals will help simplify what-goes-where when people are in the community². The long-term recommendation is to use similar-shaped lid-openings and colour-coded bins across the region. Existing bins could be repainted to align material types with specific colours. Efforts should be made to use slot shapes that indicate what type of material should be discarded in the bins.

Curbside Decals

Service providers can distribute decals for residents to place on the appropriate curbside bins where residents provide their own bins or to be affixed to bins when they are delivered to the resident where the service provider provides the bins. Where there are details on what kinds of materials go in the bin or not, these details could be

² Signage graphics could be made available to local organizations as some already are making their own unique signs (which can add to the confusion). The SLRD could provide something like San Francisco's sign maker - http://www.sfenvironment.org/signmaker.



included on an additional sticker on the lid. Best practices for signage for these first three tools are outlined in Appendix F.

Web

The website should have a fun and friendly tone that reinforces the existing new norm of Zero Waste. Social marketing science is clear about the need for communication to create the impression that most people are already engaged in the desired behaviour. In addition, with the SLRD's role as an information hub, the website will need to provide the information for residents and businesses to assist them in reducing and diverting waste. This will include the basics of what, when, where and how. For more keen users, it may include more details in additional links. First Nation Communities may wish to use the co-branding opportunities mentioned above to relate information within their communities.

Print Media

There is an opportunity to share feedback with the target audience on their progress towards achieving waste reduction and diversion targets, and to profile community Zero Waste leaders. There are some robust local papers that focus group participants noted they read and would appreciate some stories providing feedback on community progress towards Zero Waste, tips on what to do and stories about local waste reduction champions or people who are making an effort to reduce waste and what they learned. Some story ideas are listed in Appendix K. In addition, earned media can be a great way to convey key messages in a cost effective manner. Earned media are journal articles that reinforce the desired message. An example would be a feature story about how a local resident started actively reducing waste through food scraps collection, and how she has benefited.

Radio

Radio can also be an effective medium for some groups. For both print media and radio, there may be opportunities to provide information for public service announcements which can keep costs low if they meet specific criteria as well as opportunities to leverage earned media.

Printed Materials

For some audiences printed materials can be useful. In some cases, they can be used for larger groups or be small in size but provide a way to remember a website or can be a reference guide for information pertaining to reducing waste. Utilising existing community newspapers and newsletters can be an effective way to reach large audiences and specific communities.

6.1 Dynamic Engagement

Creative promotions

Recognition of positive waste reduction and diversion behaviours will help to reinforce an emerging Zero Waste norm in the SLRD. Research shows that recognition efforts are most effective when in close proximity to the time and place of the desired behaviour. Empowering local service providers at transfer stations to reward waste diversion efforts (see Role of Stakeholders Section 7.1 for details) will help to build a "customer service" culture among service provider staff, and reframe the transfer station experience as a place to learn about community stewardship.



Social Media

Municipal partners, local NGOs, and service providers actively use a variety of social media tools that will assist the SLRD in reaching the key target audience, such as Twitter, Facebook, and YouTube. The most common issue facing public organizations who initiate social media campaigns is how to effectively maintain them. For this reason, the most efficient and strategic choice for the SLRD is to support existing stakeholder tools. Rather than developing SLRD branded channels, develop a weekly story, tip, or update on regional waste reduction and diversion goals for partnering organizations to post as well as on their own pages/sites. In this way, existing resources can be leveraged and the public can be more effectively engaged.

Special Events

Integrating communications tactics with existing community events across the region will support the SLRD in a number of ways, including:

- Increasing relevance of SLRD message to local community members
- Building stronger relationships with local community leaders
- Providing access to new target audiences
- Improving efficiency of SLRD resources, related to both staff time and marketing costs

Engaging in face-to-face marketing is an important way to build relationships with the target audience(s) and better understand their communications needs. Talking directly with the people whose behaviour you wish to influence helps to reinforce the importance of the message, and provides greater word-of-mouth marketing opportunities.

Waste diversion is already promoted through interactive displays during the Farmer's Market season (approximately June through October) in Squamish, Whistler and Pemberton. The music concerts, children's festivals, and other major events would all benefit from a coordinated and consistent waste diversion and reduction program, which could reduce waste at the event but also teach participants about waste diversion options.

See Appendix J for listings of events, how to select which events to participate in and the event toolkit. Utilising already established community events and collaborating with local event planners will provide the most efficient integration. Appendix M has a sample pledge card that could be used to get commitment at events as well as to build the social norms by making these public.

School Programs

Stakeholders across the region supported the continuity of the intermediate elementary school program. This communications approach may be especially effective in reaching the single family and multifamily residence target audiences.

Seasonal Campaign

Interactive communications efforts that allow for face-to-face conversation, games, and rewards have the greatest potential to create word-of-mouth marketing. Social marketing research indicates that people share information through stories, and that they are most likely to act on the information shared by people closest to them. By selecting one key reduction/diversion theme that involves interactive communications to focus on once a year, the SLRD and regional partners can concentrate resources and continue to drive change and leverage earned media.



Background research for this strategy indicated that regional partners would like to coordinate communications efforts around the organic waste reduction/diversion. The SLRD has the opportunity to harmonize organic waste reduction and diversion communications, and future reduction/diversion efforts could follow this kind of format.

Implementing an annual campaign to increase target audience participation in organic waste reduction and diversion will require strong partnerships with key stakeholders (see next section for details on how to foster stronger collaboration). More public engagement is possible because there are now attendants at all transfers and landfill sites run by SLRD and municipalities within the SLRD, and these staff can talk with the public about their personal waste management choices. The role of the people at the "front lines" of waste management – those who work at transfer station and landfills – has the potential to be expanded and their new "green job" status is likely to become a source of pride.

We recommend building capacity with the municipal partnerships by co-leading one prototype pilot project before the end of 2014, such as the existing Pumpkin Drop campaign. There are at least two reasons for this recommendation. First, it will provide an opportunity for partner collaboration on a project, where the upfront investment of time is low because communications materials are already designed in member municipalities in many cases. In this way, the partner organizations have an opportunity to enjoy early success working together. Second, it will help to identify any organizational issues that need to be resolved before the launch of future communications campaigns.

7 IMPLEMENTATION PLAN & EVALUATION

The implementation plan noted here discusses who will implement the plan, the budget and how to evaluate its effectiveness. The more detailed Action Plan for each of the 6 communication strategy phases is in Appendix H. It looks at the tactics, the specific timeline and how to evaluate it. Where applicable for some tactics, the objective it addresses (knowledge, belief or behaviour) is also noted.

7.1 Role of Stakeholders

7.1.1 SLRD Role

The communities within the SLRD have diverse demographics and geography. While this variability poses a communications challenge on many levels, the SLRD staff and political leaders are positioned to identify and promote regional collaboration opportunities. In addition, it is most practical for SLRD staff to actively participate in provincial waste reduction/diversion programs, including processes to develop new resource management targets, EPR consultations, carbon off-set strategies, and any other Zero Waste initiatives. The SLRD can share relevant information on new initiatives and research with their member municipalities and stakeholders.

Policy Initiatives

There is a clear need for more sharing of resource management bylaw design and other structural regulatory tools to assist with improved waste reduction/diversion. While the focus of this communications strategy is on reaching the large residential target audience, a variety of mechanisms are available to influence additional segments, such as:



- Specify diversion language throughout SLRD, including transfer station and streetscape containers
- Change collection services for ICI, multi-residence dwelling units, and tourist accommodation buildings to require recycling and compost options in addition to garbage services. In some municipalities, these organizations could qualify for waiving of fees (such as those in utility fees or property taxes).
- Work with service providers to actively enforce the disposal bans and strengthen penalties for loads with divertible materials
- Encourage the use of clear bags to make it simpler for waste attendants to provide coaching
- Develop a simplified special events check list and require specific waste reduction parameters for municipally-sponsored events
- Show leadership by developing policies and implementing them internally (such as waste reduction systems or sustainable purchasing policies).
- Encourage larger ICI organizations to adopt or adapt sustainable purchasing policies, and develop sustainable purchasing toolkits
- Require new real estate developments to provide space for proper separation/collection of recycling and organics for ICI and multifamily
- Add resources to more actively enforce existing bylaws and guiding policies; this could also include positive reinforcement options, identified in this strategy

Organizational Structure

The SLRD is a small regional government compared with some others in BC, and continues to face the challenge of managing numerous social, environmental and economic projects with limited resources. Assuming a more strategic role in the region must be balanced with hands-on coordination of services in smaller member communities.

To assist in developing a balance between oversight and implementation, the following actions are recommended:

- Establish clear division of SLRD staff responsibility for operations management and regional strategic
 planning so strategic advances and actions can be made without delays due to urgent operational needs.
 This can be achieved by having one position dedicated to solid waste communications, reporting to the
 Director of Utilities and Environmental Services and collaborating with the rest of the solid waste team.
- Host annual waste reduction/diversion communications planning workshop with regional communications and waste management staff to ensure coordinated timelines, goals and campaign tactics.
- Secure communications strategy implementation commitment from both municipal partners, First Nations, and service providers. This can be best achieved through the current Advisory Council process.
- Develop a program–specific working group to plan and actively support implementation of specific programs.

It is recommended that the SLRD create a position to coordinate solid waste communications for the region and to work with partners to implement this plan. This position would be responsible for implementing the action plan, potentially in collaboration with or combined with the current scope of the Zero Waste Educator. However, as there is increasing work with partners, future reduction/diversion themes may see larger roles taken by partners depending on the projects.

7.1.2 Municipal Role

Municipalities also have control over how hauling, processing and other service provider contracts are developed, and can specify communications and outreach messages and actions that connect them to reduction/diversion programs and targets. Municipal leaders will also be most effective in advancing a distributed leadership model of



citizen engagement that capitalizes on municipal communications tools and local citizen engagement. Distributed leadership is about grassroots, citizen-led programs where local and regional government leaders support the existing social capital in their communities (such as distributing branded public awards for waste reduction efforts). Further, social marketing strategies are most effective when they include peer-to-peer influence. By working in partnership with local NGO waste organizations, member municipality resource managers can reinforce the growing new norm of improved waste reduction and diversion in their communities.

In the development of this plan and in the ongoing work of implementing the SWMP and the process of updating the SWRMP, the groundwork has been laid for closer collaboration. Member municipalities already participate in the Solid Waste Plan Monitoring Committee and now in the update process of the SWRMP. These meetings have built a relationship between the SLRD and the municipalities which can be enhanced by further partnership. It makes sure all partners are aware of new proposals and programs and that ensures local conditions are taken into account in program and education development.

7.1.3 First Nations Role

While not under the jurisdiction of the SLRD and not municipalities, First Nations communities also need to plan for and provide services for solid waste. They may use SLRD solid waste services (such as landfills) and have a common interest in reducing waste and diverting resources from landfill. As such, the SLRD can work towards stronger partnerships with local First Nations in a similar fashion as with the member municipalities (working together on common communications, inclusion in planning meetings, sharing of resources, etc.).

7.1.4 Service Provider Role

Critical to the success of this strategy is support from private sector agencies providing both curbside pick-up and transfer station management. These agencies are often the main conduit for public engagement and as such have a special role to play in reinforcing positive behaviour. Opportunities for public engagement include: asking for public commitment to waste reduction on branded postcards and then having an interactive display at transfer stations. Each month the service provider company could choose one recipient to profile on social media channels. Random draws for prizes are encouraged from the pool of submissions. In some cases, local NGOs may also play a similar role.

7.1.5 Shared Responsibility

Recognizing the value of region-wide consistency in messaging, the SLRD, member municipalities, First Nations communities, service providers, and community NGO's are recommended to commit to the following:

- Provide input on and adopt one signage design, then replace or update existing signage throughout one calendar year
- Re-locate diversion containers at transfer stations and depots to make them the most convenient choice;
 move mixed waste bins to the back of the properties
- Recommend all streetscape, business and multi-family collection bins to be grouped, and placed in consistent ordering as much as possible (e.g. no solo garbage or recycling containers)
- Share SLRD promotional messages on social media channels regularly
- Actively participate in annual strategic planning sessions



- Simplify bylaw process through developing standardized language and sample bylaws that can more easily
 adopted by councils (i.e. space requirements for recycling containers in strata buildings, requirements for
 front and back of house at businesses, requirements for deconstructing buildings)
- Pilot programs in different communities to gain lessons learned and inform broad scale regional program development and implementation
- Orient and train attendants and front line staff on current situation, and encourage them to actively promote new programs

7.2 Food Scraps Reduction Campaign Snapshot

Building on the knowledge, belief and behaviour objectives identified for the program, a two-part campaign to promote food scraps collection has been developed. While this timeline would be best followed in sequence, it would be possible to begin in Part 2 if necessary due to budget and hiring restrictions. Working through the Action Plan outlined in Appendix H will help to identify a logical starting point that is sensitive to the current context.

Part 1: Pilot -September/October: Integrate the newly branded SLRD waste reduction messaging into existing initiatives by:

Reinforcing food waste avoidance and organics diversion messaging by incorporating it into existing
Halloween pumpkin drop promotions in one or two partner municipalities. By priming the target audience
with this food scraps messaging in the fall, the larger spring campaign can build on existing positive
behaviour. This will be a pilot activity.

Part 2: Roll out starting April/May: Actively promote food scraps reduction/diversion by:

- Featuring food scraps-focused information that builds on implementation of guiding SLRD branded communication (providing food scraps collection tips online to introduce behaviour change). Tips should include bin recommendations, meal planning tools, how-to videos, etc.
- Coordinate with transfer station staff to focus feedback and support on food scraps diversion: special
 training provided in advance of campaign. Critical to include before and after feedback about food scraps
 diversion, and the results of the increased public participation in waste reduction, both at the transfer
 stations and through online channels.
- Providing branded food scraps bins (removing barriers to enable behaviour change) in exchange for public commitment to experiment with food scraps collection (post public commitments at transfer stations "wall of fame". Potential to partner with local ice cream businesses to give away bins, and provide gift certificates to receive ice cream to all "waste reduction heroes". Emphasize a "wrap your scraps" with newspaper to overcome collection and transfer challenges.
- Hosting a weekly "waste reduction hero" contest (providing rewarding communications to reinforce behaviour change). To participate, people nominate a "waste reduction hero" with a photo and story and post it on SLRD Facebook site. Winning waste reduction story featured in the News section of SLRD website, and winner awarded donated prize (potentially ice cream). Ideally nominations would include both regular citizens as well as higher profile community members including but not limited to politicians and other community leaders, professional athletes who live in or use training facilities in the area.
- Campaign promotion: through municipal partner online channels; with transfer station staff; through earned media; through targeted bought ads in local newspapers; and most effectively, through word of mouth generated by free ice cream.

Further details about how to implement this campaign are included in Appendix H which includes the preparation, announcement, launch and evaluation phases.



7.3 Resources Required

Waste reduction and diversion will continue to be a major challenge and opportunity for the SLRD. Investing in the implementation of this communications strategy is critical to achieving the SLRD SWMP. The minimum level of investment to ensure the successful implementation of this strategy requires a dedicated part time staff person for three days per week. It may be beneficial to subcontract some of the tasks, such as the more tactical actions like coordinating the production of updated signage. This will ensure that the SLRD can continue to provide a single point of contact for municipal stakeholders, assume senior level responsibility for coordinating regional waste reduction/diversion programs, and have the staff resources to leverage partnerships with municipalities, ENGOs, service providers, and other potential partners over time. The actual activities to be performed by this dedicated staff person are outlined in the Action Plan in Appendix H (with some time requirements noted but additional time will be needed for all the small detailed actions not included as well as for the work with partners which will vary based on the number of partners and their availability). Planning level resource requirement examples are outlined in the table below.

Table 7-1 Budget for Resources

Resource	Estimated First Year Budget
SLRD Solid Waste Communications Coordinator (plus additional benefits and overhead) ³	\$33,000
Ambassador stipends for special events (10 events per year, average 2 ambassadors per event, \$100 stipend each including training (in-kind entrance fee or other may be possible depending on the event)	\$2,000
Printing for wallet cards (\$1,125 for 2,500 but cost per card lower if more) —changes to template may be possible by printer with no additional fee. Considered runs for Pemberton, Lillooet, Gold Bridge and Devine; could partner with Squamish and Whistler to have consistent look for those communities also but costs for these communities are not included.	\$4,000
Printing of pledge cards (for 5,000 in postcard format)	\$1,300
Print banner for displays (2 at \$250 each)	\$500
Branded tent for events (10' x 10' aluminum)	\$1,300
Kitchen catchers for food scraps diversion (note there may be different needs for future themes) (3,800 containers to reach 10% of SLRD population at an average of \$6.50 each, offset cost by donation of reusable containers, introduced across recycle depots)	\$24,700
Home container recycling and food scraps decals (5,000 quantity, 50 cents per sticker)	\$2,500
Sign production for SLRD waste locations (4 sites, 8 signs per site, weatherproof and durable)	\$2,000
Newspaper ads (\$400 per ¼ page ad in 5 local papers, twice per year)	\$4,400
Total	\$75,700

The cost Solid Waste Communications Coordinator depends on the staffing capacity of the member municipalities to assist with this campaign.

³ Note this rate is the industry standard, verified by contacting organizations with similar positions.



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7.4 Expected Outcomes

Evaluation creates credibility and will help to improve communications as well as the programs and services offered. By identifying what works and what doesn't work, resources can be focused on the most effective communication channels and tools and eliminate or reduce other components. Evaluation typically consists of monitoring, process and program evaluation and links back to the communication objectives.

Evaluation needs to be planned and have resources to conduct it. Deciding in advance what can be tracked and what resources (staff and/or financial) are required will help ensure the information can be collected and in turn used for continuous improvements. As well, using the information gained will help avoid problems, identify opportunities and create more targeted and effective communications.

Social transformation is a long-term process that requires persistence. Committing to the strategy, including the messaging and the implementation recommendations, will yield the best results. Behaviour change is challenging to measure, and we caution the tendency to draw correlations between planned interventions and observed changes in public behaviour. Most social marketing programs target a 5% rate change within 2-3 years based on focused and consistent communications programming (Kujawski, M. 2009).

7.4.1 Process Evaluation

Before implementation begins, monitoring mechanisms are put in place to retrieve feedback on the program and to catch any problems in their early stages. Although it's unlikely to anticipate every type of problem, a monitoring system will help to identify problems as they may arise during implementation. Most problems can be resolved if detected early enough, but left unchecked, can mean the difference between success and failure of the program. Effective monitoring of public and key stakeholder response involves staying on top of trends in the program's activities and ensuring that implementation is on the right track toward accomplishing program goals.

Process evaluation should include tracking questions and feedback to the SLRD, member municipalities, program partners and RCBC by type of inquiry and by location. RCBC can be asked to provide hotline call and website tracking. Surveys could be conducted to ask how a person heard about the program. Monitoring should also include feedback from the waste attendants. Internally, maintaining open lines of communication between departments will also assist in identifying and responding to issues as they arise.

A key aspect of process evaluation also includes ensuring the plan is being implemented on time and on budget, and making adjustments as necessary. See Appendix H for action plan details.

7.4.2 Qualitative Success Measures

Identifying key milestones along the social transformation journey is critical to maintaining momentum and partner support.

These success measures should include:

- Increased regional capacity to collaborate in solving other sustainability issues (i.e. habitat restoration economic recovery planning, affordable housing, etc.)
- Improved efficiency in SLRD Utilities and Communications Departments: active stakeholder participation in SLRD-led strategic planning events



- Feedback from partners and public (including verbal comments, feedback forms at workshops)
- Phone calls and inquiries to the SLRD and partners
- Online surveys
- Future focus groups

7.4.3 Quantitative Success Measures

The communications plan should assist the SLRD in reaching its waste reduction and diversion targets. These targets will be finalized in the SWRMP update process.

These success measures should include:

- Number of transfer station, streetscape, and curbside infrastructure across the SLRD with updated unifying branding
- Number of times standard signage is downloaded from website
- Amount of public engagement in social media waste reduction/diversion stories
- Number of media stories on waste reduction/diversion (i.e. growing public interest in resource management)
- Greater use of organics diversion services at the transfer stations reported by staff
- Reduction in waste (total waste, per capita disposal rate; ideal if data can be disaggregated to show impact
 of a specific program on a population be it event or municipality)
- Actions completed in the Action Plan
- Hits to website or social media (both SLRD and key partners)
- Number of participants at events
- Number of wallet cards given out
- Number of pledges signed
- Number of committed partners
- RCBC hotline and Recyclepedia statistics from SLRD region users

7.4.4 Providing Feedback

Research shows that providing public feedback on program goals can help build community norms. This should be done for this program as well as subsequent reduction/diversion themes. Different tools can be used for different audiences. Suggested actions for providing feedback are included in the action plan



APPENDIX A: WASTE REDUCTION/DIVERSION AND COMMUNICATIONS RESEARCH

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APPENDIX B: SUGGESTIONS FOR FUTURE COMMUNITY-BASED SOCIAL MARKETING PROGRAMS

These suggestions come from the audience segmentation process conducted as part of the project.

- Multifamily building residents –food scraps reduction and diversion
- Multifamily building residents –recycling
- Institutions and major industry

 food scraps reduction and diversion
- Institutions and major industry –recycling

Other suggestions from the SLRD SWRMP update process and elsewhere (target audience to be identified for some)

- Reduction and reuse of single use packaging (plastic bags, coffee cups, water bottles)
- Reduction of unwanted ad mail through signing up residents and business for Canada Post's program to
 opt out as well as for unwanted directories through Yellow Pages and Can Pages (can distribute stickers at
 events, can have iPads for people to register online at events).
- Encouraging reuse
- Encouraging repair through highlighting existing options and/or by hosting repair cafes
- Promoting the use of rental and sharing options (work with Chambers of Commerce to have them identify repair and rental options offered by their members, support the creation of equipment libraries)
- Reduction of material use by encouraging gifts of experience over gifts of things (using materials developed and shared by Metro Vancouver)
- Encouraging use of back yard composting through a bear aware compost coaching program
- Recognizing Zero Waste heroes with a school programs where classes receive buttons to hand out to
 people they see modeling desired behaviour. Heroes are asked to log in to the website to state what they
 received the award for and to pass it on to the next person they see doing the right thing.

A Reduce/Reuse campaign could incorporate many of the above ideas, working with the Chambers of Commerce to highlight local businesses, using iPads for online signups for opting out of yellow pages distribution, giving out stickers and instructions for people to avoid junk mail from Canada Post, showing an "urban backpack" with reusable coffee mug, cutlery, shopping bag and workshops for people to share their solutions and tips. Similar tactics that were recommended for the food scraps reduction/diversion theme such as Zero Waste heroes and their news stories could be used as well as competitions, pledges and partnerships with relevant businesses for prizes.



APPENDIX C: SOCIAL MARKETING AUDIENCE SEGMENTATION PROCESS

On a scale of 1 - 10, with the **higher end being the best possible**, score the following groups against the criteria identified. Note that your scores will be determined by their comparison to each other. One segment has been left blank for you to add your own, if desired.

<u>S: Size:</u> total number of people that could be influenced: estimated population

AR: At Risk: most likely to engage in problem behaviour

P: Persuadability: realistic to expect change in attitudes and behaviour of the group

<u>A: Accessibility</u>: ease in reaching the group through existing communications tools

RR: Resources Required: financial and other assets needed to reach the group

Segment	S	AR	Р	Α	RR	TOTAL
Residential, single family in town						
Residential, single family rural						
Residential, multi family complex						
Institutions and major industry like schools, hospitals, etc.						
Commercial: retail and office						
Commercial: food and Accommodation						

APPENDIX D: POTENTIAL STAKEHOLDER LIST

This list highlights the main stakeholders whom the SLRD will want to consider when designing programs. For certain projects, there may be additional ones for specific materials.

Primary Stakeholders

Primary stakeholders are those integral to the program, such as decision-makers targeted to ensure effective support or residents or businesses targeted in order to influence behaviour.

Internal – Decision Makers, Opinion Leaders and Support

- SLRD Board of Directors
- SLRD Staff and contractors

External – Decision Makers and Opinion Leaders 4

- Ministry of Environment Environmental Protection Division
- Ministry of Environment regional offices (sit on Regional District Waste Committees etc.)
- BC Product Stewardship Council
- BC Stewards Association
- Local governments' Mayor and Council, administrators or managers
- Members of the Legislative Assembly
- BC Members of Parliament
- Aboriginal leaders/First Nations
- Local government waste management and education staff
- Local government contract staff (i.e. landfill contractor, hauler)
- Local government support staff that respond to inquiries
- Key ENGOs (e.g. AWARE, Squamish CAN)

External - Partners / Service Providers

- Recycling Council of British Columbia (RCBC) operating information services
- Service providers including waste haulers and recyclers such as Whistler Community Services Society,
 Regional Recycling, Carneys, Waste Control Services, Lillooet Recycling & Disposal, Sea to Sky Soils, etc.
- Service providers offering stewardship programs like Encorp Pacific, and Product Care
- Service providers offering rental, sharing or repair services
- Retail and commercial partners that are providing reduction/diversion theme information at point of sale/decision *(note: this may be most effective when part of a larger ICI target audience campaign, to ensure congruence between partner organizational waste management practices and public promotional of SLRD waste reduction brand).

External - Residents

Residents may be further identified based on their type of dwelling, such as single family home or multi-family home, or by rural or urban location. Residents can be defined by demographics such as age (i.e. children, youth,

⁴ Note that some of these could be internal where working groups and partnerships are formed.



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adults, seniors), by family status (i.e. parents with children, empty nesters, retirees) as well as by gender. Other characteristics, known as "psychographics" may also segment the residential target audience by habits, attitudes, lifestyle, and behaviour patterns, such as gardeners or commuters. Strategies, tactics, and message delivery may vary according to target audiences. For example, backyard composting messages are well suited to the residents in single-family homes, while not as applicable to those living in apartments.

Individual audiences can include:

- Single family homes
- Multi-family homes
- Rural residents
- Urban residents
- Families with children
- Children
- Youth
- Adults
- Retirees
- Seniors
- Employees

External –Businesses, Institutions, Accommodations

This can include individual businesses or types of businesses such as retail, office, foodservices and accommodations services. It may depend on size of business or the specific community. In some cases, there are local associations to which they may belong (e.g. Whistler Retailers Association). Institutions can include schools, universities and health care and long-term care facilities. In the region, there are various types of accommodations from hotels, and bed and breakfasts to timeshare strata buildings with property managers that may require different approaches.

External -Construction, Demolition, and Renovation

Solid waste statistics often have a separate category for waste generated by this group as there are different kinds of materials handled and the logistics may be different. This would include companies that construct, demolish or renovate buildings but there may be other groups to consider that may be in this category or others (such as planners, permitting staff, rebuild it centres, architects, and certification programs).

Secondary

The following audiences have been identified as secondary in order to prioritize delivery of programs.

External - Media

Mass media is identified as one of the foundational tools in community-based social marketing. Paid advertising disseminates the SLRD's messages to a large portion of the population over a wide geographically diverse area and supports ongoing educational activities at the local level. In some cases, Public Service Announcements could be created and aired or published.



Leveraging media coverage through publicity efforts can serve to increase this reach. Strengthening media relationships can increase social diffusion of the message as it is broadcast by credible media personalities

- Community newspapers
- Radio
- Online news outlets or discussions

External - Schools

Behaviours learned in the classroom help shape the social norms and values of a community, as students learn new behaviours and transfer them into the home. The school community is a primary focus for delivering environmental education.

- School District administration
- School Principals
- Teachers
- Students

External - Provincial / Regional ENGOs

These are like-minded organizations that are often composed of opinion leaders at a provincial or regional level. They can serve as channels for information distribution and for feedback.

- Sierra Club BC
- David Suzuki Foundation

External - Community Organizations

These are key groups of residents and are often opinion leaders at the grassroots level. In addition, they also serve as excellent channels for information distribution and feedback.

- Chambers of Commerce and other business leaders or associations
- Service clubs such as Rotary, Lions, and Kiwanis Clubs
- Community neighbourhood resident and ratepayers associations
- Interest-specific groups such as WORCA, SORCA, outdoor clubs, women in business groups, etc.



APPENDIX E: SLRD STATISTICAL INFORMATION

This data provides a description of the residents and characteristics of the SLRD. The data is from Statistics Canada 2011 Census and Composting by households in Canada (Statistics Canada).

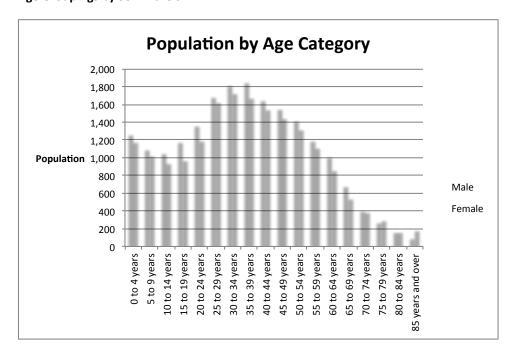
Population -38,171 (note this does not include the very high number of visitors that come to the region and use the infrastructure built for them. These visitors are concentrated in Whistler but also visit surrounding communities.)

Private dwellings -22,146

Private dwellings occupied by usual residents 14,998 (note that there are more private dwellings than are occupied as there are many second or holiday homes that are only used occasionally. The percentage of unoccupied homes is higher than in other communities due to the region's tourism sector and needs to be considered when offering services as there can be peaks and dips in demand for services and some actions may not be suitable for non-permanent residents (such as backyard composting) or neighbourhoods with a high vacancy rate (such as curbside collection).

Population density -2.3 persons/km² with a land area of 16,310 km²

Age Groupings by Sex in the SLRD



Median age -36.2 (note this is lower than the provincial average of 41.9 years and may reflect the numerous younger workers that come to work in the resort or enjoy the outdoor activities). There are also slightly more males in this region (52% of the population versus 49% provincially)

Marital status – 57% are married or living with a common law partner (note this is similar to the BC average but in the SLRD a higher percent of those people are common law rather than married, possibly reflecting the younger



demographic). 43% are not married or living common law which is also similar to the BC average but a higher percentage of those people in the SLRD are single and have never been married rather than separated, divorced or widowed (this again may be a reflection of the younger demographic).

Family characteristics – There are 10,260 families and 49% of them have at least one child at home which is similar to the provincial average. There are 8,190 people not living in a census family (living alone, or with others)

Table E-1 Household and dwelling characteristics

Dwelling Types	Number of Dwellings	Relative Percentage
Single detached house	6,895	46.0%
Movable dwelling	810	5.4%
Semi-detached house	870	5.8%
Row house	2,290	15.3%
Duplex	1,635	10.9%
Apartment (under 5 storeys)	2,400	16.0%
Apartment (5 storeys or more)	65	0.4%
Other single-attached house	45	0.3%
Total number of occupied dwellings	14,995	

Language -83% or residents have English as their mother tongue, 3.5% listed French and 12% listed other languages (the highest being Panjabi 3% and German 1.6%, Tagalog 1% and Japanese (1%). Only 325 people do not know English. While there are numerous languages spoken at home, there are no predominant groups and English is commonly spoken in the region.

Business information

There is a Chambers of Commerce in each of the member municipalities:

Lillooet -50 members Pemberton -145 members Squamish -520 members Whistler over 800 members

Note: some businesses may belong to more than one chamber.



APPENDIX F: RECOMMENDATIONS FOR SIGNAGE AND BINS

Studies on best practices for signage and bins shows that the following is the most effective:

- Reverse signage white letters on darker background, high contrast
- Terminology clear, short, consistent
- Clear slogan and messaging
- Consistent colour-coding (mixed containers/recyclables blue, paper yellow/gold, organics –green, landfill black or grey)
- Photo realistic or pictorial images without product branding for "point of use" signage
- Large icons on front to identify bins and ideally coloured bins (plus line of sight labels above and possibly also below the slot for people approaching from different angles or of different heights)
- Use tied bag or garbage can as iconic garbage sign (indicates a mix of unsorted items)
- Use banners or floor/walls where appropriate
- Keep waste prevention in mind (do not show whole food or usable items)
- Use restricted shapes to guide behaviour
- Consistent bin order –recycling, organics, and then landfill last
- Use modular containers for maximum versatility related to material types collected and options for "right sizing" bins over time; vet for accessibility and ease of servicing bins
- Use transparent bags to ensure servicing of bins is conducted properly (e.g. clear blue for recyclables, compostable liners for organics, and clear for garbage)
- Replace higher use solo garbage cans with zero waste stations; eliminate other solo garbage cans

It has been shown that clear graphics can reduce contamination by 50%. Despite the perception that people have that they respond best to words, testing showed that the decision making process to determine which stream to place an item in was slower with words only. When words are needed to define terminology, reverse signage makes words stand out more clearly as shown in the York Region, Ontario signage below.



Compost and recycling bins are the hardest to navigate so consistent colour coding and signage is especially important. The Granville Island Zero Waste station below shows the effective use of large "approach" icons and colour coding with pictorial/photo realistic point of use signage. It is also recommended that the SLRD work towards using the colours noted above for bins where possible as well as encouraging partners to do the same.







With the above in mind, and the start of the Multi Material BC program—which has introduced its own signage which uses the above practices—it is recommended that the MMBC icons (as adapted by Whistler to remove the pizza box from the mixed paper and cardboard icon) be used. Where there is not an icon available for specific items, using one from the resources at www.3Rs.ca which is promoting a Canada-wide use of certain images, means that over time, residents and local visitors will become more familiar with them.

It is recommended that the SLRD create its own downloadable signs and encourage municipalities, businesses and residents to use them. Below is a screen shot from the City and County of San Francisco's sign maker page⁵, which provides image options for businesses, apartment managers and others to customize their own signs while still keeping the same look and feel.



Related Signage Studies:

Title	Source	Highlights
Best Practice for Public	Collaboration between the BAR Lab,	Examined the impact of colour vs. black
Space Recycling	Metro Vancouver & UBC. Contact Metro Vancouver Corporate Relations for more information: www.metrovancouver.org, 604.432.6200	and white, images vs. words, icons vs. photos on time and accuracy of reaction. Found that colour, images and photos deliver the best results.
Colour, Cognition, And Recycling: How The Design Of Everyday Objects Prompt Behaviour Change	http://americarecyclesday.org/wp- content/uploads/2013/07/MontazeriG onzalez-2012.pdf	Experiment conducted in university setting to study the role of colour in triggering recycling behaviour. Found that colour can affect the salience of an object and consequently trigger the associated desired behaviour.
Clinical Validation and Cognitive Elaboration: Signs that Encourage Sustained Recycling	http://content.lib.utah.edu/cdm/ref/c ollection/uspace/id/5258	Tested different forms of signage and persuasive messages to increase recycling. Found that simple, well-designed signs can influence behaviour while the signs are in place as well as after their removal. Effective signs can encourage recycling despite some inconvenience, thereby potentially

⁵ City and County of San Francisco, 2014. http://www.sfenvironment.org/signmaker



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	1	
		reducing the costs of recycling programs.
Keep America Beautiful	http://americarecyclesday.org/wp-	Ten tips for developing public space
	content/uploads/2013/07/Public-	waste diversion opportunities, includes
	Space-Recycling-Guide1.pdf	best practices for signage: use few key
		words, use clear language, pictures are
		best, avoid "don'ts", put label where it
		will be seen.
Metro Media Technologies	https://www.google.ca/#q=MMT+out	How to use colour in designing public
	<u>door+101</u>	space and outdoor signs. Need to focus
		on: intensity, legibility, contrast and
		comprehension for best results
The Art & Science of Signs	http://www.completecampaigns.com/	Tips for developing cleaner, brighter,
and Graphics, Article in	article.asp?articleid=30	more readable graphic signs. Rendering
Winning Campaigns		your name in reverse - white against a
		contrasting bright or dark coloured
		background- makes your name look larger
		and improves visibility. According to a
		study by the Outdoor Advertising
		Institute, reverse messages are up to 40%
		more visible.

Plan for next time to save.

Love this place Reduce your w

www.slrd.bc.ca/lovethisplace

Sample signage for the SLRD:



Love this place Reduce your w



APPENDIX G: FOCUS GROUP RESULTS

Date: July 8, 2014, at the Millennium Place in Whistler

Attendees: 4 women + 2 men, all from Whistler (representatives that were confirmed to attend from Squamish and Pemberton did not arrive). These people varied in experience with solid waste diversion and reduction practices in their daily lives, from avid enthusiasts to beginners. People were recruited through member municipality social media channels, as well promotions through personal networks.

Purpose of Focus Group:

- Understand how people think about the waste reduction issue
- Identify where people look for waste reduction information
- Understand the barriers preventing people from reducing their household waste
- Discover motivating factors that would encourage participation in household waste reduction
- Response to initial program messaging / branding options

Analysis:

When asked to describe waste reduction habits that people wanted to improve, the following themes emerged:

- Better system: more efficient way of sorting and storing materials; what are the best bins and where to store them at home
- Clarity about contamination issues: for compost and recycling
- Connection to transfer station/depot system: want information they can trust about the system at the transfer station/depot that can be replicated, "mirrored", at home
- Over-packaging of materials: how can municipal governments pressure for change? Interest in EPR

When asked about where people find information, the following themes emerged:

- Online, but not clear about where to look. Often use Google for information (rather than local and/or regional links); Carney's website
- Waste facility staff
- Newspapers –Pique, editorials, would like recycling tip of the week
- Peers, friends who know more than they do
- Note that in some families one partner may sort at home and the other may actually drop it off (need to communicate with both)
- One person noted that they use You Tube to find out how and why to do things
- For reuse: buy and sell, kids swaps, Facebook
- Would like to hear how we are doing when elected officials speak to reinforce that this is what we do, pride, showcase accomplishments in living sustainably

When asked about **barriers to reducing waste**, the following themes emerged:

- Two major themes: transfer station/depot staff ineffective (discussion about not having information or giving misinformation), and ineffective home systems (i.e. storage bins)
- Conflicting information online, and online info is different from brochure information = confusion
- Stratas have terrible waste diversion systems; people living in stratas have fewer reduction options
- Misinformation from transfer station/depot staff: i.e. plastic film is incinerated, there is nowhere to recycle light bulbs



- Don't want to spend time at the depot: want to be in and out, but also see transfer station/depot staff as experts who could be consulted for advice if the customer service was better
- Perception that bins already take up too much space at home
- Compost: possible perception that they are already active enough with their recycling efforts
- Myth that recyclables are dumped: what happens to all the recyclable stuff at the end? Incinerated? Is the stuff actually made into something new?
- Compost: stinky bin, aren't happy with the system of managing scraps in home
- Can there be more reuse at depots (discussion about how a person used to take door hinges, etc off of items left at depots)
- Would like curbside pick up
- Need to educate newcomers (HR departments, Spirit Pass training, staff housing, etc) "we love this place and this is what we do with our waste..."

When asked about motivating factors to improve waste reduction, the following themes emerged:

- Two major themes: proof of impact/outcome, and feelings of making the world/community better
- Face to face conversations with experts who are teaching about new systems; explain what happens to the recycling; why is it worth the effort
- If facility staff were better service providers: misinformed, did not follow up to get question answered; rude to people; do not appear knowledgeable. Need more pride in the job. One said friendly interaction where items were taken away for refurbishing
- Simple poster with information about what can be done locally; stickers for home bins that mirror the transfer station/depot system
- There should be a sign at the garbage bin that tells people to stop and check, "Dude! There's a glass recycling bin over there! Are you sure you need to drop that off here?" and thank you notes on the recycling containers
- Walk to garbage bin/chute should be walk of shame.
- If the bins separate the types of recycling, then they believe that the stuff ends up be recycled but if its' one big bin then they're more sceptical
- More disincentives they felt could work: fees for putting recyclables/food scraps in garbage
- Share detailed target: not a broad "waste reduction" target, but more specific diversion theme goals
- Localized impact of waste: consequences to water quality; consequences to climate change
- Feel more connected to the community and better about themselves when they know they're doing the right thing; doing the right thing is empowering
- Guilt feeling by doing the wrong thing, that I'm damaging the environment but I brag to everyone about where I live I feel ashamed of myself
- Negative stories from other places in the world: See how bad it can be in other places in the world; it is
 pristine and heaven here, want to do the right thing in every aspect of life for here and for the globe; pacific
 gyre of plastic.
- Discussion of how in Japan the garbage men check your waste and will return it if unsuitable
- Seeing recycled fleece proves that there is a positive outcome of recycling: show the lifecycle of recyclables to demonstrate what happens to it; show how SLRD and local municipalities use recycled products that could have come from our own collection systems
- Have same systems (i.e. recycling and bin categories) throughout: depots/transfer stations, home bins, workplace bins, streetscape bins

When asked about how to pass along their engagement, the following themes emerged:

- Talking with people at work is the best way to spread the message
- The workplace is like having roommates that bring these new habits home with them, different group of people interacting



- Make it a standard way of life in public places; make public places the role models of waste diversion; the single recycling bins in public spaces send the message that it is all contaminated
- Need to showcase rebuild it and reuse it centres; need to show the EPR options

Key messaging recommendations:

- Icons –initially not sure of connection of paw to waste but as they started discussing it, made the connection and then liked it. Especially once added taglines. Discussion of local versus global issue. Selected bear icon with green and tan icons of options shown. In black version, concern that claws look like candles.
- Preferred version with tag line separate and horizontal below icon as opposed to including in icon.
- Love this place, reduce your waste (this was a modification of one tagline suggested by a group member, which the whole group then chose as their favourite)
- Zero Waste not seen as compelling: seen as too lofty, too ambitious and unattainable, confusing, not motivational as felt it is too far away
- Front line transfer station/depot staff have untapped role
- Lack of dialogue on the waste issue; need more, get it started in local papers
- Award or publicity for people who are reducing waste: want to see success stories, need to hear stories of how
 people are solving the problems they have, what are they doing to overcome barriers
- Local business success stories: they are motivating
- Monthly award: nominate each other for specific examples of what' they're doing, personal connection goes a long way, "waste reducer of the week"
- Provide free compost bins for use inside (i.e. kitchen catchers)
- Need benchmark: where is the best I can be, where should I be when compared to others
- Include metrics and a scale (e.g. this many bottles end to end of x kg of paper recycled equals ______)



APPENDIX H: ACTION PLAN

The following tables provide the detailed actions to be taken, the materials required, times and resources, as well as space to identify the person responsible for the action (in-house or with partners). Once the action and the person responsible have been confirmed more accurate costs can be determined. Cost estimates have been provided for planning purposes. Note that developing partnerships and collaborating with other agencies may be a way to accelerate the rollout of this plan or extend its reach; however, time must be allocated to developing these partnerships and the number of partners and their availability will impact the amount of time required to complete tasks. Timelines can be adjusted based on work with partners. To coordinate these actions with other existing communications actions, it is recommended that an annual planning calendar is used to plan events, programs and services for the year. The six phases of a social marketing plan are outlined in Section 4. Note that these tables outline key tasks but is not a comprehensive list of every action that will be required and through work with partners, other actions may need to be added. There are some time estimates included here but these are strictly estimates. There may be more time needed for actions with partners and there may be additional time needed for other details not listed here (such as setting up office computers, liaising with printers, team meetings, etc).

Phase 1: Develop the Social Marketing Plan

Time frame (June 2014 -October 2014)

Phase 1 has been mostly completed for the overall solid waste communications coordination improvements, as well as the first program theme: organics or "food scraps" reduction and diversion. The remaining tasks shown below are to pilot the food scraps collection tools in one or two partner municipalities before rolling out the program more broadly across the SLRD and in the future, use the six stages outlined in section 4 to plan the next reduction/diversion theme.

Table H-1 Phase 1 Actions

Phase	1 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
	umpkin Drop project of initial craps actions and revise plan as d.	Advertisement, Facebook post, web information, arrange and staff events, collect data and feedback	Fall –prep, Early November - implement	30 h	Number of attendees, weight of food scraps/pumpkins, website hits, feedback
promo	v new SLRD food scraps otional plan and revise plan as d based on pilot project	None yet: preparation stage. New materials are already prepared and will be printed and distributed in Phase 2 below	Fall 2014	10 h	

3	Develop plan for next	None	2016 or as	Variable	
	reduction/diversion theme (once first		suitable based on		
	one has reached maintenance phase)		results		

Phase 2: Develop Tools

Time frame (September 2014 - April 2015 - ongoing)

This phase involves developing tools that will be needed to implement a program. Initially it will also include the development of standard tools that can be used for all SLRD programs and which partners should use where possible. This includes a website, standards for signage, standards for bin colours and labels, a brand and logo and standard messaging. In some cases, these tools may also include ones that are not directly communications-related but address a program-related barrier noted by the target audience (for example, the need to change hours of operation or provide kitchen catchers).

Objectives met:

- Knowledge: Waste reduction and diversion options and services in their community
- Belief: It is easy to find out what they need to know
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: All internal and external decision makers and opinion leaders are made aware of the new tools. Wherever possible, they are encouraged to provide links to SLRD website for solid waste reduction and diversion information.

Outcome: Internal and external decision makers are prepared for the solid waste information requests.

Outcome: Member municipalities, service providers and ENGOs website link to the SLRD Solid Waste webpages.

Outcome: SLRD and associated partners use branded, standard messaging for solid waste.

Table H-2 Phase 2 Actions

	Phase 2 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Set up and coordinate SLRD solid waste communications	Meetings	Sept 2014	Depends on	Progress on
	partnership group with member municipalities, First Nations, key		and quarterly	partners	partnership: #

	service providers and others. Meet at least quarterly. Consider using video and screen sharing call in capacity for more distant team members.		thereafter		meetings, # partners
2	Develop SLRD webpages for solid waste that reflect the needs outlined in the plan Use search engine optimization strategies so that SLRD waste landing webpage is one of top three hits on Google for common phrases	Website	Sept 2014 and ongoing	5 h	Complete ⁶ Ranking on Google search
3	Develop QR code and include on printed collateral.	QR code	Sept 2014	1 h	Complete
4	Ensure accurate information is provided by partners (check RCBC website recycling information as well as inform any other partners of discrepancies).	None	Sept 2014	15 h	Accurate info # of reports of inaccuracy
5	SLRD to use the icon for all public solid waste information pieces	Include on website, email tags, printed materials for public, advertisements, collateral	Fall 2014	2 h	Complete Regular check
6	SLRD to encourage the use of the icon by member municipalities and other partners (AWARE, Squamish CAN, etc)	Meetings, communications with partners	Fall 2014	2 h	How often used? On municipal waste webpages
7	Develop outreach kit for use in Farmers Market Zero Waste stations	Outreach kit (includes wallet cards, pledge cards, other items as relevant)	Fall 2014	3 h	Complete
8	Develop a list of opportunities to give brief presentations to new residents and plan for the following year	List	Fall 2014	Depends on opportunities	Complete and vet with partnership group
9	Banner for events with icon and tagline and SLRD logo	Durable banner	Fall 2014	3 h	Complete
10	Signage for bins and colour guidelines			Depends on work	
	Approve standard signage with partners (munis, service	Jpegs (other formats as needed) of signage	Fall 2014	with partners	Complete Number of

-

⁶ Completing a task will also include vetting and/or reporting back to the partnership group and maintaining an updated task list.

	providers, MMBC)	Guideline document,	Winter 2015		downloads
	Make signage available on website for downloads and printing	stickers, online signage			
	(by citizens for home bin labeling and businesses for their				
	internal bins); print stickers for citizens for distribution at waste facilities and events	Presentation	Winter 2015		# meetings
	 Present information on plan and new signage to chambers of commerce 4), school districts (2) and healthcare organizations (2)⁷ 	Presentation	Winter 2015		1 meeting per municipality
	 Encourage use of signage in multifamily buildings (engage with service providers, management companies, stratas in conjunction with host municipality) 	Plan, signs for SLRD sites Plan	Fall 2014 Fall 2014		Complete Complete
	 Develop plan for having these signs used for all waste facilities in SLRD 				
	 Develop plan for having these signs installed on all streetscape bins in the SLRD 				
11	Waste facilities				
11	Develop plan for maximizing waste reduction through waste	Plan, meetings	Winter 2015	Depends on	# facilities laid out
	facility site layout (i.e. place garbage bins in less convenient			partners and # of	this way
	locations at transfer stations, and put signs on garbage bins, such as "last stop before landfill" and questions, such as "Have you			training sessions required	
	really done everything you can to love this place and reduce your			required	
	waste?", provide additional info at garbage bin (i.e. if not				
	Styrofoam in this bin, clear transfer station map about which				
	bin).				# training sessions
		Q&A	Fall 2014		Secret shopper
	Provide training for waste attendants to be able to answer common questions and ensure clarity on answers		/Winter 2015		experience
		Plan	Fall 2014		Complete
	Investigate best way for waste attendants to follow up with		/Winter 2015		
	residents questions they could not answer (i.e. smart phone,				
	getting email addresses, café style blackboard)				
12	Develop base line metrics for waste weights by month, food	Metrics	Fall 2014	10 h	Complete
	scrap weights by month and waste site visits by residents (can be				measurements

⁷ This also lays the groundwork for future collaboration when the ICI audience is engaged. Include the ZW school coordinator in the school district meetings.

	a one week record)				
13	Develop wallet card for each municipality and arrange for printing on 100% post-consumer recycling paper using vegetable-based inks (or lead and acid-free)	Wallet cards	Fall 2014	4 h per card	Complete
14	Develop different contact lists for different key stakeholders that need to be engaged or kept informed (municipal waste staff, municipal front desk staff, SLRD Board, municipal councils, waste attendants, service providers, local media, grocery stores, etc.)	Contact lists	Fall 2014	10 h set up plus ongoing	Complete
15	Develop outline for Zero Waste coaching sessions as community talks. Start with food scraps and move from there. Participants share ideas and stories with SLRD or partner person as facilitator. Facilitator can be the Zero Waste educator if time permits.	ZW coaching outline for workshops	Fall 2014	3 h	Complete
16	Continue with existing tools: Support of RCBC Hotline and Recyclepedia; contract with Zero Waste educator; existing partnerships. Zero Waste educator to integrate diversion theme into workshops.	None	Ongoing	Existing Depends on theme and existing curriculum	Complete annually

Food scraps-specific

While the actions in Table H-2 are to build tools and systems that will work for all diversion themes, the table below shows the actions that are specific to the food-scraps diversion theme.

Table H-3 Phase 2 Food Scraps-Specific Actions

	Phase 2 Tactic –Food Scraps	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Provide hoses and drains for home kitchen container rinsing near the food scraps collection bins at waste facilities	Hoses, signage	Fall 2014 – Spring 2015	Depends on existing infrastructure	# food scraps facilities with hoses
2	Develop and print pledge cards for residents to commit to reducing and diverting food scraps in the waste at events or waste facilities	Pledge cards	Fall 2014	3 h	Complete
3	Develop list of what food scraps drop spots are available for each community or note if none	List of drop off opportunities Webpage and	Fall 2014 Fall 2014	2 h	Complete
4	List what can go in and what can't Develop advertisement for single family building residents	wallets cards Food scraps advertisement	Fall 2014	1 h	Complete
5	Conduct and document an initial meeting with grocery store managers to encourage them to partner with the food waste prevention program (especially on area of shopping lists, planning, recipes). Follow up tool development could be store handouts they produce using SLRD artwork and messages plus an information session as held in Nesters Whistler)	Meeting to explore	Fall 2014	Depends on partners	Progress?
6	Develop list and timeline for key events that will have food scraps-related outreach	List	Fall 2014	5 h	Complete
7	Develop job description and hiring plan for keen food scraps ambassadors for events and facilities Hire ambassadors	Events requirements; HR support	Fall 2014	20 h	Complete

8	Get kitchen catcher bins for distribution (recycled ones from businesses like Cows as well as ordering some)	Bins	Fall 2014	7 h	Complete
	Determine if can get small bags of soil amendment to give out with bins to demonstrate the full cycle and result of composting.	Soil Amendment	Fall 2014		
9	Work with partners to get donations of small prizes (i.e. useful and/or durable 'green swag' that can be easily composted or recycled [pencils, kid-friendly temporary tattoos, hats, Frisbees] or gift certificates or food)		Winter 2015	5 h	Complete
10	Develop webpage content on where to get kitchen catchers and features to look for (local businesses, various models, features and where to get)	Webpages	Fall 2014	10 h	Complete
	Develop webpage content for food scraps program based on hierarchy (i.e. source reduction, food recovery – people and then animals, industrial uses and composting)				
11	Service providers (waste and composting) and waste attendants –discuss the plan with them. Ask them to take baseline measures of key statistics.		Fall 2014	4 h	Complete Measures taken

Phase 3: Program Notification

Time Frame (March 2014)

Objectives met:

- Knowledge: How to improve their participation in waste reduction and diversion
- Belief: Inspired to help achieve the community waste reduction and diversion goals
- Behaviour: Motivate and inspire others to improve their waste reduction and diversion efforts

Purpose: All internal and external decision makers and opinion leaders are notified of the program's progress and launch date by (SLRD to insert date).

Outcome: Internal and external decision makers and opinion leaders are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with internal and external decision makers and opinion leaders.

Purpose: All external program partners are notified of the program's development progress to date and launch date by (SLRD to insert date).

Outcome: Service delivery is coordinated between existing service providers and the SLRD.

Outcome: Program partners / service providers are prepared for program information requests they may receive or know who to contact for more information.

Outcome: SLRD strengthens relationships with external program partners / service providers.

Table H-4 Phase 3 Actions

	Phase 3 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Identify media spokesperson/s and provide training as required	Training session if needed	Winter 2015	4 h	Prepared?
	Provide Q&A for all partners including date of program launch or event dates for multiple stages. Check messaging with partners	Q&A	Winter 2015	10 h	Complete
	Identify target communities for different messages (i.e. food scraps reduction and backyard composting for areas with out food scraps drop spots). Work with member municipalities and First Nations to develop area specific messages.	List	Fall 2014	Depends on partners	Complete
	Prepare website landing page for food scraps reduction and diversion	Webpage	Fall 2014	3 h	Complete
	Ask partners to list key program information on their websites and to link to the SLRD webpage for more information	Sample language and layout for partner's sites references	Fall 2014	2 h	# links # blurbs
<u>2</u>	SLRD Board, municipal councils, CAOs Provide email and or mail notification of program development, launch in (SLRD to determine date) and promotion in summer and fall	Email, Q&A document	Winter 2015	6 h	Complete

	Provide Q&A				
<u>3</u>	Key SLRD staff, key municipal staff - waste reduction management staff,	Email, Q&A	Winter 2015	10h	Complete
	educators/communicators, public works staff, relevant ENGOs	document			
	Provide email and or mail notification of program development, launch in				
	(SLRD to determine date) and promotion in summer and fall				
	Provide Q&A				
	Commit to ongoing dialogue about program launch				
<u>4</u>	Service providers (waste and composting) and waste attendants	Email, Q&A	Winter 2015; follow up as	10 h	Complete
	Provide personalized email and or mail notification of program	document	needed to accommodate		
	development, launch in (SLRD to determine date) and promotion in summer and fall		staff turnover		
	Provide Q&A				
	Commit to ongoing dialogue about program launch				
5	Work with RCBC to make sure they have correct information for	Q &A document	Fall 2014	5 h	Complete
	communities and are aware of new initiative				
	Ask RCBC to provide tracking on calls regarding food scraps (as well as				
	other questions) as baseline and with monthly or quarterly updates				
6	Develop Public Service Announcements for printed media	PSAs	Winter 2015	5 h	Complete
7	Media (earned): Draft a coming soon press release and backgrounder	News release with	Winter 2015	10 h	Complete
	about new program using Q&A for public as a basis	Q&A for public			
8	Train ambassadors on information they need to know (facts, program	Training outline,	Winter 2015	15 h	Complete
	intention, customer service and engagement, etc)	training days			
	Also train transfer station attendants, as necessary				

Phase 4: Program Announcement

Time frame April 2015

The program is launched during this phase.

Objectives met:

- Knowledge: Personalized benefits of reducing household waste
- Belief: Their actions make a difference
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: Notify all stakeholders of program commencement including messages about how to reduce food scraps, how to "find food scraps depot near you", what to include, smart storage, and transport. (The purpose will be tailored to the specific program.)

Outcome: Stakeholders are aware of program commencement and know where to find information about the program.

Purpose: Prepare internal audiences and external program partners for public information requests prior to program announcement.

Outcome: Program partners provide consistent and correct information to potential program users.

Table H-5 Phase 4 Actions

	Phase 4 Tactics	Collateral or Planning Materials Required	Timeline	Time (hours)	Evaluation
1	Briefing note to SLRD Board and key staff and partners to provide info on program to date and plan for this phase Update action plan	Briefing note	April 2015	15 h	Complete
2	Provide update on planned promotions to service providers and waste attendants	Email	April 2015	2 h	Complete
3	Provide update on planned promotions to municipal waste reduction management, staff, educators/communicators, public works staff, relevant ENGOs	None	April 2015	4 h	Complete

4	Distribute news release to local media contacts	News release	April	Varies with	Track uptake of
	Organize media events and photo opportunities across region to launch program and garner earned media coverage		2015	uptake	news release
	Follow up on news release (in-house) to garner increased earned media coverage (pitching for interviews)				
5	Work with local media to print PSA	PSA	April 2015	3 h	Number of printings
6	Put information on SLRD Facebook page and blog Ask for people to "like" this page Follow and like fans	Facebook posts	April 2015	10 h	Number of likes

Phase 5: Program Promotion

Objectives met:

- Knowledge: Personalized benefits of reducing household waste; Social, environmental and ecological impacts of inappropriate resource management
- Belief: Their actions make a difference
- Behaviour: Initiate and sustain home food scraps collection and other waste reduction and diversion systems

Purpose: Increase public participation in the priority waste diversion or reduction project.

Outcome: Target audience actively uses the SLRD waste diversion services available or adopts the desired behaviour.

Outcome: SLRD waste volumes decrease.

Table H-6 Phase 5 Actions

	Phase 5 Tactics	Collateral or Planning	Timeline	Time (hours)	Evaluation
		Materials Required			
1	Develop Zero Waste educator school curriculum based on food	To be determined,	Fall, winter-	Depends on	# workshops,
1	scraps diversion theme (could include action projects for classroom	build off existing	spring,	curriculum	feedback
	teachers involving groups auditing their school or a business, making	provincial and other	summer		

	recommendations and checking back in to measure progress)	curricula			
2	Host Zero Waste coaching sessions as community talks. Can start with food scraps and move from there. Participants share ideas and stories with SLRD or partner person as facilitator	Outline for coaching session, book space, advertise, etc.	Summer, Fall 2015	3 h per session (not including travel time)	# hosted, feedback
3	Partner with children's program such as AWARE kids nature club or	To be determined	Depends on	Depends on	To be determined
3	the Whistler Museum summer programs to develop a food scraps or waste reduction themed session. It can include group activity of painting the paw prints to designated recycling or food scraps bins.		partner	partners	
4	Give brief presentations to new residents on how we love this place so this is what we do for waste reduction (Spirit Pass training Whistler, Welcome Wagon type programs, Human Relations events for larger organizations)	Municipal wallet card	Fall/winter 2015-16	Depends on partners	# presentations, feedback, # cards given out
5	Post food theme-related items on SLRD Facebook page	Facebook	Spring- Winter 2016	4 h	# likes # posts
6	Post food theme-related items on SLRD twitter feed	Twitter	Spring- Winter 2016	2 h	Followers, retweets?
7	Good behaviour recognition –hero nomination or sending photos of people doing the right thing –Need name/pic/number or email and reason. Get people to commit to pass it on.	SLRD Facebook page, community volunteers to find heroes	May onward	40 h	# heroes, # website clicks
	Newspaper stories about the heroes	Newspaper stories			# stories
	Random awards of gift certificates from waste attendants/ambassadors to people demonstrating good food scraps sorting and collection during high traffic times (to maximize	Awards			# awards, feedback
	reinforcement of norms and visibility) Get pledges, give out bins	Pledge cards, bins, soil amendment			# pledges signed, # bins
8	SLRD SW Communications person to attend events, gather pledges and give out bins	Pledge cards, bins, soil amendment	April 2015 onwards	Depends on # events and duration	# events
9	Ongoing updates to all previously notified stakeholders on progress of program		Ongoing	Average 1 h /wk	
10	Clean Bin project –Just Eat It food waste movie screenings	Film night	If time permits		# attendees, feedback

11	Short film challenge on theme of food scraps reduction/diversion	Film event	If time	# attendees,	1
11	(like events during Ski and Snowboard festival), work with partner to		permits	feedback	
	promote, offer prizes				

Phase 6: Evaluation and Ongoing Communication

Objectives met:

- Knowledge: Community waste reduction targets and progress towards them
- Belief: Convinced that other people "just like them" are already reducing waste
- Behaviour: Motivate and inspire others to improve their waste reduction and diversion efforts

Purpose: This phase focuses on measuring the effectiveness of the program and the development of ways to improve it as well as strategies for ongoing communication and evaluation.

Outcome: Meet SLRD waste diversion goal determined by the SLRD SWMP process or a sub-goal developed in the program development process.

Outcome: Identify is there is a need to modify or enhance the program based on results and make the needed changes.

Table H-7 Phase 6 Actions

Evaluate and act

Track key measures such as:

- Total waste weight per site or event (per household or attendee)
- Food waste remaining in the waste stream (visual waste audits)
- Total food scraps volume per participating site
- Webpage hits
- Number of wallet cards distributed
- Number of event attendees reached (over 5 years of age)
- Quantity and quality of feedback
- Number of pledges signed
- Number of people attending ZW coaching sessions

- Number of Zero Waste ambassadors trained and retained
- Other material tonnages and metrics tracked by municipalities or partners

Evaluate progress quarterly and report at partner meeting

Determine what the quarterly feedback to the public will be (gather input from waste attendants and member municipalities)

Provide quarterly feedback on progress (annually on waste weights/volumes, per capita, progress to overall goal, results of past actions, upcoming actions; other quarters on a message to be determined by partners -degree of contamination, number of facility users bringing food scraps, weight of food scraps, areas of improvement, areas that need improvement, etc.)

Monitor media for relevant stories in local media and uptake of SLRD releases

Monitor website visits (SLRD and member municipalities and partners (ENGOs, service providers)

Track calls to SLRD, member municipalities and partners regarding program

Ask for ongoing tracking updates quarterly from RCBC (hotline and online)

Seek and track anecdotal information on response to program

Review responses and metrics and incorporate changes to program based on results

Continuous Improvement

A review of the implemented communication strategies and tactics can provide valuable insights for continuous improvement. This can include a review by SLRD staff, interviews with key partners and contacts, informal conversations with members of the public, reviewing any measurable data such as website hits and those noted above. Future communication action planning should specify continuation of existing promotions and propose adding new ones to keep awareness of the program(s), and the SLRD and its partners elevated.

For tracking, a master list should be set up to track metrics from all sources (e.g. Facebook number of impressions) or events (e.g. number of events where materials distributed). This can be used to track the numbers as well as the outcomes of the event and notes about whether it was worthwhile. This information can be used to help guide future decisions. It will also be handy to have available for reporting out about the program.

Continue to build media profile

Becoming a known and trusted source for information takes time. Consider developing an annual calendar of promotional days, weeks and months and arrange to send a news release with a photo to leverage media coverage (e.g. send news release reminder and photo about all how easy to find the food scraps collection sites nearest you just prior to Earth Day or other key times during the year). Showcasing positive testimonials in mass media is an excellent

way to increase earned media coverage and build community norms. Providing advance notice of media releases to key contacts such as RCBC and local government staff will be required to ensure they are prepared in case they receive calls from the media or the public.

Schools Program

There are a number of options to consider in order to build stronger ties with the schools. School age children are strong influencers for bringing new environmental behaviours into the home. Examples of school-based programs can range from formal curriculum-based programs to lighter contests and events. In addition to the Zero Waste educator using the diversion theme as a basis for the curriculum, attention should be paid to barriers for teachers and children implementing the actions in school (i.e. they may need compost collection). Addressing some of these barriers may be part of a future diversion theme. The current program allows for 20 workshops per year but increasing this to 30 would allow for some follow up and possibly the ability to reach some community groups, as was the original intention.

Community Outreach

Personal contact is one of the most effective communication channels. Building some form of face-to-face communication into diversion theme plans can support other ongoing programs and partnerships. It can also help increase the community profile of the SLRD and its partners.

Building Relationships

It is important, and a worthwhile investment, to continue on the work started in this plan to build relationships. Activities can range from simple follow up phone calls with key partners and stakeholders to more personal contact with partners through regular meetings with member municipalities to continue to elevate SLRD communication programs and also support localized outreach efforts. Other opportunities may include:

- Continue to develop and update contact lists for local governments and other key stakeholders
- Continue to work with local environmental groups such as AWARE and Squamish CAN (ZW team).

*Note: there are other methods to evaluate the impact of programs such as surveys and media monitoring, however, given the scope of the budget and the manageable scale of local media, they were not included at this time

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APPENDIX I: RECOMMENDATIONS FOR SWRMP CONSULTATIONS

As part of the update of the SWRMP, the SLRD has the opportunity to both collect input from the public about what motivates them to reduce waste, and to also hear what they perceive to be barriers preventing their use of the various waste diversion options available to them. Building on the insights shared during the research phase of this communications strategy, it will be most effective to leverage the unique sense of place, and to frame the invitation for consultation as an opportunity to demonstrate how much people love where they live. Consistent use of the new messaging will help it to grow and become more relevant.

Community engagement is best viewed as a long-term strategy with the aim of fostering meaningful community leadership. While there may be short-term programmatic feedback requirements, opening an issue to public input is also about building relationships with concerned citizens. Often people attend consultations as much to gather information about an issue as to share their opinions. Promotional activities should note the benefits for people who attend, such as providing them with practical waste reduction tools and access to expert staff who can answer questions relating to home or business waste reduction.

There are a wide variety of communications channels available to collect public input. The communities within the SLRD are spread across a wide geographic range, and residents vary in their ability to either travel or access online resources. Using a combination of online and offline methods, the SLRD can be most effective in collecting input from a broad cross-section of constituents. Below is an outline of a few options that may be most effective in the SLRD member municipalities:

- Intercept surveys at transfer stations and community centers
- Online surveys available through the waste reduction section of the SLRD website
- Open House event that coincides with a local celebration or festivals
- Special feature of an ongoing community event, such as a farmer's market

Leveraging stakeholder support and partnerships is critical to success, including the use of creative promotional tactics. In addition to traditional media advertising, earned media stories about a local project or issue can help to build interest and increase participation. Inviting community leaders to become active in recruitment of public input reinforces their value to the process (critical to long term community engagement success), and extends the credibility of the SLRD. Multiple messengers using diverse communications channels with the same messaging creates a sense of momentum; this is essential to fostering a new social norm.

Developing and implementing an effective community engagement strategy is equal in importance to developing and implementing an effective communications strategy. The ten step process below, *Planning for Successful Citizen Engagement in 10 Easy Steps*, illustrates how to get started.



Planning for Successful Citizen Engagement in 1 Easy Steps

TOPIC:

- 1 What is your purpose or call to action what are you seeking input on or problem you need to solve? E.g. Get feedback on new bylaw? How to improve communications? Close landfill?
- **2** Who is your audience? Who do you need to reach, who will be impacted. E.g., front line staff, elected officials, neighbourhood residents, dog owners?
- **3** What level of consultation do you want to achieve? Inform only? Consult? Involve? Pick one per audience.
- 4 What are your key messages? Be audience focused: What does this mean to them?

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5	How will you consult your audiences, what methods will you use? Set up an advisory committee? Hold an open house? Host an online forum?
6	How will you collect feedback, gain input? Conduct a survey? Online or at event?
7	How will you promote, what communication tools will you use? Send a news release, newsletter? Advertise? Put up posters? Email? Online?
8	What's your timeframe for completing these steps? What's your last day for feedback? When do decisions need to be made? When will you report out?
9	Create an action plan. Identify who needs to do what by when and with what resources (people and money).
10	How did it go? Were you successful?
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APPENDIX J: REGIONAL EVENTS –LIST, SELECTION AND TOOLKIT

Events Listing across SLRD Member Municipalities

Spring/Summer

- Squamish Fest
- Pemberton Music Festival
- Whistler Presents summer series
- Whistler Children's Festival
- Whistler Envirofest
- Summer Farmer's Markets (across SLRD)
- Earth Day community events (across SLRD)
- Re-use it Fair (Squamish)
- Apricot Festival (Lillooet)
- Salmon in the Canyon (Lillooet)
- Moving Mountains Community Garage Sale -May (Whistler)
- Slow Food Cycle (Pemberton)
- Nesters Day (Whistler) –useful if partner with Nesters Grocery Store

Fall/Winter

- Whistler Ski and Snowboard Festival (Whistler)
- Cornucopia (Whistler)
- Fungus Among Us festivals (Whistler)
- Moving Mountains Community Garage Sale -October (Whistler)

Note that these events are for the member municipalities. Partnering First Nations could share details on events in their communities.

Criteria for Selecting Event

Not all events will yield the benefits noted in Section 6.1. To ensure a positive return on the investment of time and resources required, consider the following criteria:

- Alignment with target audience: are the people we want to influence likely to attend?
- Alignment with current SLRD priorities: does this event advance our goals, such as: relationship building with a member municipality or other partner, or connection to new target audience?
- Expected size of event: how many people are we likely to meet?
- Message permeability: can we "stand out" from the rest of the event? Will we get noticed? Are we adding value or can our objectives be achieved by others already attending?
- Behaviour change modelling: can we provide opportunity to publically demonstrate desired behaviour change? Can the behaviour be replicated by others to demonstrate new norm?
- Resources required to attend: how much time and money will be required to participate? Will the return on the investment be worthwhile?



If any of these success criteria are not possible at the potential event, there may be a good reason to pass on the opportunity. Face to face marketing can be very beneficial so it may be useful to identify 10 major special community events per year across the region, in addition to the smaller farmer's markets.

Community Event Toolkit

- Establish clear objectives: what is the purpose of attending? Set a target for the number of people you
 want to talk with, and what you want them to do at the end.
 For example:
 - *At the end of the event, 500 people will be introduced to the new SLRD waste diversion coding system
 - *At the end of the event, 100 people will have signed a pledge to commit to using new food scraps containers and participating in one follow up with SLRD staff
 - *At the end of the event, 60 people will have signed up to opt out of junk mail and directory delivery
- Develop interactive components: flat promotional booths are rarely memorable, and even less likely to influence behaviour. People need a way to actively engage with the message.
 For example:
 - *Create a speed recycling contest between two people for prizes (prizes must align with overall waste reduction message, such a kitchen catcher compost bin, a \$5 gift certificate to local re-use it centre, an SLRD branded re-usable water bottle or a cloth shopping bag made from fabric scraps or old banners)
 - *Host a mock "food scraps feud" to dispel myths about composting, and again provide prizes that get people talking
- Provide a single set of branded materials: include mix of print materials and interactive display materials, all connected back to the objectives.
 For example:
 - * Print branded banner for booth display (and tent if needed)
 - * Distribute updated municipality-specific wallet cards, and provide stickers for bins that correlate to the transfer station colour codes
 - *Show different food scraps containers, with sample of scraps with paper lining (and distribute bins at certain events)
 - * Develop poster-size food scraps pledge for demonstration and postcard size pledges for use
 - *Purchase simple camera to take pictures of booth visitors with poster pledge, for posting on social media sites. If this device has web capability (like an iPad), it can also be used for future actions such as having people sign up to stop receiving junk mail or directories, as well as be used to find out information if a question cannot be answered. (Note this item is not included in the budget).



APPENDIX K: MEDIA STORY STARTERS

These ideas can be used for regular or periodic submissions to local newspapers and other forms of media.

- Rate our region against another somewhere else in the world: how do we measure up? Against two other mountain towns, one in Japan, one in France / Switzerland or Banff/Jasper
- Focus on the lifecycle of a material: what happens to all the plastic that leaves the transfer station? Where does it go, and how does it end up in the market again? "50 reasons to love fleece"
- Case study on how one busy local woman started collecting food scraps after many attempts at "quitting garbage" failed in the past. Top tips on "how to stay on the waste wagon"
- EPR programs: what it means for locals
- Relationship between landfills and climate change
- Holiday story of "giving experiences" and top local "waste free gifts to give"



APPENDIX L: ICON



Love this place. Reduce your waste.

APPENDIX M: SAMPLE PLEDGE CARD

This pledge card could be made in a postcard style using the SLRD branding and commitments could be made at events. The cards should be made public to show that reducing food scraps to waste is the new social norm. The actions below can work for most communities with the exception of the food scraps collection which is available in Pemberton, Squamish and Whistler. Note that the draft below will need to be developed in alignment with the new branding before production and should include a place for the person to sign their name or even add their photo as well as providing contact information including an email address.





APPENDIX B:

Facility Authorization Process

Process for Authorizing New Facilities

All facilities not currently authorized in the Solid Waste Management Plan that are involved, or propose to be involved, in the handling of Municipal Solid Waste or recyclable materials, be it processing or disposal, shall file an application for authorization in the Plan with the Regional District. In the Squamish Lillooet Regional District (SLRD) this includes the following:

- a) a disposal facility;
- b) a transfer station;
- c) a material recovery facility;
- d) a storage facility (including recycling and organic waste depots);
- e) a brokering facility;
- f) a composting facility;
- g) a land clearing/ demolition waste facility (including burn sites);
- i) waste-to-energy facility (including the manufacturing facilities of refuse-derived fuel)
- j) any proposal for the beneficial use of waste;
- k) any other facility the Ministry of Environment requires.

The Director of Waste Management of the Ministry of Environment shall determine if a given or proposed facility or process can be authorized to the Plan using the procedure outlined below, or a SWM Plan Amendment is required.

Pre-Application Meeting

Prior to investing significant time and effort in the compilation of a formal application, it is required that the applicant discuss plans with BC Environment and meet with SLRD staff to identify any immediate concerns.

Form of Application

An application shall be filed at the Regional District office in the form prescribed by the SLRD and copied to both the host municipality, if applicable, and the Director of Waste Management of the Ministry of Environment. Applications submitted to the Regional District will not be accepted unless accompanied by the application fee. The Regional District will prepare a letter to the Director of Waste Management of the Ministry of Environment to determine if the proposed facility or process can be added to the Plan using this procedure found or a SWM Plan Amendment is required.

Application Fee

Every person who files an application shall pay to the Regional District, on application, a posted fee reflecting the technical review and administrative costs necessary to process these applications. SLRD member municipalities (Squamish, Whistler, Pemberton and Lillooet) shall be exempt from all application fees, as they are already contributing funds to the Solid Waste Management budget through disposal fees and tax requisition.

Application Enclosures

The application shall contain the following enclosures:

Operating Plan

The applicant shall submit an Operations Plan including, but not limited to:

- a) the legal description and civic address of the facility;
- b) the name of the owner of the land on which the facility is located or proposed to be located;
- c) the full name and address of the operator of the facility;
- d) a brief and complete description of the activity to be carried out and the municipal solid waste or recyclable material to be handled at the facility;
- e) maximum annual tonnage of material to be handled at the facility;
- f) the maximum amount of material or product (by type) to be stored at the facility at any one time;
- g) maximum discharge to air, water or land, if applicable;
- h) other information as requested by the Regional District.

Approval of Host Municipality

The applicant shall obtain written approval from the Municipal Administrator or designate of the municipality in which the facility is proposed to be located. This approval shall state that the facility meets all zoning bylaws and business licensing requirements and that the municipality endorses (at least in-principle), inclusion of this facility in the Plan. The Regional District shall not process an application if, in a report submitted to the Regional District, the municipality states that it does not approve of the application.

Ministry of Environment Concerns

All facilities must meet the British Columbia standards for environmental protection, and the applicable processes for the establishment of such facilities. If higher standards exist in the host jurisdiction, those standards must be met. A letter from the Director of Waste Management of the Ministry of Environment will be required.

Preliminary Approval by Regional District Board

Once the Director of Waste Management of the Ministry of Environment has determined that the proposed facility can be added to the Plan using this procedure, and upon receipt of an application, the application fee and the application enclosures (described above), the application shall be submitted to the SLRD Board of Directors for approval to continue with the application process.

Preliminary Evaluation of Plan Authorization Application

Having obtained the approval (at least in-principle) of both the host municipality and the Regional District Board of Directors, the application is subject to review by Regional District staff. In reviewing the application, Regional District Staff may consider the following:

- a) the potential risk posed to the environment and public health;
- b) protection of the environment (i.e. security considerations);
- c) Ministry of Environment concerns;
- d) compliance with Municipal or Regional District zoning and land use designations;
- e) effects on other facilities identified in the Plan;
- f) the report of the Municipal Council and other municipal concerns;
- g) effects on the local community resulting from, but not limited to: transportation, odour, noise and aesthetics;

- h) any environmental impact assessment and any other investigations, test, surveys or any other action taken;
- i) any other information submitted to the Regional District;
- j) operating plans submitted to the Regional District;
- k) closure plans submitted to the Regional District;
- the payment of any annual fees for operation or reporting of quantities as required by the Regional District;
- m) compliance with the guiding principles of the Solid Waste Management Plan; and
- n) any other matter which the Regional District considers relevant.

If the reports and technical studies indicate that the facility may be acceptable, (subject to addressing BC Environment concerns), the applicant will be directed by Regional District staff to proceed with public consultation.

Public Consultation Procedure

The applicants shall, at their own cost, and within 30 days of receiving Regional District direction:

(1) Publish two (2) successive notices in a newspaper that is distributed at least weekly in the area where the facility is located or proposed to be located. In the event that a newspaper does not service the area, the application shall be posted in a manner acceptable to the Regional District.

The notice must be SLRD-approved and entitled SOLID WASTE MANAGEMENT PLAN - REQUEST FOR A NEW FACILITY AUTHORIZATION. The notice must be at least 10 cm in width, at least 100 square centimetres in area (i.e. equivalent to 4"x 4"), and include at least the following information:

- a) the legal description and civic address of the facility;
- b) the name of the owner of the land on which the facility is located or proposed to be located;
- c) the full name and address of the operator of the facility;
- d) a brief and complete description of the activity to be carried out and the municipal solid waste or recyclable material to be handled at the facility;
- e) that any concerns should be addressed in writing to the SLRD; and
- f) other information considered necessary by the Regional District.
- (2) Post a readable copy of the application, at the discretion of the Regional District, in a conspicuous place at all main road entrances to the land on which the facility is located, or proposed to be located, and/or erect a full-size sign in a location visible to the general public and keep these posted for a period of not less than 30 days.
- (3) Serve a written notice that an application has been filed, on all neighbours, commercial or residential, within 50 metres from any lot line of the subject property. The written notice shall contain the information set out in paragraph (1) a) to f) above. In cases where there will be a significant discharge to the environment, or considerable financial impact on the Plan's current solid waste facilities, the applicant may be required, at their own cost, to additionally complete the following:
- (4) Arrange for a public meeting(s) as directed by the Regional District, in the municipality in which the facility is located, or proposed to be located.
- (5) Publish a notice of the specifications set out in paragraph (1) a) to f) in all major newspapers of the Squamish Lillooet, at the discretion of the Regional District.

- (6) Publish the subject application in The British Columbia Gazette, under the heading Waste Management Application.
- (7) Serve a written notice that an application has been filed, on any tenants, commercial or residential, within 1 km of the proposed facility that the Regional District considers affected. The written notice shall contain the information set out in paragraph (1) a) to f).
- (8) Forward copies of the application to the following agencies for circulation and review:
 - a) Environment Canada;
 - b) Ministry of Health;
 - c) Ministry of Environment
 - d) Council of Host Municipality; and
 - e) Any other government agencies the Regional District or Director of Waste Management of the Ministry of Environment consider necessary.
- (9) Additional Public Consultation as recommended by the Director of Waste Management of the Ministry of Environment.

Final Evaluation of Application

Upon receipt of the required documents indicating the appropriate Public Consultation Process has been completed, Regional District Staff shall complete a comprehensive Technical Review of the proposed facility. If the review indicates the proposed facility is feasible, all concerns have been addressed, and the Director of Waste Management of the Ministry of Environment is satisfied that the application meets Ministry requirements for environmental protection, Staff will prepare a Final Evaluation Report to be presented to the Regional District Board. With the Final Evaluation Report, the application will be presented to the Board of Directors for final authorization and inclusion in the Plan. Board approval of the proposed application shall take into account the following:

- 1) Approval of the application by Regional District staff and the Plan Monitoring Advisory Committee.
- 2) Presentation on proposed facility by the applicant to the SLRD;
- 3) Written notice from the Director of Waste Management of the Ministry of Environment, stating the application meets Ministry requirements for environmental protection;
- 4) Payment in full of the Application Fee as determined by the SLRD;
- 5) The results of the Public Consultation Process and Technical Review; and
- 6) If the facility is to be situated within a municipality, the final approval of the Host Municipality, after receiving the completed application.

Final Approval by Regional District Board

Upon approval of an application by the Regional District Board of Directors, the facility shall be considered authorized in the Plan. As a condition of this Final Approval, the Board, in accordance with the Environmental Management Act, shall require an interim Operational Plan for the facility. The Director of Waste Management of the Ministry of Environment, in accordance with the Environmental Management Act, may issue an Operational Certificate (OC) for the facility. If an OC is issued by MOE, it will supersede the previous interim Operational Plan required by the Board. Prior to operational start-up of the facility, the Regional District shall receive a copy of the OC, or other Operational Plan documents as required by the Board.

Notification of Agencies

On approval of an application, the Regional District shall notify, in writing, the following agencies: a) Environment Canada; b) Ministry of Environment c) Ministry of Health; d) any other government agencies the Regional District considers necessary; e) Council of Host Municipality; and f) the Applicant.

Procedure for Changing Operating Conditions for Plan Facilities

If there are minor changes to operating conditions for solid waste management facilities listed in this Plan, notice of the change shall be provided by the facility owner in writing to the SLRD General Manager of Utilities and Environmental Services (General Manager). If the General Manager determines that the change does not affect the objectives of the SLRD Solid Waste Management Plan, he/she will provide written acceptance of the change of operation to the facility owner and provide a copy of this notice to the Plan Monitoring Committee. If the General Manager determines that the change in operational conditions has a negative impact on the objectives of the Plan, he/she will notify the facility owner that the change in operating conditions will require a Plan Amendment.

APPENDIX C:

Plan Monitoring Advisory Committee Terms of Reference



Solid Waste Management Plan Monitoring Advisory Committee

Terms of Reference

Purpose: As outlined in section 7 of the <u>SLRD Solid Waste Management Plan (SWMP)</u> the purpose of the Plan Monitoring Advisory Committee (PMAC) is to monitor the implementation of the Solid Waste Management Plan and report directly to the Regional Board.

Goal: The goal of the PMAC is to ensure the ongoing evaluation, assessment, implementation and updates and/or amendments to the actions and policies outlined in the SWMP.

Responsibilities: Plan Monitoring Advisory Committee members will:

- Review and become familiar with the Solid Waste Management Plan;
- Review and become familiar with the existing solid waste management system in the SLRD;
- Identify methodologies to be employed in the monitoring and evaluation of the Plan's implementation;
- Monitor the implementation of the Plan and annually report to the Board on the effectiveness of the SWMP at achieving its objectives; and
- Make recommendations to increase the effectiveness of the Plan or the solid waste management system.

Expected Outcomes: It is expected that the PMAC will recommend to the Board strategies and an associated implementation plan for enhancing recommendations and objectives identified in the SWMP. Additionally, the PMAC will strive to enhance communication and collaboration through committee members.

Membership: The committee membership will strive to have a broad representation of interests including the following:

- Local government/public works representatives from municipalities within the SLRD (4 members)
- SLRD staff (2 members)
- First Nations representatives within the SLRD (4 members)
- Members at Large Interested members of the public, including local environmental groups and recycling organizations, owners and operators of private waste facilities, commercial and institutional solid waste generators, haulers and operators. (6 members, representing at least 3 electoral areas).

The Committee shall consist of a minimum of 7 and a maximum of 16 members appointed as follows:

- Local government/public works representatives from the four municipalities and the SLRD will be appointed by their organization.
- First Nation Members and Members at Large will be appointed by the Regional Board.



Term of Appointment: Membership of the SLRD and Municipal governmental agencies shall have permanent terms of appointment. However, the agencies can change their representation at their discretion.

First Nations and Members At Large will have the following Term of Appointment:

- In the first year of the Committee, one half of the Members at Large shall be appointed for a term to expire on December 31st of the year in which they were appointed and one half of the members shall be appointed for a term to expire on December 31st of the year following the year of their appointment.
- All subsequent appointments to the Committee shall be for a two year term.
- If appointments to the Committee have not been reviewed by the Regional Board before the expiration of the term of the members, members appointed to the Committee shall continue to hold office until the annual membership has been determined.

Group Culture: The PMAC membership shares the common understanding that all participants will:

- Act in a professional and respectful manner;
- Actively listen;
- Act with integrity and;
- Attend meetings with a positive purpose;

Decision Making: The main role of the PMAC is to be an advisory committee to provide recommendations to SLRD Staff for amendments to the SWMP. SLRD staff will bring recommendations to the SLRD Board, as the SLRD Board is the decision making body. Ideally, results recommended by the PMAC will be made by collaboratively.

Committee Protocol

- The SLRD will chair and host the meetings.
- All PMAC members are equal and have equal opportunity to contribute at meetings, as well as
 responsibility to respect the opinions of others. Committee members are encouraged to actively
 participate in the discussions and use their experience, education, and insight to speak freely
 about any issues or opportunities to be considered.
- Committee members are present to give a voice to the community. However, members are
 equally responsible to listen and understand the views of others. It is only through this dialogue
 that real consensus can be achieved.
- Members are encouraged to work collaboratively and to be committed to reaching consensus
 where possible by using an interest-based approach rather than an individual member positionbased approach. Consensus will be formally recorded in the meeting's Minutes. Any members
 unable to agree with the consensus decision may have their objections noted in the Minutes.
- Committee members may choose to express their personal views about the process to others
 outside the PMAC but may not speak on behalf of or in any way create the impression that they
 are speaking for the PMAC as a whole. In order to ensure open and honest dialogue, Committee



members should not discuss comments or opinions expressed by other Committee members without their knowledge and consent.

- Members will be asked to arrive promptly at meetings.
- Members of the public may observe meetings but will not have speaking rights unless invited to speak by the Chair.
- Members who miss three Committee meetings over the course of 18 months may have their membership revoked at the SLRD Board's discretion, or for appointments from government agencies, a request may be made by the SLRD Board that their representative be changed.
- A Conflict of Interest arises when a PMAC member speaks on a motion that could be the cause
 of some direct significant benefit monetary or otherwise to that member. If such a situation
 arises, the member involved should excuse themselves from proceedings that relate to the
 conflict unless explicitly requested to speak, only after a majority vote from meeting participants
 to do so. Any subsequent information provided by the individual will clearly be identified in the
 Minutes as coming from a source perceived to be in a conflict of interest.

Reporting: The Plan Monitoring Advisory Committee reports to the SLRD Board.

Meetings: In general, there will be three meetings per year of the PMAC with the provision for additional meetings, workshops or other presentations at the committee's discretion. The SLRD will chair and host all PMAC meeting in the geographic center of the SLRD, Pemberton, BC. Agendas will be posted on the SLRD website at www.slrd.bc.ca

Resources: SLRD staff will provide administrative support to the PMAC including, but not limited to: arranging meetings, creating agendas, taking minutes, and distributing materials.

Any PMAC budget requirements will be included within the SWMP budget subject to the SLRD's normal annual review and approval process.

PMAC participation is voluntary with no remuneration provided for members' time.

Contacts

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REPORT TO COUNCIL

Date: November 17, 2015

To: Nikki Gilmore, Chief Administrative Officer

From: Lisa Pedrini, Village Planner

Subject: Consideration of Official Community Bylaw No. 654, 2011, Amendment

('580' Hillside Lands) Bylaw No. 789, 2015 and Zoning Bylaw No. 466, 2001, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 for Second Reading

PURPOSE

This report considers a revised application for Official Community Plan/Zoning Bylaw Amendments from 580049 Ltd. for Hillside Mixed Use Development on lands legally described as Lots 2 & 3, DL 211, EPP21848, LLD. As a result of the revision, the Official Community Plan Amendment Bylaw No. 789, 2015 and Zoning Amendment Bylaw No. 790, 2015 are being presented for consideration of second reading in addition to the scheduling of a Public Hearing.

This report also presents an update of how the applicant has addressed the identified action items that Council resolved had to be addressed before the application could proceed to Second Reading.

BACKGROUND

A detailed report on the "580" Development Lands Application – a mixed land use development proposal - as well as agency referral comments, Village Advisory Land Use Commission's (ALUC) comments and staff comments specifically related to the development concept was presented to the Committee of the Whole (COW) Meeting No. 129 held on April 7, 2015 where the following recommendation was passed:

Moved/Seconded

THAT staff be directed to give the proponents an opportunity to address issues raised by the Committee of the Whole, referral agencies, the Advisory Land Use Commission and staff before bylaws are presented for Council's consideration;

AND THAT staff be directed to present additional information to the Advisory Land Use Commission so that they may fully understand the context and background of the proposed land use changes, before bylaws are presented for Council's consideration;

AND THAT staff be directed to proceed to the next stage of preparing amending bylaws based on this application for Council's consideration;

CARRIED OPPOSED: Councillor Helmer

Following this, an updated report on the application, which included a summary of the comments from referral agencies and Village Staff, which identified specific points for discussion, was presented to the Committee of the Whole Meeting No. 134 held on June 2, 2015 where the following recommendation was passed:

Council Meeting No. 1412 Tuesday, November 17, 2015 Consideration of Bylaw 789, 2015 and Bylaw 790, 2015 for Second Reading Page 2 of 9

Moved/Seconded

THAT Staff bring forward an Official Community Plan ('580' Hillside Lands) Amendment Bylaw and Zoning ('580' Hillside Lands) Amendment Bylaw for first reading on July 7, 2015:

AND THAT the staff report include reference to the Bylaws not receiving 2nd reading until the Village has been provided with the results of a developer-led public info meeting, and until all outstanding information on the application has been received by the Village of Pemberton.

CARRIED OPPOSED: Councillor Helmer

As per the recommendation above, staff presented Amending Bylaws No. 789 and 790 for consideration of First Reading at the Regular Meeting of Council No. 1401 held on July 7, 2015 where the following recommendation was passed:

Moved/Seconded

THAT Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 be given First Reading;

CARRIED OPPOSED: Councillor Helmer

THAT Zoning Bylaw No. 466, 2001, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 be given First Reading;

CARRIED OPPOSED: Councillor Helmer

THAT Second Reading of Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 and Zoning Bylaw No. 466, 2001, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 not be considered until the Applicant:

- Holds a public information session regarding the proposed development, at their own expense, and forwards the consultation results to the Village Planner;
- Works with Staff to create a draft Land Development Agreement (Restrictive Covenant) that addresses outstanding items mentioned in Appendix B, and any additional items that may arise as a result of the public information session;
- Submits more refined details with respect to the Siting and Massing of the proposed Hotel/Conference Centre; and
- Demonstrates access to the satisfaction of the Village.

CARRIED OPPOSED: Councillor Helmer

DISCUSSION AND COMMENTS

This section of the report informs how the applicant has addressed the outstanding identified action items before the application could proceed to Second Reading.

1. Hold a Public Open House to gage early feedback on the Proposal

In accordance with Council's July 7th, 2015 resolution (noted above), the agent for the development held a public open house meeting on Wednesday, October 21, 2015 at the Pemberton Community Centre. Advertising for the Public Open house (which was the responsibility of the Applicant) included an ad in the October 20th Whistler Question Newspaper. In addition, the Open House information was shared by the Village in the

October 16, 2015 eNews and the Pemberton and District Chamber of Commerce in their October 16, 2015 Newsletter.

Following the Open House, the Agent for the Application submitted the results of the developer led public engagement opportunity to staff. In terms of attendance, twenty-six (26) people signed in (there may have been a few more that attended but did not sign-in), and thirteen (13) comment sheets in total were submitted.

A summary of the results is as follows:

Description	#	Description	#	TOTAL
# of Pemberton Residents in attendance	12	# of Attendees from outside of Pemberton (Whistler)	1	13
# of Attendees that Signed in	26	# of Attendees that did not Sign in (approx.)	4	30
# of Comments Sheets submitted at the Open House	10	# of comment sheets submitted following the Open House	3	13
# of Comment Sheets signed by the person filling them in	9	# of Comment Sheets not signed	4	13
# of Persons who were in favour of Rezoning this land in general	10	# of Persons who were not in favour of Rezoning this land in general / or were unsure	3	13
# of Persons who were in support of this Rezoning Concept	7	# of Persons who were not in support of this Rezoning Concept	6	13
# of Persons specifically not in favour of Single Family Residential	1			1
# of Persons specifically not in favour of Multi-Family Residential	1			1
# of Persons specifically not in favour of the Hotel/Conference Centre	7			7

The following is a sample of some of the general comments received:

- Increase the amount of smaller lots with less emphasis on estate [lots]
- Pedestrian friendly neighborhood
- Gear towards young families
- Outline road access to small lot area[s] before rezoning is approved
- [Would like] to see the lodge site proposed as a townhouse/multi-family instead

2. Provide More Details on the Design Scheme of Tourist Accommodation Use

As the applicants have removed the concept of a Tourist Accommodation (Hotel/Conference Centre) use on the property, the request to provide staff with an appropriate level of detail to assist in the analysis of the zoning amendment request is no longer necessary.

3. Submit a Draft Land Use Agreement

There were a number of outstanding items that have been identified by staff that would be best addressed via the implementation of an additional Restrictive Covenant or Land Development Agreement between the developer and the Village of Pemberton prior to adoption of the both Bylaws. There is an existing Section 219 (No Build) Restrictive Covenant that applies to the property which obligates the payment of Community Amenity Contributions and the provision of Servicing before Building Permits can be issued. It was identified that a draft of this Agreement be provided before Second Reading was considered.

The items included the Developer's commitment to ensure the provision of the following:

- Alternative Egress/Road Connections
- Buffering / Fencing as per CN's requirements
- Future Transit Stop(s) in the Development to ensure viable access to transit and school buses
- Future Trails/Pedestrian and Bicycle Connections
- Future On-site Solid Waste Management Plans
- Green Initiatives i.e., plans for homes to be solar hot water ready
- Traffic Calming Measures

No additional items were raised as a result of the public open house for inclusion in the proposed Land Use Agreement.

Staff can advise that the Applicants have met the condition to provide a draft Land Development Agreement. Staff will continue to work with the Agent for the Applicants to further develop this Agreement before the Bylaws receive Fourth and Final Readings.

4. Status of the Access Road – Pemberton Farm Road East

It was recognized that further investigation was required on the status of the main access road leading to the proposed development – Pemberton Farm Road East. Staff anticipates that all of the potential development proponents in the Hillside Area will be required to contribute to the upgrade of Pemberton Farm Road East at some point in the future as the access road should be built and maintained to the Village standard. This would include the Village of Pemberton (re: the Recreation Site), the 580049 Ltd. Group, the Sunstone Group (Sunstone Ridge Developments), Sabre/Den Duyf, and the future developers of the Private School Site (at this point still unknown). This item will be addressed through the Land Development Agreement as a condition to be met at subdivision.

Council Meeting No. 1412 Tuesday, November 17, 2015 Consideration of Bylaw 789, 2015 and Bylaw 790, 2015 for Second Reading Page 5 of 9

NEW PROPOSAL

On October 28, 2015 the Village received notice from the applicants that they wish to revise their proposal and are now seeking approval for up to seventy-six (76) single family lots and twenty-eight (28) multi-family residential uses on the subject property. The amended land use proposal is attached as **Appendix A**. The most noteworthy change is that the applicants have removed the option of locating a hotel and conference centre (Tourist Accommodation Use) on the property and wish to proceed with a phased proposal containing only residential uses (single-family and townhouse development).

The Agent has advised that it will be a phased plan with Phases 1 & 2 proposed to be a bare land strata. Phase 3 may be fee simple depending on access and servicing levels through neighbouring property.

With respect to the removal of the proposed potential Tourist Accommodation Use, the Village has been advised as follows:

In response to feedback from Council and the community, the proposed Hotel/Conference Centre land use has been removed from the development concept. The revised layout is illustrated in a drawing to follow. The drawing shows the removal of the Hotel/Conference Centre, relocation of the Multi-Family site, and reconfiguration of lots and roads, as well as proposed phasing for development. This revised layout supersedes the layout provided in the original Rezoning application.

The proposed zoning for the revised layout illustrated in the attached Zoning drawing and is summarized as follows:

RSA-2 Zone: To be same as existing RSA-1 Zone except minimum lot size in "302B.2 b)" is to be 1,400-sq.m. Total area for this Zone is 150,677-sq.m.

RTA-2 Zone: To be same as existing RTA-1 Zone except minimum lot size in "303A.2 c)" is to be 700-sq.m. and minimum lot width is to be 18-m. Total area for this Zone is 67,709-sq.m.

Given that the revised concept will have a lesser impact on the land; this change in land use is considered positive and welcomed by staff.

Proceeding with a strata development will essentially change the Village's role in guiding the end product with respect to the standards of roads, sidewalks, lighting, etc. The maintenance and replacement of all infrastructures will be the responsibility of the strata, including items such as snow clearing, and does not transfer to the municipality.

On November 5th the CAO, the Manager of Operations and Development Services and the Village Planner met with the Agent and the Engineer for the Project to discuss the Applicant's plans to revise their concept. Preliminary designs and drawings have been completed at this time, however, the detailed drawing are not required until subdivision.

REFERRAL AGENCY COMMENTS

On the week of November 10, 2015, the Village sent an update on the application via email to all referral agencies that had previously been contacted. The purpose of the email was to update referral agencies on the change to the proposal and provide an opportunity to submit further comments. At the time of writing this report, only the SLRD, the Village of Pemberton's Advisory Land Use Commission, Tourism Pemberton and the Chamber of Commerce have responded. Staff will bring forward any additional feedback received on the revised version at the next Regular Council meeting.

a) Squamish-Lillooet Regional District (SLRD)

The SLRD reviewed the rezoning application and offered the following comments on November 4, 2015:

The amended proposal is seen by SLRD staff as an improvement.

Their letter is attached as **Appendix B**.

b) Advisory Land Use Commission (ALUC)

The ALUC was provided an opportunity to hold a second meeting to review the revised application. . As a reminder, the Village's ALUC met on February 24, 2015 to review the "580" Lands OCP and Zoning Amendment application and give feedback on the overall development concept. At that meeting they passed the following resolution:

Moved/Seconded

THAT the ALUC recommend to Council that support be provided for the application for an OCP Amendment /Rezoning with respect to Concept Plan 2 (without Tourist Accommodation Node included) only, due to:

- The lack of rationale provided for locating a commercial business (hotel/conference centre) in a residential neighborhood, and:
- This type of use is more appropriately located in the Downtown Core, in order to protect & support the Village's Downtown growth as previously supported by Council.

CARRIED

Given the above-noted recommendation made on February 24th, 2015 the ALUC gave support for the concept that did not include the hotel/conference centre (Tourist Accommodation Use), the ALUC did not express the desire to hold another meeting and advised that their original recommendation should stand.

c) Pemberton and District Chamber of Commerce

The Secretary-Treasurer of the Pemberton and District Chamber of Commerce contacted the Village by email on November 11, 2015 to inform staff that the Chamber has notified its Board of the revision, but does not anticipate any issues, as the Chamber did not have issues with the previous iteration. This item may be on the next Directors meeting agenda in December depending on feedback received from the Executive.

Council Meeting No. 1412 Tuesday, November 17, 2015 Consideration of Bylaw 789, 2015 and Bylaw 790, 2015 for Second Reading Page 7 of 9

d) Tourism Pemberton

In a letter, dated November 12, 2015, the Secretary-Treasurer of Tourism Pemberton notified the Village that the Tourism Pemberton Board reviewed the revision and did not have any issues.

Their letter is attached as **Appendix C**.

PROPOSED BYLAWS

The bylaws presented at First Reading have been revised to incorporate the requested amendment to the development proposal. The Revised Official Community Plan (580 Hillside) Amendment Bylaw No. 789, 2015 and revised Zoning (580 Hillside) Amendment Bylaw No. 790, 2015 are attached as *Appendix D* and *E*.

Given that the previous bylaws were only given First Reading, which essentially is the introduction of the Title of the regulatory amendment for consideration, they are able to be amended at Second Reading without the requirement to rescind any Bylaw Readings. Second Reading is the stage where Council is provided the opportunity to debate the merits or provisions of the regulatory amendments (the "essence" of the topic).

The revised OCP (580 Hillside) Amendment Bylaw No. 789, 2015 re-designates the subject lands from "Special Planning Area – Hillside" to the "Residential" OCP Designation. The Bylaw also designates the subject lands as Development Permit Area for environmental protection, land constraints, and form and character of multi-family residential and commercial development. (In accordance with the Village Official Community Plan, p. 38, Residential Designation means "the local neighbourhoods including single family and multifamily uses together with complementing parks, open spaces and civic spaces. Home based businesses are permitted subject to certain requirements".)

The revised Zoning (580 Hillside) Amendment Bylaw No. 790, 2015 will zone the upper portion of the subject lands as a new Residential (Amenity) Zone -- RSA-2 and will zone the lower portion as a new Residential Townhouse (Amenity) Zone -- RTA-2 to enable different densities as proposed. The intent of the new RSA-2 zone is to provide for the purposes of low density (large lot) single family dwellings and to provide density incentives earned by provision of certain amenities. The intent of the new RTA-2 zone is to provide for the purpose of moderate density townhouse or single family development and to provide density incentives earned by provision of certain amenities.

Upon receiving Second Reading, the next step is to schedule a Public Hearing after which the Bylaws would come forward for consideration of Third Reading. Third Reading is the stage where the Bylaw is perfected in its final form and allows Council to determine what its response to the particular issue will look like.

COMMUNICATIONS

Subject to Section 890 of the *Local Government Act (LGA)*, a Public Hearing must be held for both the OCP and the Zoning Amendment Bylaws, after First Reading of the Bylaws and before Third Reading. Notice of the Public Hearing will be given as per Section 892 of the *LGA*. Staff recommends a concurrent Public Hearing to both Bylaws.

Council Meeting No. 1412 Tuesday, November 17, 2015 Consideration of Bylaw 789, 2015 and Bylaw 790, 2015 for Second Reading Page 8 of 9

LEGAL CONSIDERATIONS

The processing of an OCP Amendment and Rezoning application is regulated by various sections contained in Part 26 of the *Local Government Act* and by the Village's Development Procedures Bylaw 725, 2013, as amended from time to time.

IMPACT ON BUDGET & STAFFING

The research and preparation of the report/draft bylaws is a component of the daily work undertaken by the Operations & Development Services Department. All costs associated with the processing of this application, including staff time, are recoverable from the applicant's fees as per the Village of Pemberton Development Procedures Bylaw 725, 2013, as amended from time to time.

INTERDEPARTMENTAL IMPACT & APPROVAL

There are no interdepartmental impacts or approvals required respecting the processing of this application as it is a function of the Operations and Development Services Department.

IMPACT ON THE REGION OR NEIGHBOURING JURISDICTIONS

There are no impacts on the region or neighbouring jurisdictions as this area has been identified in the Regional Growth Strategy as an area for future growth.

ALTERNATIVE OPTIONS / NEXT STEPS

Option for consideration:

- 1. Give the Village of Pemberton Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 and Village of Pemberton Zoning Bylaw No. 466, 2011, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 Second Reading and schedule a Public Hearing Tuesday, December 8, 2015 at 7PM.
- 2. Not give the Bylaws Second Reading at this time, and request that staff bring forward referral agency comments before Second Reading is contemplated. Staff is prepared to support giving the Bylaws Second Reading at this time without having heard back from all referral agencies, under the condition that staff has an opportunity to convey any comments received prior to a Public Hearing at the next Regular Council Meeting (December 1st, 2015).
- 3. Give the Bylaws Second Reading and schedule a Public Hearing for the next Regular Council Meeting to be held on Tuesday, December ^{15th}, so that any additional referral agency comments may be received at the Regular meeting scheduled for December 1st, 2015. However, given that the December 15th meeting will be held in the morning and the proximity of the busy holiday season which may hamper the ability for the public to attend this option is not recommended.
- 4. Council may refuse the application.

POTENTIAL GOVERNANCE CONSIDERATIONS

Responding to the proposed OCP and Zoning Amendment Applications is consistent with Strategic Plan Priority 1: Economic Vitality to foster investment within the Village and Priority 3: Excellence in Service through the continuation of delivering quality municipal services by processing development applications efficiently.

RECOMMENDATIONS

THAT Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 be given Second Reading;

AND THAT Village of Pemberton Zoning Bylaw No. 466, 2011, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 be given Second Reading;

AND THAT any referral agencies comments submitted after noon on Wednesday, November 25, 2015 will be presented to Council on December 1, 2015, so that they can be received prior to the Public Hearing.

AND THAT a Public Hearing for Official Community Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 and Village of Pemberton Zoning Bylaw No. 466, 2011, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 be scheduled for 7PM Tuesday, December 8th, 2015, at Council Chambers.

Attachments:

Appendix A – Revised Land Use Concept

Appendix B – Letter from the SLRD

Appendix C - Letter from Tourism Pemberton

Appendix D - OCP Amendment Bylaw No. 789, 2015

Appendix E – Zoning Amendment Bylaw No. 790, 2015

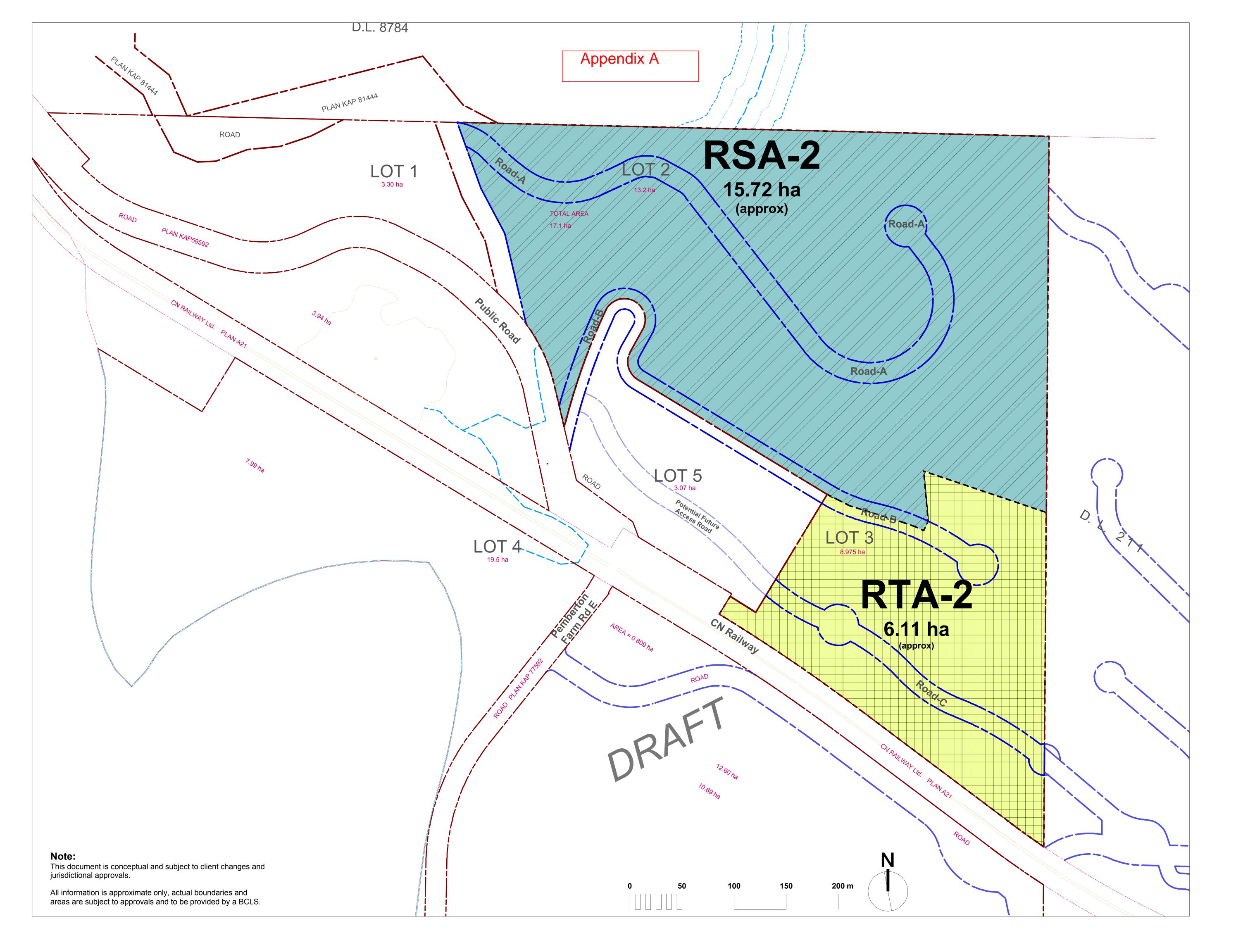
Lisa Pedrini, Contract Planner

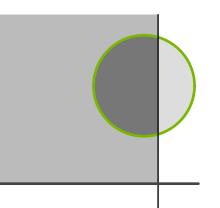
MANAGER OF OPERATIONS AND DEVELOPMENT SERVICES REVIEW

Tim Harris, Manager of Operations and Development Services

CHIEF ADMINISTRATIVE OFFICER REVIEW

Nikki Gilmore, Chief Administrative Officer





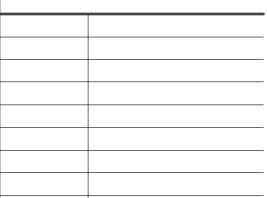
CROSLAND DOAK DESIGN

Landscape Architecture + Building Design



3121 Alta Vista Road Whistler, BC VON 1B3 604. 966-8309 info@CroslandDoakDesign.com CroslandDoakDesign.com

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2015.11.12 Rezoning Application
Date Issued For

client

580049BC Ltd Hillside Lands

Pemberton, BC

project title

Proposed Zoning Plan

Concept-4

drawing title

scale: As Noted

project no. 1201

LC-4.1

Village of Pemberton Regular Council Meeting No. 1412 Tuesday, November 17, 2015 Page 447 of 463

Appendix B



Box 219, 1350 Aster Street
Pemberton, BC VON 2L0
P. 604-894-6371 TF. 800-298-7753
F. 604-894-6526
info@slrd.bc.ca www.slrd.bc.ca

November 12, 2015

Village of Pemberton 7400 Prospect Street Pemberton, B.C. V0N 2L0

Dear Lisa Pedrini,

Re: Village of Pemberton – OR108 Biro Subdivision

The Squamish-Lillooet Regional District (SLRD) is appreciative of the update provided on the Village of Pemberton-OR108 Biro Subdivision proposal and amendment process. SLRD staff has reviewed the amended proposal and notes that the amended proposal is an improvement.

Sincerely,

Claire Daniels Planner

cc Kim Needham, Director of Planning and Development Services, SLRD



RECEIVED

NOV 1 2 2015

Village of Pemberton

November 12,2015.

Lisa Pedrini, Village of Pemberton – Contract Planner, Box 100, Pemberton, B.C. VON 2L0

Dear Lisa;

RE: OR108 Biro Subdivision Referral Package.

The Tourism Pemberton Board of Directors supports the OR 108 Biro Subdivision referred to as '580049 BC Ltd.' amended proposal that removes the tourist accommodation use and is now seeking approval for up to 76 single family lots and 28 multi family residential uses on the subject property.

Yours truly,

Shirley Henry,

Secretary- treasurer

THE CORPORATION OF THE VILLAGE OF PEMBERTON

BYLAW NO. 789, 2015

Being a bylaw to amend the Village of Pemberton Official Community Plan Bylaw No. 654, 2011

WHEREAS the Council may amend its Official Community Plan from time to time;

AND WHEREAS the Council of the Village of Pemberton deems it desirable to amend the Official Community Plan Bylaw to accommodate residential development in the Hillside area;

NOW THEREFORE the Council of the Corporation of the Village of Pemberton in open meeting assembled **ENACTS AS FOLLOWS**:

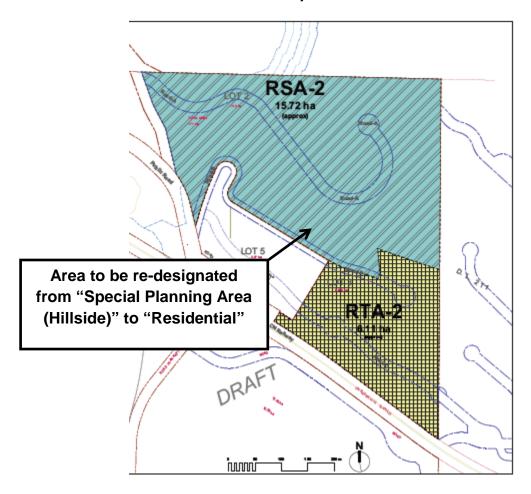
- 1. This Bylaw may be cited for all purposes as "Official Community Plan Bylaw 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015."
- 2. Village of Pemberton Official Community Plan Bylaw No 654, 2011 is amended as follows:
 - a) Amend Map B to re-designate the "Subject Lands" identified in Schedule A of this bylaw from "Special Planning Area (Hillside)" to "Residential".
 - b) Amend Map L to designate the "Subject Lands" as identified in Schedule A of this bylaw as "Development Permit Areas No. 1 Environmental Protection; No. 2 Natural Hazards; and No. 6 Multi-family and/or Commercial Development.

READ A FIRST TIME this 7th day	y of July, 2015.		
READ A SECOND TIME this	day of	, 2015.	
NOTICE OF PUBLIC HEARING F COMMUNITY PLAN BYLAW NO. BYLAW NO. 789, 2015 WAS PUB , 2015 AND	. 654, 2011, AM BLISHED IN TH	MENDMENT ('580' HILLSIDE LANDS HEON	3)
PUBLIC HEARING HELD this	day of	, 2015.	
READ A THIRD TIME this	day of	, 201	
PASSED AND ADOPTED this	day of	201	

Mayor	Corporate Officer

Schedule A

Village of Pemberton OCP Bylaw No. 654, 2011, Amendment ('580' Hillside Lands) Bylaw No. 789, 2015 "Subject Lands"



THE CORPORATION OF THE VILLAGE OF PEMBERTON

BYLAW NO. 790, 2015

Being a bylaw to amend the Village of Pemberton Zoning Bylaw No. 466, 2001

WHEREAS the Council may amend its Zoning Bylaw from time to time;

AND WHEREAS the Council of the Village of Pemberton deems it desirable to zone lands for Residential Uses:

NOW THEREFORE the Council of the Corporation of the Village of Pemberton in open meeting assembled **ENACTS AS FOLLOWS**:

1. CITATION

This Bylaw may be cited for all purposes as "Village of Pemberton Zoning Bylaw No. 466, 2001, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015."

2. Village of Pemberton Zoning Bylaw No. 466, 2001 is amended by addition of the following as Section 302 C:

"302C RESIDENTIAL (AMENITY) ZONE RSA-2

The intent of the RSA-2 Zone is to provide for the purpose of low density single family dwellings, and to provide density incentives earned by provision of certain amenities.

302C.1 Permitted Uses

Single Residential Dwelling Home Occupation ^(a) Accessory Suite ^(b) Bed and Breakfast ^(c) Accessory Uses

- (a) Home Occupation shall be subject to the requirements of Section 207.
- (b) Accessory Suite shall be subject to the requirements of Section 210 (1) and (3).
- (c) Bed and Breakfast shall be subject to the requirements of Section 224.

302C.2 Lot Sizes

(a) The minimum lot sizes as a base density are as follows:

Single Residential Dwelling Bed and Breakfast

Page 453 of 463

(b) The minimum lot sizes where the requirements identified in Section 302.C(c) have been fulfilled are as follows:

Single Residential Dwelling 1,400 m² Bed and Breakfast 1,400 m²

(c) The densities may be increased from the requirements identified in Section 302C.2(a) to the requirements identified in Section 302C.3(b) providing contributions toward community amenities have been provided through a cash payment of \$9165 per (single family lot or bed & breakfast) lot payable prior to the registration of a plan of subdivision and to be held in a reserve fund by the Village for the purpose of future recreational capital costs on sports fields, an ice arena or aquatic centre and ancillary uses.

302C.3 Buildings and Structures

- (a) No more than two dwellings (which includes an accessory suite) may be located on a parcel.
- (b) No more than two accessory buildings or structures are permitted on a parcel.

302C.4 Building Heights

Refer to the regulations contained in Section 302.2, which shall apply.

302C.5 Setbacks

Refer to the regulations contained in Section 302.3, which shall apply.

302C.6 Lot Coverage

The lot coverage of all buildings on a lot shall not exceed 40%.

302C.7 Off-Street Parking

Off-street parking spaces shall be provided in accordance with the requirements of Division 500.

302C.8 Screening and Landscaping

Screening and landscaping shall be provided in accordance with the regulations in Division 400.

302C.9 Signage

Signage should be limited to that permitted pursuant to Section 207(7) – Home Occupation.

302B.10 Watercourse Setbacks

Setbacks from any watercourses on the property must be in accordance with the requirements of the Village of Pemberton, Ministry of Environment and the Department of Fisheries and Oceans.

3. Village of Pemberton Zoning Bylaw No. 466, 2001 is amended by addition of the following as Section 303B:

303B RESIDENTIAL TOWNHOUSE (AMENITY) ZONE RTA-2

The intent of the RTA-2 Zone is to provide for the purpose of moderate density townhouse or single family development, and to provide density incentives earned by provision of certain amenities.

303B.1 Permitted Uses

Townhouse Single Residential Dwelling ^(a) Home Occupation ^(b) Accessory Uses

- (a) Single Residential Dwellings within this zone shall be subject to all the requirements of Section 302.
- (b) Home Occupation shall be subject to the requirements of Section 207.

303B.2 Lot Sizes

(a) The minimum lot sizes as a base density are as follows:

Single Residential Dwelling 20,000 m² Townhouse 20,000 m² per unit

- (b) The maximum unit size for a Townhouse is 300 m².
- (c) Where the requirements identified in Section 303B.2(e) are fulfilled, the permitted density of a Single Residential use may be increase to the following:

Minimum Lot Size	700 m ^{2 (a)}
Minimum Lot Width 1	18 m ^(b)
Maximum Floor Space Ratio	0.50

- (d) Where the requirements identified in Section 303B.2(e) are fulfilled, the permitted density of a Townhouse use may be increased in accordance with the regulations contained within Section 303.3 of the RT-1 Zone.
- (e) The densities may be increased from the requirements identified in Section 303B.2(a) and 303B.2(b) to the requirements identified in Section 303B.2(c) and Section 303B2(d) providing the following contributions toward community amenities have been provided through a cash payment of \$9165 per (single family lot or bed & breakfast) lot payable; or \$6110.00 per townhouse unit payable at the earlier of building permit issuance or prior to the registration of a plan of subdivision and to be held in a reserve fund by the Village for the purpose of future recreational capital costs sports fields, an ice arena or aquatic centre and ancillary uses .

303B.3 Buildings and Structures

- (a) No more than two dwellings including an accessory suite may be located on a parcel.
- (b) No more than two accessory buildings or structures are permitted on a parcel.

303B.4 Building Height and Setbacks

- (a) Single Residential Dwellings refer to regulations contained in Section 302B.2 and 302B.3, which shall apply .
- (b) Townhouse refer to regulations contained in Section 303.2 and 303.3, which shall apply.

303B.5 Lot Coverage

The lot coverage of all buildings on a lot shall not exceed 40%.

303B.6 Off-Street Parking

Off-street parking spaces shall be provided in accordance with the requirements of Division 500.

303B.7 Screening and Landscaping

Screening and landscaping shall be provided in accordance with the regulations in Division 400.

303B.8 Signage

READ A FIRST TIME this 7th day of July, 2015.

Mayor

Signage should be limited to that permitted pursuant to Section 207(7) – Home Occupation.

303B.9 Watercourse Setbacks

Any watercourses on the property must be in accordance with the requirements of the Village of Pemberton, Ministry of Environment and the Department of Fisheries and Oceans Canada.

4. Schedule A – Zoning Districts Map of Zoning Bylaw 466, 2001 is amended by re-zoning the lands shown shaded on Schedule 1 of this Bylaw from SLRD Electoral Area C Zoning: Rural 1 – Rural Residential sub zone (RR1_{Res}) to Village of Pemberton Residential (Amenity) Zone (RSA-2) and Residential Townhouse (Amenity) Zone (RTA-2).

READ A SECOND TIME this ___day of _______, 2015.

NOTICE OF PUBLIC HEARING FOR VILLAGE OF PEMBERTON ZONING BYLAW NO. 466, 2001, AMENDMENT ('580' HILLSIDE LANDS) BYLAW NO. 790, 2015 WAS PUBLISHED IN THE _______ ON ______, 2015 AND _______, 2015.

PUBLIC HEARING HELD this ______ day of _______, 2015.

READ A THIRD TIME this ______ day of _______, 201_.

APPROVED BY THE MINISTER OF TRANSPORTATION AND INFRASTRUCTURE PURSUANT TO SECTION 52 of the *Transportation Act* this ______ day of _______, 201_.

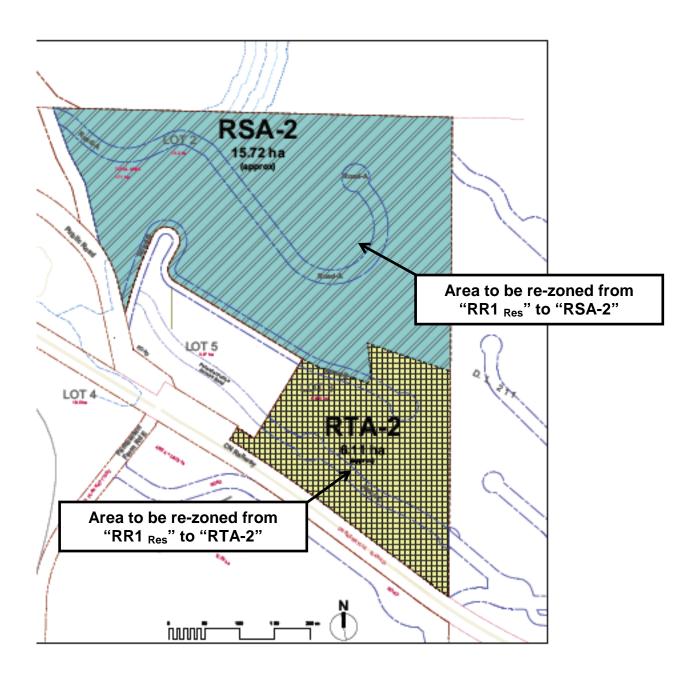
ADOPTED this ______ day of _______, 201_.

Mike Richman Sheena Fraser

Corporate Officer

Schedule A

Village of Pemberton Zoning Bylaw No. 466, 2001, Amendment ('580' Hillside Lands) Bylaw No. 790, 2015 "Subject Lands"





St. David's United Church

P.O. Box 346 Pemberton, B.C. VON 2L0 Telephone 604-894-6981

October 28, 2015

Mayor and Council, Village of Pemberton P.O. Box 100, Pemberton, BC V0N 2L0

Re: Thank you for By-Law No. 796, 2015

Dear Mayor and Council:

On behalf of the Official Board of St. David's I would like to express our sincere appreciation for your positive response to our application for Tax Exemption. The renewal of this exemption means a great deal to everyone at St. David's. It is hard to imagine how our group could manage without it.

Our gratitude should also be conveyed to staff members who alerted us to the need for an application and helped us through the process.

Thanks, again, for your support.

m& Hilmore

Yours Truly,

Mary Gilmore,

Secretary

St. David's United Church

October 29, 2015

Mayor and Council

Villaage of Pemberton

Regarding Village of Pemberton Noise Bylaw, 699,2012

Your present Quiet Hours state:

"No person shall cause or permit noise of any kind, which by its nature is reasonable interrupting or would tend to interrupt the sleep of a person in the neighbourhood vicinity on a Monday to Saturday inclusive before 7am or after 11 pm on a Sunday or stat holiday before 9 am or after 11 pm"

The Resort Municipality of Whistler Noise Bylaw 1660, 2004 states:

"Without limiting the generality of Section 2 or 3 of this Bylaw, Council believes that the following noises or sounds are objectionable.

Any amplified music or speech which is audible between the hours of 10:00 pm and 8 am outside the premises on the real property from which it emanates or is reproduced or at any boundary of the real property from which it emanates or is reproduced."

I am a resident of The Peaks which backs onto the pool and deck area of the Pemberton Valley Lodge. Although the pool is suppose to close at 11 it is not enforced. Guests continue to party of the pool deck into the wee hours of the mornings, especially during the summer months. I call the front desk of the hotel on a regular basis reminding them there are still people partying well after one or two in the morning. This is exhausting and annoying.

I notice that they are in the process of expanding their deck area and I am fearful that the noise will continue to get worse.

I respectfully request that you amend your bylaw to read quiet hours be between 10 pm and 8 am, which is in line with Whistler, which is a resort full of hotels, and

not in a residential area like The Peaks.. I would also like to be assured that the deck will be cleared of all guests by 10 pm. Maybe that would mean closing the pool at 9 so the deck will be vacant by 10.

I have spoken to some of my neighbors directly affected (backing onto the property) and they are in agreement that closing our windows and complaining on a regular basis is not acceptable nor does it produce any results. The Pemberton Valley Lodge Hotel guests are disturbing the quiet, peace, rest, enjoyment, comfort and convenience of the residential neighbourhood of the Peaks and of persons in the vicinity. I am therefore requesting that the Village take action on our behalf to amend the current noise bylaw with new hours in line with Whistler quiet hours.

Respectfully submitted,

Jan Simpson

1450 Vine Road

CORPORATE PRIORITIES (Council/CAO)

NOW

1. FRIENDSHIP TRAIL BRIDGE: Application

2. COMMUNITY FOREST: Feasibility 3. BOUNDARY EXTENSION: Analysis 4. PVUS: Joint Governance Review

5. SHELF READY PROJECT: Selection

TIMELINE

Februar y June March June June

NEXT

- CAPITAL STRATEGY
- RECREATION SERVICE DELIVERY
- ECONOMIC DEVELOPMENT STRATEGY
- SEWER FEES
- FIRE SERVICES AGREEMENT
- ONE MILE LAKE PLAN
- FIRST NATION SHARED SERVICES

ADVOCACY/PARTNERSHIPS

- Gas Tax Grant
- Friendship Trail Bridge Grant
- PVUS Joint Governance Review

OPERATIONAL STRATEGIES (CAO/Staff)

CHIEF ADMINISTRATIVE OFFICER

- 1. FRIENDSHIP TRAIL: Application Feb.
- 2. PVUS: Joint Governance Review June
- 3. BOUNDARY EXTENSION: Analysis Mar.
- SHELF READY PROJECT: Selection
- FIRE SERVICES AGREEMENT

FIRE

- 1. Fire Truck Specifications April
- 2. Fire Hall Design June
- 3. FUSS Report: Review Priorities Mar.
- Training Ground Upgrades

CORPORATE & LEGISLATIVE SERVICES

- 1. COMMUNITY FOREST: Feasibility June
- 2. Council Procedure Bylaw April
- 3. Employee Manual Sept.
- ECONOMIC DEVELOPMENT STRATEGY
- Chamber Welcome Sign

OPERATIONS

- 1. Reservoir June
- 2. Water Looping Sept.
- 3. I&I and Outflow inspections May
- · ONE MILE LAKE: Projects & Plan
- Eagle Drive Remediation

FINANCE / ADMINISTRATION

- 1. CAPITAL STRATEGY: Priorities Oct.
- 2. SEWER FEE: Anaylsis Nov.
- 3. Admin fee Bylaw Review Sept.
- · Expense Policy Review

1. Barn Program - April

DEVELOPMENT

- 2. Agricultural Parks Plan Sept.
- 3. Development Procedure Bylaw June
- Zoning Bylaw
- OCP Review

CODES: BOLD CAPITALS = NOW Priorities; CAPITALS = NEXT Priorities; Italics = Advocacy; Regular Title Case = Operational Strategies

Website: www.pemberton.ca



OPEN QUESTION PERIOD POLICY

THAT the following guidelines for the Open Question Period held at the conclusion of the Regular Council Meetings:

- 1) The Open Question Period will commence after the adjournment of the Regular Council Meeting;
- 2) A maximum of 15 minutes for the questions from the Press and Public will be permitted, subject to curtailment at the discretion of the Chair if other business necessitates;
- 3) Only questions directly related to business discussed during the Council Meeting are allowed;
- 4) Questions may be asked of any Council Member;
- 5) Questions must be truly questions and not statements of opinions or policy by the questioner;
- 6) Not more than two (2) separate subjects per questioner will be allowed;
- 7) Questions from each member of the attending Press will be allowed preference prior to proceeding to the public;
- 8) The Chair will recognize the questioner and will direct questions to the Councillor whom he/she feels is best able to reply;
- 9) More than one Councillor may reply if he/she feels there is something to contribute.

Approved by Council at Meeting No. 920 Held November 2, 1999

Amended by Council at Meeting No. 1405 Held September 15, 2015