

NORTH COAST REGIONAL DISTRICT REGULAR BOARD MEETING AGENDA

Held at 344 2nd Avenue West in Prince Rupert, B.C. On August 18, 2017 at 7:00 PM

1. CALL TO ORDER

2. CONSIDERATION OF AGENDA (additions/deletions)

3. BOARD MINUTES & BUSINESS ARISING FROM MINUTES

3.1 Minutes of the Regular Meeting of held June 16, 2017	of the North Coast Regional District Board	Pg 1-9
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4. STANDING COMMITTEE/COMMISSION MINUTES – BUSINESS ARISING

4.1	Minutes of the Annual General Meeting of the Haida Gwaii Regional Recreation Commission held May 16, 2017	Pg 10-13
4.2	Minutes of the Regular Meeting of the Sandspit Water System Review Advisory Committee held November 15, 2016	Pg 14-15
4.3	Minutes of the Regular Meeting of the Sandspit Water System Review Advisory Committee held January 10, 2017	Pg 16-17
4.4	Minutes of the Regular Meeting of the Sandspit Water System Review Advisory Committee held February 21, 2017	Pg 18-19
4.5	Minutes of the Regular Meeting of the Regional Recycling Advisory Committee held April 5, 2017	Pg 20-21

5. DELEGATIONS

None.		
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6. FINANCE

6.1	J. Musgrave, Administrative Assistant – Cheques Payable over \$5,000 for June, 2017	Pg 22
6.2	J. Musgrave, Administrative Assistant – Cheques Payable over \$5,000 for July, 2017	Pg 23

7. CORRESPONDENCE

7.1	Honourable Justin Trudeau, Prime Minister of Canada – RE: Crude Oil Tanker Moratorium on British Columbia's North Coast	Pg 24-25
7.2	C3 Alliance Corp – 4 th Annual Resource Breakfast Series	Pg 26-27
7.3	Northern B.C. Helicopter Emergency Rescue Operations Society – Request for Letter of Support	Pg 28-29
7.4	Northern Development Initiative Trust – Community Land Use Planning Program	Pg 30
7.5	Truck Loggers Association – TLA Mayoral Forestry Dinner Invitation	Pg 31-32
7.6	Union of B.C. Municipalities – Gas Tax Agreement Community Works Fund Payment	Pg 33
7.7	B.C. Ferry Authority – Nominations for Appointment to the B.C. Ferry Authority Board of Directors	Pg 34-43
7.8	Honourable Marc Garneau, Minister of Transport – RE: Crude Oil Tanker Moratorium on British Columbia's North Coast	Pg 44-46
7.9	TransCanada – Prince Rupert Gas Transmission Project Update	Pg 47-52
7.10	BC Ferry Services Inc. – Fall Ferry Advisory Committee Meeting	Pg 53

8. REPORTS / RESOLUTIONS

8.1	D. Fish, Corporate Officer – Alternative Approval Process for Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 & Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017	Pg 54-65
8.2	D. Fish, Corporate Officer – BC Ferry Authority Appointment	Pg 66-67
8.3	D. Lomax, Haida Gwaii Regional Recreation Coordinator – Haida Gwaii Regional Recreation: 2017 2 nd Quarter	Pg 68-77
8.4	D. Fish, Corporate Officer – Haida Gwaii Building/Fire Inspection Feasibility Study Funding	Pg 78-83
8.5	D. Fish, Corporate Officer – Emergency Notification System for Haida Gwaii (ePact)	Pg 84-85
8.6	S. Gill, Treasurer – Proposed Tlell Fire Protection Service	Pg 86-88
8.7	D. Fish, Corporate Officer – Haida Gwaii Recreation Survey	Pg 89-201

9. BYLAWS

9.1	Bylaw No. 616, 2017 – Being a bylaw to provide for the determination of various procedures for the conduct of local government elections and other	Pg 202-204
	voting Prior to being given first, second, third readings and adoption.	

10. LAND REFERRALS / PLANNING (Voting restricted to Electoral Area Directors)

None.	
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11. NEW BUSINESS

11.1	Directors' Reports	Verbal
11.2	Haida Gwaii Public Transportation Study	Pg 205-282
11.3	Qay'llnagaay Heritage Centre Society – Application to Northern Development Initiative Trust's Fabulous Festivals and Events Program	Pg 283-293
11.4	North Coast Regional District Rebranding Strategy	Pg 294-325

12. OLD BUSINESS

12.1	Board Policy: Delegations	Pg 326-328
12.2	Ministry of Forests, Lands and Natural Resource Operations – New Allowable Annual Cut Level set for Portion of Pacific TSA	Pg 329-391

13. PUBLIC INPUT

14. IN-CAMERA

That the public be excluded from the meeting according to sections 90(1)(a) of the <i>Community Charter</i> "personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality".	
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15. ADJOURNMENT

3 | P a g e



NORTH COAST REGIONAL DISTRICT

MINUTES

of the Regular Meeting of the Board of Directors of the North Coast Regional District (NCRD) held at the Dodge Cove Community Hall in Dodge Cove, B.C. on Friday, June 16, 2017 immediately following the Regular meeting of the Skeena-Queen Charlotte Regional Hospital District Board.

PRESENT PRIOR TO ADOPTION

Chair B. Pages, Village of Masset

Directors L. Brain, City of Prince Rupert

N. Kinney, City of Prince Rupert (teleconference)

D. Franzen, District of Port Edward

U. Thomas, Village of Port Clements (teleconference)

D. Nobels, Electoral Area A

L. Budde, Alternate, Electoral Area C

M. Racz, Electoral Area D

Regrets G. Martin, Village of Queen Charlotte

K. Bergman, Electoral Area C B. Beldessi, Electoral Area E

Staff D. Chapman, Chief Administrative Officer

D. Fish, Corporate Officer

S. Gill, Treasurer

Public 6 Media 1

1. CALL TO ORDER 4:13 p.m.

2. AGENDA

MOVED by Director Nobels, SECONDED by Director Franzen, that the June 16, 2017 North Coast Regional District Regular amended agenda be adopted further amended and adopted to include the following:

12.3 Delegations

265-2017 CARRIED

3. MINUTES & BUSINESS ARISING FROM MINUTES

3.1 Minutes of the Regular Meeting of the North Coast Regional District Board held May 26, 2017

MOVED by Director Franzen, SECONDED by Director Nobels, that the minutes of Regular meeting of the North Coast Regional District Board held May 26, 2017 be adopted as presented.

266-2017 CARRIED

3.2 Rise and Report – May 26, 2017 (no motion required)

MOVED by Director Franzen, SECONDED by Director Nobels, that the proposal prepared by Upanup Studios Inc. for the North Coast Regional District Rebranding Project be received;

AND THAT the Board of the North Coast Regional District authorize staff to sign and enter into agreement with Upanup Studios Inc. for the completion of the North Coast Regional District Rebranding Project.

IC036-2017 CARRIED

4. STANDING COMMITTEE/COMMISSION MINUTES – BUSINESS ARISING

4.1 Minutes of the Regular Meeting of the Committee of the Whole held May 27, 2017

MOVED by Director Nobels, SECONDED by Director Franzen, that the minutes of the Regular meeting of the Committee of the Whole held May 27, 2017 be received as presented.

267-2017 CARRIED

4.2 Minutes of the Regular Meeting of the Moresby Island Management Standing Committee held May 2, 2017

MOVED by Director Franzen, SECONDED by Director Brain, that the minutes of the Regular meeting of the Moresby Island Management Standing Committee held May 2, 2017 be received as presented.

268-2017 CARRIED

4.3 June 8, 2017 Recommendation from the Moresby Island Advisory Planning Commission

MOVED by Director Nobels, SECONDED by Director Racz, that the June 8, 2017 Recommendations of the Moresby Island Advisory Planning Commission entitled "MMAC Boundary Expansion" be received;

AND THAT the Board of the North Coast Regional District request the Moresby Island Adventure Camp Society provide additional information prior to making a decision to support the potential boundary expansion.

269-2017 CARRIED

5. DELEGATIONS

None.

6. PUBLIC INPUT

None.

7. FINANCE

7.1 S. Gill, Treasurer – Statement of Financial Information & Audited Financial Statements for Year End 2016

MOVED by Director Franzen, SECONDED by Director Racz, that the report from staff entitled "Statement of Financial Information & Audited Financial Statements for Year End 2016" be received;

AND THAT the Board approve the 2016 Statement of Financial Information as presented;

AND FURTHER THAT the 2016 Audited Financial Statements be adopted as presented.

270-2017 CARRIED

7.2 J. Musgrave, Administrative Assistant - Cheques Payable over \$5,000 for May, 2017

MOVED by Director Kinney, SECONDED by Director Brain, that the staff report on Cheques Payable over \$5,000 issued by the North Coast Regional District for May, 2017 be received and filed.

271-2017 CARRIED

8. CORRESPONDENCE

8.1 Old Massett Village Council – Invitation to Attend National Aboriginal Day Totem Pole Raising

MOVED by Director Racz, SECONDED by Director Nobels, that the correspondence from the Old Massett Village Council with regard to its invitation to attend a totem pole raising event on National Aboriginal Day be received.

272-2017 CARRIED

8.2 Northern Development Initiative Trust – Business Façade Program

MOVED by Director Racz, SECONDED by Director Nobels, that the correspondence from Northern Development Initiative Trust with respect to the business façade program be received;

AND THAT the Board of the North Coast Regional District request that Northern Development Initiative Trust offer the business façade improvement program to the North Coast Regional District utilizing funds from the North Coast Regional District nominal account.

273-2017 CARRIED

8.3 Dodge Cove Improvement District – Nexen/CNOOC Delegation at June 16, 2017 North Coast Regional District Board Meeting

MOVED by Director Nobels, SECONDED by Director Racz, that the correspondence from the Dodge Cove Improvement District with respect to the Nexen delegation at the June 16, 2017 Regular Board meeting be received.

274-2017 CARRIED

8.4 L. Allison, Resident, Dodge Cove – The Attendance by Nexen CNOOC Ltd. At the Regional District Board Meeting to be held in Dodge Cove on June 16th

MOVED by Director Nobels, SECONDED by Director Franzen, that the correspondence from Ms. Allison with respect to the Nexen delegation at the June 16, 2017 Regular Board meeting be received.

275-2017 CARRIED

8.5 Carlyle Sheperd & Co. – 2016 Audit of NCRD Financial Statements

MOVED by Director Brain, SECONDED by Director Racz, that the correspondence from Carlyle Sheperd & Co. with respect to the 2016 audit of the North Coast Regional District Financial Statements be received.

276-2017 CARRIED

9. REPORTS - RESOLUTIONS

9.1 S. Gill, Treasurer – Building/Fire Inspection Service on Haida Gwaii

MOVED by Director Nobels, SECONDED by Director Racz, that the report from staff entitled "Building/Fire Inspection Service on Haida Gwaii" be received;

AND THAT the report from staff entitled "Building/Fire Inspection Service on Haida Gwaii" be referred to Island Directors for further consideration.

277-2017 CARRIED

9.2 D. Fish, Corporate Officer – 2017 UBCM Resolutions

MOVED by Director Nobels, SECONDED by Director Franzen, that the report from staff entitled "2017 UBCM Resolutions" be received;

AND THAT the following resolutions be submitted to the Union of B.C. Municipalities for consideration at the 2017 Annual General Meeting:

BC Ambulance Service

WHEREAS the BC Ambulance Service is an integral part of the provincial health care system;

AND WHEREAS BC Ambulance dispatch services are not provided locally to rural communities in B.C.;

AND WHEREAS there are logistical challenges in rural communities that may be best managed locally;

THEREFORE BE IT RESOLVED THAT the UBCM urge the provincial Minister of Health to require the BC Ambulance Service to amend its dispatch model to allow for local responders to determine how best to manage a response to an emergency or other calls for service.

Parks and Recreation Sites in Northern B.C.

WHEREAS the Lieutenant Governor in Council may establish an area of Crown land as Class A, B, C park, or as a conservancy or recreation area;

AND WHEREAS day use and camping attendance in the northern region of B.C. increased by 16% and 4%, respectively, from 2014 to 2015;

AND WHEREAS the number of parks and recreation sites in the northern region of B.C. is significantly lower than in other regions of the province;

AND WHEREAS the region's parks are vital contributors to tourism and the economy;

THEREFORE BE IT RESOLVED THAT the UBCM urge the Lieutenant Governor in Council to establish additional park and recreation sites in northern B.C.

278-2017 CARRIED

9.3 D. Fish, Corporate Officer & S. Gill, Treasurer – Electoral Area D – Emergency Planning

MOVED by Director Racz, SECONDED by Director Nobels, that the report from staff entitled "Electoral Area D – Emergency Planning" be received;

AND THAT the Board of the North Coast Regional District allocate surplus funding from Emergency Planning Area D, Function 229, in the amount of \$10,000, to the review and update of emergency planning documents for Electoral Area D;

AND FURTHER THAT, prior to issuance, staff be directed to review and amend the Request for Proposal 2017-02 with the Electoral Area D Director.

279-2017 CARRIED

9.4 D. Fish, Corporate Officer – North Coast Regional District Procedure Bylaw No. 591, 2016

MOVED by Director Nobels, SECONDED by Director Brain, that the report from staff entitled "North Coast Regional District Procedure Bylaw No. 591, 2016" be received for information.

280-2017 CARRIED

9.5 M. Williams, Consultant – Aurora LNG Working Group Comments

MOVED by Director Nobels, SECONDED by Director Racz, that the report from the consultant entitled "Aurora LNG Working Group Comments" be received;

AND THAT the Board of the North Coast Regional District submit comments to the B.C. Environmental Assessment Office on the proposed Aurora LNG Project as attached to the consultant's report entitled "Aurora LNG Working Group Comments".

281-2017 CARRIED

MOVED by Director Nobels, SECONDED by Director Kinney, that the North Coast Regional District Board send correspondence to the B.C. Environmental Assessment Office requesting additional time to review the technical memorandum dated June 5, 2017.

282-2017 CARRIED

MOVED by Director Nobels, SECONDED by Alternate Director Budde, that staff be directed to investigate the cost and potential funding sources to hire a qualified professional to assess the potential impact on Dodge Cove's drinking water source.

283-2017 CARRIED

10. BYLAWS

10.1 Bylaw No. 591, 2016 – being a bylaw to establish procedures for the Board and Board established Committees of the North Coast Regional District

MOVED by Director Nobels, SECONDED by Director Franzen, that Bylaw No. 591, 2016 be given first reading.

284-2017 CARRIED

MOVED by Director Franzen, SECONDED by Director Racz, that Bylaw No. 591, 2016 be given second reading.

285-2017 CARRIED

MOVED by Director Thomas, SECONDED by Director Racz, that Bylaw No. 591, 2016 be given third reading.

286-2017 CARRIED

MOVED by Director Franzen, SECONDED by Director Racz, that Bylaw No. 591, 2016 be adopted.

287-2017 CARRIED

11. LAND REFERRALS / PLANNING

11.1 M. Williams, Consultant – Land Referral: Ministry of Forests, Lands and Natural Resource Operations, Withdrawal from Section 16 Reserve – Sandspit

MOVED by Director Racz, SECONDED by Director Nobels, that the report from the consultant entitled "Land Referral: Ministry of Forests, Lands and Natural Resource Operations, Withdrawal from Section 16 Reserve – Sandspit" be received;

AND THAT the Board of the North Coast Regional District not support the land referral from the Ministry of Forests, Lands and Natural Resource Operations for withdrawal from Section 16 reserve.

288-2017 CARRIED

11.2 M. Williams, Consultant – Land Referral: PWF Ltd., Withdrawal from Section 16 Reserve: Village of Queen Charlotte

MOVED by Director Racz, SECONDED by Director Nobels, that the report from the consultant entitled "Land Referral: PWF Ltd., Withdrawal from Section 16 Reserve: Village of Queen Charlotte" be received;

AND THAT the Board of the North Coast Regional District provide no comment on the land referral from PWF Ltd. for withdrawal from Section 16 reserve.

289-2017 CARRIED

12. NEW BUSINESS

12.1 Director's Reports

MOVED by Director Racz, SECONDED by Director Nobels, that the verbal reports from the Directors, as follows, be received:

<u>Director Brain – City of Prince Rupert</u>

- The City is near completion of the \$4 million repaving project along 2nd and 3rd Avenues;
- The City has issued tender for the completion of phase 1 of its water line repair project;
- The City was awarded funding for the phase 2 of its water dam replacement project, with an application for funding in the amount of \$20 million having recently been submitted to complete phase 3 of the project;
- Director Brain attended the Federation of Canadian Municipalities annual conference in Ottawa from June 1-4, 2017;
- 2 senior housing projects have been approved for development in the City; and
- The City recently met with CN Rail to discuss its upcoming operation review and access to beach sites within the City.

Alternate Director Budde – Electoral Area C

• The community continues to work on the universal access project for the Oona River Community Hall.

Director Franzen - District of Port Edward

- The District welcomed Inspector Blake Ward and Pembina as delegations at its last Regular Council meeting;
- Jennifer Rice, MLA North Coast, attended the last Regular Council meeting;
- The District made a donation of \$250 to the Prince Rupert Friendship House;
- The District joined the Association of Vancouver Island and Coastal Communities; and
- The District sent correspondence to Prime Minister Trudeau inviting him to visit the community and surrounding area.

<u>Director Racz – Electoral Area D</u>

- Residents continue to work on funding applications to provincial and federal granting agencies for support with upcoming telecommunications projects;
- The Haida Gwaii Community Forest project has been moving slowly; and
- A couple of new businesses have opened in the community.

The Corporate Officer read aloud the following report from Director Martin:

Director Martin - Village of Queen Charlotte

- Director Martin attended the BC Ferries Advisory Committee meeting held in Port Hardy, B.C. on May 31, 2017;
- Director Martin was elected Co-Chair of the North Central Coast BC Ferries Advisory Committee; and
- Director Martin will attend the annual assembly of the BC Ferries Advisory Committee Chairs, and subsequent Annual General Meeting, held in Vancouver, B.C., on August 17 and 18, 2017.

Director Thomas - Village of Port Clements

- The Village is preparing for its upcoming Canada Day Celebrations to be held July 1, 2017 in the community; and
- Haida Gwaii communities met on June 13, 2017 to strategize Minister meetings at the upcoming annual UBCM convention.

Chair Pages - Village of Masset

- Construction of the new Vancouver Island Regional Library facility is scheduled to commence in the fall of 2017; and
- The Haida Gwaii Higher Education Society will be holding a fall session in the community of Masset, with undergraduate students residing in the community for the semester.

289-2017 CARRIED

12.2 Minutes of the 2017 Business Sessions – North Central Local Government Association: May 3-5, 2017

MOVED by Director Brain, SECONDED by Director Franzen, that the minutes of the 2017 North Central Local Government Association business sessions held May 3-5, 2017 be received for information.

290-2017 CARRIED

12.3 Delegations

MOVED by Director Nobels, SECONDED by Director Franzen, that staff be directed to bring forward the North Coast Regional District Delegation Policy with proposed amendments to include notice to Directors of a scheduled delegation.

291-2017 CARRIED

13. OLD BUSINESS

None.

14. PUBLIC INPUT

There were 5 questions from the public.

15. IN CAMERA

None.

16. ADJOURNMENT

MOVED by Director Racz,	SECONDED I	by Director	Franzen,	that the	North	Coast	Regional
District Regular Board meet	ting be adjourn	ed at 5:56 p	o.m.				•

292-2017	CARRIED
Approved and adopted:	Certified correct:
Obside	O a manage of the control of the con
Chair	Corporate Officer

HAIDA GWAII REGIONAL RECREATION COMMISSION MINUTES OF MEETING

Annual General Meeting – Commission/Society
Tuesday, May 16, 2017 at 7:00 pm
Haida House at Tllaal

Present: David Lomax – Haida Gwaii Recreation Coordinator; Shirley Kricheldorf – Bookkeeper;

Commissioners: Amber Bellis, Marg Youngson, Christine Martyniuk, Fran Fowler,

Harold White

Society Directors: Amber Bellis, Marg Youngson, Shirley Kricheldorf Absent: Laurie Chisholm – Commissioner/Society Director, Darcy Pollard – Commissioner/Society Director; Crystal Holdershaw - Commissioner

- 1) **Call To Order** 7:21 pm by Chairing Director Christine Martyniuk
- 2) Amendments To The Agenda NONE

MOTIONED BY Amber Bellis and SECONDED by Harold White to adopt the agenda of the meeting.

ALL IN FAVOUR

3) Adoption of the 2016 Annual General Meeting Minutes (Note change of year to 2016 from 2017 Annual General Meeting Minutes in agenda heading)

MOTIONED by Harold White and SECONDED by Marg Youngson to adopt the 2016 Annual General Meeting Minutes.

ALL IN FAVOUR

- 4) Business Arising From 2016 Annual General Meeting Minutes
 - a. Commission/Society information. Shirley reported that she and Debbie Beemer had researched the background of the Society and found a letter on file from the government suggesting that the Commission incorporate as a Society and Deb had spoken to a person at the Society office and determined that is indeed what transpired in 2001. The directors of the Commission were the first directors of the Society and sometime in the past directors besides the appointed Commission directors were elected when it is likely this was not the intention. Four of the current Commissioners are not Society Directors. Shirley Kricheldorf will not let her name stand again as a Society director as she is not a Commissioner. There is a new BC Society Act and all societies need to transition to it before November 2018 and the by-laws of the Commission and Society will be reviewed and changed as necessary during that process and seeking advice from the Regional District staff.

MOTIONED by Harold White and SECONDED by Marg Youngson to accept the business arising from the 2016 Annual General Meeting. ALL IN FAVOUR

MOTIONED by Fran Fowler, SECONDED by Harold White that this meeting is deemed to be a joint meeting of the Commission and Society. ALL IN FAVOUR

5) Adoption Of The October 2016 Quarterly Commission Meeting Minutes

MOTIONED by Amber Bellis, SECONDED by Marg Youngson to adopt the minutes of the October quarterly meeting.

ALL IN FAVOUR

- 6) Business Arising From October 2016 Quarterly Commission Meeting Minutes
 - a. There was no business arising from the October meeting.
- 7) Reports
 - a. **2016 Year-End CORE Financial Report** HGRRC Book-Keeper
 - b. 2017 First Quarter CORE Financial Report HGRRC Book-Keeper
 - c. **2016 Programs Report** HGRRC Book-Keeper
 - d. 2016 Funds Acquired Report HGRRC Book-Keeper
 - e. **2017 Funds Acquired Report** HGRRC Book-Keeper
 - f. **2016 Income Statement and Balance Sheet** HGRRC Book-Keeper

All financial reports and notes to such were presented by Shirley Kricheldorf except the December 31st, 2016 Balance Sheet, unfortunately an incorrectly dated one was included in the package in error. Correct one to be emailed to directors for review.

MOTIONED by Amber Bellis, SECONDED by Marg Youngson to accept the financial reports as presented by Shirley Kricheldorf except for the incorrectly dated balance sheet. New balance sheet awaiting approval of directors by email.

ALL IN FAVOUR

ADDENDA – 31 December 2016 Balance Sheet was circulated to all directors by email for review and MOTIONED by Amber Bellis and SECONDED by Marg Youngson to accept the balance sheet. NO OBJECTIONS

g. **2016 Vendor Purchases/Instructor Report** – HGRRC Book-Keeper

This report is for information purposes only to show distribution of economic benefits to communities. Masset percentage includes Old

Massett and Tow Hill instructors as they share the same postal code and also includes local purchases for the office due to where it is situated and is higher due to the cost of running the surf program.

- h. **2016 Program Statistics** HGRRC Coordinator
 David Lomas presented the Program Statistics and commented on
 the new methodology for keeping the statistics based on individuals
 participating and not spaces filled. The ASSAI program statistics will
 be change to reflect the new method with the fall programming.
- 2009-2016 HGRRC Growth Chart HGRRC Coordinator
 The change in methodology is reflected in the charts and reporting in future will not include years previous to 2016 so the statistics are standardized and reflect the difference.

8) New Business

b. Website/e-commerce approval— HGRRC Coordinator David explained the new website will allow for registrations to be done and paid for directly rather than e-transfers and direct deposit needing to be managed separately. The e-commerce system is called and STRIPE and charges 2.2% Cdn which would be covered from the current program admin fee.

MOTIONED by Harold Young and seconded by Amber Bellis to approve the adoption of e-commerce and the 2.2% associated charged. ALL IN FAVOUR

c. **Approval for Commissioner and Election Society Directors**—HGRRC Coordinator

There are no new names forwarded for Commissioners at this time as there are currently the maximum eight allowed. Current society directors Amber Bellis and Marg Youngson allowed their names to stand.

MOTIONED by Amber Bellis and SECONDED by Marg Youngson to invite the Commissioners to become Society Directors. ALL IN FAVOUR

Christine Martyniuk, Fran Fowler and Harold White all accepted the invitation to become society directors. Crystal Holdershaw still to be invited and to confirm that she will stay on as Commissioner. Darcy Pollard and Laurie Chisholm to be requested to submit letters confirming that they will stay on as Commissioners and Society Directors.

- 9) **Open Discussion** David Lomax spoke about the updating of the website; that the Haida Gwaii ASSAI program had enough response to their program survey to warrant a report of their own; he is exploring the possibility of getting a BMX & Skateboard instructor on-island, and also working on a gymnastics program for the month of November.
- 10) Adjournment And Next Meeting Date Harold White motioned for the adjournment of the meeting at approximately 9:15. Next meeting date to be determined.



NORTH COAST REGIONAL DISTRICT

WATER BOARD COMMITTEE MINUTES

MINUTES of the Regular Meeting of the Sandpit Water Board Committee held at

MIMSC Community Office, Sandspit, B.C. on November 15, 2016 at 7:00

PM.

Adopted January 10, 2017

PRESENT Jim Henry, Gord Usher, Carol Wagner, Bill Beldessi

ABSENT Carole Bowler, Doug Gould

Staff Barb Parser

Public 2

- 1. CALL TO ORDER 7:07 PM
- 2. AGENDA, (additions/deletions) none

009-2016 Motion to accept agenda as presented moved by Gord Usher,

Seconded by Carol Wagner, Carried

3. MINUTES & BUSINESS ARISING FROM MINUTES

010-2016 Motion to accept and approve minutes from Nov 2 meeting

moved by Bill Beldessi, Seconded by Gord Usher, Carried

- 4. **DELEGATIONS** none
- 5. CORRESPONDENCE
 - 5.1 Audrey Putterill Email

011-2016 Motion to receive and file correspondence moved by Carol

Wagner, Seconded by Gord Usher, Carried

6. REPORTS - RESOLUTIONS

7. OLD BUSINESS

- 7.1 Stantec Sandspit Community Water Supply System Interim Site Assessment Report and Recommendations
- Motion made that when Vu Nguyen, Environmental Health Officer for Northern Health visits, members of Sandspit Water Board may also meet with him, moved by Carol Wagner, Seconded by Gord Usher, Carried
- Motion to write a letter to Regional District requesting a report for revenue in and revenue out report, a contingency reserve fund and what is in it as well as a cost breakdown of Sandspit water system including Regional District administration fees for year ending 2015 and to date for year 2016, moved by Carol Wagner, Seconded by Bill Beldessi, Carried
- Motion to have Sandspit Water Operator, Bob Prudhomme do a spreadsheet of meter readings for each meter in the community of Sandspit for the year of 2010 and 2015, moved by Carol Wagner, Seconded by Gord Usher, Carried
- 8. NEW BUSINESS
- 9. PUBLIC INPUT
- 10. IN CAMERA
- 11. ADJOURNMENT 8:45 PM

015-2016 Motion to Adjourn made by Jim Henry, Carried

Approved and adopted:	Certified correct:
Chair	Secretary



NORTH COAST REGIONAL DISTRICT

WATER BOARD COMMITTEE MINUTES

MINUTES of the Regular Meeting of the Sandpit Water Board Committee held at

MIMSC Community Office, Sandspit, B.C. on January 10, 2017 at 7:15

PM.

Adopted February 21, 2017

PRESENT Carol Wagner, Carole Bowler, Doug Gould, Bill Beldessi, Gord Usher

ABSENT Jim Henry

Staff Barb Parser

Public 4

1. CALL TO ORDER 7:12 PM

2. AGENDA, (additions/deletions) none

001-2017 Motion to accept agenda as presented moved by Gord Usher,

Seconded by Carole Bowler, Carried

3. MINUTES & BUSINESS ARISING FROM MINUTES

002-2017 Motion to accept and approve minutes from Nov 15 meeting

moved by Bill Beldessi, Seconded by Gord Usher, Carried

- 4. **DELEGATIONS none**
- 5. CORRESPONDENCE
- 6. REPORTS RESOLUTIONS
- 7. OLD BUSINESS

	003-2017	Motion that we write a letter to Teal Jones requesting that we have a discussion in regards to the water system at their trailer court in Sandspit moved by Gord Usher, seconded by Bill Beldessi, Carried			
	004-2017	Motion that this committee develop a procedures document relating to the Sandspit Water System moved by Bill Beldessi, seconded by Carole Bowler, Carried			
	005-2017	Motion that meter readings be provided by the Sandspit Water Operator be entered into a spread sheet by the Administrative Assistant moved by Carole Bowler, Seconded by Doug Gould, Carried			
9.	PUBLIC INPUT				
10.	IN CAMERA				
11.	ADJOURNMENT 8:45 PM				
	006-2017	Motion to Adjourn made by Carole Bowler,	Carried		
	Approved and	adopted:	Certified correct:		
	Chair		Secretary		

NEW BUSINESS

8.



NORTH COAST REGIONAL DISTRICT

SANDSPIT WATER SYSTEM COMMITTEE

MINUTES

of the Regular Meeting of the Sandpit Water Board Committee held at MIMSC Community Office, Sandspit, B.C. on February 21, 2017 at 7:15 PM.

Adopted June 20, 2017

PRESENT Jim Henry, Carole Bowler, Doug Gould, Carol Wagner, Gord Usher, Bill

Beldessi (on speaker phone from Prince Rupert)

ABSENT

Staff Barb Parser

Public 2

- 1. CALL TO ORDER 7:12 PM
- 2. AGENDA, (additions/deletions) none

007-2017 MOTION to accept agenda as presented MOVED by Gord Usher, SECONDED by Carole Bowler, CARRIED

3. MINUTES & BUSINESS ARISING FROM MINUTES

008-2017 MOTION to accept and approve minutes from January 10, 2017 meeting MOVED by Carol Wagner, SECONDED by Gord Usher,

CARRIED

- 4. DELEGATIONS none
- 5. CORRESPONDENCE
 - 5.1 Stantec Report Sandspit Water Treatment Report dated January 20, 2017

009-2017 MOTION that NCRD proceed with implementation of further

testing of the water system to fully determine the THM formation potential as recommended in section 15.0 (closure) of the January 20, 2017, Stantec Sandspit Community Water Supply System water treatment assessment report. We suggest that NCRD contact Northern Health to see if additional tests are

recommended at this point in the process, MOVED by Doug

Gould, SECONDED by Carole Bowler CARRIED

7.	OLD BUSINESS					
8.	NEW BUSINESS					
	8.1 Election of Chair Person and Vice Chairperson					
	010-20	017	Gord Usher nominated for Chairperson MO SECONDED by Carol Wagner, Gord Usher			
			Doug Gould nominated for Vice Chairperson Bowler, SECONDED by Carol Wagner, Dou CARRIED			
	8.2		Letter from RD Sukhraj Gill-Stantec Februar	ry 16, 2017		
	011-20	017	MOTION to accept document 8.2 regarding presented MOVED by Doug Gould, SECON Bowler CARRIED			
	8.3	Folios	/Parcels/Maps - Sandspit			
	012-20	017	MOTION to request NCRD provide:			
			1) A list of parcels in Sandspit and a map s	howing the parcels.		
			 How many folios (registered users) are the addresses of these folios/users MOVED SECONDED by Carole Bowler CARRIEI 	by Carol Wagner,		
9.	PUBL	IC INPU	JT			
10.	IN CA	MERA				
11.	ADJOURNMENT 9:12 PM					
	013-20	017	MOTION to Adjourn made by Carol Wagner	CARRIED		
	Approv	ved and	d adopted:	Certified correct:		
		Chair		Secretary		

6.

REPORTS – RESOLUTIONS



NORTH COAST REGIONAL DISTRICT REGIONAL RECYCLING ADVISORY COMMITTEE

MINUTES

of the Regular Meeting of the Regional Recycling Advisory Committee (RRAC) held at the 14-342 3rd Avenue West in Prince Rupert, B.C. on Wednesday, April 5, 2017 at 12:00 pm.

PRESENT

Chair D. Nobels, NCRD Electoral Area A

Members T. Ostrom, City of Prince Rupert

H. Seidemann, City of Prince Rupert

Regrets B. Payette, District of Port Edward

J. Martin, Environmental Representative

Staff D. Fish, Corporate Officer

T. Des Champ, Recycling Operations Manager

Public 2

1. CALL TO ORDER 12:10 p.m.

2. AGENDA

MOVED by Member Ostrom, SECONDED by Member Seidemann, that the April 5, 2017 Regional Recycling Advisory Committee meeting agenda be adopted as presented.

007-2017 CARRIED

3. MINUTES & BUSINESS ARISING FROM MINUTES

3.1 Minutes of the Regional Recycling Advisory Committee meeting held January 11, 2017

MOVED by Member Ostrom, SECONDED by Member Seidemann, that the minutes of the January 11, 2017 Regional Recycling Advisory Committee meeting be adopted as presented.

008-2017 CARRIED

4. DELEGATIONS

None.

Sarah Dantzer, Resident and organizer of the Rupert Rubbish Cleanup project, addressed the Regional Recycling Advisory Committee with respect to the cleanup scheduled to take place April 8th, 2017. Mrs. Dantzer indicated that twelve residents in the community had volunteered as neighbourhood stewards. Mrs. Dantzer clarified garbage disposal and recycling procedures with the Regional Recycling Advisory Committee and thanked it for its continued support for the initiative.

5. CORRESPONDENCE

None.

6. REPORTS - RESOLUTIONS

6.1 T. Des Champ, Recycling Operations Manager – Regional Recycling Operations Report

MOVED by Member Seidemann, SECONDED by Member Ostrom, that the verbal report from staff entitled "Regional Recycling Operations Report" be received for information.

009-2017 CARRIED

8. NEW BUSINESS

None.

9. OLD BUSINESS

None.

10. ADJOURNMENT

MOVED by Member Seidemann, SECONDED by Member Ostrom, that the Regional Recycling Advisory Committee meeting be adjourned at 12:44 p.m.

010-2017 CARRIED

Approved and adopted:	Certified correct:			
Chair	Corporate Officer			

North Coast Regional District Cheques payable over \$5,000 - JUNE, 2017

ITEM 6.1

Payable To	Date	Amount	Purpose
Munro Thompson Communications	1-Jun	\$ 52,277.40	RBA Website development & expenses
Port Edward Historical Society (NP Cannery)	2-Jun	\$ 50,000.00	2nd & final grant for 2017
At Source Recycling Systems Corp.	14-Jun	\$ 6,414.45	Gemini 3560 Horizontal Baler
Big Red Enterprises Ltd.	14-Jun	\$ 17,226.45	May Garbage Collection Contract
Pacific Blue Cross	14-Jun	\$ 6,999.83	June PBC & BC Life Premiums
Ticker's Hauling & Storage	14-Jun	\$ 9,145.50	Transport recyclables, excavator/forklift use & worker, building & equipment rental and porto toilet rental/cleaning
City of Prince Rupert	14-Jun	\$ 18,666.73	MFA Issues 63 & 99 Payout
Village of Masset	14-Jun	\$ 10,247.26	MFA Issue 61 Payout
Sperling Hansen Associates	27-Jun	\$ 6,852.17	May Environmental Review, travel & accommodations
Municipal Pension Plan	1-Jun	\$ 6,008.64	Payroll Remittance (PP11-2017)
Municipal Pension Plan	14-Jun	\$ 5,830.84	Payroll Remittance (PP12-2017)
Receiver General	14-Jun	\$ 10,670.93	Payroll Remittance (PP12-2017)
Receiver General	28-Jun	\$ 13,186.52	Payroll Remittance (PP13-2017)
Municipal Pension Plan	28-Jun	\$ 5,930.21	Payroll Remittance (PP13-2017)

CHEQUES OVER \$5,000: \$
CHEQUES UNDER \$5,000: \$
TOTAL CHEQUES: \$

\$ 219,456.93 \$ 81,170.18 \$ 300,627.11

North Coast Regional District Cheques payable over \$5,000 - JULY, 2017

Payable To	Date	Amount	Purpose
Big Red Enterprises Ltd.	12-Jul	\$ 17,178.42	June Garbage Collection Contract
Coast Industrial Construction	12-Jul	\$ 20,752.98	Resurfacing of White Goods Laydown Area - Regional Recycling
Pacific Blue Cross	12-Jul	\$ 6,106.47	July PBC & BC Life Premiums
Ticker's Hauling & Storage	14-Jun	\$ 7,180.95	June Contaminated waste oil removal, Skidegate Transfer Station cleanup, building & equipment rental & porto toilet rental/cleaning
Upanup Studios	12-Jul	\$ 7,980.00	RD Rebranding - Research & Planning
Dixon Entrance Maritime Museum Society	31-Jul	\$ 8,000.00	2017 Annual Grant
Haida Gwaii Museum	31-Jul	\$ 48,000.00	2017 Annual Grant
Haida Gwaii Regional Recreation Commission	31-Jul	\$ 56,270.00	2017 Annual Grant
Port Clements Historical Society & Museum	31-Jul	\$ 10,000.00	2017 Annual Grant
Prince Rupert Regional Archives	31-Jul	\$ 21,250.00	2017 Grant - 3rd Installment
Prince Rupert Public Library	31-Jul	\$ 5,010.00	2017 Annual Grant
Receiver General	28-Jun	\$ 13,186.52	Payroll Remittance (PP14-2017)
Municipal Pension Plan	28-Jun	\$ 5,930.21	Payroll Remittance (PP14-2017)
Municipal Pension Plan	28-Jun	\$ 5,930.21	Payroll Remittance (PP15-2017)
Receiver General	28-Jun	\$ 13,186.52	Payroll Remittance (PP15-2017)

CHEQUES OVER \$5,000: CHEQUES UNDER \$5,000: TOTAL CHEQUES:

\$ 245,962.28 \$ 53,168.23 \$ 299,130.51 Ottawa, Canada K1A 0A2

RECEIVED JUN 2 3 2017.

June 14, 2017

Mr. Barry Pages Chair North Coast Regional District Unit 14 342 West 3rd Avenue Prince Rupert, British Columbia V8J 1L5

Dear Mr. Pages:

On behalf of the Right Honourable Justin Trudeau, Prime Minister of Canada, I would like to acknowledge receipt of your letter regarding Bill C-48, An Act respecting the regulation of vessels that transport crude oil or persistent oil to or from ports or marine installations located along British Columbia's north coast.

Thank you for taking the time to share your gratitude with the Prime Minister. You may be assured that your correspondence, written on behalf of the Board of the North Coast Regional District, has been carefully reviewed.

As you know, the issue you raise falls under the purview of the Honourable Marc Garneau, Minister of Transport. I have therefore taken the liberty of forwarding a copy of your letter to Minister Garneau for his information and consideration.

Once again, thank you for writing to the Prime Minister.

Yours sincerely,

R. Olshansky

Executive Correspondence Officer



NORTH COAST REGIONAL DISTRICT

14 – 342 West 3rd Avenue, Prince Rupert, B.C. V8J 1L5 Phone: (250) 624-2002 Fax: (250) 627-8493 Website: www.sgcrd.bc.ca

May 29, 2017

Office of the Prime Minister 80 Wellington Street Ottawa, ON K1A 0A2

<u>Attention: The Right Honourable Justin Trudeau, P.C., M.P., Prime Minister of Canada,</u> Ottawa

Dear Prime Minister:

Re: Crude Oil Tanker Moratorium on British Columbia's North Coast

On behalf of the Board of the North Coast Regional District (NCRD), I am writing to you today with respect the crude oil tanker moratorium on B.C.'s north coast.

The Government of Canada committed to introducing legislation to formalize a moratorium for crude oil tankers on B.C.'s north coast to provide extra protection for B.C's northern coastline from potential oil spills by spring of 2017.

On May 12, 2017, the Government of Canada introduced C-48, the proposed Oil Tanker Moratorium Act in Parliament. This Act will deliver on your election commitment to Canadians, and included in Transport Minister Marc Garneau's mandate letter in 2015, to formalize a crude oil tanker ban on B.C.'s north coast

The Board wishes to take this opportunity to extend its gratitude and appreciation for your Government on following through with this commitment, and to reiterate the importance of this legislation in protecting our coast and improving marine safety.

Should you have any questions, please do not hesitate to contact the office of the NCRD.

Best regards,

NORTH COAST REGIONAL DISTRICT

Barry Pages Chair



June 22, 2017

Municipal Chair Barry Pages Regional District of North Coast 14 - 342 3rd Avenue West Prince Rupert, BC V8J 1L5



Dear Municipal Chair Pages,

Re: 4th Annual Resource Breakfast Series September 26 to 28, 2017 - Vancouver, BC

On behalf of the BC Resource Sector, it is my sincere pleasure to offer two of your elected representatives complimentary tickets to the 4th Annual *Resource Breakfast Series*. The event will be hosted September 26 - 28, 2017, in Vancouver, BC during the annual Union of BC Municipalities' (UBCM) convention. The breakfasts take place from 7:00 am to 8:30 am and feature three key sectors including mining, energy, and forestry, in a friendly, relaxed and casual atmosphere. These breakfast events provide an excellent opportunity to network and receive brief updates on the resource sector's role in our provincial economy. It is also a fantastic chance to meet representatives from the resource sector and the generous sponsors.

The Resource Breakfast Series has become a must-attend event with sellout crowds each day. We encourage you to reserve your complimentary ticket early, as we sell out every year. This year, we are restructuring the program to make it even more informative, engaging and beneficial. We are committed to developing the event and want to keep it fresh and interesting. Therefore, we are introducing a new panel format which will include inviting the respective Minister, a resource sector business leader, and a local Mayor to engage in a constructive dialogue about the future of BC's resource sector. This diverse panel structure will ensure we share a variety of perspectives. As was the case last year, there will be broad representation from Mayors, Councillors, MLAs, resource sectors and association sponsors from across the province. These breakfasts present an excellent opportunity to meet, network, and learn first-hand the latest news about BC's important resource sector.

Event Details:

Dates: Tuesday, September 26, 2017 - Mining Sector Breakfast

Wednesday, September 27, 2017 - Energy Sector Breakfast Thursday, September 28, 2017 - Forest Sector Breakfast

Time: 7:00 am-8:30 am

Invited Guests: MLAs, Mayors, Councillors, Association & Resource Sector Leaders

Style: Plated breakfast

Location: Terminal City Club – 837 West Hastings Street, Vancouver, BC

Cost: No charge, hosted breakfast

Attire: Business casual

408 – 688 West Hastings Street Vancouver, British Columbia V6B 1P1, Canada

(604) 343-4847 info@c3alliancecorp.ca www.c3alliancecorp.ca Seating is limited and will be assigned on a first-come, first-served basis. To support and encourage a broad spectrum of leaders from across the Province, we are limiting local government seats to two per Municipal Council or Regional District at any or all of the breakfasts. Please RSVP to info@c3alliancecorp.ca and specify which event(s) you would like your representatives to attend. There is great demand for these popular events, therefore, we respectfully encourage you to request tickets to only the breakfasts you have an interest in attending and are available for. Also, please note, tickets are non-transferable.

We look forward to seeing you at the 4th Annual Resource Breakfast Series.

Kind regards,

Dan Jepsen, RPF President & CEO

C3 Alliance Corp. Resource Breakfast Series Manager

info@nbcheros.org P.O. BOX 614 Prince George, BC V2L 458 www.nbcHEROS.org every second **counts!**



June 28, 2017

To: All Northern B.C. mayors, district chairs and chief councillors

c/o North Central Local Government Association

From: Ted Clarke

Vice-president of Northern B.C. Helicopter Emergency Rescue Operations Society (HEROS)

Dear elected members,

I am writing to your organization today to ask for you to consider drafting a letter of support for our proposal that the provincial government establish an independent Royal Commission to examine all aspects of prehospital care in B.C., supported by a universal cost/benefit analysis study.

For five years, Northern B.C. HEROS has been working to create public awareness of the shortcomings of the current emergency medical services the provincial authorities provide. We are driven to highlight the need for a doctor-led, rapid-response helicopter service capable of reaching rural and remote areas of the province quickly to prevent unnecessary deaths and decrease morbidity of injuries and illnesses by reducing the time it takes to bring definitive medical care to the patient.

As an organization whose mandate is to take on challenges of public concern to facilitate positive change on regional issues, the North Central Local Government Association represents cities, towns, First Nations communities and organizations whose employees live and work in this vast geographic area. You oversee an area which contains 69 per cent of B.C.s land mass and which is home to 60 per cent of our aboriginal people. Those people, as well as everyone who lives, works and travels in and around our region, deserve better prehospital care than is currently available to them.

When you are gravely ill or seriously injured, the medical system should not start once you arrive at the hospital door. Other provinces and countries realized decades ago the shortcomings of their own prehospital medical systems and took steps to improve patient care. That has resulted in fewer deaths and significant cost savings to their medical systems as a result of better patient outcomes and fewer lifelong medical conditions because those patients received timely interventions. B.C. Emergency Health Services estimates the cost to taxpayers of trauma (not including medical conditions such as strokes, heart attacks, and diabetic shock) at \$5 billion per year. Yet, in the history of this province, there has never been a non-partisan universal cost-benefit study on pre-hospital care to examine whether our

health care system is spending tax dollars wisely. We think the findings of such a study would lead investigators to conclude money spent up to essentially bring the hospital to the patient will not only save lives but money as well. Those patients will recover quicker without the need for extended hospital stays with less of a chance of developing a longterm medical condition. As a result, WorkSafe BC and ICBC payouts will be reduced and premiums for coverage paid by employers and ordinary citizens would drop.

In this initiative to gather a groundswell of support for this pre-hospital care investigation, HEROS is appealing to private industry - foresters, truckers, miners, petroleum producers; public entities such as firefighters and other first responders and health authorities; and elected government officials like yourselves to push for real change in how the province conducts its emergency services.

Employers are reluctant to send their workers into areas where they are not protected and this issue can negatively affect decisions on where resource-based companies will be willing to establish their rural operations. They expect to have a modern system in place to protect their employees, should they need a rapid evacuation. In northern and rural regions of B.C., that system does not exist simply because our provincial authorities believe it is our choice to live in this area and that we should not expect the same level of emergency care as the people of the Lower Mainland and Victoria now receive. That very comment was taken directly from B.C. Forest Safety Council ombudsman Roger Harris two-year study into northern B.C.'s air ambulance helicopter services, released in February,

We are not the only region of this province that is underserved but this is without a doubt the area that has suffered the longest as a result of having our voices ignored by the people making decisions on how emergency resources are allocated.

We encourage you to join us in this opportunity to show your support in addressing an issue which potentially could affect all British Columbians as well as visitors to this province, by providing this letter showing you are in favour of our proposed system-wide prehospital care inquiry.

Thank you for considering this proposal.

For more information please contact:

Ted Clarke

Northern B.C Helicopter Emergency Operations Society (HEROS)

tedc@nbcheros.org

www.nbcheros.org

www.facebook.com/NorthernBCHeros

Cell: 250-981-0783



ITEM 7.4

301 - 1268 Fifth Avenue Prince George, BC V2L 3L2 Tel: 250-561-2525 Fax: 250-561-2563 info@northerndevelopment.bc.ca www.northerndevelopment.bc.ca

CONFIDENTIAL

March 7, 2017

North Coast Regional District 14 – 342 3rd Avenue West Prince Rupert, BC V8G 1L5

Attention:

Chair Barry Pages

Dear Chair Pages:

Subject:

Northern Coast Official Community Plan Community Land Use Planning Program

On behalf of the Ministry of Community, Sport and Cultural Development we are pleased to enclose a cheque in the amount of \$80,000, which represents the Community Land Use Planning Program grant disbursement for the Northern Coast Official Community Plan project.

If you have questions regarding the Community Land Use Planning Program please contact the Ministry of Community, Sport and Cultural Development, Province of B.C., Cathy LeBlanc at (778) 698-3454.

Sincerely,

Joel McKay
Chief Executive

Chief Executive Officer

Doug Chapman, Chief Administrative Officer, North Coast Regional District Daniel Fish, Deputy Corporate Officer, North Coast Regional District

RECEIVED JUN 2 0 2017

NCRD Info

From:

Truck Loggers Association <monica@tla.ca>

Sent:

Thursday, June 29, 2017 2:54 PM

To:

info@sqcrd.bc.ca

Subject:

TLA Mayoral Forestry Dinner Invitation

Dear Barry Pages,

You are receiving this complimentary dinner invitation because the Truck Loggers Association (TLA) wants to share important forest industry information that will impact Skeena-Queen Charlotte.

The TLA's Mayoral Forestry Dinner at UBCM

The Truck Loggers Association cordially invites you to attend

The TLA's Mayoral Forestry Dinner

This essential event will show how you and your community can support and benefit from your local forest industry—and give you an opportunity to network and compare what other forestry communities are doing.

Logging contractors are the economic backbone of rural communities. They create secure, well-paid, local jobs which make up part of the 60,700 direct jobs created by the forest sector in BC.

Find out how Skeena-Queen Charlotte can be part of our success today!

While this invitation is directed at mayors, we encourage you to invite up to two engaged stakeholders such as councillors or city managers to attend with you.

Please RSVP by August 1, 2017 as space is limited.

Date:

Location:

Terminal City Club

837 W Hastings St, Vancouver, BC, V6C 1B6

Time:

Cocktail Reception - 5:00 pm

Dinner - 6:00- 9:00 pm

In recognition that this is a busy night for all of you, dinner will start promptly at 6:00 pm

Please RSVP to Monica Sayers at

monica@tla.ca or 604-684-4291 ext. 5

We look forward to seeing you there!

Best regards,

TLA Board of Directors

--

Monica Sayers, CMP
Director of Events

Truck Loggers Association #725, 815 West Hastings Street Vancouver, BC V6C 1B4 T 604 684 4291 ext 5 M 604 312 7320 F 604 684 7134 monica@tla.ca



RECEIVED JUL 2 4 2017

July 18, 2017

Chair Barry Pages North Coast Regional District 14 - 342 3rd Avenue West Prince Rupert, BC V8J 1L5

Dear Chair Barry Pages:

RE: GAS TAX AGREEMENT COMMUNITY WORKS FUND PAYMENT

I am pleased to advise that UBCM is in the process of distributing the first of two Community Works Fund (CWF) payments for fiscal 2017/2018. An electronic transfer of \$101,655.12 is expected to occur within the next 30 days. These payments are made in accordance with the payment schedule set out in your CWF Agreement with UBCM (see section 4 of your Agreement).

CWF is made available to eligible local governments by the Government of Canada pursuant to the Administrative Agreement on the Federal Gas Tax Fund in British Columbia. Funding under the program may be directed to local priorities that fall within one of the eligible project categories.

Also included with the 2017/18 funding payment is a one-time federal legacy infrastructure funding payment, which was committed by the Government of Canada in *Budget 2016*.

Further details regarding use of CWF and project eligibility are outlined in your CWF Agreement and details on the Renewed Gas Tax Agreement can be found on our website at www.ubcm.ca.

For further information, please contact Gas Tax Program Services by e-mail at gastax@ubcm.ca or by phone at 250-356-5134.

Sincerely,

Councillor Murry Krause

UBCM President

Pc: Daniel Fish, Deputy Corporate Officer

B.C. Ferry Authority

OFFICE OF THE CHAIR

500 – 1321 Blanshard Street Victoria, BC V8W 0B7 Tel (250) 978-1502 Fax (250) 978-1953

July 24, 2017

Ms. Alison Sayers, Chair Central Coast Regional District 626 Cliff Street, P.O. Box 186 Bella Coola, BC VOT 1C0

Mr. Andrew Hory, Chair Regional District of Mount Waddington 2044 McNeill Road, P.O. Box 729 Port McNeill, BC VON 2R0 Mr. Philip Germuth, Chair Regional District of Kitimat-Stikine 300 – 4545 Lazelle Avenue Terrace, BC V8G 4E1

Mr. Barry Pages, Chair Skeena-Queen Charlotte Regional District 14, 342 – 3 Avenue West Prince Rupert, BC V8J 1A6

NOMINATIONS FOR APPOINTMENT TO THE B.C. FERRY AUTHORITY BOARD OF DIRECTORS

On behalf of the B.C. Ferry Authority (the "Authority"), I am writing to request the participation of your Regional Districts in the process to identify and nominate qualified individuals for appointment to the board of directors of the Authority.

Under the *Coastal Ferry Act* (the "Act"), the Regional Districts of Central Coast, Kitimat-Stikine, Mount Waddington and Skeena-Queen Charlotte have been designated as the "Northern Coastal & North Island Appointment Area" for purposes of nominating qualified individuals suitable for appointment to the board of directors of the Authority. In accordance with the requirements of the Act, the four Regional District boards in your appointment area are asked to develop and jointly submit by **November 17**, **2017**, a list of 3 to 5 nominees to fill one position on the board of directors of the Authority commencing April 1, 2018. The term of the appointment is three years to March 31, 2021.

The incumbent director from your appointment area is Michael W. Pucci. Mr. Pucci is eligible for nomination.

In order to be considered for appointment to the board of the Authority, a nominee must be a "qualified Authority candidate" as that term is defined in the Act. This definition, together with other background information on the Authority, including its role and responsibilities, and the appointment process, is attached.

In light of the nomination process which we ask that you undertake, we feel it is important that you be mindful that all directors owe a fiduciary duty to the Authority, and its best interests, and are not appointed in order to be delegates of a particular region, stakeholder or constituent group.

.../2

A skills and experience profile will be used by the Authority to guide the appointment process. That profile is attached for your use. We have also attached a copy of the nomination form that may be completed electronically.

The responsibilities of the Authority comprise appointing the board of directors of the operating company, British Columbia Ferry Services Inc. ("BC Ferries"), and establishing the compensation plans for the directors and certain executives of BC Ferries. We believe that there are many highly-qualified individuals in your Regional Districts who have the skills and experience that would be of benefit to the Authority board in meeting these responsibilities.

We would be pleased to have the opportunity to meet with you in person or by telephone to discuss the skills and experience that would be of greatest value to the board at this time, as well as any other matters which you may wish to discuss concerning the nomination process. We will be in contact with your offices shortly to determine your interest in holding such a meeting or teleconference.

As has been done in the past, the Authority would be pleased to provide assistance to you in your recruitment process. Should you wish, the Authority will cover the cost of three newspaper advertisements and will post on its website nomination forms for on-line completion and submission directly to your Regional District. We can discuss these arrangements further with you.

If you have any questions with respect to this matter, please contact Cynthia M. Lukaitis, Vice President & Corporate Secretary at 250-978-1218 or Cynthia.Lukaitis@bcferries.com.

Thank you for your assistance with our appointment process.

Sincerely,

Yuri L. Fulmer, OBC

Chair, Board of Directors

B.C. Ferry Authority

cc: Ms. Cynthia Lukaitis, Vice President & Corporate Secretary

Ms. Courtney Kirk, Chief Administrative Officer, Central Coast Regional District

Mr. Robert Marcellin, Administrator, Kitimat-Stikine Regional District

Mr. Greg Fletcher, Administrator, Regional District of Mount Waddington

Mr. Doug Chapman, Chief Administrative Officer, Skeena-Queen Charlotte Regional District

Attachments (3):

Backgrounder Nomination Form

Skills and Experience Profile

B.C. Ferry Authority

Director Nominations Backgrounder

2017

Introduction

Under the *Coastal Ferry Act (British Columbia)*, the Regional Districts of Central Coast, Kitimat-Stikine, Mount Waddington and Skeena-Queen Charlotte have been designated as the "Northern Coast and North Island Appointment Area" and the Regional Districts of Alberni-Clayoquot, Comox Valley, Nanaimo, Powell River and Strathcona have been designated as the "Central Vancouver Island and Northern Georgia Strait Area" for purposes of nominating qualified individuals suitable for appointment to the board of directors of B.C. Ferry Authority ("BCFA" or the "Authority").

In accordance with the *Coastal Ferry Act* (*British Columbia*), the Authority is requesting that the Northern Coast and North Island Appointment Area and the Central Vancouver Island and Northern Georgia Strait Appointment Area each submit three to five qualified nominees to fill two vacancies on the BCFA board of directors effective April 1, 2018. The two appointments will each be for a three-year term ending March 31, 2021.

This document provides background information on the Authority, the qualifications that nominees must have, the skills and experience of candidates being sought by the board, the support the Authority will provide the Appointment Areas in their identification of candidates for nomination and the Authority's process for selecting nominees for appointment.

Overview

BCFA is a corporation without share capital created under the *Coastal Ferry Act (British Columbia)*. It is the sole voting shareholder of British Columbia Ferry Services Inc., an independent company incorporated under the *Business Corporations Act (British Columbia)*, which is commonly known as BC Ferries. The provincial government holds all of the preferred shares of BC Ferries, but has no voting interest in BC Ferries or BCFA.

BC F erries p rovides ferry s ervices on the west coast of B ritish C olumbia under contract to the provincial government. BC F erries provides f requent, year-round transportation s ervice with 3 4 vessels operating on 24 routes out of 47 terminals spread out over 1,600 kilometres of coastline. In the year ended March 31, 2017, BC Ferries carried 8.3 million vehicles and 21 million passengers on over 172,000 sailings.

BCFA's sole function is that of shareholder of BC Ferries, and its responsibilities are to:

- Appoint the directors to the BC Ferries board of directors; and,
- Establish compensation plans for the directors and certain executives of BC Ferries.

For more information, please visit BCFA's website at www.bcferryauthority.com and BC Ferries' website at www.bcferries.com.

Governance Structure

Board Structure

The board of B CFA is composed of nine directors. Its size and composition is prescribed by the Coastal Ferry Act (British Columbia) as follows:

- Four members are appointed by the board from the nominees of the 14 coastal regional districts, grouped by provincial regulation into four Appointment Areas as follows:
 - One member: Northern Coastal and North Island Area
 - o Skeena Queen Charlotte Regional District
 - o Regional District of Kitimat-Stikine
 - Central Coast Regional District
 - o Regional District of Mount Waddington
 - One member: Central Vancouver Island and Northern Georgia Strait Area
 - o Alberni-Clayoquot Regional District
 - o Comox Valley Regional District
 - o Strathcona Regional District
 - o Powell River Regional District
 - Regional District of Nanaimo
 - One member: Southern Mainland Area
 - o Sunshine Coast Regional District
 - o Squamish-Lillooett Regional District
 - o Metro Vancouver Regional District
 - One member: Southern Vancouver Island Area
 - Cowichan Valley Regional District
 - Capital Regional District;
- One member is appointed by the board from nominees of the BC Ferry and Marine Workers'
 Union;
- Two members are appointed by the board from members of the community-at-large; and
- Two members are appointed by the provincial government through Order in Council.

Officers

There are two Officers of the Authority:

- Chair of the board a position elected by the members of the board; and
- Corporate Secretary a position appointed by the board.

There are no employees of the Authority.

Appointment Terms

The *Coastal Ferry Act (British Columbia)* requires that the terms of three directors expire on March 31st each year. Appointments are for terms of three years beginning April 1st. Directors may serve up to two consecutive terms.

Board Membership

The current membership of the BCFA board is as follows:

Director	Appointment	Term Ending March 31 st
Yuri L. Fulmer*	Community-at-Large	2021
Fiona L. Macdonald	Community-at-Large	2019
Shirley J. Mathieson	Organized Labour	2019
Susan Mehinagic	Southern Vancouver Island	2020
Randolph K. Morriss*	Central Vancouver Island & Northern Georgia Strait	2018
G. Wynne Powell	Province of British Columbia	2020
Michael W. Pucci	Northern Coastal & North Island	2018
Sandra A. Stoddart-Hansen*	Southern Mainland	2020
Paul L. Williams	Province of British Columbia	2019

^{*} Has served two consecutive terms and is ineligible for re-appointment for a subsequent term

Biographies of the current board members are available on the BCFA website.

Vacant Positions

There are two vacancies on the BCFA board effective April 1, 2018.

In accordance with the *Coastal Ferry Act (British Columbia)*, the board is seeking nominations of qualified candidates from the Northern Coast and North Island Appointment Area and the Central Vancouver Island and Northern Georgia Strait Area to fill two positions. The provincial government is to appoint a qualified candidate to fill the third position.

All three appointments are for three-year terms ending March 31, 2021.

Nominee Criteria

Basic Qualifications

The appointment of BCFA directors is undertaken with the objective of ensuring the board is composed of a majority of strong, qualified, independent directors. The board supports the concept that the board Chair should be an independent director.

Under guidelines adopted by the board, a director is independent if he or she has no direct or indirect material relationship with the Authority. For this purpose, a "material relationship" is a relationship that could, in the view of the board, be reasonably expected to interfere with the exercise of a director's judgment. Directors are required annually to attest to their independence.

All of the nine directors owe a fiduciary duty to the Authority, and are not appointed in order to be delegates of a region, stakeholder, union or constituent group.

Statutory Qualifications

A person nominated for appointment to the Authority board must be a "qualified Authority candidate" as defined in the *Coastal Ferry Act*. Specifically, this means an individual who:

- does not hold elected public office of any type;
- is not an employee, steward, officer, director, elected official or member of any union representing employees of BC Ferries;
- is not an employee of a municipality, regional district, trust council or greater board within the Appointment Area; and
- is not an employee, director, officer or executive of BC Ferries.

As well, those appointed to the Authority board must comply with the provisions related to director qualifications and conflicts addressed in sections 8 and 9 of the *Coastal Ferry Act*. This includes the requirement that directors meet the qualification requirements of section 1 24 of the *Business Corporations Act*.

Skills and Experience

The board has identified the following skills and experience that the board, as a whole, should possess in order to meet its mandate effectively. A nominee for appointment to the board should possess skills and experience in more than one of the following five categories:

- 1. **Leadership** experience at a senior level managing the operations of a large or complex commercial or non-profit entity.
- 2. **Business** experience in operating a business in British Columbia.
- 3. **Board Experience** previous experience as a member of a board of directors of a commercial or non-profit entity.
- 4. **Accounting and Finance** accounting or financial expertise.
- 5. Legal a law degree or experience in managing legal issues of a complex commercial nature.

Core Competencies

As well, a nominee should possess the following core competencies and abilities:

- Well-developed faculty for critical analysis;
- Financial literacy, including an ability to read financial statements and the ability to understand the use of financial ratios and other indices to measure performance;
- Appreciation of the unique role of the Authority as the shareholder of BC Ferries as set out in the Coastal Ferry Act (British Columbia);
- Thorough knowledge of the responsibilities and duties of a director;
- Sufficient time and availability to devote to the board;
- Experience a s a c orporate d irector w ith a s olid u nderstanding of c orporate g overnance practices and the ability to distinguish corporate governance from management;
- Ability to effectively apply knowledge, experience, and expertise to matters before the board;
 and
- The stature and integrity to be seen as a credible member of the board.

Personal Attributes

Appointments to the board are also made in consideration of the following personal attributes:

- Ability to be an effective ambassador and representative of BCFA;
- Ability to participate fully and frankly in the deliberations and discussions of the board to make a meaningful and knowledgeable contribution;
- A team player with the ability to work effectively with fellow directors and be a positive and constructive force within the board, along with a demonstrated in terest in the long-term success of BCFA and BC Ferries;
- Encourages free and open discussion of the affairs of BCFA by the board;
- Communicates persuasively and logically, voices concerns, listens, and raises tough questions
 in a manner that encourages open discussion;
- Willingness to take a stand or express a view, even if it runs contrary to prevailing wisdom or the direction of conversation, and exercise independent judgment;

- Establishes an effective, independent, and respected presence and a collegial and respectful relationship with other directors;
- Focusses enquiries on issues related to strategy, policy, implementation, and results rather than issues relating to the day-to-day management of BCFA or BC Ferries;
- Maintains high ethical standards in professional and personal dealings;
- Ability and willingness to raise potentially controversial is sues in a manner that encourages dialogue;
- Demonstrates flexibility, responsiveness, and willingness to consider change;
- Capability for a wide perspective on issues; and
- Respects confidentiality, exercises good judgment and acts with integrity; understands conflict
 of interest issues and declares potential, real, or perceived conflicts.

Diversity

BCFA seeks to ensure that the board, as a whole, reflects diversity of skills and experience as well as diversity of ethnicity, gender, geography and age range.

Board Operations

Board Committees and Task Groups

There are currently no committees of the board. However, task groups of directors are established, from time to time, to undertake specific assignments.

Time Commitment

The board meets at such time and place as necessary for the dispatch of business. The board plans for a minimum of three meetings per year. Meetings are usually held at BC Ferries' Head Office in Victoria, British Columbia; however, meetings may be held in Vancouver, British Columbia or other locations in the province, or by teleconference. Directors are also expected to make themselves available to work with other directors as may be needed from time to time. Directors are also required to attend the annual general meeting of BCFA, which is open to the public and held in conjunction with an annual public meeting of BC Ferries.

Board Policies

BCFA has a set of board policies, including a Code of Business Conduct and Ethics.

Remuneration

Directors receive an annual honorarium of \$6,250 and a fee of \$1,200 for each regular meeting or \$600 for each teleconference or meeting of short duration of the board attended.

Directors a re en titled to reimbursement of reasonable travel-related expenses incurred on BCFA business.

Liability Insurance and Indemnity

BCFA directors are covered by Directors' and Officer's Liability Insurance and are indemnified by BCFA.

Nomination Process

Each Appointment Area is requested to submit three to five nominees of qualified individuals to the Authority by **November 17**, **2017**, together with a completed Nomination Form signed by each nominee.

Each Appointment Area will determine its own process for identifying its nominees. However, to be considered for appointment, each nominee must have been recommended by one or more of the Regional District boards of the Appointment Area.

There are a variety of ways in which suitable nominees can be identified by the Regional Districts, ranging from informal to formal. For example, potential nominees may be identified through:

- direct canvass;
- unsolicited expressions of interest;
- solicitation through advertising.

Should a Regional District wish to advertise for nominees, the Authority will make available a template print advertisement and will provide financial support to fund the placement of up to three newspaper advertisements. In addition, if requested, the Authority will post nomination forms on its website for on-line completion and submission directly to the Regional District.

Selection Process

Qualified nominees will be interviewed by a task group of the board of directors of the Authority.

The Authority will make a decision on the nominees for appointment to the board by March 31, 2018.

Disclaimer

This document is intended to provide background information on B.C. Ferry Authority for the purposes of informing the Regional Districts and their potential nominees to the board of directors, and does not provide binding legal representations or contractual obligations. The information contained herein may be subject to change.

Ottawa, Canada K1A 0N5

생산 2 1 2017

Mr. Barry Pages Chair North Coast Regional District 14-342 West 3rd Avenue Prince Rupert BC V8J 1L5

Dear Mr. Pages:

The Prime Minister's Office provided me with your correspondence of May 29, 2017, regarding the introduction of Bill C-48, the Oil Tanker Moratorium Act.

The government believes that a clean environment and a strong economy go hand in hand. With the introduction of Bill C-48, the government is fulfilling an important commitment to Canadians and providing an unprecedented level of coastal protection around Dixon Entrance, Hecate Strait and Queen Charlotte Sound.

After extensive consultation, including in Prince Rupert, the government came to the conclusion that it is preferable to take a precautionary approach to the petroleum products included in the moratorium. Accordingly, the proposed moratorium will apply to the shipment of crude oils as defined by the *International Convention for the Prevention of Pollution from Ships* (MARPOL) and persistent oil products that are heavier and when spilled, and that break up and dissipate slowly.

During consultations, I also heard that community and industry resupply should be protected. Shipments of less than 12,500 metric tonnes will continue to be allowed to ensure north coast communities and industries can receive critical shipments of heating oils and other petroleum products. A copy of the proposed legislation, including a full list of persistent oil products covered by the moratorium, can be found online at

http://www.parl.gc.ca/LEGISINFO/Home.aspx?ParliamentSession=42-1.

The proposed moratorium is part of a suite of actions to protect Canada's water and pristine coastline and is complementary to the Government of Canada's Oceans Protection Plan, which was announced by the Prime Minister on November 7, 2016. This national plan is an investment of \$1.5 billion over five years in long-needed coastal protections that include specific investments to build a world-leading marine safety system and strengthen the environmental stewardship of Canada's coasts. The government will work with Indigenous groups, local communities, first responders and key partners to deliver this comprehensive national plan. Please visit http://www.tc.gc.ca/eng/oceans-protection-plan.html for more information.

The federal government is committed to continue working with Indigenous groups, provincial and territorial governments and stakeholders across the country to advance measures to enhance marine safety, protect the environment and communities and support economic development.

Thank you for taking the time to write.

Yours sincerely,

The Honourable Marc Garneau, P.C., M.P.

Minister of Transport



NORTH COAST REGIONAL DISTRICT

14 – 342 West 3rd Avenue, Prince Rupert, B.C. V8J 1L5 Phone: (250) 624-2002 Fax: (250) 627-8493 Website: www.sgcrd.bc.ca

May 29, 2017

Office of the Prime Minister 80 Wellington Street Ottawa, ON K1A 0A2

<u>Attention: The Right Honourable Justin Trudeau, P.C., M.P., Prime Minister of Canada,</u> Ottawa

Dear Prime Minister:

Re: Crude Oil Tanker Moratorium on British Columbia's North Coast

On behalf of the Board of the North Coast Regional District (NCRD), I am writing to you today with respect the crude oil tanker moratorium on B.C.'s north coast.

The Government of Canada committed to introducing legislation to formalize a moratorium for crude oil tankers on B.C.'s north coast to provide extra protection for B.C's northern coastline from potential oil spills by spring of 2017.

On May 12, 2017, the Government of Canada introduced C-48, the proposed Oil Tanker Moratorium Act in Parliament. This Act will deliver on your election commitment to Canadians, and included in Transport Minister Marc Garneau's mandate letter in 2015, to formalize a crude oil tanker ban on B.C.'s north coast

The Board wishes to take this opportunity to extend its gratitude and appreciation for your Government on following through with this commitment, and to reiterate the importance of this legislation in protecting our coast and improving marine safety.

Should you have any questions, please do not hesitate to contact the office of the NCRD.

Best regards,

NORTH COAST REGIONAL DISTRICT

Barry Pages Chair

NCRD Info

From:

Prince Rupert Gas Transmission <princerupertgas@transcanada.com>

Sent: To: Thursday, August 3, 2017 1:36 PM Prince Rupert Gas Transmission

Subject:

Prince Rupert Gas Transmission Project Update

Good Afternoon,

On July 25, 2017, Pacific Northwest LNG announced that it would not be proceeding with the proposed LNG facility near Port Edward. We were notified about this decision on the same day, and wanted to let you know what this means for our proposed Prince Rupert Gas Transmission (PRGT) project.

In its announcement, PETRONAS / PNW LNG indicated that after a careful and total review of their project, they could not proceed because of changes in market conditions. A copy of their announcement can be found at www.pacificnorthwestlng.com. Shortly after learning about this decision, TransCanada also issued a public statement, which can be found at www.transcanada.com.

There is still a strong need for Canadian natural gas supplies to get to market, and the infrastructure we are building in Alberta and British Columbia - including recently announced multi-billion dollar investments in our NGTL system and North Montney Mainline - are designed to help move natural gas supplies to markets where they are needed.

We are proud of the work we have done, which has allowed us to sign 14 Project Agreements with First Nations, receive letters of support from municipalities and Chambers of Commerce across the route, invest in important community initiatives, and secure key regulatory approvals and permits. We have built strong new relationships, and we look forward to continuing our partnerships with landowners, First Nations, stakeholders and communities in BC as we develop other natural gas assets, including our North Montney Mainline and Coastal GasLink projects.

Once we have completed our review we will be in touch. If you have questions about the project, please contact us through the project toll-free line at 1-855-253-0099, or by email at PRGT appreciates your input and collaboration to progress the project.

Sincerely,

John Dunn

Vice President, Prince Rupert Gas Transmission

TransCanada

We respect your right to choose which electronic messages you receive. To stop receiving this message and similar communications from TransCanada PipeLines Limited please reply to this message with the subject "UNSUBSCRIBE". This electronic message and any attached documents are intended only for the named addressee(s). This communication from TransCanada may contain information that is privileged, confidential or otherwise protected from disclosure and it must not be disclosed, copied, forwarded or distributed without authorization. If you have received this message in error, please notify the sender immediately and delete the original message. Thank you. Nous respectons votre droit de choisir quels messages électroniques vous désirez recevoir. Pour ne plus recevoir ce message et les communications similaires, de la part de TransCanada



For immediate release July 25, 2017

Pacific NorthWest LNG Project Not Proceeding

Vancouver, British Columbia - Pacific NorthWest LNG (PNW LNG) today announced that the LNG project in Port Edward, British Columbia will not proceed as previously planned.

The decision was made by PETRONAS and its partners after a careful and total review of the project amid changes in market conditions.

Anuar Taib, Chairman of the PNW LNG Board, said: "We are disappointed that the extremely challenging environment brought about by the prolonged depressed prices and shifts in the energy industry have led us to this decision.

"PETRONAS and its North Montney Joint Venture partners remain committed to developing their significant natural gas assets in Canada and will continue to explore all options as part of its long-term investment strategy moving forward," added Anuar.

President and CEO of PNW LNG Adnan Zainal Abidin said: "On behalf of the entire PNW LNG team, I would like to thank everyone who has supported the project. I also want to thank everyone who contributed towards the development of this project and its comprehensive environmental assessments. In particular, I want to recognize the area First Nations, the District of Port Edward, the City of Prince Rupert, and their communities for their invaluable support and involvement in the project. I would also like to acknowledge the Pacific NorthWest LNG project team for all of their dedication and hard work."

"Without everyone's support and involvement, we would not have achieved the many key milestones for the project, including agreements with the area First Nations, the BC environmental assessment certificate and the Canadian environmental assessment approval," added Adnan.

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Media Contact

Eryn Rizzoli
erizzoli@progressenergy.com

Cell: 587 834 3796

Backgrounder: Project Timeline



About Pacific NorthWest LNG

Pacific NorthWest LNG was a liquefied natural gas export facility proposed to be situated on Lelu Island in the District of Port Edward, in northwest British Columbia. Pacific NorthWest LNG is majority-owned by PETRONAS. Japan Petroleum Exploration Co., Ltd. (JAPEX), PetroleumBRUNEI, IndianOil Corporation (IOC) and Sinopec-China Huadian who are also partners in Pacific NorthWest LNG and its associated natural gas supply.

About the North Montney Joint Venture

The North Montney Joint Venture is a joint venture between Progress Energy Canada Ltd, Japan Petroleum Exploration Co., Ltd. (JAPEX), PetroleumBRUNEI, IndianOil Corporation (IOC) and Sinopec-China Huadian to develop the resources in the North Montney formation located along the foothills of the Rocky Mountains in northeast British Columbia. Progress, a wholly owned subsidiary of PETRONAS, is the operator of the joint venture, which has approximately 800,000 acres of largely contiguous mineral rights in the North Montney with more than 52 trillion cubic feet of reserves and contingent resources, and over 15,000 identified drilling locations. Total gas initially in place is over 200 tcf of high-quality, low-cost unconventional gas and liquids.



For Immediate Release July 25, 2017

BACKGROUNDER Pacific NorthWest LNG Project Timeline

Date	Milestone		
	2011		
June	PETRONAS and Progress Energy Resources Corp form the 50-50 North Montney Joint		
	Venture to develop the Altares, Lily and Kahta properties		
	2012		
Q1	Lelu Island is identified as the preferred site for Pacific NorthWest LNG		
June	PETRONAS announces the intent to acquire Progress Energy Resources Corp		
December	Pre-FEED of the Pacific NorthWest LNG facility begins, investigating the project scope,		
	timelines, costs and labour requirements		
December	Investment Canada approves purchase of Progress Energy Resources Corp by PETRONAS		
	2013		
February	Project Description is submitted to the Canadian Environmental Assessment Agency (CEAA)		
March	The Pacific NorthWest LNG Project Limited Partnership (PNW LNG) is incorporated		
April	Japan Petroleum Exploration Co (JAPEX) acquires 10 percent interest in PNW LNG and		
	the associated natural gas supply		
July	PNW LNG applies to the National Energy Board (NEB) for a license to export up to 19.68		
	million tons per annum (MTPA) of LNG per year for 25 years starting in 2019		
July	PNW LNG submits its Project Description to the BC Environmental Assessment Office (BC EAO)		
December	PetroleumBRUNEI acquires 3 percent interest in PNW LNG and the associated natural		
	gas supply		
December	The NEB approves a license to export up to 22.2 MTPA of LNG per year for 25 years		
	beginning in 2019		
2014			
February	PNW LNG submits its joint Environmental Impact Statement/Application to CEAA and to		
	the BC EAO		
March	The Government of Canada approves the LNG export license previously granted by the NEB		
March	Indian Oil Corporation acquires 10 per cent interest in PNW LNG and the associated		
	natural gas supply		
June	Sinopec acquires 15 percent interest in PNW LNG and the associated natural gas supply		
November	PNW LNG receives its EA Certificate from the BC EAO, subject to 8 conditions		
November	PNW LNG's associated pipeline, the Prince Rupert Gas Transmission pipeline, receives its		
	BC EA Certificate		
	ı		



Milestone
Milestone
PNW LNG submits its Environmental Impact Statement Addendum to CEAA, due to
improvements in the project design
Property tax agreement signed with the District of Port Edward
PECL proves more than 15 tcf of natural gas reserves, exceeding target for PNW LNG
Final Investment Decision
2015
BC Government passes legislation to enable PNW LNG's tax agreement with the District
of Port Edward
BC Government and PNW LNG agree to terms of a Project Development Agreement
IBA signed with Kitselas First Nation
PNW LNG signs an IBA term sheet with Gitxaala First Nation
PNW LNG board and shareholders announce a conditional Final Investment Decision
subject to two conditions: approval of the PDA by the BC Legislature and regulatory
approval by the Government of Canada on the EA application
PNW LNG's Project Development Agreement with the BC Government is approved by
the BC Legislature
PNW signs an IBA term sheet with Kitsumkalum First Nation
2016
CEAA releases draft Environmental Assessment Report and conditions on PNW LNG's EA
application to inform a public comment period from February 10 – March 11
Federal government approves the PNW LNG project and issues their Decision Statement
for PNW LNG with 190 conditions
IBA signed with Metlakatla First Nation
The Government of Canada approves a 40-year LNG export license previously granted by
the NEB
2017
IBA signed with Lax Kw'alaams First Nation
The BC Oil and Gas Commission issues an LNG Export Facility permit to PNW LNG
PNW LNG's shareholders announce they are not proceeding with the development of
the project after a careful and total review of the proposed project amid changes in market conditions

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Media Contact

Eryn Rizzoli

erizzoli@progressenergy.com

Cell: 587 834 3796

TransCanada Responds to PNW LNG Decision; Company to be reimbursed for full costs to advance PRGT Project

www.transcanada.com /en/announcements/2017-07-25transcanada-responds-to-pnw-Ing-decision-company-to-be-reimbursed-for-full-costs-to-advance-prgt-project/

CALGARY, Alberta – July 25, 2017 – Media Advisory – TransCanada Corporation (TSX, NYSE: TRP) (TransCanada) today was notified that PETRONAS affiliate Pacific NorthWest LNG (PNW LNG) would not be proceeding with their proposed LNG project near Port Edward, British Columbia.

Following is a statement from Karl Johannson, TransCanada's executive vice-president and president, Canada and Mexico natural gas pipelines and energy:

With this news, we are reviewing our options related to our proposed *Prince Rupert Gas Transmission (PRGT)* project as we continue to focus on our significant investments in new and existing natural gas infrastructure to meet our customers' needs.

As part of our agreement with PETRONAS affiliate, Progress Energy, following receipt of a termination notice, TransCanada would be reimbursed for the full costs and carrying charges incurred to advance the PRGT project. We expect to receive this payment later in 2017.

We are proud of the work we have done along the PRGT route, which has allowed us to sign 14 Project Agreements with First Nations and secure the key regulatory approvals and permits. We have built strong new relationships, and we look forward to continuing our strong partnerships with First Nations and communities in B.C. as we develop other natural gas assets, including our North Montney Mainline project. This important project is backed by independent 20-year commercial service agreements with 11 shippers (including Progress Energy), and pending regulatory approvals, we remain ready to move forward.

There is still a strong need for Canadian natural gas supplies to get to market, and the infrastructure we are building in Alberta and British Columbia – including recently announced multi-billion dollar investments in our NGTL system and North Montney Mainline - are designed to help move natural gas supplies to markets where they are needed.

With more than 65 years' experience, TransCanada is a leader in the responsible development and reliable operation of North American energy infrastructure including natural gas and liquids pipelines, power generation and gas storage facilities. TransCanada operates one of the largest natural gas transmission networks that extends more than 91,500 kilometres (56,900 miles), tapping into virtually all major gas supply basins in North America. TransCanada is the continent's leading provider of gas storage and related services with 653 billion cubic feet of storage capacity. A large independent power producer, TransCanada currently owns or has interests in approximately 6,200 megawatts of power generation in Canada and the United States. TransCanada is also the developer and operator of one of North America's leading liquids pipeline systems that extends over 4,300 kilometres (2,700 miles), connecting growing continental oil supplies to key markets and refineries. TransCanada's common shares trade on the Toronto and New York stock exchanges under the symbol TRP. Visit TransCanada.com to learn more, or connect with us on social media and 3BL Media.

Media Enquiries:

Mark Cooper / Shawn Howard 403.920.7859 or 800.608.7859

TransCanada Investor & Analyst Enquiries: David Moneta / Stuart Kampel 403.920.7911 or 800.361.6522

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Daniel Fish

From:

Greg Martin <mayor@queencharlotte.ca>

Sent:

Friday, August 11, 2017 11:28 AM

To:

Daniel Fish

Subject:

FW: Fall FAC meeting with BC Ferries reps

Hi Daniel,

Please add this to our NCRD agenda. BCF has honoured Barry Cunningham's request to meet in Rupert.

Regards,

Greg

From: Guenette, Darin [mailto:Darin.Guenette@bcferries.com]

Sent: August-10-17 1:58 PM

To: manager@porthardychamber.com; carsha@goldcity.net; darren.kitasoo@gmail.com; pete@bcmountainlodge.com; Jo-anne Macmullin <joanne_macmullin@yahoo.ca>; barry.cunningham@princerupert.ca; travis.hall@heiltsuknation.ca; tharealtrav@gmail.com; Greg Martin <mayor@queencharlotte.ca>; frobertson@porthardy.ca; XT:Schlichting, Mark <mark@shearwater.ca>; william.yovanovich@skidegate.ca

Cc: greba@telus.net

Subject: Fall FAC meeting with BC Ferries reps

Hello all,

This is a heads up that I will be planning the fall FAC meeting to occur **Wed, October 25 in Prince Rupert.** The reason for this date is that Mark Collins will be in Prince Rupert at that time for an employee engagement session, and has asked me to also schedule the FAC meeting so that he can attend.

As is our recent practice, I would look to set aside a three-hour window for the meeting. It would therefore make sense to set the meeting time either 9-12 noon (and include lunch after) or 1-4 pm (with 12 pm lunch prior to the meeting).

I am looking to you for advice on which time window would make better sense, please. Barry, I am also seeking ideas for a suggested venue.

Other than Barry, all other FAC attendees will be coming from elsewhere and arriving no later than the evening of Oct 24. I see that there are flights arriving and departing three times a time for those who would need to fly. Otherwise, I would be able to help coordinate ferry bookings for those who would be coming from Port Hardy/Central Coast areas on Route 10 (departs Pt Hardy Oct 22 at 6 pm, then Bella Bella Oct 23 and 2 am, then Klemtu Oct 23 and 6:30 am), or the Haida Gwaii reps if they take the sailing that leaves Skidegate at 10 am on Oct 24.

I hope this date works for most of you, as I realize this is not giving you more than one option (Mark's calendar is driving this plan). Remember that we can work at setting up a conference call if you are not able to attend in person.

Please mark your calendars and think about planning your way to/from. Regards,

Darin Guenette

Manager, Public Affairs

British Columbia Ferry Services Inc.

The Atrium

Suite 500, 1321 Blanshard St., Victoria, BC V8W 0B7

T: 1-877-978-2385 (toll free) or 250-978-2385 C: 250-213-9253 F: 250-978-1119

darin.quenette@bcferries.com

bcferries.com | Facebook | Twitter



STAFF REPORT

DATE: August 18, 2017

TO: Doug Chapman, Chief Administrative Officer

FROM: Daniel Fish, Corporate Officer

SUBJECT: Alternative Approval Process for Vancouver Island Regional Library

Borrowing Service Establishment Bylaw No. 614, 2017 & Vancouver Island

Regional Library Loan Authorization Bylaw No. 615, 2017

Recommendation:

THAT the staff report entitled "Alternative Approval Process for Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 & Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017" be received;

AND THAT, in accordance with section 342 of the *Local Government Act*, approval of the electors of Bylaw No. 614, 2017 and Bylaw No. 615, 2017 be authorized in the entire service area, which is comprised of the Village of Queen Charlotte, the Village of Masset and Electoral Area E;

AND THAT, in accordance with section 86(3) of the Community Charter, October 6th at 4:30 p.m. be established as the deadline by which elector responses, under the alternative approval process for Bylaw No. 614, 2017 and Bylaw No. 615, 2017, must be submitted to the North Coast Regional District by qualified electors within the service area;

AND THAT the elector response form be approved and established as the single response form attached as Attachment D to the Corporate Officer's August 18, 2017 staff report entitled "Alternative Approval Process for Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 & Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017"

AND THAT the notice of alternative approval process, attached as Attachment D of the Corporate Officer's August 18, 2017 staff report entitled "Alternative Approval Process for Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 & Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017" be approved;

AND FURTHER THAT, pursuant to section 86(3) of the Community Charter, a fair determination of the total number of electors of the service area, being the area to which the alternative approval process applies, is 128.

PURPOSE:

To conduct an Alternative Approval Process (AAP) for Bylaw No. 614, 2017 & Bylaw No. 615, 2017 by setting the deadline to receive elector responses, establishing the total number of electors, and approving the notice of AAP and the elector response form.

BACKGROUND:

At its regular meeting held May 26, 2017, the Board of the North Coast Regional District (NCRD) gave first to third readings to the Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 (Attachment A) and the Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017 (Attachment B) and directive that required elector approval for the bylaws be obtained through an AAP. The purpose of Bylaw No. 614, 2017 is to establish a service to borrow upon the credit of the NCRD in order to lend money to the Vancouver Island Regional Library (VIRL) to build and renovate library facilities in Queen Charlotte, Masset and Sandspit. The purpose of Bylaw No. 615, 2017 is to authorize the borrowing of up to \$1.5 million on behalf of the VIRL. The VIRL has advised that the NCRD may now proceed with the AAP.

The attached Notice of AAP (Attachment C) and Elector Response Form (Attachment D) have been prepared in accordance with the applicable sections of the *Local Government Act (LGA)* and the *Community Charter (CC)*. The total number of electors in the service area has been estimated at 1,280. The Board may proceed with adopting the bylaws unless at least 10% of the electors (128) indicate that the Board must obtain the assent of the electors by way of assent voting (referendum). The proposed deadline to receive elector responses is October 2, 2017.

DISCUSSION:

Financial Implications

Under an agreement with the NCRD, the VIRL would service the \$1.5 million debt for the construction and renovation of library facilities in Queen Charlotte, Masset and Sandspit, and defray the costs of the AAP. The maximum requisition of \$170,000 contained in the borrowing service establishment bylaw is a safeguard to be levied only in the event that the VIRL is unable to meet its debt service obligations under its agreement with the NCRD.

Conclusion

The VIRL is planning to construct and renovate library facilities in Queen Charlotte, Masset and Sandspit, and has requested the NCRD to take out a \$1.5 million on its behalf. The VIRL-NCRD partnership requires a borrowing service establishment bylaw (Bylaw No. 614, 2017) and a loan authorization bylaw (Bylaw No. 615, 2017). The bylaws require electoral assent through an AAP in order to proceed to adoption. The VIRL has requested that the NCRD proceed with the AAP.

RECOMMENDATION:

- 1. That, in accordance with 342 of the *LGA*, approval of the electors of Bylaw Nos. 614 and 615 be authorized in the entire service area, which is comprised of the following municipalities within the NCRD: Queen Charlotte, Masset and Electoral Area E.
- 2. That, in accordance with section 86(3) of the *CC*, the date of October 6, 2017 at 4:30 p.m. be established as the deadline by which elector responses, under the AAP for NCRD Bylaw No. 614, 2017 and Bylaw No. 615, 2017, must be submitted to the NCRD by qualified electors within the service area of the NCRD;
- 3. That the attached Notice of Alternative Approval Process and the Elector Response Form be approved; and
- 4. That, pursuant to section 86(3) of the *CC*, a fair determination of the total number of electors of the service area, being the area to which the alternative approval process applies, is 128.

NORTH COAST REGIONAL DISTRICT

BYLAW NO. 614, 2017

A bylaw to establish a service within the North Coast Regional District for the purpose of borrowing funds on behalf of the Vancouver Island Regional Library for the construction and renovation of library building facilities

WHEREAS

- i. Section 179(1)(b) of the *Community Charter* empowers a regional district to borrow money to lend to a person or public authority under an agreement;
- ii. The Board of the North Coast Regional District wishes to establish a service for the purpose of borrowing funds on behalf of the Vancouver Island Regional Library for construction and renovation of library facilities in Queen Charlotte, Masset and Sandspit, B.C.;
- iii. The Vancouver Island Regional Library will be responsible for servicing the debt under an agreement with the North Coast Regional District. Should the Vancouver Island Regional Library default on its obligations under this agreement, the North Coast Regional District will levy the requisition needed to service the debt;
- **iv.** Participating area approval is required and shall be obtained by alternative approval process under section 345 of the *Local Government Act*;
- v. Pursuant to section 342(4) of the *Local Government Act*, the Board of the North Coast Regional District has authorized, by resolution adopted by at least 2/3 of the votes cast, that participating area approval will be obtained for the entire service area:
- vi. The approval of the inspector of municipalities has been obtained under section 342(1)(a) of the *Local Government Act*.

NOW THEREFORE the Board of the North Coast Regional District, in open meeting assembled, enacts as follows:

SERVICE

1. The service being established is for the purpose of borrowing funds to provide capital financing to the Vancouver Island Regional Library for the construction and renovation of library building facilities.

BOUNDARIES

2. The boundaries of the service area shall be coterminous with the boundaries of the Village of Queen Charlotte, the Village of Masset and Electoral Area E.

PARTICIPATING AREA

3. The participating areas for this service are the Village of Queen Charlotte, the Village of Masset and Electoral Area E.

COST RECOVERY

- **4.** As provided in Section 380 of the *Local Government Act*, the annual costs of providing the service may be recovered by one or more of the following:
 - **a.** Property value taxes imposed in accordance with Division 3 of Part 11 [Requisition and Tax Collection];
 - **b.** Parcel taxes imposed in accordance with Division 3 of Part 11 of the *Local Government Act*;
 - **c.** Fees and charges imposed under section 397 of the *Local Government Act*:
 - **d.** Revenues raised by other means authorized under this or another Act;
 - **e.** Revenues received by agreement, enterprise, gift, grant or otherwise.

MAXIMUM REQUISITION

READ A FIRST TIME this

5. The maximum amount that may be requisitioned annually for the service shall be (\$170,000).

CITATION

6. This bylaw may be cited as the "Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017".

26th day of May 2017

TEAD AT INOT TIME UIS		20 day	OI IVI	ay, 2017.			
READ A SECOND TIME this			26 th day	of Ma	ау, 2017.		
READ A THIRD TIME this			26 th day	of Ma	ay, 2017.		
APPROVED BY	THE INS	SPECTOR OF	MUNICIPALI	TIES			
	th	is	23 rd day	of Ju	ine, 2017.		
APPROVAL O PROCESS	F THE	ELECTORS	RECEIVED	BY	ALTERNA	TIVE	APPROVAL
	th	is	da	y of _		, 2017	·.
ADOPTED THIS	6		day	of		, 2017	.
 Chair			-	Corpo	rate Officer		



Statutory Approval

	visions of section	342	
of the	Local Governmen	t Act	
I hereby appro	ove Bylaw No	614, 2017	
of the	North Coast Region	onal District	,
a copy of whic	ch is attached here	eto.	
	Dated this	23 rd	day
	Dated this	23 rd June	day , 2017

NORTH COAST REGIONAL DISTRICT

BYLAW NO. 615, 2017

A bylaw to authorize the borrowing of one and a half million dollars (\$1,500,000) for the purpose of borrowing funds on behalf of the Vancouver Island Regional Library for the construction and renovation of library building facilities

WHEREAS:

- i. Pursuant to Section 348 of the *Local Government Act*, if money is to be borrowed for the start of a service, the establishing bylaw and the loan authorization bylaw must, for the purpose of obtaining participating area approval, be dealt with as if they were one bylaw;
- **ii.** The Board of the North Coast Regional District adopted Bylaw No. 614, 2017 for the purpose of borrowing funds on behalf of the Vancouver Island Regional Library for the construction and renovation of library building facilities;
- **iii.** The authority to borrow under this loan authorization bylaw expires 5 years from the date on which it is adopted;
- iv. Pursuant to Section 407 of the *Local Government Act*, participating area approval is required and shall be obtained by alternative approval process under Section 345 of the *Local Government Act*;
- **v.** The approval of the inspector of municipalities is required under Section 403 of the *Local Government Act*.

NOW THEREFORE the Board of the North Coast Regional District, in open meeting assembled, enacts as follows:

- **1.** The North Coast Regional District service for which this bylaw relates to is the Vancouver Island Regional Library Borrowing Service.
- 2. The North Coast Regional District is hereby empowered and authorized to borrow, on behalf of the Vancouver Island Regional Library upon the credit of the North Coast Regional District a sum not exceeding One and a Half Million Dollars (\$1,500,000) for the construction and renovation of library building facilities.
- **3.** The maximum term for which debentures may be issued to secure the debt intended to be created by this bylaw is 20 years.

4. This bylaw may be cited as the "Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017."

READ A FIRST TIME this			26 th day	26 th day of May, 2017.			
READ A SECOND TIME this			26 th day	26 th day of May, 2017.			
READ A THIRD TIME this			26 th day	26 th day of May, 2017.			
APPROVED BY	THE INS	SPECTOR OF	MUNICIPALI	TIES			
	thi	is	23 rd day	of Ju	ne, 2017.		
APPROVAL O PROCESS	F THE	ELECTORS	RECEIVED	BY	ALTERNA [®]	TIVE	APPROVAL
	thi	is	da	y of _		, 2017	
ADOPTED THIS	3		day	of	<u>.</u>	, 2017	
Chair			_	Corpo	rate Officer		



Statutory Approval

Under the provisions of section 403

of the	Local Governm	ent Act	and
of section	179 of the	Community Char	ter
I hereby appr	rove Bylaw No.	615, 2017	
of the	North Coast Re	gional District	,
a copy of wh	ich is attached he	ereto.	
	Dated th	is 23 rd	day
	of A	June	, 2017
	Paratal	nanastar of Munici	nolition



NORTH COAST REGIONAL DISTRICT

NOTICE OF ALTERNATIVE APPROVAL PROCESS

Proposed adoption of Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 and Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017

NOTICE IS HEREBY GIVEN THAT the Board of the North Coast Regional District (NCRD) proposes to adopt the "Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017", to establish a service for the NCRD to borrow funds on behalf of the Vancouver Island Regional Library (VIRL) and the "Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017", to authorize the borrowing of up to One and a Half Million Dollars (\$1,500,000) to lend to the VIRL for construction and renovation of library facilities in the Village of Queen Charlotte, the Village of Masset and Sandspit. Under an agreement with the NCRD, the VIRL would service the \$1,500,000 debt for the construction of facilities. The maximum requisition of \$170,000 contained in the borrowing service establishment bylaw is a safeguard to be levied only in the event that the VIRL is unable to meet is debt service obligations under its agreement with the NCRD.

FURTHER NOTICE IS HEREBY GIVEN THAT the Board of the North Coast Regional District may adopt the "Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017" and the "Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017" if, after the deadline, elector response forms are certified by the Corporate Officer as having been signed by less than 10% of the eligible electors in the boundary of the participating area which is the whole of the Village of Queen Charlotte, the Village of Masset and Electoral Area E. If, after the deadline, elector response forms are certified by the Corporate Officer as having been signed by at least 10% of the eligible electors in the participating area (calculated to be **128**), the Board may not proceed with the adoption of the "Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017" and the "Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017" and may not proceed with the process unless the matter receives assent of the electors in a voting proceeding.

Elector Response Forms

The response of the electors must be in the form established by the NCRD. Forms are available at the NCRD office (14-342 3rd Avenue West, Prince Rupert). Blank forms can be mailed, faxed, or e-mailed, upon request. An accurate copy of the elector response form may be utilized, provided that it is made of the form prior to any electors signing such form, so that only elector response forms with original signatures are submitted. For an elector response to be accepted it must meet the following conditions:

- only eligible electors of the NCRD are entitled to sign an elector response form;
- the full name of the elector must be stated;
- the residential address of the elector must be stated;
- the elector must sign the elector response form;
- if applicable, the address of the property in relation to which the person is entitled to vote as a non-resident property elector must be stated; and,
- the elector response form must be submitted to the Corporate Officer before the deadline.

Forms may be submitted in person or by mail to be received by the Corporate Officer at the NCRD office located at 14-342 3rd Avenue West, Prince Rupert, BC V8J 1L5 **NO LATER THAN 4:30 P.M. ON Friday, October 6, 2017**. Elector response forms must be in the possession of the Corporate Officer by this time, as postmarks **WILL NOT** be accepted as date of submission. **FORMS MAY NOT BE RETURNED BY FAX.**

Eligible Elector

An eligible elector for the purpose of this Alternative Approval Process is a resident who meets the following criteria:

- is age eighteen or older;
- is a Canadian citizen;
- has been a resident of British Columbia for at least six months;
- has been a resident of the Regional District for at least thirty days; and,
- is not disqualified from voting by the Local Government Act or any other act.

A non-resident property elector who meets the following criteria is also an eligible elector:

- is not entitled to register as a resident elector for the Regional District;
- is age eighteen or older;
- is a Canadian citizen;
- has been a resident of British Columbia for at least six months;
- has been a registered owner of the real property within the Regional District for at least thirty days; and,
- is not disqualified from voting by the *Local Government Act* or any other act.

Note: Corporations or land held in a corporate name are not entitled to vote. In the case of multiple owners of a parcel, only one person (with the consent of the majority of owners) may vote as a non-resident property elector.

What is an Alternative Approval Process?

On January 1st, 2004 the *Community Charter* came into force and prescribes two methods by which a local government may seek approval of the electors. These are *Assent of the Electors* (which is approval by voting) or *Alternative Approval Process* which allows a Board to proceed with an action unless at least 10% of the electors state their opposition within a prescribed period. In this case, the Board has opted for the latter process. If at least 10% of the electors state their opposition to the proposed action, the matter requires the *Assent of the Electors* if the Board wishes to proceed. The *Alternative Approval Process* under the *Community Charter* replaces the *Counter Petition Opportunity* under the *Local Government Act* that some may have been familiar with.

More information may be obtained by contacting Daniel Fish, Corporate Officer at the North Coast Regional District office at 14-342 3rd Avenue West, Prince Rupert, BC or by telephone at 250-624-2002.

Daniel Fish, Corporate Officer

Attachment D



NORTH COAST REGIONAL DISTRICT

ELECTOR RESPONSE FORM

North Coast Regional District proposed adoption of Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 and Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017

NOTE TO PETITIONERS

To be eligible to sign a petition opposing the adoption of Bylaw No. 614, 2017 and Bylaw No. 615, 2017 you must be entitled to register as an elector within the boundary of the service area which are the Village of Queen Charlotte, the Village of Masset and Electoral Area E.

Pursuant to the *Community Charter*, I certify that I am a person entitled to be registered as an Elector (pursuant to the *Local Government Act*) within the North Coast Regional District, that I have not previously signed an Elector Response Form with respect to this matter and I am <u>OPPOSED</u> to the Board of the North Coast Regional District's intention to adopt the Vancouver Island Regional Library Borrowing Service Establishment Bylaw No. 614, 2017 and Vancouver Island Regional Library Loan Authorization Bylaw No. 615, 2017, which establish a service for the purpose of borrowing funds on behalf of the Vancouver Island Regional Library and authorizes the borrowing of \$1,500,000 to be repaid over a period not exceeding twenty (20) years, in order to lend money to the Vancouver Island Regional Library to finance the cost of construction of a new library facility in Masset, B.C., as well as library facility upgrades in Sandspit and Queen Charlotte, B.C.

Name of Elector	(please print)
Signature	
Address	
Date	

To be completed by Non-Resident Property Electors only

I am entitled to register as a non-resident property elector as an owner of the property legally described as:



STAFF REPORT

DATE: August 18, 2017

FROM: Daniel Fish, Corporate Officer

SUBJECT: BC Ferry Authority Appointment

Recommendation:

THAT the Board receives the staff report "BC Ferry Authority Appointment";

AND THAT Board approves the selection process as outlined in this report.

BACKGROUND:

Correspondence was received from the BC Ferry Authority requesting Regional District participation in selecting a slate of candidates for <u>one seat</u> on the BC Ferry Authority Board. The Authority Board is composed of nine Directors. Seven appointments are made by the Authority, 2 by the provincial government.

The current Director from this appointment area is Michael Pucci from Prince Rupert. This, his first, term will expire in 2017 and is eligible to be reappointed because the Coastal Ferry Act limits terms to two consecutive. Appointments are for 3 year terms

For the purposes of nominating one Director, the Regional Districts of Mount Waddington, Central Coast, North Coast and Kitimat-Stikine are grouped into the "Northern Coastal and North Island Appointment Area." The four regional districts are asked to develop collectively a slate of 3 to 5 nominations for this Director position.

In 2008, 2011, and 2014 it was agreed among the Regional Districts that each Regional District would make a single nomination, building a slate of four.

The following process was suggested by the Regional District of Kitimat-Stikine:

- 1. that each Regional District in the Appointment Area chose a single nomination;
- 2. that media advertising and the online application method be used to seek applications;
- 3. that a meeting for Regional District Chairs and CAOs be organized during UBCM to confirm the slate of four candidates, if required; and
- 4. that the slate, one member to be put forth by each Regional District, be ratified after UBCM by each Regional District Board in time to meet the December 31st deadline.

RECOMMENDATION:

That the Regional District approve the selection process described above, confirm with the other three Regional Districts agreement on the process and commence advertising for applicants in this region.



STAFF REPORT

DATE: August 18, 2017

TO: Haida Gwaii Regional Recreation Commission

FROM: D. Lomax, Haida Gwaii Regional Recreation Coordinator

SUBJECT: Haida Gwaii Regional Recreation: 2017 2nd Quarter Reporting

BACKGROUND:

Throughout April to June 2017 (Q2 2017), the Haida Gwaii Regional Recreation (HGR) offered support for programs in varying degrees of capacity, which included the operation of registered HGR programs; coordination and support for drop-in sports programs; and participation and support for community events across Haida Gwaii. These programs are categorized as being either: ran/led; cooperative/partnership; or supporting.

DISCUSSION:

After School Sport and Art Initiative (ASSAI) (Ran/Led Program)

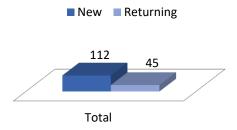
In September 2016, the Haida Gwaii ASSAI program began its sixth year of programming on Haida Gwaii. The ASSAI program offers a wide variety of free sport, art and cultural programs across the islands to youth ages 5-12. The program had a total of 112 first time participants in Q2 2017 and was completed at the end of May 2017.

Note: The upcoming 2017/2018 ASSAI program will be the last year that HGR will be adminestering the program. Over the past 2 years, School District 50 (SD50) has prepared 3 one-year term contracts which have become more convoluted as each one has changed. Throughout contract negotiations for the 2017/2018 ASSAI program, SD50 has been unwilling to sign a three-year contract that would provide the HGR program and ASSAI coordinator with any security. In staff's opinion, our current ASSAI coordinator has done a remarkable job over the past 2 years, and has now left due to her need for longer-term work.

Staff have reached out to all HGR Commissioners with regards to HGR moving forward from the ASSAI program and is in agreement with the HGR no longer overseeing the administration of this program. This will be a transitional year for SD50, and HGR will work with it to ensure that the program operates efficiently with minimal disruption.

The total contract value of the 2017/2018 ASSAI program is anticipated to be \$105,000, with HGR receiving a 10% administrative fee (\$10,500) for its oversight of the program. These funds will not be recovered following the 2017/2018 year.

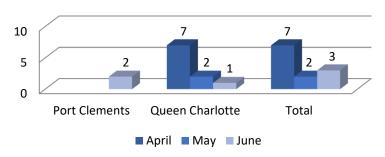
Haida Gwaii ASSAI



Weight Room Orientations-Port Clements and Queen Charlotte (Ran/Led Program)

Throughout Q2 2017, HGR held a total of 4 weight room orientation sessions, with a total of 12 participants.

Weight Room Orientations

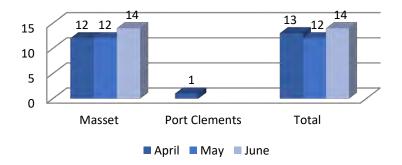


Alternate Fitness-Masset and Port Clements (Ran/Led Program)

Alternate Fitness, held in Masset, runs every Tuesday and Thursday. The class averaged 12.5 participants per month.

Alternate Fitness, held once a week in Port Clements, started in November of 2016 and finished April 2017. This program averaged a total of 1 registered participant for the month of April and the program will resume in the fall of 2017.

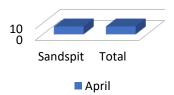
Alternate Fitness



Circuit Fitness-Sandspit (Ran/Led Program)

This circuit program is held at Agnes L. Mathers Elementary in Sandspit. This program aims to create an open and inclusive venue for anyone looking to increase their level of fitness. The program ran twice-weekly from April 4-30th, 2017. This program had a total of 7 registered participants and averaged 3 participants per class.

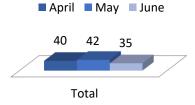
Circuit Fitness



Fitness Bootcamp-Masset (Ran/Led Program)

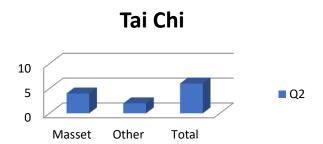
The Fitness Bootcamp provides a mixture of exercises and cardiovascular training designed to work the heart and lungs and give almost every muscle in the body a workout. This class is suitable for novice exercisers and fitness enthusiasts alike, because individuals are allowed to work at their own personal level and intensity. The Fitness Bootcamp runs 3 classes every Monday, Wednesday and Friday and, in Q2 2017, averaged 39 participants.

Fitness Bootcamp



Tai Chi-Masset (Ran/Led Program) NEW

The Tai Chi program taught by a new HGR Instructor is an introduction to the Japanese defensive and meditational martial art. Students learn essential movements and practice exercises to build strength and flexibility. This program drew a total of 6 registered participants from both Masset and Tallahasse, FL.

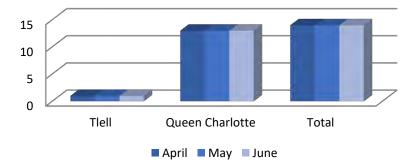


<u>Note:</u> HGR also tried to provide a <u>"Seniors" Tai Chi program</u> at the Howard Philips Community Hall in Masset. The program was open for 2 consecutive Wednesdays during the month of April, 2017 with no participants attending. The program was cancelled due to low turnout and will be revisited should there be a demand for programming.

Shitu Ryu Karate-Skidegate (Ran/Led Program)

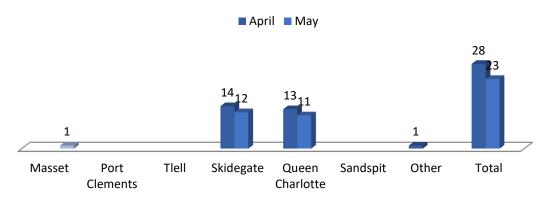
Shito Ryu Adult and Youth Karate Sensei, Deavlan Bradley, has kick started this program at Queen Charlotte Secondary School, which runs for its 5th consecutive year, twice-weekly. Shito Ryu Karate is attended by youth and adults ages 7-57 and this month saw a total 14 participants.

Shitu Ryu Karate

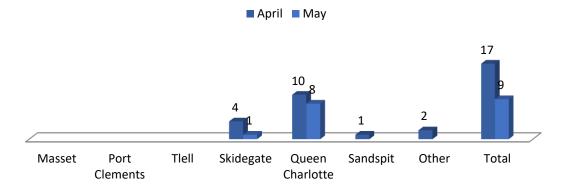


"Drop-in" Programs- GidGalang Kuuyas Naay Secondary School, Queen Charlotte (Ran/Led Programs)

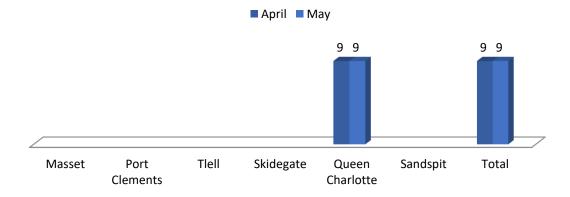
Indoor Floor Hockey



Basketball



Pickleball



"Drop-in" Programs- Port Clements Elementary School (Ran/Led Programs)

International Folk Dancing



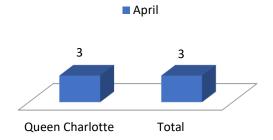
"Drop-in" Programs- Gudangaay Tlaats'gaa Naay Secondary School, Masset (Ran/Led Programs)

Note: There were challenges with the drop-in program during Q2 2017 due to the systems and procedures still being relatively new at the school. As such, no information was collected for the months of April and May. This issue has been addressed and HGR will be meeting with the user groups in the fall of 2017.

Archery, Valentines Weekend Event-Queen Charlotte (Supporting)

The Archery Club hosted a fun afternoon for participants to test out their archery skills. The event was held on Sunday, April 23rd at GidGalang Kuuyas Naay Secondary School (Queen Charlotte) and drew a total of 3 participants.

Archery Event

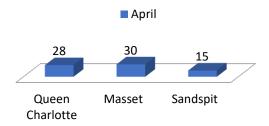


Bike Re-Psych Program-All Islands (Supporting)

In April, 4 weekly sessions of Bike Re-Psych were held in Queen Charlotte, with 7 people attending each week. The program also ran 5 days of training for 6 mechanics with 2 instructors for a total of 25 hours of training for our volunteers. There were also 2 community bike fixing days held in Sandspit and Masset, with 15 people attending in Sandspit and 30 people in Masset.

The Bike Re-Psych team also volunteered in Sk'aadgaa Naay and Tahayghen Elementary Schools for 4 hours each and fixed about 15 to 25 children's bicycles at each location. Kids went on rides with volunteers at Sk'aadgaa Naay as well.

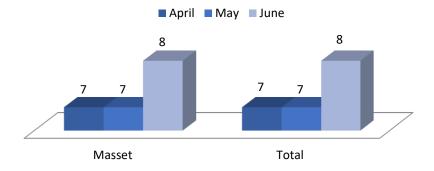
Bike Re-Psych Program



Women's Wood Working Program-Masset (Supporting)

Gudangaay Tlaats'gaa Naay Secondary School is teaching a woodworking program for women only.

Women's Wood Working Program

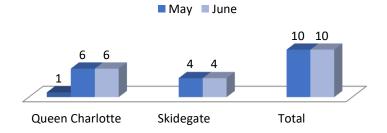


Latin Dance-Queen Charlotte (Supporting)

Jessica Ruskin ran several dance programs out of Sun Studio in Queen Charlotte that started Q1 2017 and ran throughout Q2 2017. Sun Studio's dance program is a cardiovascular dance class geared towards those who love motivating music to get a work-out, and is great for all fitness levels and age groups. This aerobic choreography class provides high and low impact options and draws on a variety of dance genres.



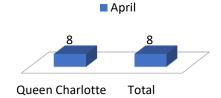
Salsa Dance Series



Canadian Firearms Safety (PAL) Course (Supporting)

In April 2017, long-time HGR instructor, Ron Haralson, concluded two pre-requisite licensing courses in Queen Charlotte. The certification is required for all hunters as part of the foundation for the Possession and Acquisition License.

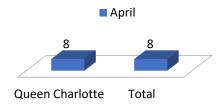
Canadian Firearms Safety (PAL) Course



Conservation and Outdoor Recreation Education (CORE) Course (Supporting)

In April 2017, HGR instructor, Ron Haralson, concluded pre-requisite licensing courses in Queen Charlotte. The certification is required for all hunters as part of the foundation for the Possession and Acquisition License.

Conservation and Outdoor Recreation Education (Core) Course

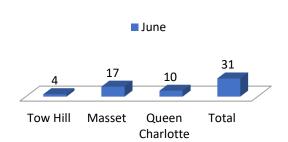


Roller Girls "Jam Skate" Event Held in Masset and Skidegate, June 23-25, 2017 (Supporting)

Masset Rollergirls - Jam Skate Committee - partnered with HGR and created a fundraising event to bring in an experienced coach to facilitate jam/dance workshops. This event was to encourage new skaters to try something new.

This event ran for 3 consecutive days and hosted a total 5 different events and each class averaged 9 participants with a total of 31 participants overall.

Jam Skate Event

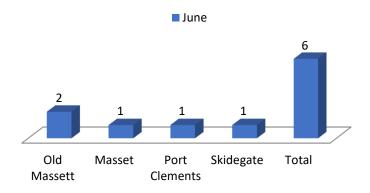


BC Rugby in school clinics, June 1, 2, 5, 6, 13 and 15 (Supporting)

HGR worked with BC Rugby to set up dates in Masset, Port Clements, Skidegate and Queen Charlotte to help spearhead rugby clinics during the schools physical education classes for the dates listed above. There was great interest in Masset and will be looking forward to setting up additional clinics for the following years.

St. John's Ambulance Standard First Aid Course, June 24 and 25 (Supporting)

Standard First Aid Course



Additional Reporting

- In June 2017, HGR was awarded a conditional grant in the amount of \$4,500 from Northern Health's "Imagine Community Grants" program. Funding was applied for in May 2017.
- The annual HGR summer program launched on July 3, 2017.
- The new HGR website will be launched on June 23, 2017.
- HGR is currently working to prepare for the Agate Man Triathlon, which HGR has assumed responsibility for planning.
- HGR is currently accepting registrations for a skate board/BMX work shop in Queen Charlotte. This is a paid program and, unfortunately, at this point, there are *0 registrations*. Final numbers need to be in by August 1st, 2017 or the program will be cancelled. The advertising for this program has been up for over 1 month.
- HGR is developing a 10-week program for the youth of Sandspit for the fall of 2017. The goal is to offer the youth of Sandspit a different program like wrestling, fitness classes, karate etc. every other weekend for 1.5 to 2 hours on a Saturday or Sunday.
- HGR is working on a program to have a gymnast coach, Boby Wager, teaching gymnastics programs across the islands for the month of November 2017.

RECOMMENDATION:

Staff is recommending that the Board receive the Haida Gwaii Regional Recreation Coordinators report entitled "Haida Gwaii Regional Recreation: 2017 2nd Quarter Reporting" for information.



STAFF REPORT

DATE: August 18, 2017

TO: D. Chapman, Chief Administrative Officer

FROM: D. Fish, Corporate Officer

SUBJECT: Haida Gwaii Building/Fire Inspection Feasibility Study Funding

Recommendation:

THAT the staff report, dated August 18, 2017, entitled "Haida Gwaii Building/Fire Inspection Feasibility Study Funding" be received;

AND THAT the 2017 Annual Budget, Function 901, be amended as follows:

- \$5,600 in Surplus funding to be allocated toward current year expenditures; and
- \$4,970 in Transfer to Reserves be allocated toward current year expenditures.

AND FURTHER THAT the Board of the North Coast Regional District authorize the use of \$10,570 in Feasibility Studies, Function 901, to be used toward the undertaking of a building/fire inspection feasibility study for Haida Gwaii.

PURPOSE:

The purpose of this report is to provide resolutions from member municipalities on Haida Gwaii requesting the undertaking of a feasibility study for a proposed building/fire inspection service; provide estimated costs for a study to determine the feasibility of establishing a building/fire inspection service on Haida Gwaii; and to seek authorization from the Board of the North Coast Regional District (NCRD) to expend funds from the feasibility reserve for the undertaking of the proposed study.

BACKGROUND:

There has been ongoing discussion between staff at the Villages of Queen Charlotte, Masset and Port Clements, as well as Skidegate, Old Massett and the NCRD with respect to establishing a building/fire inspection service on Haida Gwaii.

DISCUSSION:

At its Regular meeting held June 16, 2017, the Board of the NCRD received correspondence from the Village of Queen Charlotte Council requesting that the NCRD undertake a feasibility study on behalf of its member municipalities on Haida Gwaii for a proposed building/fire inspection service (Attachment A). At that same time, the Board was also presented with a cost for a feasibility study of this nature estimated to be \$10,570.

Since the June 16, 2017 Regular meeting, similar requests from the Village of Masset and Port Clements Councils have been received in office (Attachments B & C).

It should be noted that Skidegate and Old Massett have expressed interest in participating in a proposed service by way of a service agreement and, as such, their support for the use of feasibility study funds for this initiative has not been requested.

Feasibility Studies

The use of feasibility study reserves as a means of financing the investigation of proposed services is common to all regional districts. Feasibility study funding typically covers the research, evaluation, promotion and approval requirements associated with proposed services.

In the absence of a feasibility study reserve fund, costs associated with the establishment of a new service could only be accessed through the general administration budget.

A service feasibility study will, typically, consider the following types of items when analyzing the feasibility of a potential service:

- The proposed service has a clear and understood purpose;
- The proposed service has a defined and agreed-upon scope;
- Specific, measurable goals for the service have been identified;
- The parties agree on a way to share costs;
- The parties agree on how the service should be governed;
- The parties agree on how the service should be delivered;
- The parties agree on a process for service review;
- A start-up plan has been developed; and
- Support among elected officials is broad and sufficient.

At a minimum, the feasibility study should include a general review of all relevant information and provide a summary of the costs and benefits of the proposed service. From the feasibility study, provided a service is deemed feasible, a service establishing bylaw is developed.

With respect to the undertaking of feasibility studies, the following points should be considered:

- All municipalities and electoral areas participate in the service;
- If a new service is established that consumed feasibility study funds, the new service will repay those funds to the NCRD feasibility study service; and
- Voting by Directors on all matters related to feasibility studies are to be done on an unweighted basis.

Financial Implications

As mentioned, the estimated cost for the undertaking of a feasibility study of this nature is \$10,570.

At present, the 2017 Annual Budget authorizes the transfer of \$4,970 as a contribution to reserve. The budget also reflects \$10,698 in surplus funds within the service and an additional \$26,667 held in reserve. In theory, there is a total of \$42,335 available for feasibility studies.

RECOMMENDATION:

Staff is	recommer	nding th	nat the	Board	autho	rize	the	use o	of :	\$10,57	0 fr	om	the f	easik	oility	studies
service,	Function	901, fo	or the	undert	aking	of	a fe	asibili	ty	study	for	a p	oropo	sed	build	ling/fire
inspecti	on service	on Hai	da Gw	aii.												



May 16, 2017

North Coast Regional District, Building and Fire Inspection On Haida Gwaii

Resolution # 2017/16/06

Moved by Councillor Frazier Seconded by Councillor MacMullin And Resolved:

> "That the Village of Queen Charlotte request that the Board of North Coast Regional District approve expending funds from the Feasibility Studies Fund to undertake a study to determine the feasibility of providing building and fire inspection services on Haida Gwaii."

> > **CARRIED**

I hereby certify the above to be A true and correct copy of Resolution #2017/16/06 as passed by Council on the 15th day of May, 2017.

L. Wiedeman, CAO



Village of Masset

wings .waves . wilderness www.massetbc.com
PO Box 68 (1686 Main Street) Masset, BC VoT 1Mo
Phone (250) 626-3995 Fax (250) 626-3968

North Coast Regional District 14-342 3rd Avenue West Prince Rupert, BC V8J 1L5

Re: Building and Fire Inspection Service

The Village of Masset Council discussed the above issue at their meeting of June 12, 2017 and passed the following motion:

Moved by Councillor Johnston, seconded by Councillor Tyler, that the Village of Masset request that the Board of North Coast Regional District approve expending funds from the Feasibility Studies Fund to undertake a study to determine the feasibility of provide building and fire inspection services on Haida Gwaii.

CARRIED

The above motion is certified as a true and correct copy excerpted from the minutes of the June 12, 2017 Council meeting.

The Village of Masset looks forward to working with our neighbouring communities and the North Coast Regional District to determine the feasibility of this service for Haida Gwaii.

Sincerely.

Trevor Jarvis CAO

Attachment C



The Village of **PORT CLEMENTS** "Gateway to the Wilderness"

36 Cedar Avenue West
PO Box 198
Port Clements, BC
V0T1R0
Phone :250-557-4295
FAX :250-557-4568
Email : cao@portclements.ca
Web : www.portclements.ca

July 4, 2017

To: North Coast Regional District

Re: Building/Fire Inspection Service on Haida Gwaii

The Village of Port Clements Council unanimously passed the following motion at the July 3, 2017 Regular Council Meeting:

2017-169 — Moved by Councilor Daugert, seconded by Councilor Cumming THAT Council supports the recommendation for a feasibility study into the Building/Fire Inspector position for Haida Gwaii. CARRIED

Thank you for undertaking this study. Please contact us if you have any questions, concerns or require assistance with setting up for any of the necessary meetings.

Sincerely,

Kim Mushynsky, BBA

Chief Administrative Officer



STAFF REPORT

DATE: August 18, 2017

TO: D. Chapman, Chief Administrative Officer

FROM: D. Fish, Corporate Officer

SUBJECT: Emergency Notification System for Haida Gwaii (ePact)

Recommendation:

THAT the staff report entitled "Emergency Notification System for Haida Gwaii (ePact)" be received;

AND THAT that the Board of the North Coast Regional District support the adoption of the ePact system;

AND FURTHER THAT staff be directed to work with the All Island Emergency Planning Committee to negotiate cost of implementation of the ePact system on Haida Gwaii.

PURPOSE:

The purpose of this report is to provide an information to the Board of the North Coast Regional District (NCRD) with respect to an All Island Emergency Planning Committee recommended emergency notification system for Haida Gwaii, ePact.

BACKGROUND:

The All Island Emergency Planning Committee (Committee) was formed in 2015. The Committee is composed of representatives from all communities on Haida Gwaii, as well as several additional organizations such as volunteer fire departments, hospitals, RCMP, School District 50, and others involved in emergency planning.

The Committee has been researching the various mass emergency communication systems available. This has involved cost and functionality comparisons to determine the most effective system and then to leverage an "All-Island" buy-in to try and reduce costs.

<u>ePact</u>

The ePact network is an emergency notification system that has the capability to mass alert participants via text, email and phone in the event of an emergency, which builds redundancy into the system. ePact also has the ability to ask residents to make specific responses and the system then pulls this information into reports for use by emergency responders. The administration of the system is internet-based.

The system is developed by voluntary opting in by residents who, in turn, are able to input their data into the system at no cost and choose which organizations to share this information with. The ePact system is currently used by schools and sports groups within the province, and is gaining broader participation with municipalities due to their role as emergency responders.

The ePact system has the ability to be broken down into numerous sub-units – by town, group, by area of town, etc. – and do mass notifications only to specific units.

There is no direct cost to residents for the ePact system. ePact meets or exceeds all federal and provincial privacy legislation laws and information is stored on servers in Canada. The system also sends out prescheduled reconfirmation notifications to residents to ensure that the information in the system remains accurate and current.

DISCUSSION:

The Committee has indicated that it feels it is important that the entire islands agree on one system so that there is unity and ease of operation and the ability for communities to work together and, as such, this information is being brought forward to Electoral Area Directors for their consideration.

The Committee agreed that the ePact system offers the best functionality and pricing relative to other systems investigated by the Committee. It was agreed that each community would bring this information back to their respective Council or Board for support to proceed with negotiating the purchase of a communication system.

The Committee indicated that it would be ideal to have the system in place by October 2017 to coincide with the Shakeout BC Drill. The Committee indicated that commencing now would allow time for advertising of the system to residents and encourage them to register. This would assist in maximizing resident registration and testing the overall effectiveness of the ePact system on Haida Gwaii.

Financial Implications

The Committee has estimated that the maximum the implementation of the ePact system would cost on Haida Gwaii is \$2 per individual per year, however, if all of Haida Gwaii opted to participate, this cost may be reduced to \$1 per individual per year. Given these cost estimates, the costs to Electoral Areas D and E are estimated as follows:

Electoral Area	2016 Population ¹	High Cost Scenario	Low Cost Scenario
Area D	539	\$1,078	\$539
Area E	340	\$680	\$340

RECOMMENDATION:

Staff is seeking further direction from the Electoral Area D and E Directors whether or not this is an initiative they wish to pursue. If so, the North Coast Regional District Board should support the adoption of the ePact system and authorize staff to work with the Committee to negotiate cost of implementation.

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¹ Statistics Canada, 2016 Census of Population.



NORTH COAST REGIONAL DISTRICT

14 – 342 3rd Avenue West Prince Rupert, BC V8J 1L5 Phone: (250) 624-2002 Fax: (250) 627-8493 Website: www.sqcrd.bc.ca

MEMORANDUM

To: North Coast Regional District Board

From: Sukhraj Gill, Treasurer

Date: August 18, 2017

Subject: Proposed Tlell Fire Protection Service

The North Coast Regional District (NCRD) was contacted in early 2016 by the Tlell Volunteer Fire Department (TVFD) with an inquiry as to how to become a local service under the NCRD. Staff has held information meetings with TVFD and has provided information on the development of a possible service.

During our trip to Haida Gwaii for the April 21, 2017 Board Meeting held in Sandspit, the CAO and Treasurer met with TVFD to discuss what their needs were, their overall financial health and how the society operates. From this meeting and subsequent telephone meetings held we have completed the following:

- Developed a 20 year financial plan for the TVFD;
- Defined and created a matrix of the properties to be included into the proposed service area;
- Created a TVFD Newsletter informing people of the long-term financial planning needed for the fire department to operate and replace assets (see Appendix A);
- Contacted BC Assessment Authority (BCAA) and discussed the timing of including the proposed service area in the 2018 assessment roll if a referendum is successful.

In order for the service to be established the following steps will need to be completed:

- Hold a community meeting (date has yet to be set, likely in September) to explain the service and taxation impacts on property owners and answer questions raised;
- If there is thought to be sufficient support, determine the question for the referendum;
- Hold a referendum;
- Develop the Tlell Fire Protection Service Area Bylaw;
- Board to adopt the Tlell Fire Protection Service Area Bylaw & Service establishing bylaw;
- Seek Ministry approval and Board to adopt the Service establishing Bylaw;
- Send list of participating properties to BCAA before the end of October;
- Consider amendments to the 20 year financial plan for the Tlell Fire Protection service based on questions and concerns raised at the community meeting.

A further update will be provided to the Board after the community meeting is held.

Tlell Fire Fighters Association and the North Coast Regional District

Proposal:

The Tlell Volunteer Firefighters Association (TVFA) has initiated a process to develop a long-term financial strategy to fund the TVFA firefighting operations.

History:

Fire protection in the community of Tlell started with an informal group of Tlell residents after the Village of Port Clements donated an old fire truck to the community in the early 1980s. These residents formed the TVFA and, in 1996, with the acquisition of crown land, constructed a dedicated community fire hall. Construction of the Tlell Fire Hall was completed by the hard work of volunteers and funded by a Gwaii Trust grant. Grants from the Gwaii Trust have subsequently allowed the TVFA to purchase critical firefighting equipment from fire protection suites, rescue equipment and even the fire truck affectionately called "Mona Lisa".

TVFA provides emergency firefighting and rescue services from Tlell to Dead Tree Point and includes the households and businesses in between. This service has been 100% supported by the community through volunteers, annual memberships, hall rentals and fundraising. This funding provided the bare minimum funds for hall utilities, truck insurance and basic maintenance of equipment and building.

Current Issue:

The time has arrived where the TVFA needs to develop a long-term strategy on how to fund the After 20 years of operating on a operation. shoestring budget and without committed annual funding, the TVFA faces the challenge of purchasing or replacing aging vehicles, safety equipment and clothing, as well as critical truck and building maintenance. Funding the training material and equipment that is needed is also expensive and necessary. Providing the appropriate training, along with proper equipment is the primary method to keeping our volunteer firefighters safe from harm and protects our community at the same time.

While our community has benefited from the Gwaii Trust grants, we recognize that we cannot organize our financial affairs around hoping to continue to receive these grants. Future grants from the Gwaii

Trust are not guaranteed as the fund is over subscribed.

To find a workable long-term solution, the TVFA has been working with the North Coast Regional District (NCRD) to explore the creation of a Local Service and to develop a long-term financial strategy that would be funded, in part, through property taxation. This sort of committed funding has many benefits such as:

- Eliminating the need for annual membership payments;
- Allows the TVFA association to continue to fund raise to assist with capital purchases;
- Base funding will allow for strategic planning and ability to apply for Gwaii Trust grants or other sources that require matched funding;
- Replacement of large pieces of equipment via financing options through the NCRD at lower interest rates;
- Regular small equipment replacement;
- Annual training and recertification of volunteer firefighters;
- · Maintenance of aging infrastructure;
- Regular training would increase membership interest and capacity
- Provide a better, more effective service for Tlell;
- Insurance through the Municipal Insurance Association through the NCRD.

How It Will Work:

Every effort has gone into keeping the budget to a minimum amount in order to minimize the tax impact to those who live in our area. We have determined that the minimum budget of \$25,000 would provide for the required long-term funding to operate the fire department. The impact on the average type of property is:

	Yearly
	Tax
Property Type	Amount \$
Residential	182
Business/Other	289
Recreation/Non profit	58
Farm	4

Staff from the NCRD will be on hand at a future public information meeting to answer any questions from residents and to determine the possible impact to tax payers.

The bottom line is that for the average residential home located within the boundary of the proposed Tlell Fire Protection Service Area, you will pay \$182 per year or \$15.16 per month for the service.

Next Steps:

The TVFA, in partnership with the NCRD, will hold a public information meeting to discuss the proposed Tlell Fire Protection Service and to explain in greater detail the taxation impact and to answer any questions concerning the proposed service and the benefits.

After there has been adequate public consultation and input, and if there appears to be sufficient support for our recommended new direction, the TVFA will request that the NCRD hold a public referendum so the people in the proposed service area can vote on whether or not they want to create a long-term financial strategy by requesting the NCRD to establish this service on all of our behalf.

We will send out a "Notice of Meeting" to inform everyone as to the time and place where the public consultation meeting will be held.

Please watch your mail for further notices.

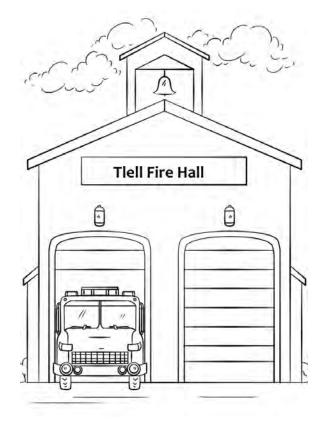
Contact Information:

Doug Chapman Chief Administrative Officer North Coast Regional District Email: cao@sqcrd.bc.ca

Telephone: 250-624-2002 Ext 8 Toll Free: 1-888-301-2002

Sukhraj Gill Treasurer

North Coast Regional District Email: treasurer@sqcrd.bc.ca Telephone: 250-624-2002 Ext 4 Toll Free: 1-888-301-2002





STAFF REPORT

DATE: August 18, 2017

TO: D. Chapman, Chief Administrative Officer

FROM: D. Fish, Corporate Officer

SUBJECT: Haida Gwaii Recreation Survey

Recommendation:

THAT the staff report entitled "Haida Gwaii Recreation Survey" be received;

AND THAT Staff work with the Haida Gwaii Regional Recreation Coordinator to implement a standardized communications strategy for all Haida Gwaii Regional Recreation program and service offerings;

AND THAT the Board of the North Coast Regional District provide Staff with further direction as to whether or not to develop options and cost estimates for a recreation facility on Haida Gwaii;

AND FURTHER THAT this information be brought forward to the Board of the North Coast Regional District's 2018-2023 Financial Planning discussions for consideration;

BACKGROUND:

At its Regular Meeting held February 17, 2017, the Board of the North Coast Regional District (NCRD) directed staff to develop a community survey with respect to desired recreational programming on Haida Gwaii.

In April 2017, the Haida Gwaii Regional Recreation Service Customer Satisfaction Survey (Survey) was mailed to residents on Haida Gwaii for completion and return to the office of the NCRD. The Survey has been included as Appendix 1 of this report.

PURPOSE:

The purpose of this report is to present the findings of the Survey to the Board of the NCRD and provide recommendation with respect to future programming and service delivery.

DISCUSSION:

Survey

The survey was composed of four (4) sections as follows:

1. Tell us about yourself

This section of the survey collected demographic and behavioural data from respondents and their household with respect to lifestyle and involvement with Haida Gwaii Regional Recreation (HGR).

2. How we communicate with you

This section of the survey collected behavioural and attitudinal data from respondents and their household with respect to HGR and its communications with residents.

3. How are we doing?

This section of the survey collected attitudinal data from respondents and their household with respect to HGR's current service and program delivery.

4. Your suggestions

This section of the survey collected written data from respondents with respect to improving the HGR service, new programming and general comments. This section of the survey also allowed for HGR volunteer registration.

In total, 1,040 surveys were mailed to residents on Haida Gwaii. The total number of returned surveys was 140, yielding a total response rate of 13.46% - an average response rate for external surveys.

For the purpose of this report, and in the spirit of regional service delivery, survey findings have been amalgamated. However, survey findings for each of the following communities have been included as appendices to this report:

- **Appendix 2:** Haida Gwaii (Amalgamated)
- Appendix 3: Village of Queen Charlotte
- Appendix 4: Village of Masset
- Appendix 5: Village of Port Clements
- Appendix 6: Electoral Area D
- Appendix 7: Electoral Area E

Survey Findings

Demographics

In the Survey, respondents were offered the opportunity to select multiple responses to questions. The percentage totals for figures have been calculated by dividing the total number of responses to a question against the total number of returned surveys (140). As such, table percentage figures will not total 100%.

Survey findings for Haida Gwaii (amalgamated) have been detailed in Appendix 2. In summary:

Community	Total (#)	Total (%) of all Respondents
Masset	43	30.7
Queen Charlotte	49	35.0
Port Clements	16	11.4
Electoral Area D	21	15.0
Electoral Area E	11	7.9

The majority of respondents were from the Village of Queen Charlotte (49), with Electoral Area E yielding the lowest number of survey respondents (11).

Age	Total (#)	Total (%) of all Respondents
18-24	2	1.4
25-34	5	3.6
35-44	23	16.4
45-54	24	17.1
55-64	30	21.5
65-74	46	32.9
75 or older	10	7.1

The majority of survey respondents were over the age of 35, with this demographic representing 95% of total survey respondents. Those respondents aged 65-74 represented 32.9% of survey respondents, the highest of all age groups.

Of the 140 total respondents, 75.7% were female, which the remainder (24.3%) were male.

With respect to household characteristics, a total of 76 respondents (54.7%) indicated that there were no children living in their household, whereas 47 respondents (33.8%) indicated that there were children or teens living in their household. Based on the survey, the average number of people living in a household on Haida Gwaii is 2.24, with those homes of 2 individuals representing 50.7% of total respondents.

Behavioural

The HGR programs enjoyed by respondents are as follows, with additional programming information included in Appendix 2:

Program	Total (#)	Total (%) of all Survey Respondents
Events or Festivals	54	38.6
Drop-in Sports	23	16.4
Yoga-Pilates	22	15.7
Volunteering	20	14.3
Visual Arts	18	12.9
None	38	27.1

It should also be noted that 38 respondents (27.1%) indicated that they did not participate in HGR programs or services.

100 survey respondents (71.4%) indicated that their motivator to participate in recreational programs and activities was to achieve better personal fitness, while 95 respondents (67.8%) indicated that participating in recreational programs and activities was for general leisure purposes.

Of the 140 total respondents, 81 (57.9%) indicated that they had participated in a HGR program or service within the past year. The top five HGR programs enjoyed by respondents who indicated participation in an HGR program or service over the past year are as follows:

Program	Total (#)	Total (%) of all Survey Respondents
Events or Festivals	34	41.9
Yoga-Pilates	15	18.5
Alternate Fitness	14	17.3
Drop-in Sports	13	16.0
Circuit Training	12	14.8

Within the past year, respondents had participated in HGR programs or services in the following locations:

Community	Total (#)
Queen Charlotte	30
Masset	34
Port Clements	15
Electoral Area D	20
Electoral Area E	5

It should be noted that mobility of HGR participants is recorded in the individual community breakdowns included as appendices to this report.

Survey respondents indicated that the following times are most ideal for participation in HGR programs and services:

Weekdays	7:00 p.m. – 9:00 p.m.
Weekends	9:00 a.m. – 12:00 p.m.

Of those respondents that indicated they had participated in HGR programs and services over the past year: 27.8% indicated that they were a participant in drop-in programs; 25.3% indicated that they were a participant in registered programs; and 39.2% indicated that they were a participant in both drop-in and registered programs.

When asked for the reasons most likely to prevent respondents from participating in HGR programs and services, respondents provided the following responses:

Reason	Total (%) of all Survey Respondents
Unaware of activities offered	32.9
Inconvenient scheduling	28.6
Lack of time	27.1

Communication

When asked how much advance notice is required for planning purposes as they relate to HGR programs and services, respondents indicated:

Advance Notice	Total (%) of all Survey Respondents
Less than 1 week	5.0
1-2 weeks	35.0
2-4 weeks	29.3
4-6 weeks	7.9
More than 6 weeks	4.2

Respondents indicated the following preferences with respect to receiving news respecting HGR programs and services:

Means	Total (%) of all Survey Respondents
Email	53.6
Viewed Online	33.6
Direct Mail	31.4
The Observer	27.9

It should be noted that 58.4% of respondents indicated that their household did not regularly receive a local community-based newspaper.

Attitudinal

The following data details survey respondents' attitudes toward HGR – survey responses are limited to agree, unsure and disagree.

1. I can easily access all of the information I need about HGR:

Agree	29.3%
Unsure	51.9%
Disagree	18.8%

2. I regularly receive accurate and complete information about HGR:

Disagree	48.9%
Unsure	38.3%
Agree	12.8%

3. The information that I receive from HGR is relevant and useful to me and members of my household:

Agree	30.2%
Unsure	47.3%
Disagree	22.5%

4. HGR currently offers the types of programs and classes that appeal to me and members of my household:

Agree	22.0%
Unsure	47.3%
Disagree	30.7%

5. HGR currently offers adequate opportunities for drop-in access to recreation facilities:

Agree	25.8%
Unsure	57.0%
Disagree	17.2%

6. HGR should offer a wider variety of sports, fitness and age appropriate physical activities in its programs:

Agree	60.8%
Unsure	36.2%
Disagree	3.0%

7. HGR should offer a wider variety of non-physical activity type of programming in its programs:

Agree	55.1%
Unsure	40.7%
Disagree	4.2%

8. HGR should offer fewer registered programs and lessons and provide more opportunities for drop-in and casual use activities:

Agree	25.8%
Unsure	55.5%
Disagree	18.7%

9. HGR should offer increased opportunities and access for community-based organizations to provide programs at recreation facilities:

Agree	57.4%
Unsure	41.8%
Disagree	0.8%

10. HGR's website is informative and easy to use:

Agree	26.1%
Unsure	66.3%
Disagree	7.6%

11. I always use the HGR website as my main source of information about HGR:

Agree	23.4%
Unsure	15.8%
Disagree	60.8%

12. I feel well informed about HGR services and programs:

Disagree	59.5%
Unsure	23.1%
Agree	17.4%

13. The HGR website offers easy access and clear instructions for self-registration into HGR programs and services:

Agree	24.6%
Unsure	63.5%
Disagree	11.9%

14. Both the in-person and telephone registration procedures for HGR programs are straightforward and easy to do:

Agree	26.7%
Unsure	65.8%
Disagree	7.5%

15. Whenever I have a question, I can easily obtain support from HGR staff:

Agree	33.1%
Unsure	58.6%
Disagree	8.3%

16. I am served in an efficient and timely fashion by HGR staff:

Agree	29.8%
Unsure	60.3%
Disagree	9.9%

Suggestions

The final portion of the survey was broken into three questions requesting respondents' feedback. The following summarizes the responses received to each of these questions. Once again, community-specific responses have been included in the appendices to this report.

- 1. We are seeking your ideas and thoughts on how we can improve.
 - Build a swimming pool;
 - Build an island-wide recreation centre;
 - Offer music and arts programs;
 - Once a month programming mail-outs to residents;
 - More senior-friendly classes;
 - More communication and advance notice for programming; and
 - Increase public awareness.
- 2. Do you have any comments about Haida Gwaii Recreation that you would like to draw to our attention?
 - Advertise upcoming events in the Observer;
 - More communication with residents and advertising for programs;
 - Work with School District 50 to facilitate drop-in sports;
 - Partner with the Haida Gwaii Arts Council; and
 - Lower prices.
- 3. Do you have any suggestions or ideas for new programs or services that should be offered at Haida Gwaii Recreation?
 - More family activities;
 - More senior-friendly activities;
 - More music and arts programs;
 - Swimming pool;
 - Bootcamp/circuit classes in the south-end of island; and
 - Tai Chi classes.

CONCLUSION:

Summary and Findings

The demographic portion of the survey findings provide the NCRD with relevant household data that may be used to tailor programs and services to the various age groups and household sizes. For instance, given that the 65-75 age group was the largest of all respondents, it may be beneficial to investigate new age-appropriate programs to cater to this group. Similarly, consideration can be given to the mobility of these respondents and the likelihood of travel between communities to attend programs and services tailored to the demographic.

The behavioural portion of the survey findings provide insight into respondents current use of the HGR service and programs such as current participation in programming. This data positions the NCRD to focus its programming to better correspond with the demands of respondents, by either focusing efforts on well-attended programs or removing programs that are not attended. This section also provides insight into attitudes of respondents with respect to location of programming, motivation to participate in recreational programming, program scheduling and barriers to participation in programming.

The communication portion of the survey findings provide valuable insight as to how best to communicate with respondents respecting HGR programs and services. For instance, respondents have indicated a preference toward online notification through email or website postings as opposed to more traditional advertising methods such as newspaper advertisements and direct mail. This data also illustrates respondents' preferences with respect to timing of communication for upcoming programs and services, indicating that 1-2 weeks advance notice is preferred by respondents. This data may provide further insight into formalizing and standardizing how HGR communicates with the general public.

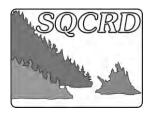
The attitudinal section of the survey findings present, arguably, the most useful data for the NCRD's purposes. Through these responses, it appears quite evident that there is further work to be done with respect to HGR communications and messaging to the general public. The sheer number of "unsure" responses to these questions indicate that respondents are unaware of, or unfamiliar with, HGR and its service and program offerings. Similarly, the NCRD is able to use this data in tailoring its program offerings. For instance, respondents have indicated that they are in favour of HGR offering a wider variety of non-physical activities, which appears intuitive given the information the NCRD has gleaned in the demographics section which indicates that the 65-75 age group represented the largest age group in the survey findings.

Again, the appendices to this report include further detail on amalgamated and community's specific survey responses. While the responses vary from community to community, the majority of responses for each community align with those responses outlined in the amalgamated survey findings.

RECOMMENDATION:

Staff is recommending that the Board:

- Authorize staff to work with the Haida Gwaii Regional Recreation Coordinator to implement a standardized communications strategy for all Haida Gwaii Regional Recreation programs and service offerings;
- Allocate additional Haida Gwaii Regional Recreation funding in 2018 to undertake an educational/awareness project with respect to the Haida Gwaii Regional Recreation service; and
- Provide staff with further direction.



North Coast Regional District Haida Gwaii Regional Recreation Service Customer Satisfaction Survey

The North Coast Regional District (NCRD) is seeking your opinion to help Haida Gwaii Regional Recreation improve its level of service to you. This survey may be completed only once per household. We request that an adult (18 year of age or older) be the person to complete this survey.

All multiple choice sections of this survey must be completed in order for your opinions and views to be included in the survey results. Written response questions are not mandatory to complete. Partially completed surveys will not be accepted.

1.

,								
Tell Us About Yourself								
1.	Please tell us a little about yourself. I	lix	ve in (check one):					
0	Masset	0	Sandspit					
0	Queen Charlotte	0	Tlell					
0	Port Clements	0	Skidegate					
0	Other Graham Island	0	Old Massett					
2.	My age is (check one):							
0	17 or younger	0	45-54					
0	18-24	0	55-64					
0	25-34	0	65-74					
0	35-44	0	75 or older					
3.	Please indicate your gender:							
0	Male	0	Female					
4.	In my household there are (check all	th	at apply):					
0	No children	0	Teens 16-18					
0	Children younger than 5	0	One adult over 18					
0	Children between 5-7	0	Two adults					
0	Children between 8-12	0	Three adults					
0	Young teens 13-15	0	More than three adults					
5.	In my household there is a total of (c	he	ck one):					
0	1 person	0	5 people					
0	2 people	0	6 people					
0	3 people	0	7 people					
0	4 people	0	More than 7 people					

	participate in under the	Hai	da Gwaii Recreation	Sei	rvi	ce? (Check all that	
	apply):						
0	Dance	0	Circuit training	0	Vis	ual arts	
0	Skating	0	Alternate fitness	0	Μι	ısic	
0	Hockey	0	Karate	0	Pot	ttery	
0	Bicycling	0	Aerobics	0	Pei	rforming arts	
0	Figure skating	0	Yoga-Pilates	0	Cra	afts	
0	Swimming	0	Spin class	0	W	oodworking	
0	Tennis	0	Running or jogging	0	You	uth programs	
0	Squash	0	Basketball	0	Co	aching	
0	Badminton	0	Volleyball	0	Vo	lunteering	
0	Competitive sports	0	Floor hockey	0	Co	oking	
0	Drop-in recreational sports	0	Martial arts	0	Cai	noeing/kayaking	
0	Weight training	0	Attend events or	0	Otl	her (please specify)	
0	Learning a language		festivals				
7.	What type of recreationa	l a	ctivities do vou and v	zou [.]	r fa	amily participate	
	in on your own that are not offered or organized by the Haida Gwaii						
	Recreation Service? (che		_	,		o Haida Gwaii	
_	•				_		
0	Dance	0	Floor hockey			Curling	
0	Skating	0	Martial arts			Skiing/snowboarding	
0	Hockey	0	Soccer			Lawn bowling	
0	Figure skating	0	Rugby			Cricket	
0	Swimming	0	Football			Cooking	
0	Baseball	0	Hiking/walking			Lacrosse	
0	Bicycling	0	Tennis			Visual arts	
0	Camping	0	Music			Equestrian sports	
0	Squash	0	Pottery			Bird watching	
0	Creative writing	0	Badminton			Performing arts	
0	Boating	0	Competitive sports			Visual arts	
0	Scuba diving	0	Drop-in recreational	(0	Crafts	
			sports				
0	Canoeing/kayaking	0	Weight training			Woodworking	
0	Aerobics	0	Learning a language			Yoga-Pilates	
0	Youth programs	0	Spin class			Basketball	
0	Volleyball	0	Running/jogging			Gardening	
0	Volunteering	0	Coaching	(0	Golf	
0	Other (please specify):						

6. What types of recreation activities do you or your family members

8.	3. Please indicate what motivates you or members of your household to						
	participate in recreational programs and activities (check all that						
	apply):		_				
0	for general leisure	0	as part of personal		o as part of a competitive		
	purposes		interest based learning		individual sport		
0	to reduce stress	0	as part of art		 as part of recreational 		
			appreciation		league or club		
0	to learn new skills	0	as part of lifelong		 as part of a competitive 		
			learning		team sport		
0	to become more	0	as part of a social outing		 as part of a competitive 		
	proficient and refine				league or club		
	skills						
0	to gain an accreditation		to achieve better		 as part of a recognized 		
	or designation		personal fitness		competitive organization		
0	to expose my children to		as part of a rehab		 as a competitive athlete 		
	learning new skills		therapy program		in training		
0	to help teach my		as part of a fitness		Other (please specify:		
	children about healthy		training program				
	lifestyle choices						
9.	A member of our house	hol	d participated in a Ha	aida	Gwaii Recreation		
	program or service with						
0	Yes		O No				
10	. A member of our house	eho	ld has participated in	ı on	e or more of the		
	following Haida Gwaii		= =				
	all that apply):		1 0		1 ,		
_		_	Cinavit tuaining	0	Minus I auto		
0	Dance	0		0	Visual arts Music		
0	Skating Hockey	0		0	Pottery		
0	Bicycling	0		0	Performing arts		
0	Figure skating	0	Yoga-Pilates	0	Crafts		
0	Swimming	0		0	Woodworking		
0	Tennis	0	•	0	Youth programs		
0	Squash	0		0	Coaching		
0	Badminton	0		0	Volunteering		
0	Competitive sports	0		0	Cooking		
0	Drop-in recreational sports	0		0	Canoeing/kayaking		
0	Weight training	0		0	Other (please specify)		
0	Learning a language	J	festivals	0	Cancil (picase specify)		
_							

11	l. Within the past year, I or	a member of	our housel	hol	d have participated			
in a Haida Gwaii Recreation program or drop-in activity in the								
following locations (check all that apply):								
0	Masset	0	Sandspit					
0	Queen Charlotte	0	Tlell					
0	Port Clements	0						
0	Other Graham Island	0	Old Massett					
12	2. Within the past year, I or	a member of	our housel	hol	d have participated			
	in a program or drop-in a	ctivity, outsid	de of the Ha	aid	a Gwaii Recreation			
	service, in the following l	ocations (che	ck all that	apj	oly):			
0	Masset	0	Sandspit					
0	Queen Charlotte	0	Tlell					
0	Port Clements	0	Skidegate					
0	Other Graham Island	0	Old Massett					
13	B. During <u>WEEKDAYS</u> , the ti	me of day me	mbers of o	ur	household are most			
	likely to participate in Ha							
	activities are (check all th		•		-			
0	Before 6:30 am	3:00 pm – 5:00 p	om	Ο	After 11:00 pm			
0	6:30 am - 9:00 am	5:00 pm – 7:00 p		0	None of these times			
0	9:00 am – 12:00 pm O	7:00 pm – 9:00 p		0	Weekdays not best			
0	12:00 pm – 3:00 pm	9:00 pm - 11:00	pm		suited for household			
0	Other (please specify):							
1 4	l. During <u>WEEKENDS</u> , the ti	me of dav me	mbers of o	ur	household are most			
	likely to participate in Ha	-						
	activities are (check all th		or cutton pr	ν _В	idiii or drop iii			
0	Before 6:30 am		nm	\circ	After 11:00 pm			
0	6:30 am - 9:00 am	5:00 pm – 7:00 p		0	None of these times			
0	9:00 am – 12:00 pm	7:00 pm – 9:00 p		0	Weekends not best			
0	12:00 pm – 3:00 pm	9:00 pm - 11:00	pm		suited for household			
0	Other (please specify):							
15	5. I would classify myself an	ıd members o	of my house	ho	ld as primarily one			
	of the following (check or		1119 110 410 4		in as primarily one			
0	Participant in drop-in activities) () () () () () () () () () (A volunteer	or ir	nstructor of programs			
0	Participant in registered programs		Not a partici		• •			
0	Participant in both	0	Other (pleas	•				

16.	For planning purposes I require advance notice and details about Haida
	Gwaii Recreation programs, services and events within the following
	time-frame (check one):

0	Less than 1 week in advance	0	6 – 8 weeks in advance
0	1 – 2 weeks in advance	0	8 – 10 weeks in advance
0	2 – 4 weeks in advance	0	10 – 12 weeks in advance
0	4 – 6 weeks in advance	0	More than 12 weeks in advance
0	I do not plan in advance	0	This does not apply to me

17. The reasons most likely to prevent members of my household of myself from participating in Haida Gwaii Recreation programs, services and events are (check all that apply):

	•				
0	Lack of time	0	Facilities are too far	0	Feel uncomfortable in
0	Activities not scheduled		away		facilities
	at convenient times	0	Equipment is not appropriate	0	Poor facility cleanliness
0	Cost/price too high	0	Equipment needs upgrading	0	Unaware of activities offered
0	Programming is not appealing	0	Quality of instruction is poor	0	Lack of transit
0	Ferry restrictions	0	Not interested in doing so	0	None of these apply
0	Prefer private facilities/clubs	0	Other (please specify):		

2. How We Communicate With You

This section focuses on our communications with you. Your responses are critical and will help shape our communication strategies into the future.

1.	Select the response that indicates the best way for you to receive						
	information and news respecting Haida Gwaii Recreation program and						
	service offerings (chec	k all that apply):					
0	Sent via direct mail	0	Delivered in the	0	Picked up at recreation		
0	Sent via Email		Observer		centres		
0	Other (please specify):	0	Picked up at a store	0	Viewed online		
2.	Haida Gwaii Recreation	n pi	rovides advertising. He	lp u	s understand the		
	best way to inform and	m	ake you aware of Haida	Gw	aii Recreation		
	programs and services	(cl	neck all that apply):				
0	Haida Gwaii Recreation	0	North Coast Regional	0	Other websites		
	website		District website				
0	Direct mail	0	Email from Haida Gwaii	0	Advertising in recreation		
			Recreation		centres		
0	Newspaper	0	Email from instructor	0	Facebook		
	advertisements						
0	Radio advertisements	0	Yellow pages	0	Brochures or pamphlets picked up at events		
0	Brochures or pamphlets	0	Word of mouth	0	Referral		
	inserted into utility bills						
0	Other (please specify):						
3.	All recreation centres	on 1	Haida Gwaii (all munici	pali	ties) should jointly		
	publish a guide that co	nta	ins all recreation facilit	y ho	ours, schedules and		
	fees.			•	•		
0	Yes	0	No	0	Not important to me		
0	Other (please specify):	Ū		Ū			
4.	Members of our housel	hol	d:				
0	Regularly read a news paper		Rarely read	a nev	vspaper		
0	Occasionally read a newspape	r	O Never read				
		_		_			
5.	Our household current	ly 1		nity	based newspaper:		
0	Yes		O No				

3. How Are We Doing?

When thinking of Haida Gwaii Recreation's programs, services and communications with you please rank how much you agree with each statement. You may also comment on your ranking.

Recreation:	of the information	n i need about Ha	ida Gwaii
Check One	Agree	Unsure	Disagree
2. I regularly receive ac Gwaii Recreation:	ccurate and compl	ete information a	bout Haida
Check One	O Agree	O Unsure	Disagree
3. The information that and useful to me and Check One			ion is relevant O Disagree
	-		-
4. Haida Gwaii Recreati	=		_
classes that appeal to		<u>-</u>	
Check One	Agree	Unsure	Disagree
5. Haida Gwaii Recreati drop-in access to rec	_	s adequate oppor	tunities for
Check One	O Agree	O Unsure	O Disagree
6. Haida Gwaii Recreati and age appropriate		•	orts, fitness
Check One	O Agree	Unsure	Disagree
7. Haida Gwaii Recreati activity type of progr		-	on-physical
Check One	O Agree	Unsure	Disagree
8. Haida Gwaii Recreati lessons and provide activities:		_	_
Check One	Agree	Unsure	 Disagree
9. Haida Gwaii Recreati	ion should offer in	creased opportun	ities and access
for community based facilities:	d organizations to	provide programs	at recreation
Check One	Agree	Unsure	Disagree

10. Haida Gwaii Recreatio	on's web	site is i	informa	tive and e	asy to u	se:
Check One	0	Agree	0	Unsure	0	Disagree
11. I always use the Haida	a Gwaii I	Recreat	tion web	site as m	y main s	source of
information about Ha	ida Gwa	ii Recr	eation:			
Check One	0	Agree	0	Unsure	0	Disagree
12. I feel well informed al	bout Hai	da Gwa	aii Recre	ation ser	vices an	ıd
programs:						
Check One	0	Agree	0	Unsure	0	Disagree
13. The Haida Gwaii Recr	eation v	vebsite	offers e	asy acces	s and cle	ear
instructions for self-rand services:	egistrati	ion into) Haida (Gwaii Rec	reation	programs
Check One	0	Agree	0	Unsure	0	Disagree
14. Both the in-person an	d teleph	one re	gistratio	n proced	ures for	· Haida
Gwaii Recreation pro	grams a	re strai	ghtforw	ard and e	asy to d	0:
Check One	0	Agree	0	Unsure	0	Disagree
15. Whenever I have a qu	estion, I	can ea	sily obta	in suppo	rt from	Haida
Gwaii Recreation staf	f:					
Check One	0	Agree	0	Unsure	0	Disagree
16. I am served in an effic	cient and	l timely	y fashior	n by Haida	a Gwaii	
Recreation service sta	aff:					
Check One	0	Agree	0	Unsure	0	Disagree

4. Your Suggestions In this section, we are seeking your ideas and thoughts about how we can improve.	
Do you have any comments about Haida Gwaii Recreation that you would like to draw to our attention?	

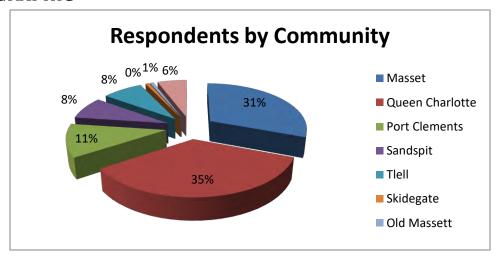
Do you have any suggestion Gwaii Recreation?	ons or ideas for new programs or services that should be offered at Haida				
5. Instructors and Volunteers					
If you are anyone in your household is interested in becoming an instructor or volunteer of the Haida					
Gwaii Recreation service, please take the time to complete the following contact information for follow-					
up from Haida Gwaii Recre	ation staff!				
Name:					
Telephone:					
Email:					
Program Interest:					

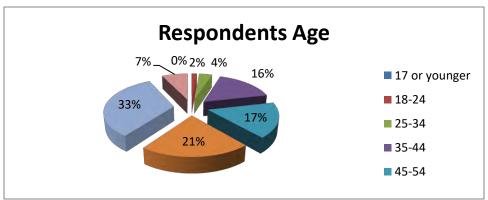
Thank you! You have helped in making our communities a better place by providing your feedback in this survey.

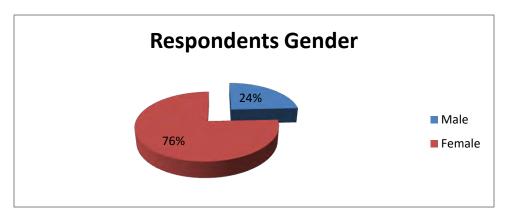
The NCRD is strongly committed to protecting the privacy of any personal information you may provide when completing this survey. Our practices have been designed to ensure compliance with the privacy provisions of the Freedom of Information and Protection of Privacy Act.

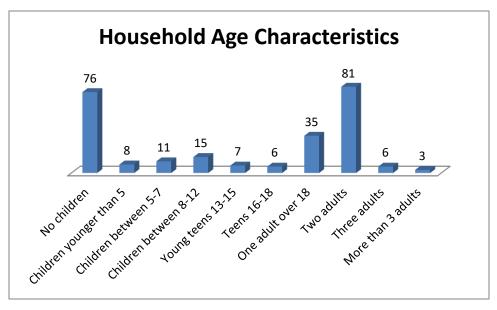
HAIDA GWAII

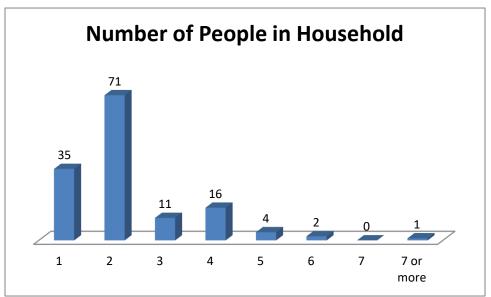
DEMOGRAPHIC



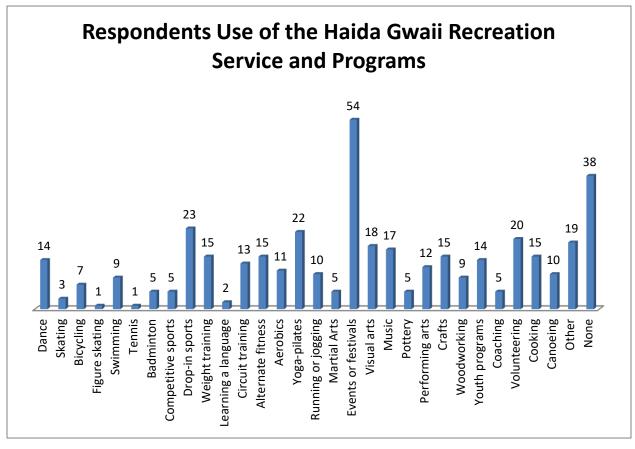


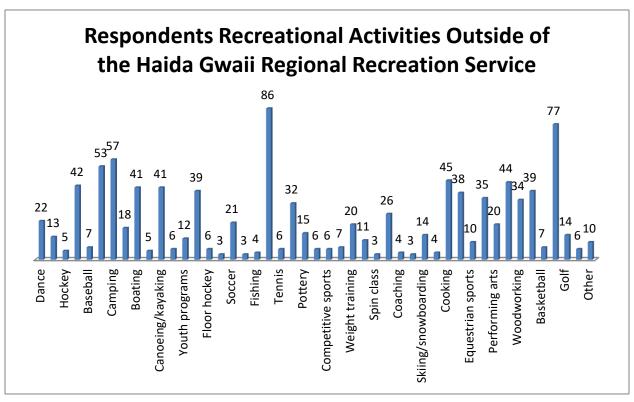


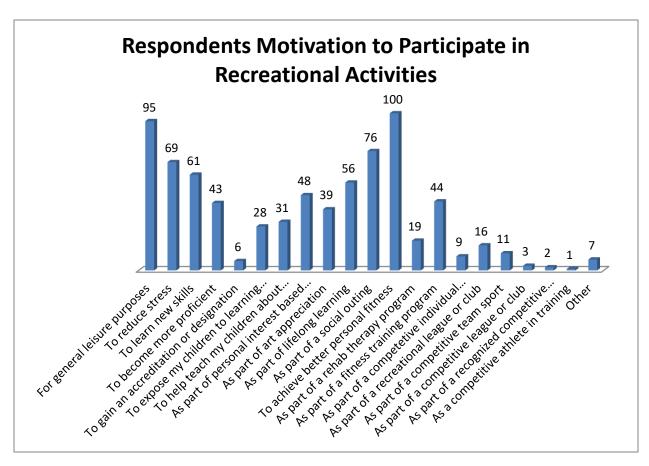


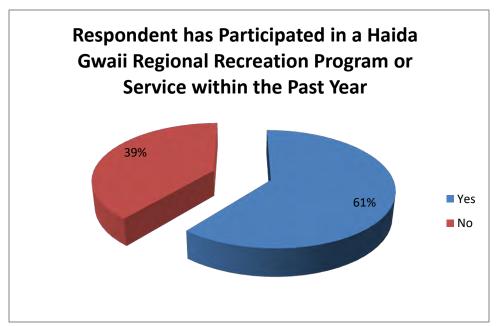


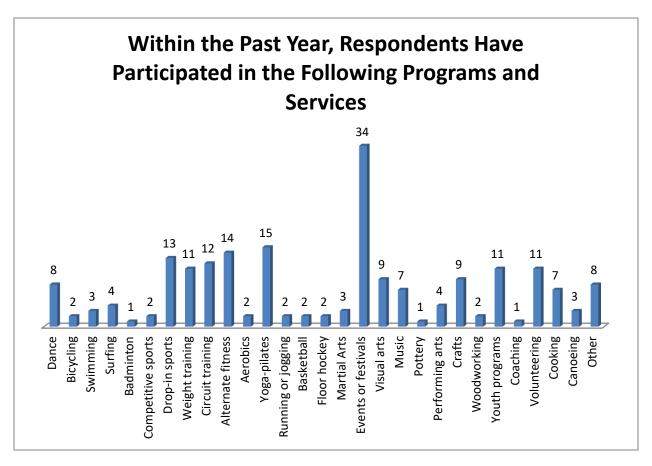
BEHAVIORAL

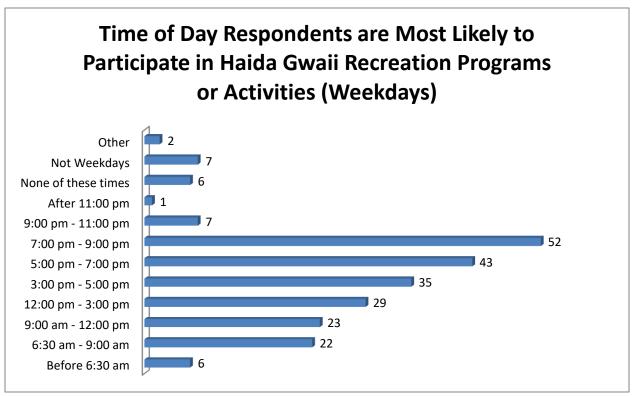


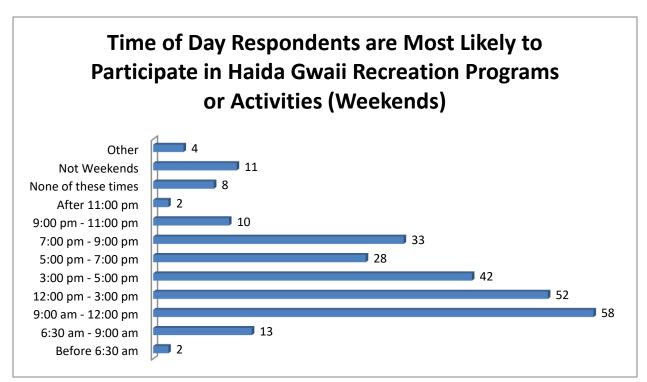


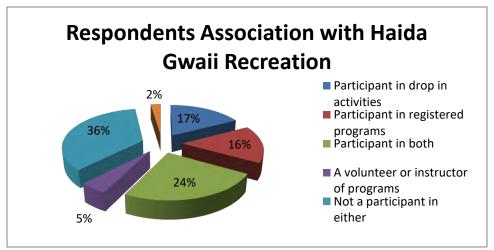


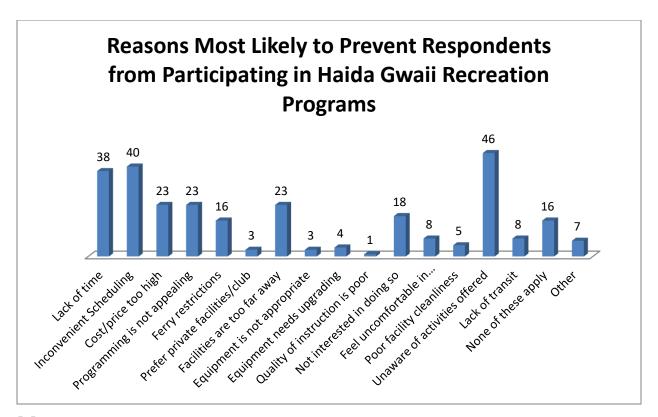




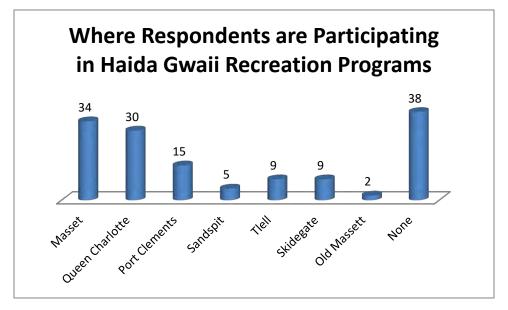


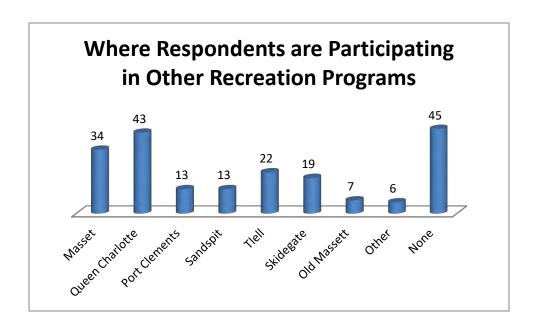




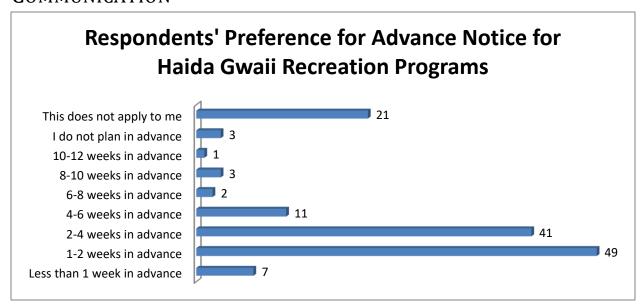


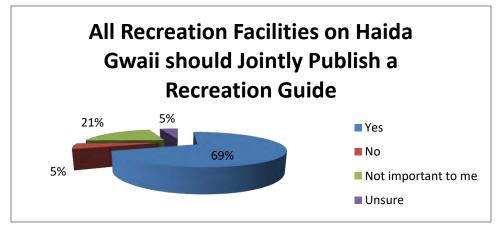
MOBILITY

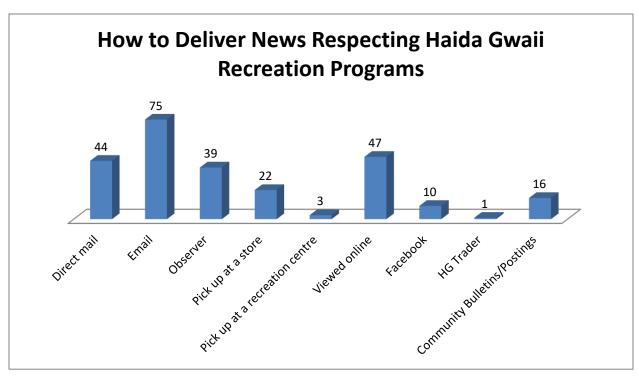


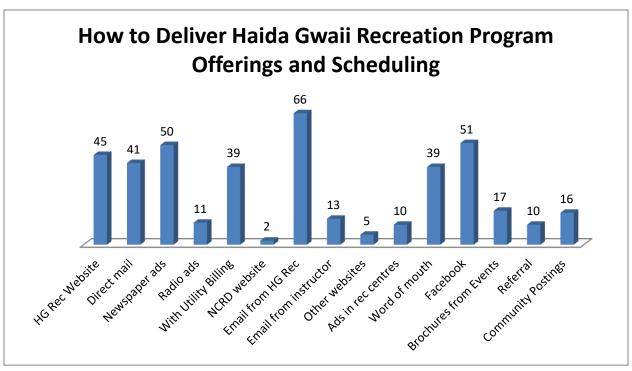


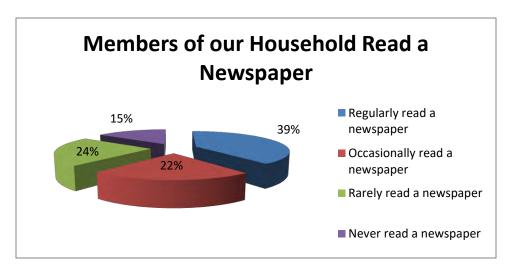
COMMUNICATION

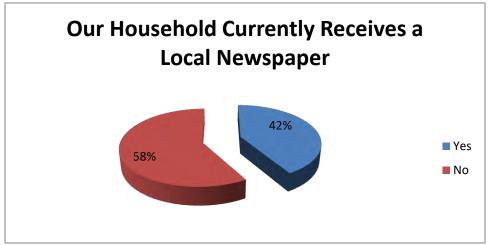




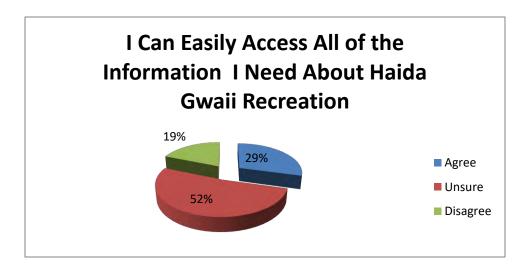


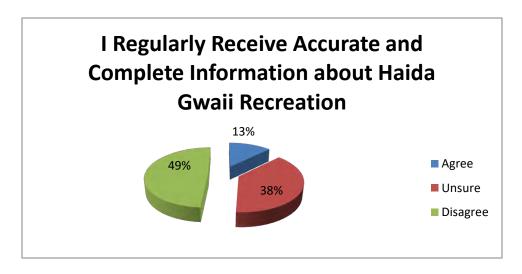


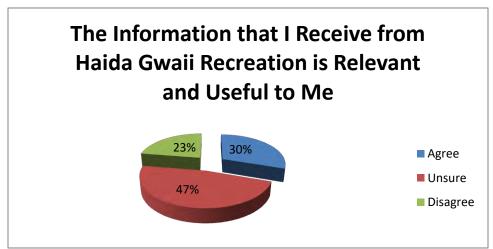


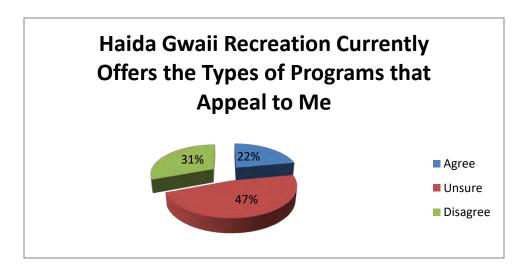


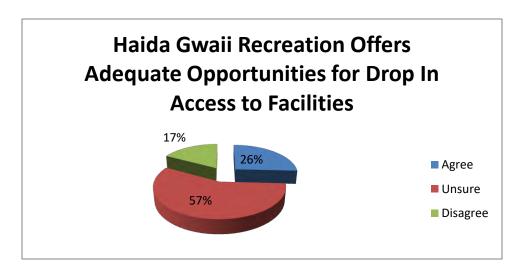
ATTITUDINAL

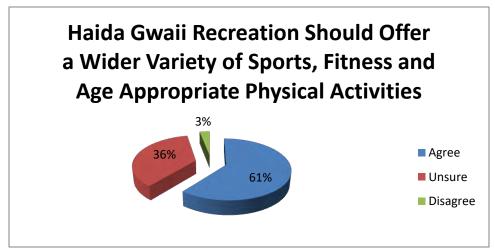


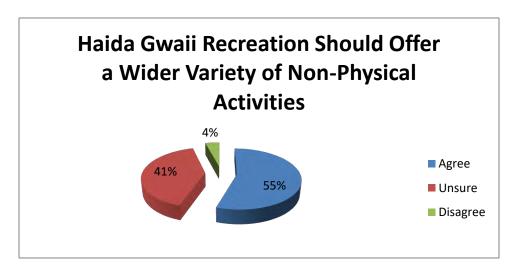


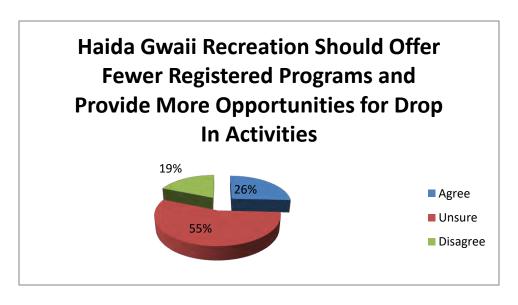


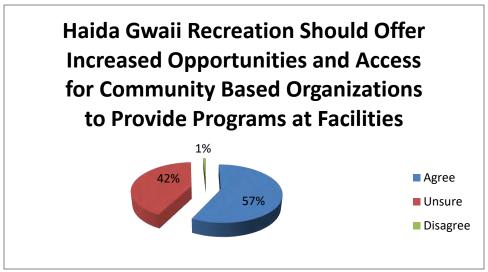


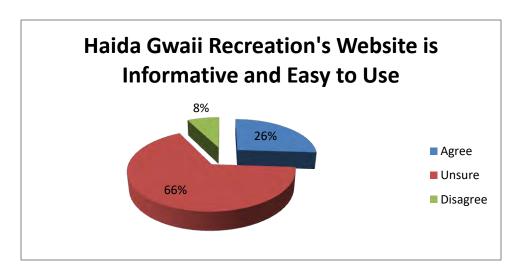


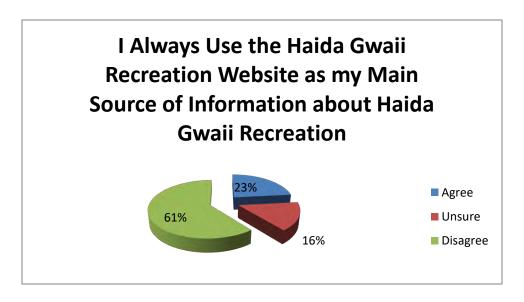


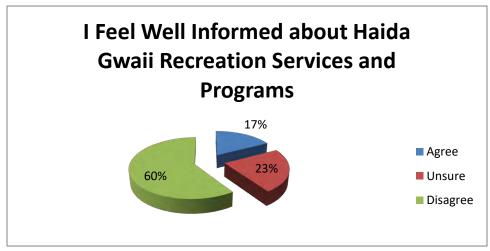




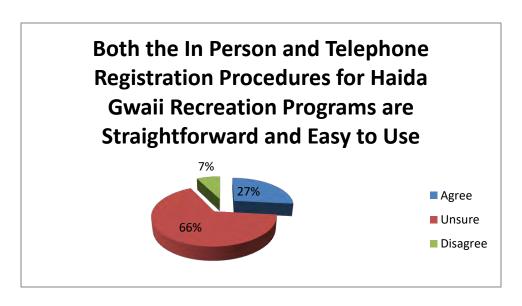


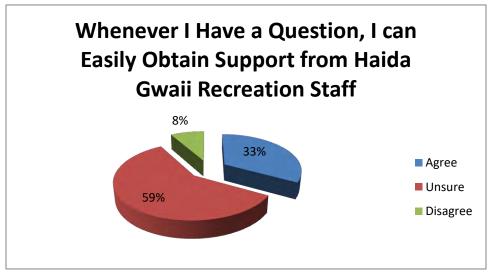


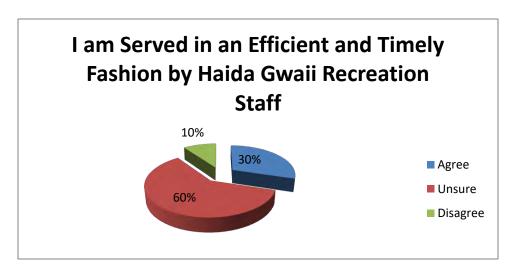












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- Less focus on online communication and more focus on community bulletins, word of mouth and the Observer for communicating with residents;
- Increased online payment options through Haida Gwaii Recreation website;
- Need a swimming facility (x3);
- Lack of awareness leads to low participation need better communication;
- Need significant investment in facilities;
- Thankful for this service and what is available in our community;
- Increase notice times for upcoming programs and services;
- Bring the fitness bootcamp classes to the south island;
- More programming in coordination with the school;
- More and cheaper summer and afterschool programs;
- Consider offering music instruction;
- Consider using email as a more regular form of communication with residents;
- As I am in the aging population, most questions are not applicable to me;
- There are none or very few recreation facilities in Masset we need a swimming pool;
- Further use of the community hall to provide easy sporting activities for seniors there has been a big interest in pickleball;
- An ongoing afterschool program for kids;
- The programs offered in Masset have been varied and cover a number areas of interest;
- The website needs more work to be useful:
- Walking club;
- In Masset, Tai Chi no longer has an instructor. Is there a way Haida Gwaii Recreation could facilitate finding a new instructor?;
- More programs that can be adapted for noise sensitive children and children not interested in physical sports;
- More widely messaged on Facebook;
- Advertise better; don't depend on Facebook. Have meetings to gather input;
- Upgrade the equipment for some of the programs;
- More programs for 3-5 year olds;
- Bring back dance/acrobatics and start surf club earlier in the year;
- Provide discount rates to repeat users or minority groups on a specific program;
- Liaise with the Haida Gwaii Arts Council for some northern opportunities in the arts
- Provide more adult arts, yoga, fitness programming in Port Clements;
- The art programs offered for Port Clements Elementary School would serve us better it they were not restricted to certain grades;
- All islands swimming pool in Port Clements;
- Use Gwaii Trust funding to provide free and affordable programs;
- More awareness and notice on program scheduling;
- More awareness of the Haida Gwaii Recreation website;
- More programs in smaller communities:
- Hold more events in Tlell;
- More after hour programs;
- A space available to offer dance classes with proper acoustics;
- Advocate for a swimming pool on island;

- Programs at more advanced levels;
- Give the Moresby Island Management Committee a copy of the financial statements so it may know precisely what funding is allocated to the community;
- Sandspit is not really served by Haida Gwaii Recreation because of ferry restrictions. Allocate more funding for instructors to spend the night in the community; and
- I am not familiar enough with seeking out program offered by Haida Gwaii Recreation.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

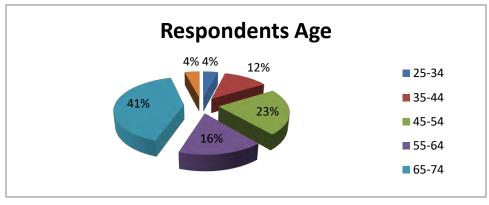
- Happy to have a group on island dedicated to offering recreational programs;
- Raise your profile and public awareness (x2);
- Huge benefit to these islands communities (x2);
- It is unfortunate that there is no swimming facility on Haida Gwaii;
- Better communication would be great. We're lucky to have so many opportunities for such little cost on Haida Gwaii;
- Wish to use school facilities and equipment having difficulty scheduling around Haida Gwaii Recreation;
- The Haida Gwaii Recreation Service functions well and am happy to have on island;
- More for seniors;
- Assist local sports groups to use School District facilities;
- Partner with the Haida Gwaii Arts Council;
- The drop-in bootcamp class is too expensive;
- Website needs to be updated to be more user-friendly;
- Organize swimming trips to Prince Rupert for youth;
- Activities and programs seem to be focused on youth. We need more programs for seniors;
- The music at the alternate fitness classes is not enjoyable:
- The new horse program has been a great addition and is well-run;
- We need a swimming pool;
- I feel that Haida Gwaii Recreation is very involved in the communities and delivering good programs;
- Cleanliness for alternate fitness in Masset is not up to standard;
- Love the after school programs;
- The recreation coordinator seems to be going a great job help him with what he needs;
- Unaware the Haida Gwaii Recreation had a website until now;
- Keep growing:
- Must be more advertisement flyers for larger events;
- Tlell and Port Clements are lacking for programming and events;
- The community hall in Masset is a terrible place to hold physical activities;
- Have been very secretive over the years;
- Haida Gwaii Recreation used to do activities at Loggers Day Sports in Sandspit maybe they could bring down the go-carts from Masset; and
- Advertise upcoming opportunities in the Observer.

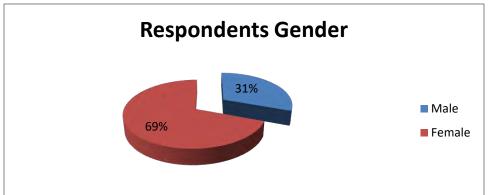
RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

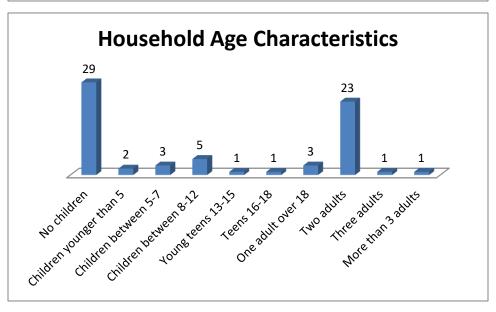
- Build a swimming pool (x4);
- Evening spin classes in Queen Charlotte or Skidegate;
- Need a proper aquatic centre;
- Butcher lessons:
- Bootcamp/circuit class in the south end of Haida Gwaii;
- Mentorship program;
- Bring the equestrian program to Queen Charlotte;
- One day seniors programs;
- More arts and crafts;
- Quilting and cooking;
- Build a swimming pool and gym in Masset (x2);
- More information for families visiting the island;
- A more varied fitness class by provided instructors with more course training to vary workouts;
- Classes that offer more gentle fit for the aging demographic;
- More arts programs;
- Construct a bowling alley;
- Skill development workshops in sports throughout the year;
- Establish a mentorship program;
- Golf we need a golf instructor on island;
- More family activities;
- Yoga in Port Clements and music programs for adults;
- Yoga, alternate fitness and would also social cooking, crafts and walking;
- Use of color and designing things;
- More programs should be developed for seniors;
- Really impressed with the variety of activities for kids;
- Swimming skills development;
- More festivals and more events in Tlell;
- Family involved activities;
- Programs for teenagers in Sandspit;
- Recreation for seniors;
- Sailing instruction and boat building; and
- Curling rink.

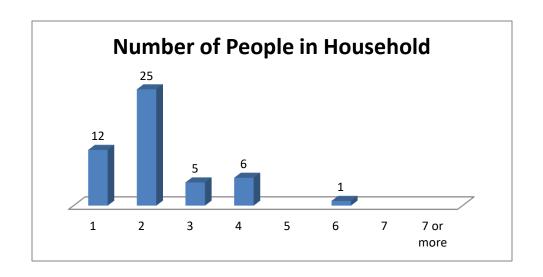
VILLAGE OF QUEEN CHARLOTTE

DEMOGRAPHIC

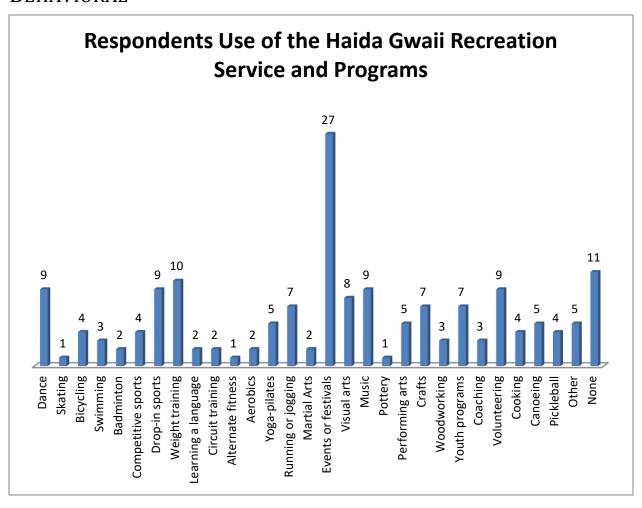


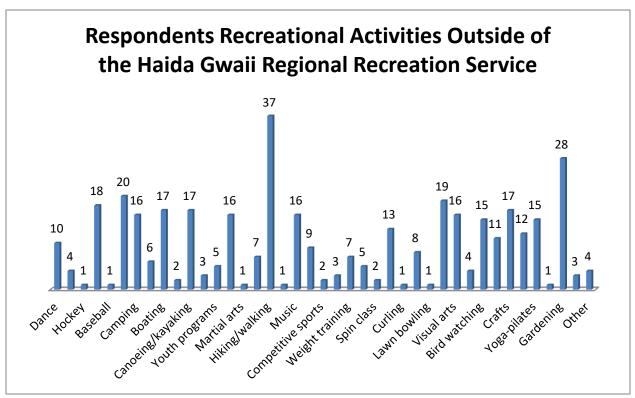


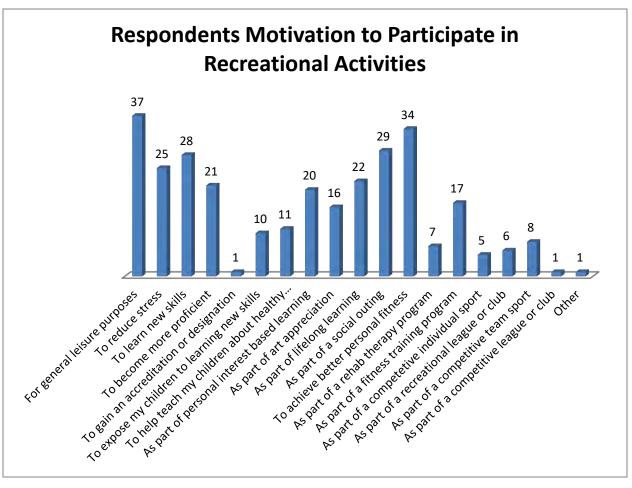


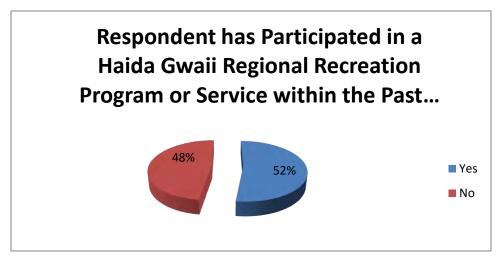


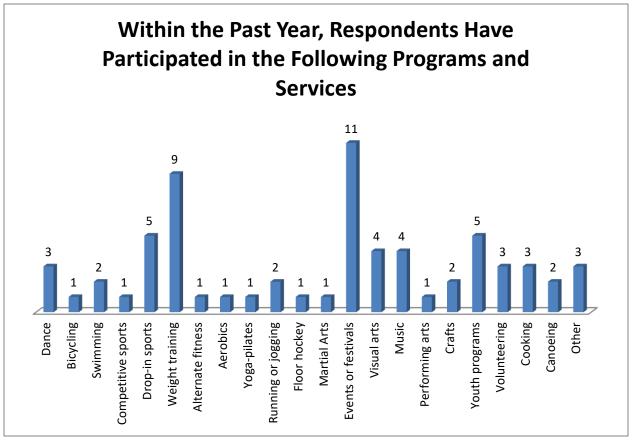
BEHAVIORAL

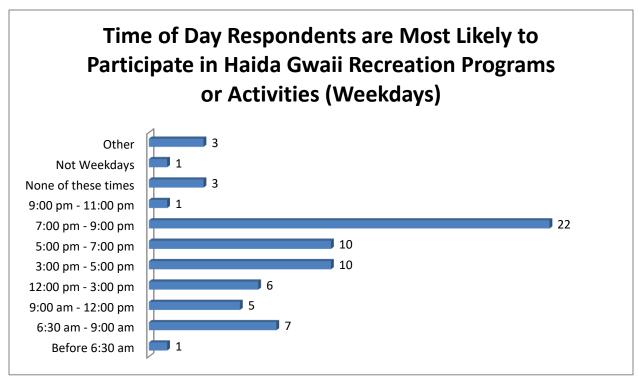


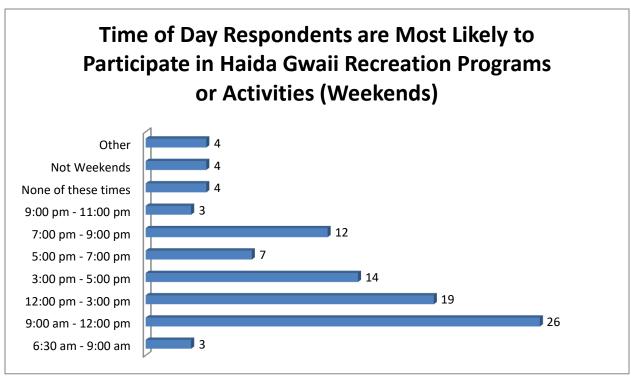


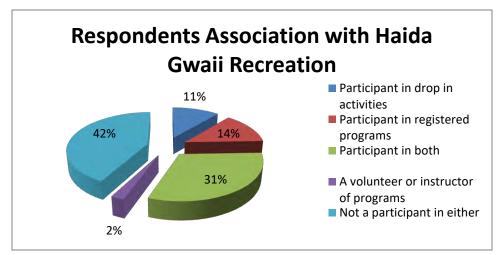


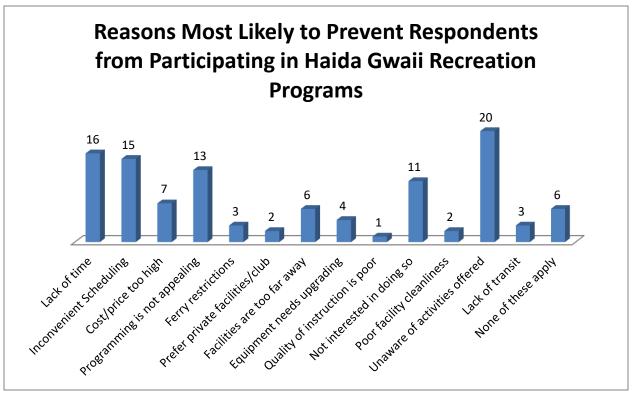




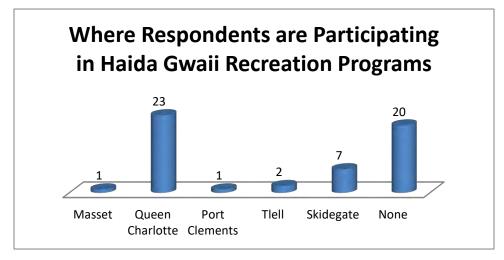


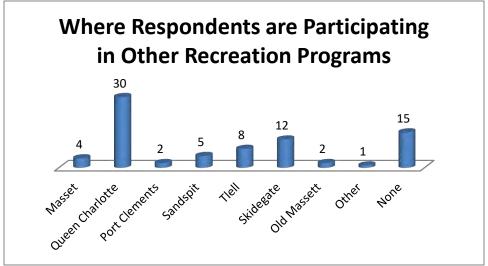




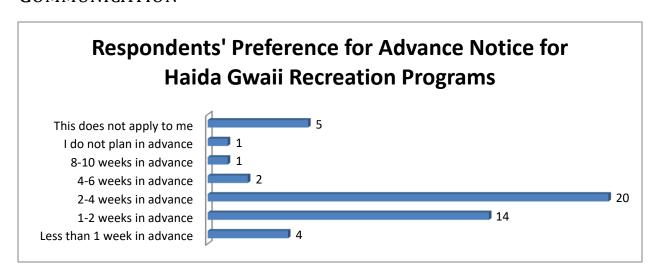


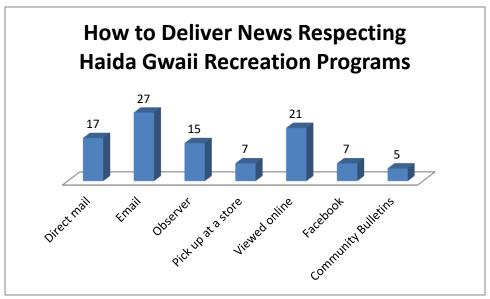
MOBILITY

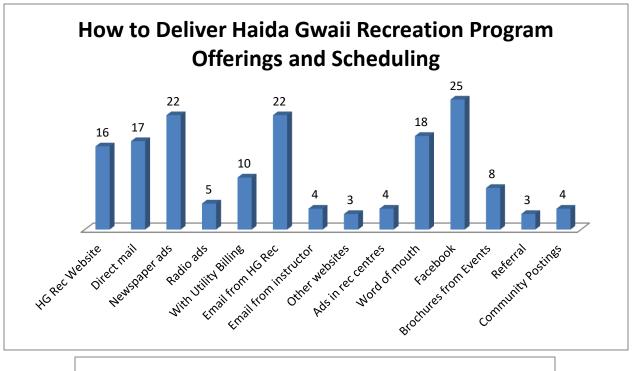


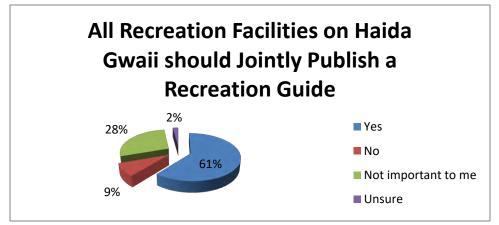


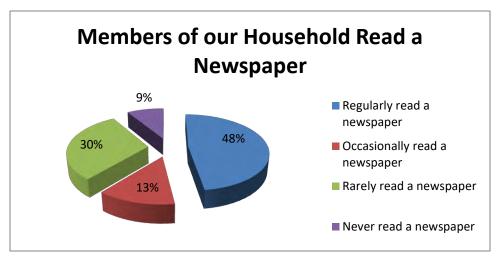
COMMUNICATION

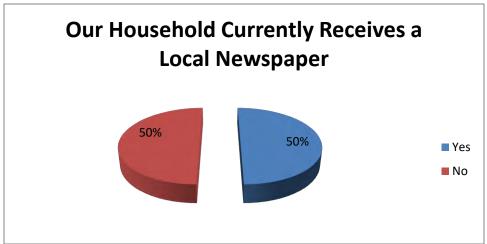




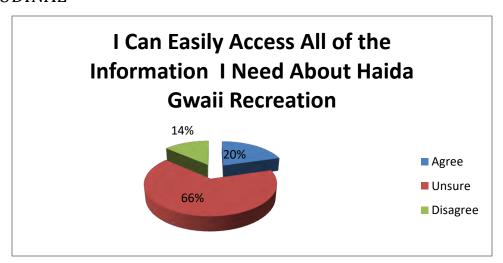


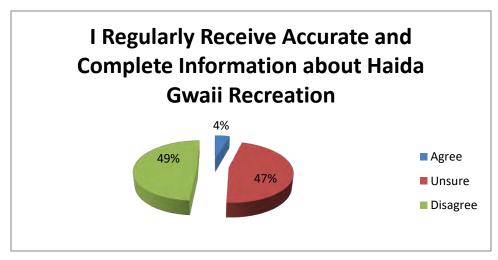


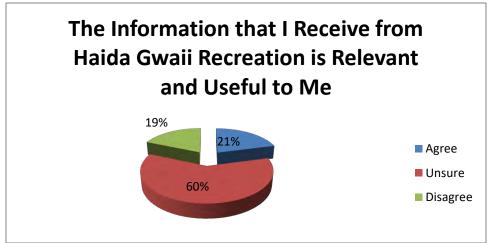


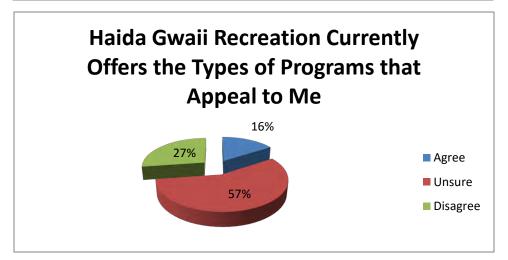


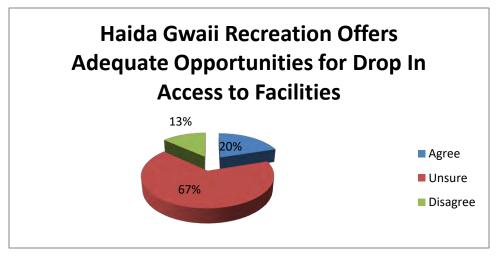
ATTITUDINAL

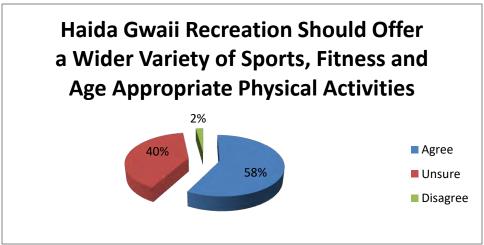


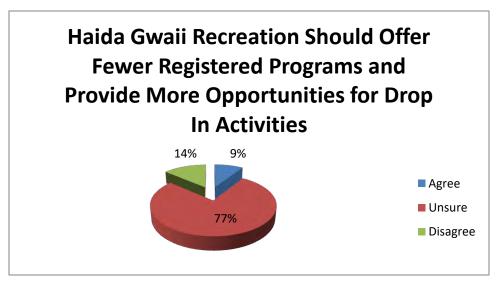


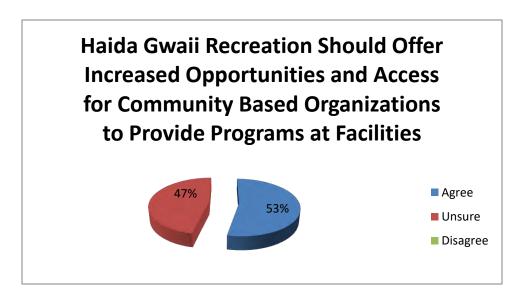


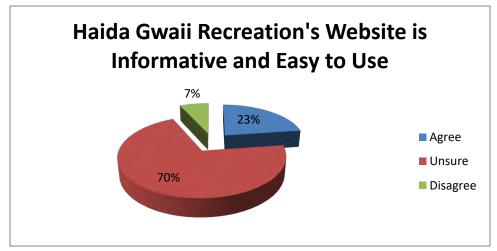


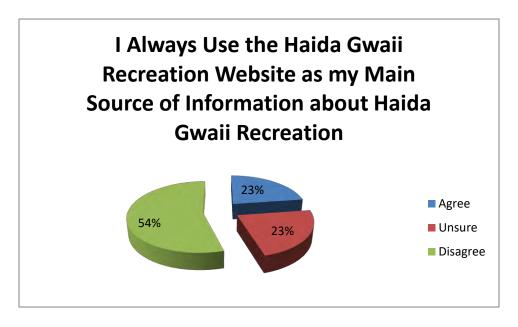


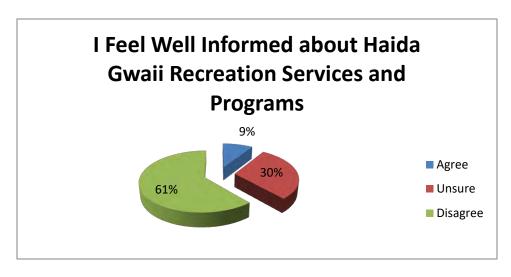




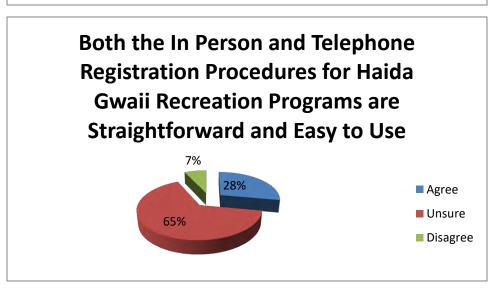


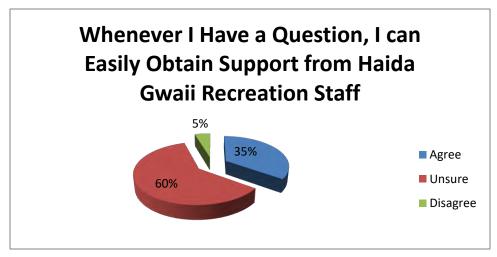


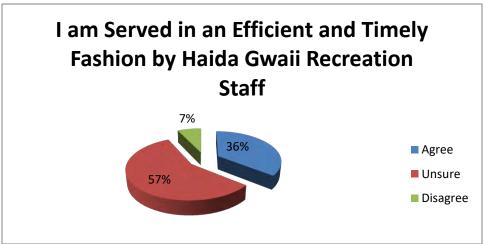












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- Less focus on online communication and more focus on community bulletins, word of mouth and the Observer for communicating with residents;
- Increased online payment options through Haida Gwaii Recreation website;
- Need a swimming facility (x3);
- Lack of awareness leads to low participation need better communication;
- Need significant investment in facilities;
- Thankful for this service and what is available in our community;
- Increase notice times for upcoming programs and services;
- Bring the fitness bootcamp classes to the south island;
- More programming in coordination with the school;
- More and cheaper summer and afterschool programs;
- Consider offering music instruction; and
- Consider using email as a more regular form of communication with residents.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

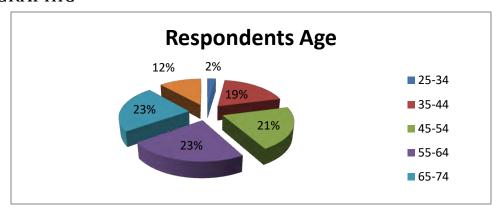
- Happy to have a group on island dedicated to offering recreational programs;
- Raise your profile and public awareness (x2);
- Huge benefit to these islands communities (x2);
- It is unfortunate that there is no swimming facility on Haida Gwaii;
- Better communication would be great. We're lucky to have so many opportunities for such little cost on Haida Gwaii;
- Wish to use school facilities and equipment having difficulty scheduling around Haida Gwaii Recreation;
- The Haida Gwaii Recreation Service functions well and am happy to have on island;
- More for seniors;
- Assist local sports groups to use School District facilities; and
- Partner with the Haida Gwaii Arts Council.

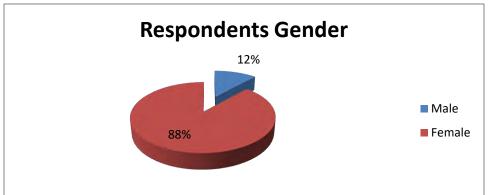
RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

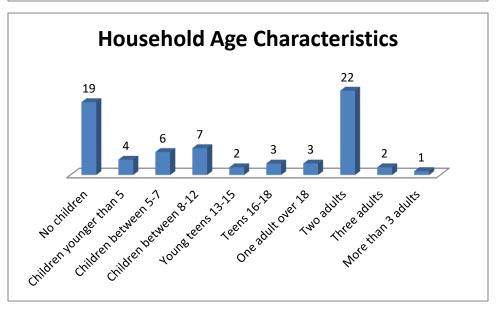
- Evening spin classes in Queen Charlotte or Skidegate;
- Need a proper aquatic centre;
- Butcher lessons;
- Bootcamp/circuit class in the south end of Haida Gwaii;
- Mentorship program;
- Bring the equestrian program to Queen Charlotte;
- One day seniors programs;
- More arts and crafts; and
- Quilting and cooking.

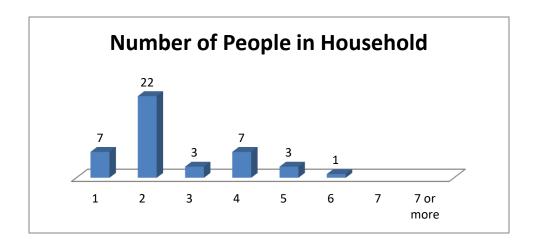
VILLAGE OF MASSET

DEMOGRAPHIC

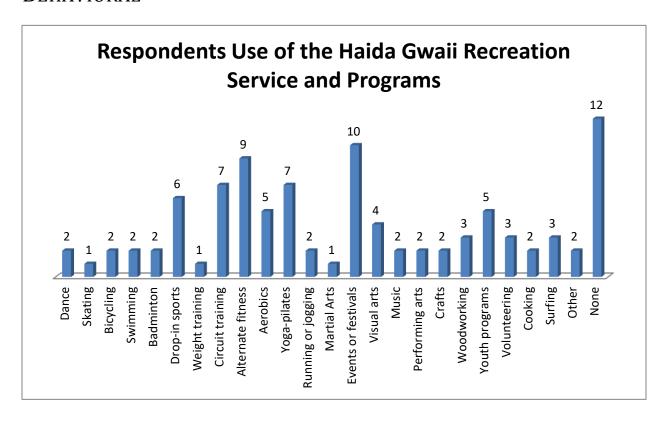


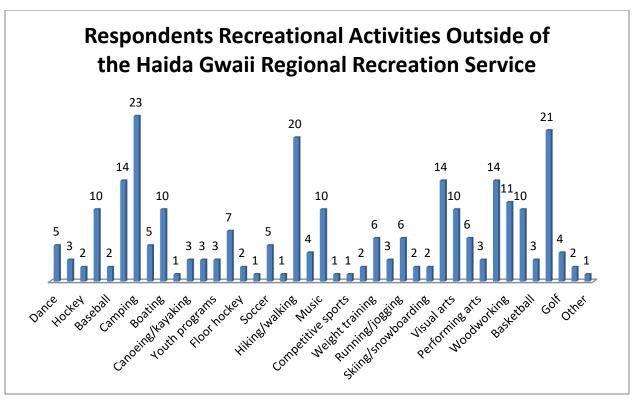


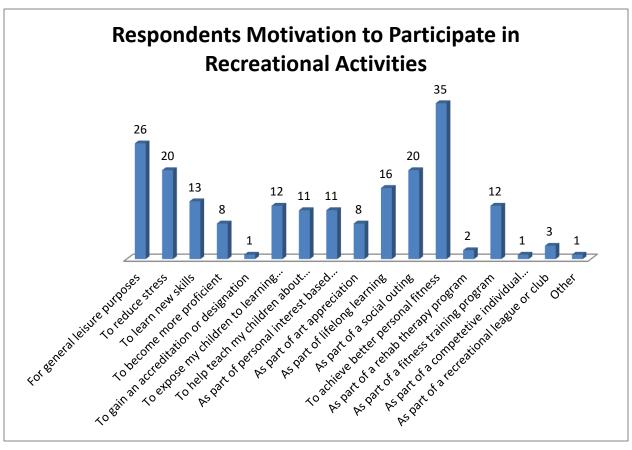


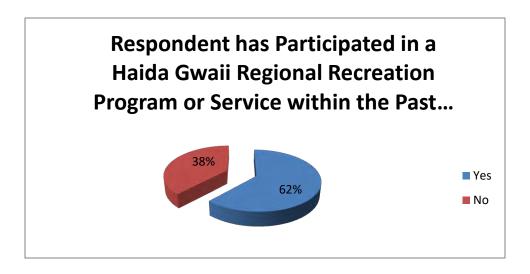


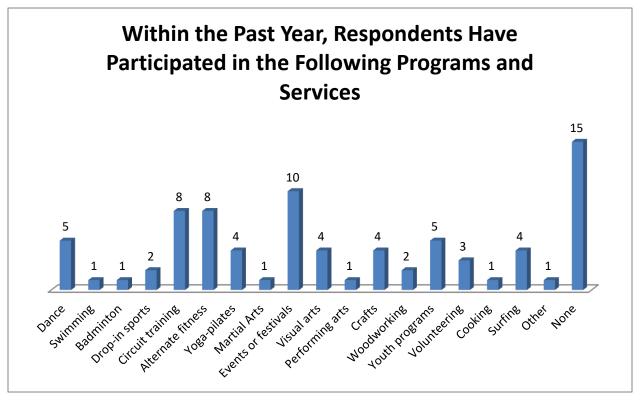
BEHAVIORAL

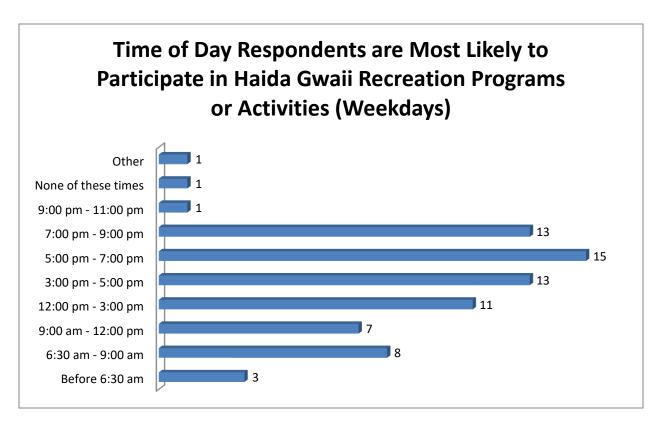


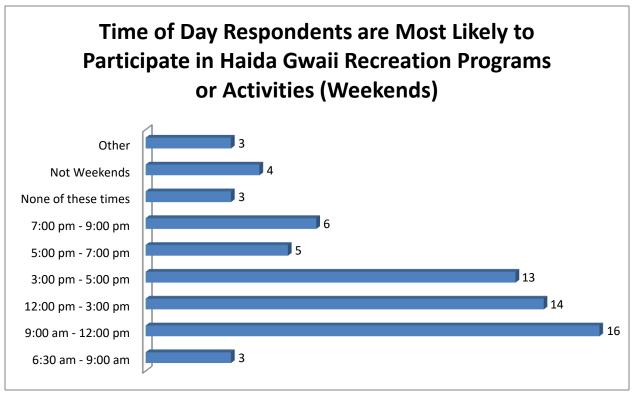


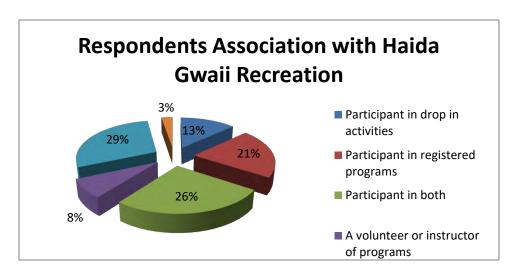


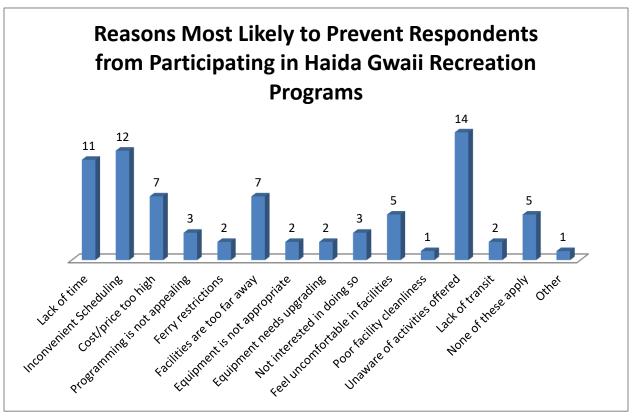




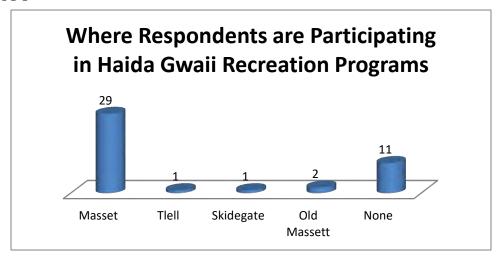


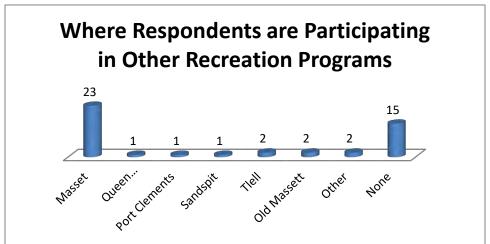




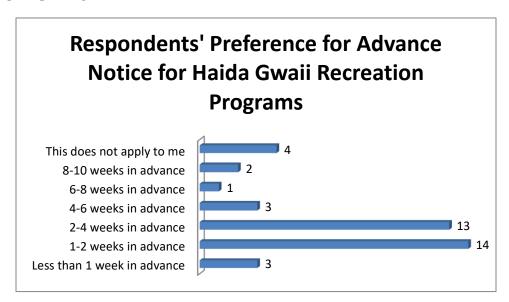


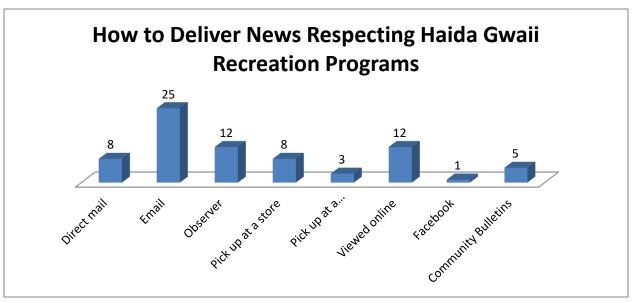
MOBILITY

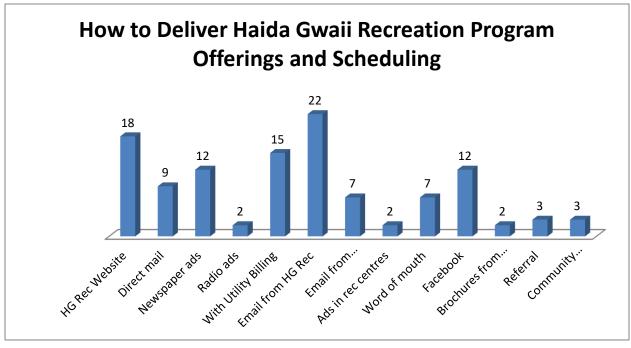


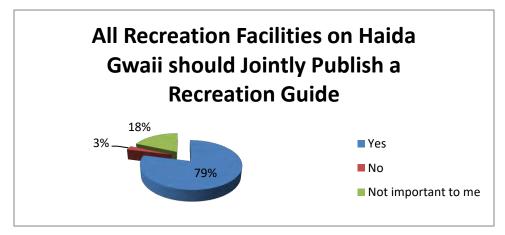


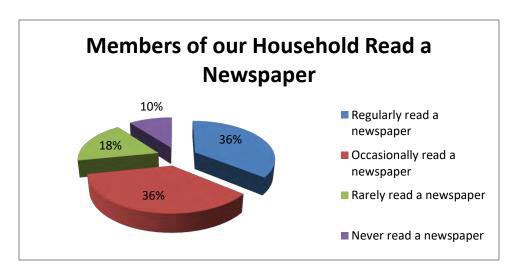
COMMUNICATION

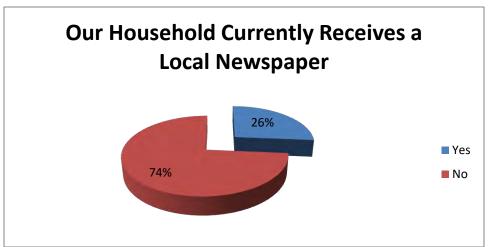




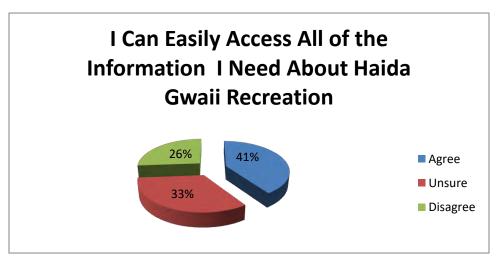


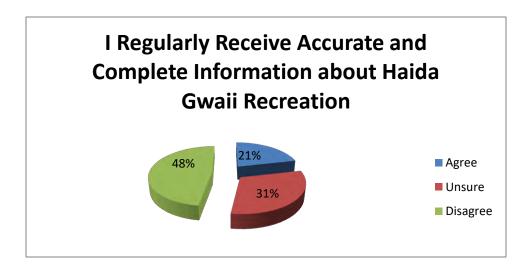


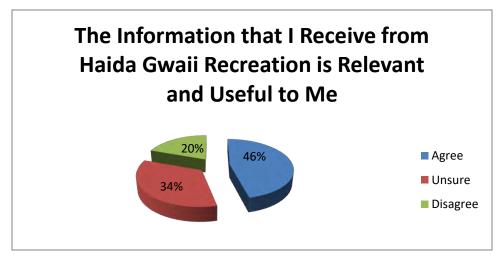


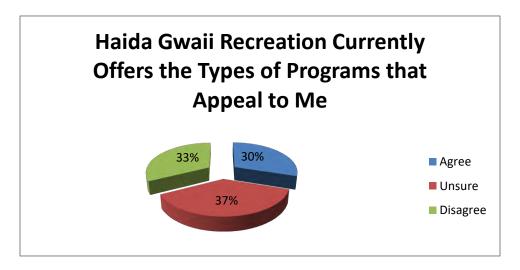


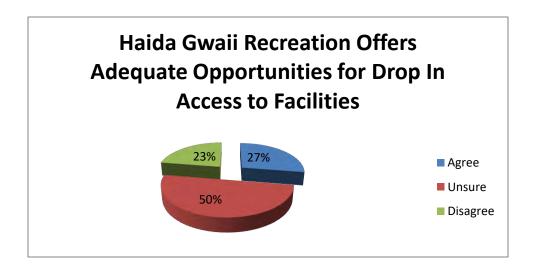
ATTITUDINAL

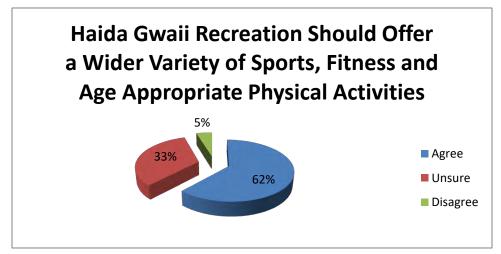


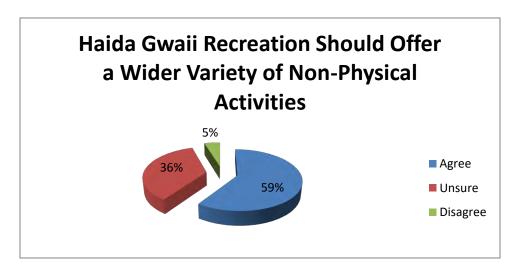


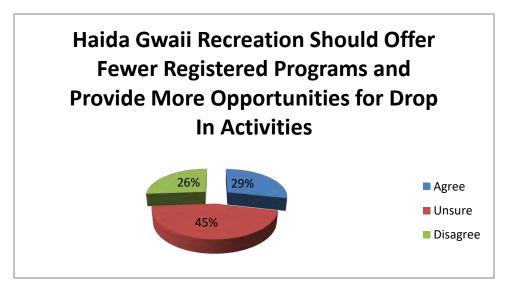


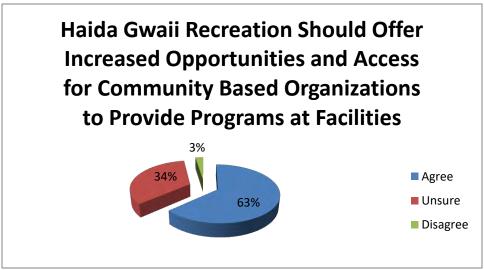


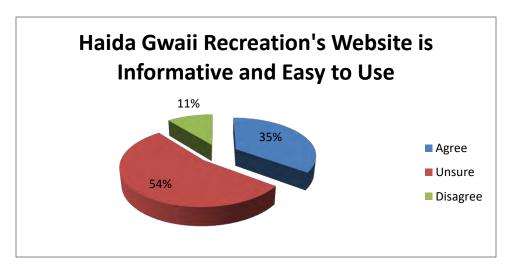


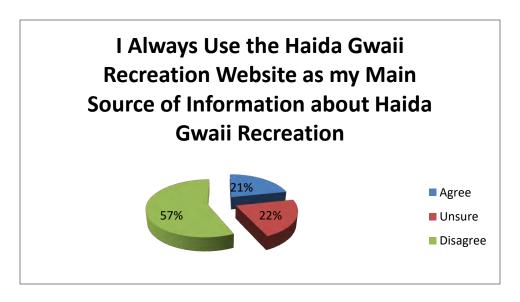


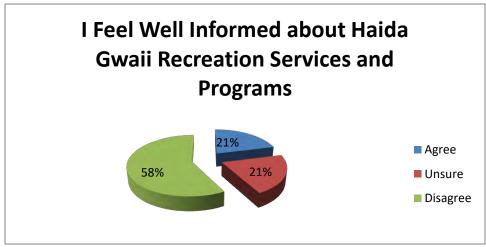




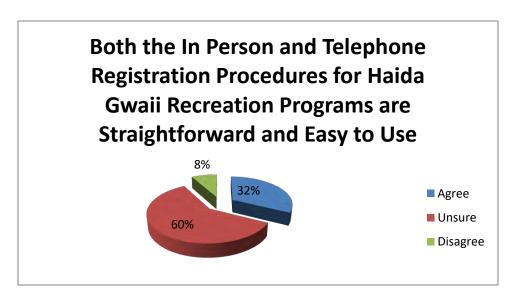


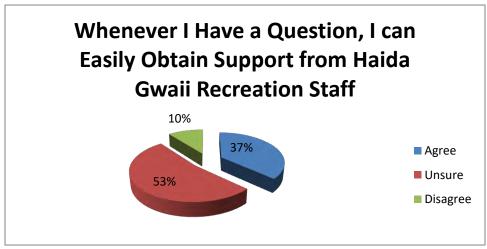


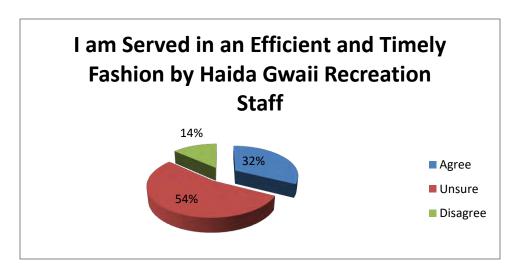












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- As I am in the aging population, most questions are not applicable to me;
- There are none or very few recreation facilities in Masset we need a swimming pool (x2);
- Further use of the community hall to provide easy sporting activities for seniors there has been a big interest in pickleball;
- An ongoing afterschool program for kids;
- The programs offered in Masset have been varied and cover a number areas of interest;
- The website needs more work to be useful;
- Walking club;
- In Masset, Tai Chi no longer has an instructor. Is there a way Haida Gwaii Recreation could facilitate finding a new instructor?;
- More programs that can be adapted for noise sensitive children and children not interested in physical sports;
- More widely messaged on Facebook;
- Advertise better; don't depend on Facebook. Have meetings to gather input;
- Upgrade the equipment for some of the programs;
- More programs for 3-5 year olds;
- Bring back dance/acrobatics and start surf club earlier in the year;
- Provide discount rates to repeat users or minority groups on a specific program; and
- Liaise with the Haida Gwaii Arts Council for some northern opportunities in the arts.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

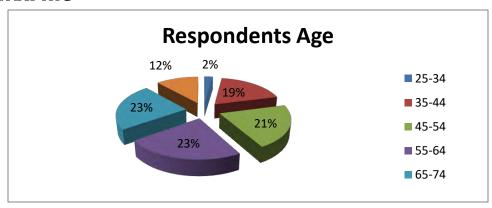
- The drop-in bootcamp class is too expensive;
- Website needs to be updated to be more user-friendly;
- Organize swimming trips to Prince Rupert for youth;
- Activities and programs seem to be focused on youth. We need more programs for seniors;
- The music at the alternate fitness classes is not enjoyable;
- The new horse program has been a great addition and is well-run;
- We need a swimming pool;
- I feel that Haida Gwaii Recreation is very involved in the communities and delivering good programs;
- Cleanliness for alternate fitness in Masset is not up to standard;
- Love the after school programs; and
- The recreation coordinator seems to be going a great job help him with what he needs.

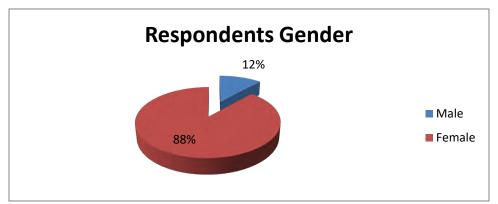
RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

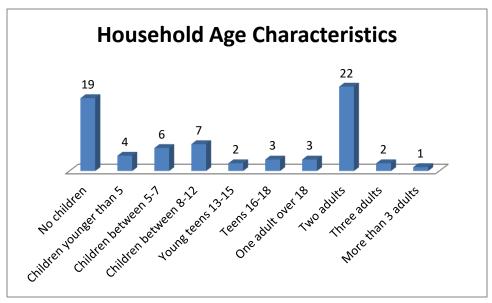
- Build a swimming pool and gym in Masset (x2);
- More information for families visiting the island;
- A more varied fitness class by provided instructors with more course training to vary workouts;
- Classes that offer more gentle fit for the aging demographic;
- More arts programs;
- Construct a bowling alley;
- Skill development workshops in sports throughout the year;
- Establish a mentorship program;
- Golf we need a golf instructor on island; and
- More family activities.

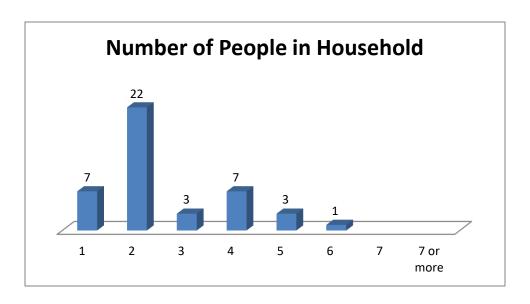
VILLAGE OF PORT CLEMENTS

DEMOGRAPHIC

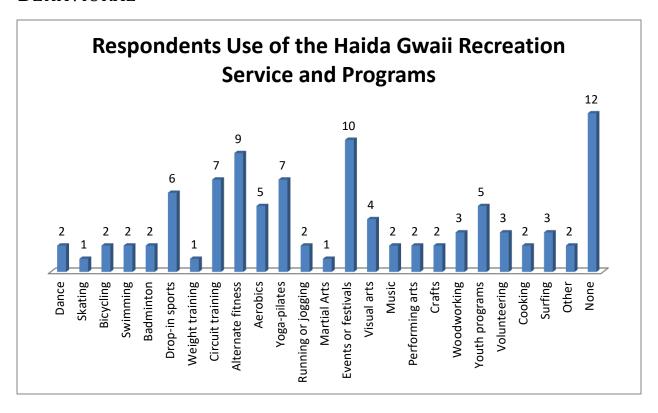


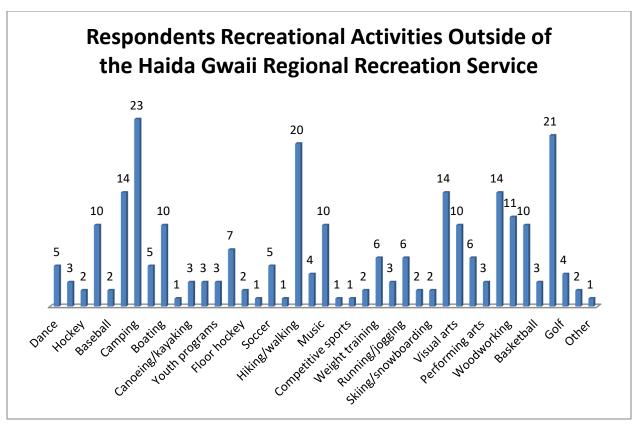


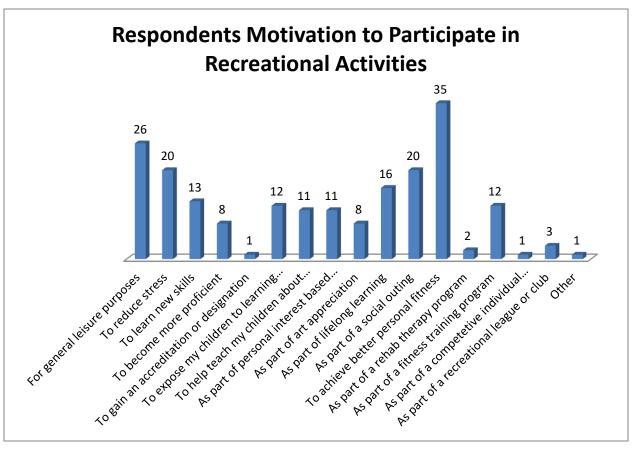


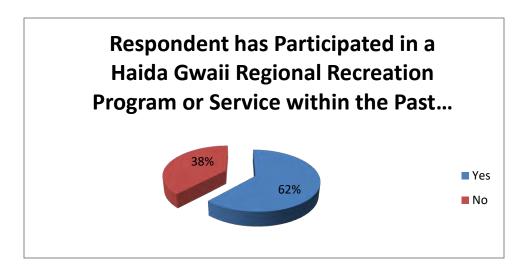


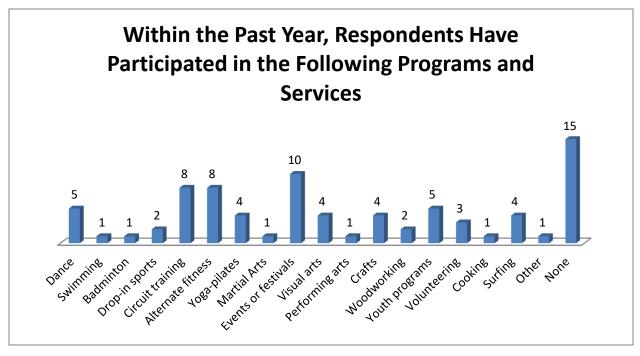
BEHAVIORAL

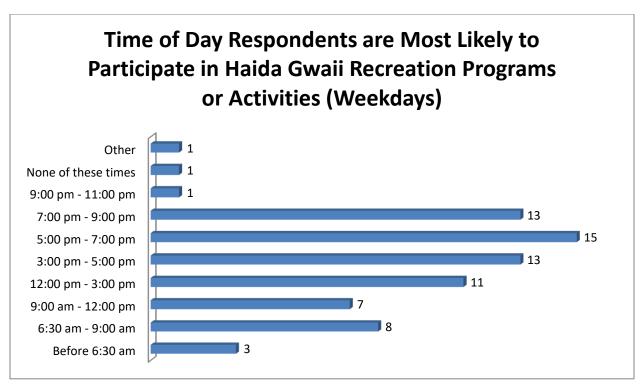


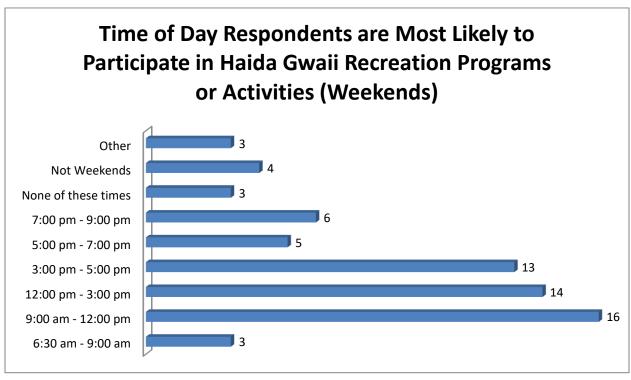


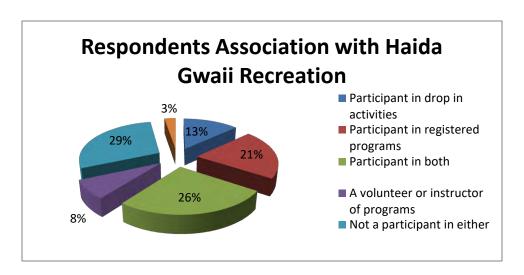


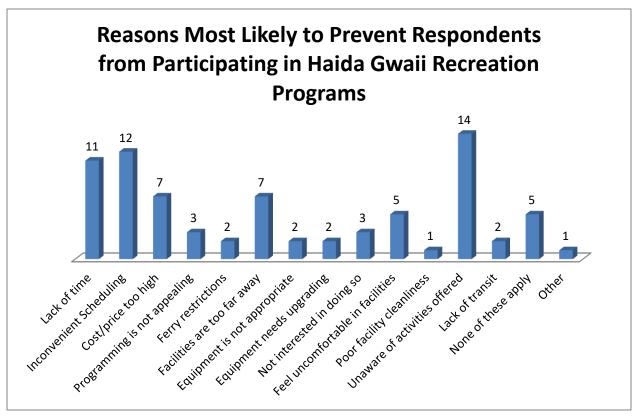




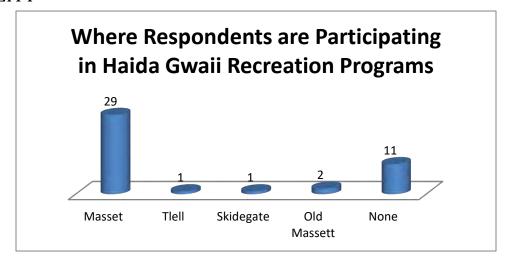


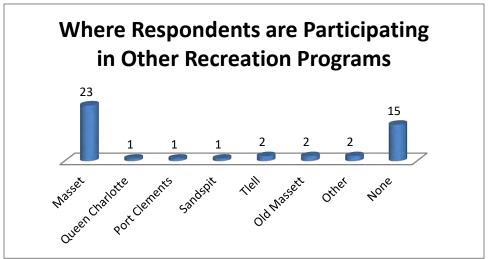




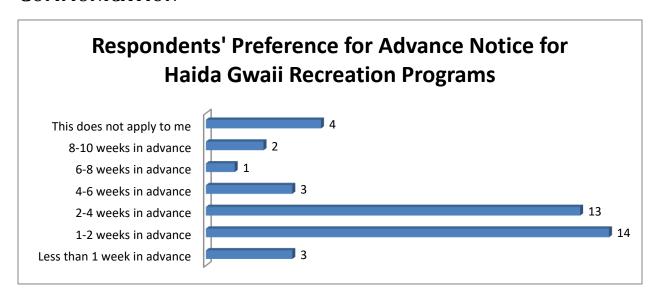


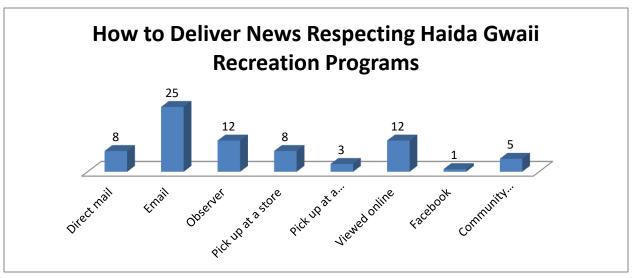
MOBILITY

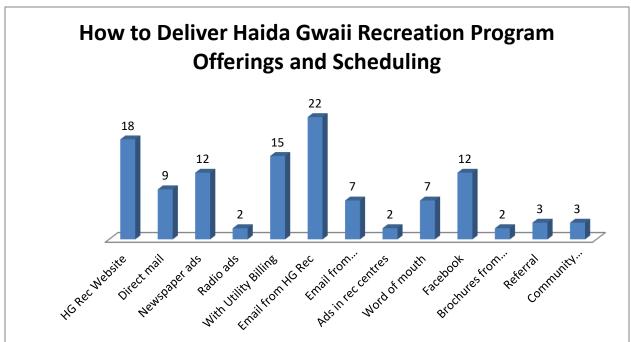


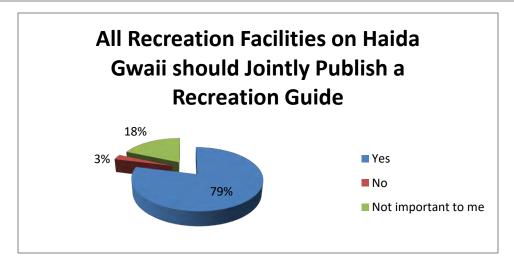


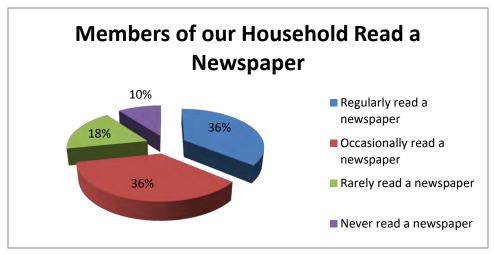
COMMUNICATION

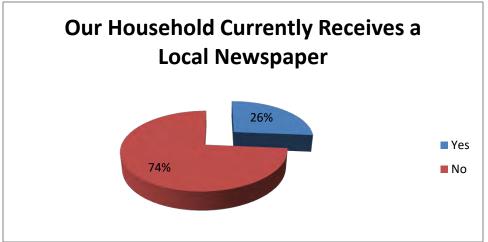




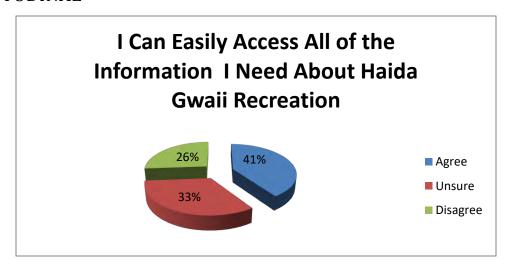


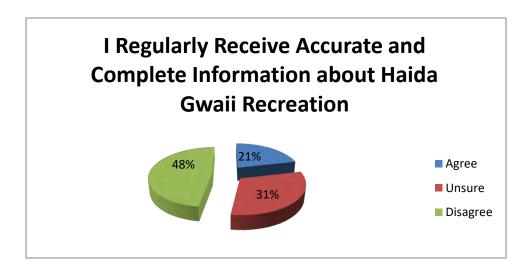


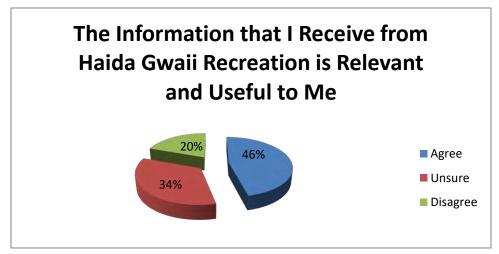


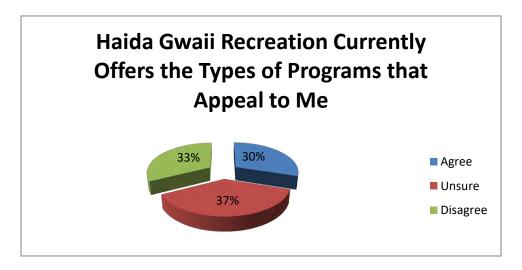


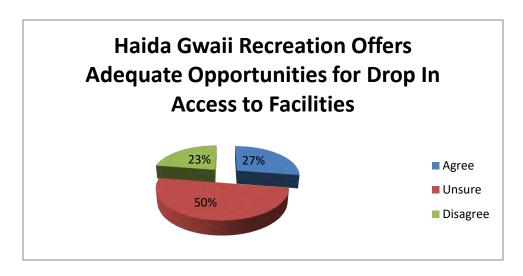
ATTITUDINAL

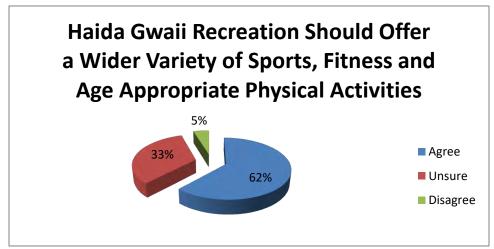


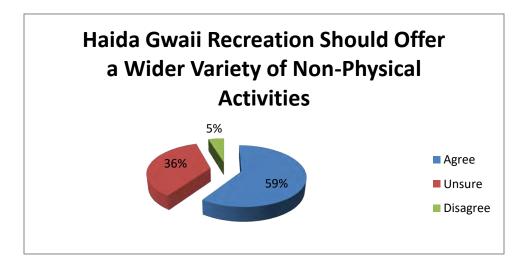


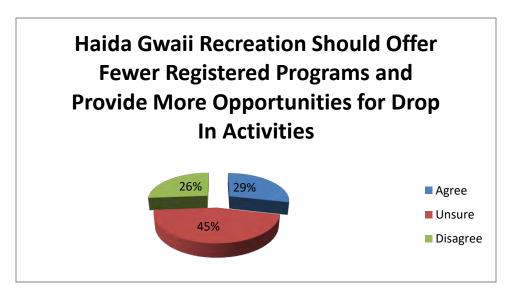


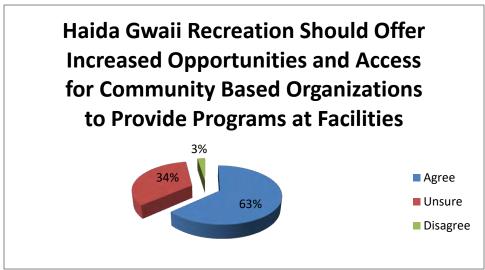


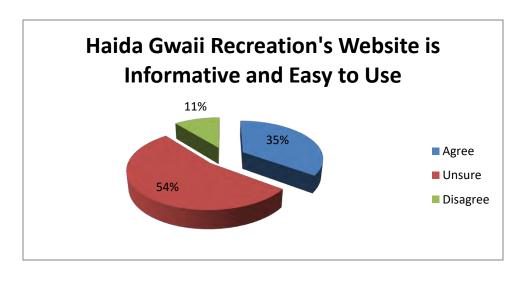


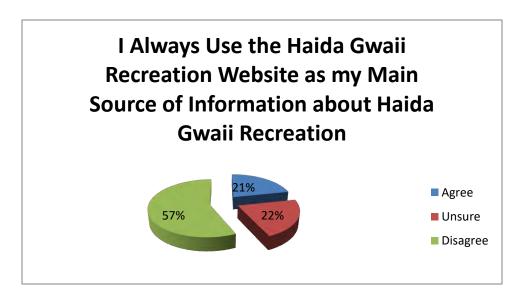


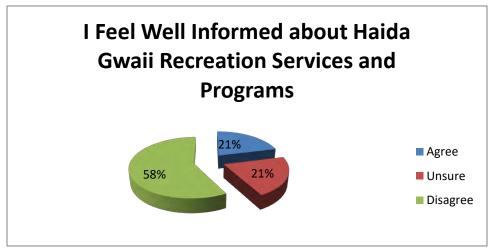




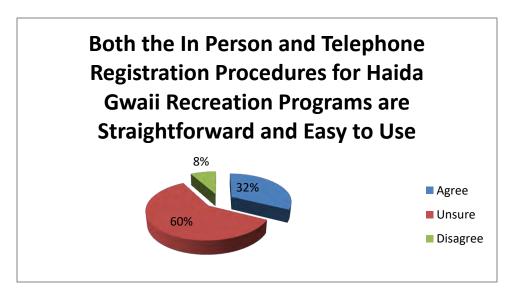


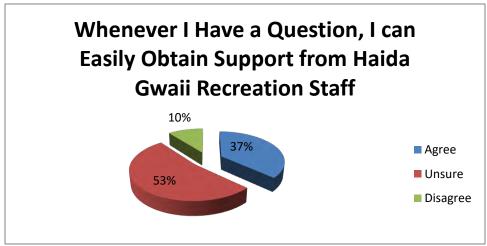


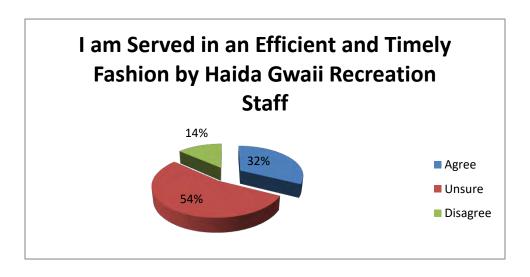












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- Provide more adult arts, yoga, fitness programming in Port Clements;
- The art programs offered for Port Clements Elementary School would serve us better it they were not restricted to certain grades;
- All islands swimming pool in Port Clements;
- Use Gwaii Trust funding to provide free and affordable programs; and
- More awareness and notice on program scheduling.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

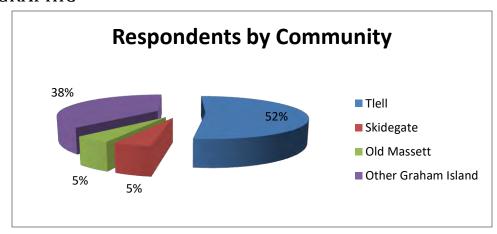
• Unaware the Haida Gwaii Recreation had a website until now.

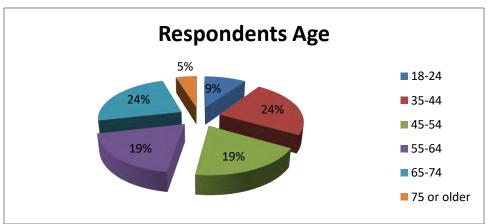
RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

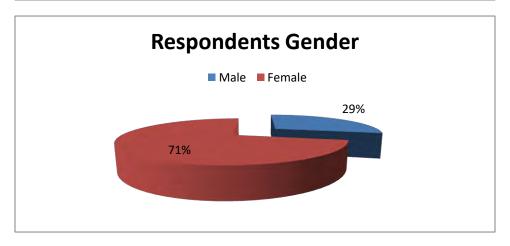
- Yoga in Port Clements and music programs for adults;
- Yoga, alternate fitness and would also social cooking, crafts and walking;
- Use of color and designing things;
- More programs should be developed for seniors; and
- Really impressed with the variety of activities for kids.

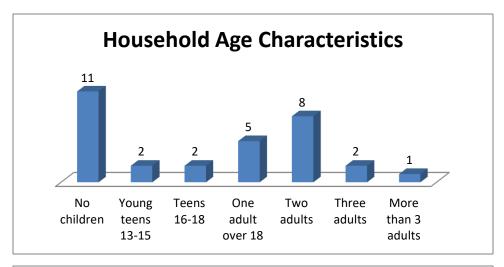
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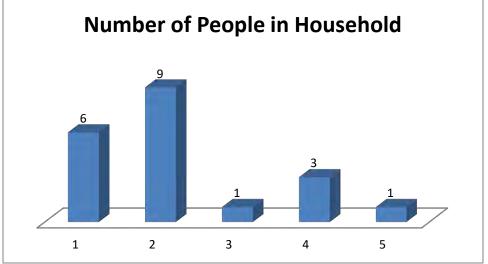
DEMOGRAPHIC



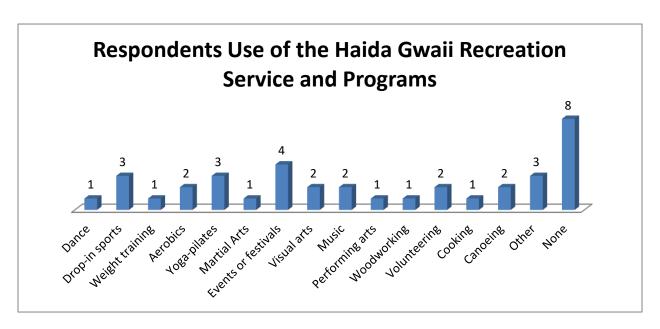


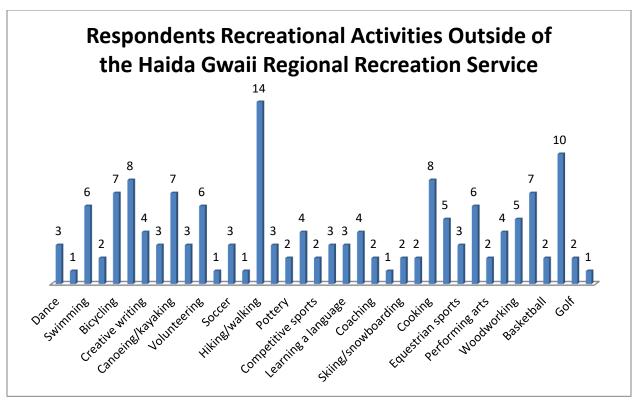


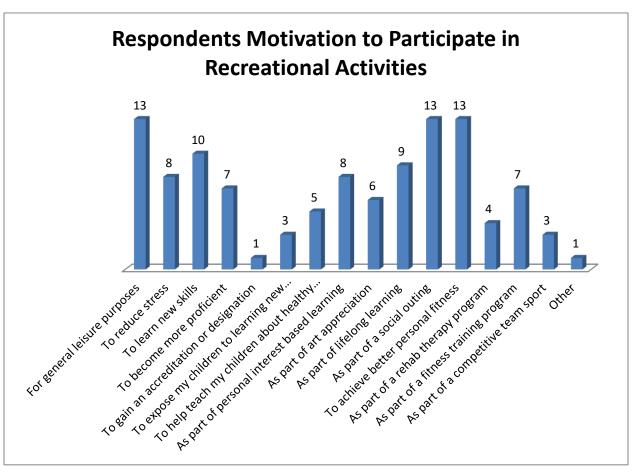


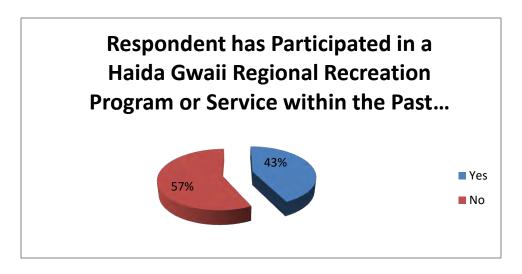


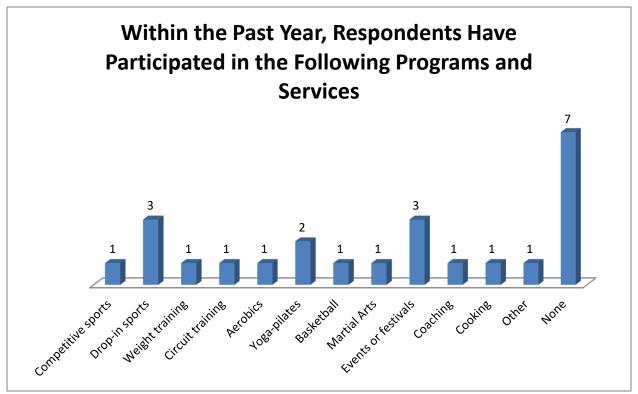
BEHAVIORAL

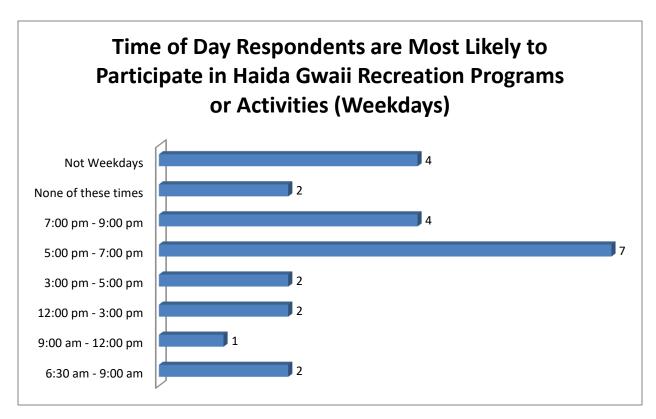


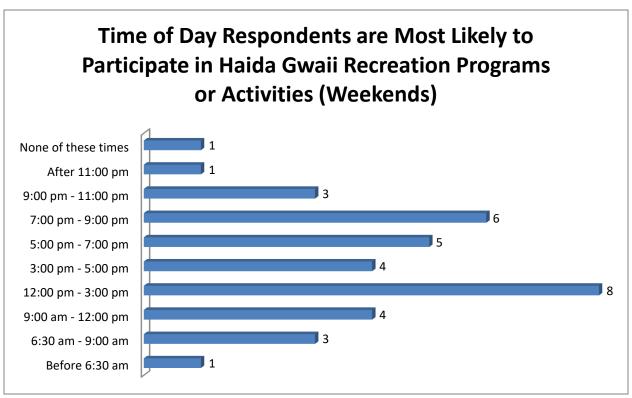


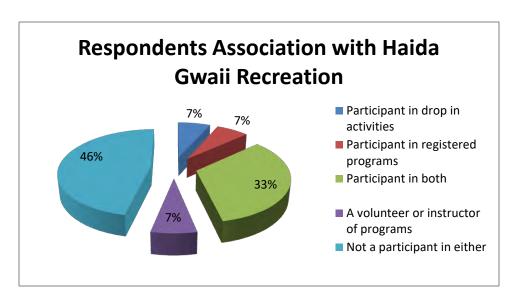


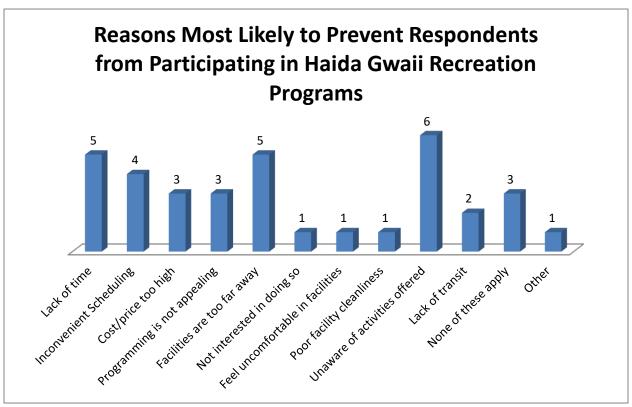




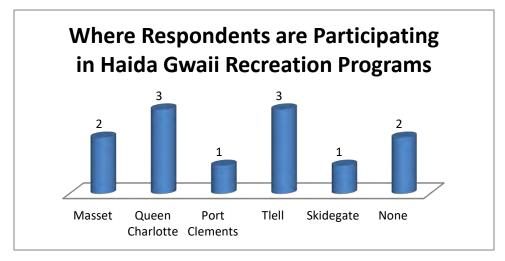


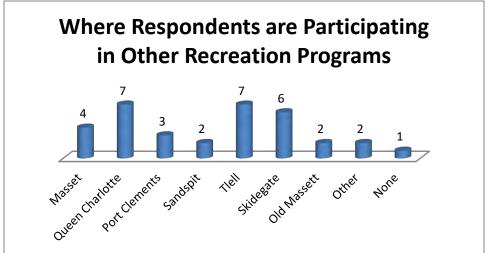




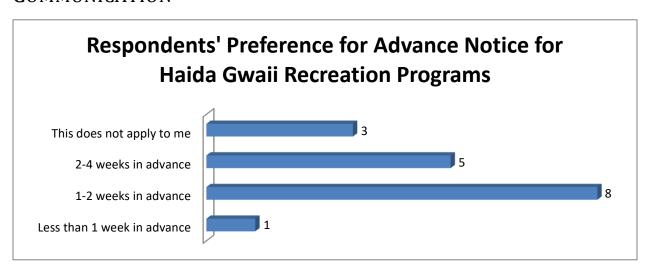


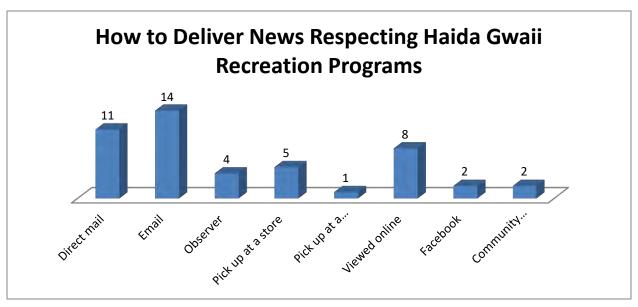
MOBILITY

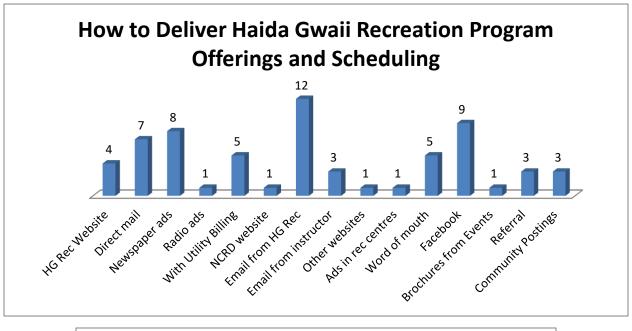


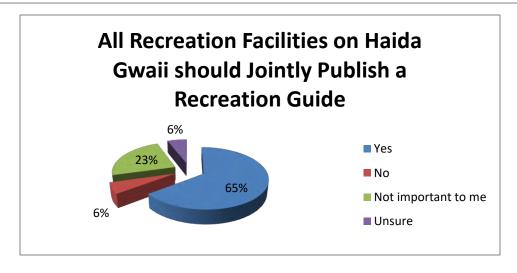


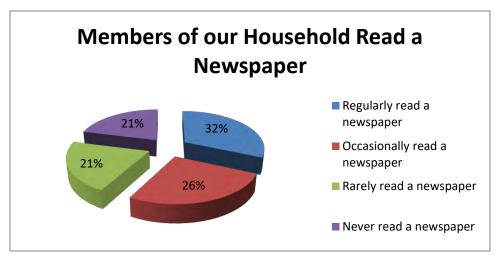
COMMUNICATION

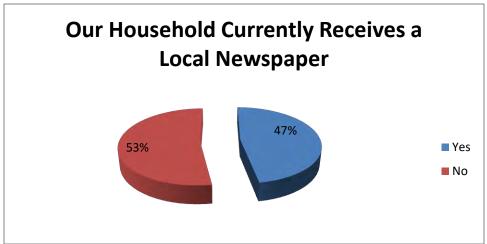




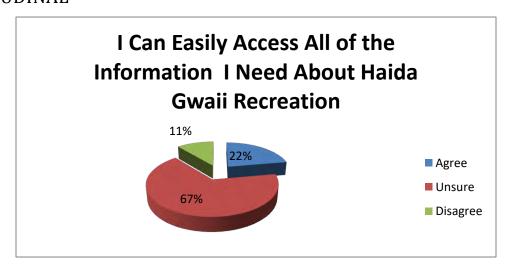


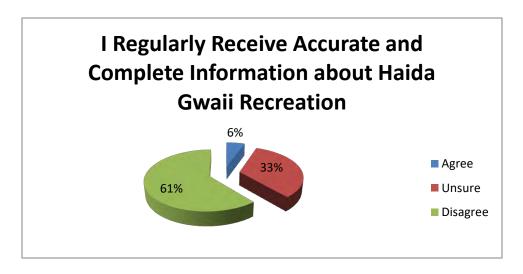


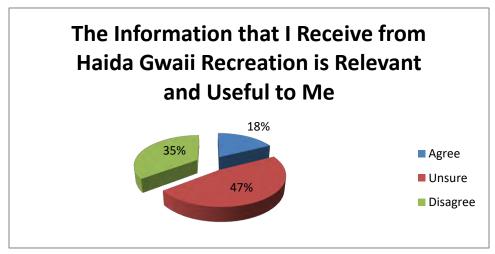


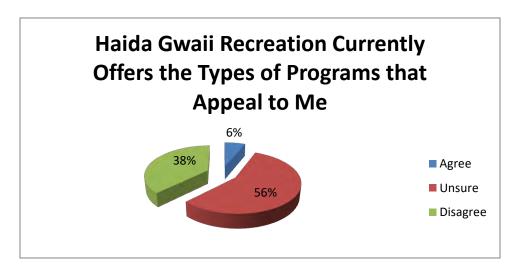


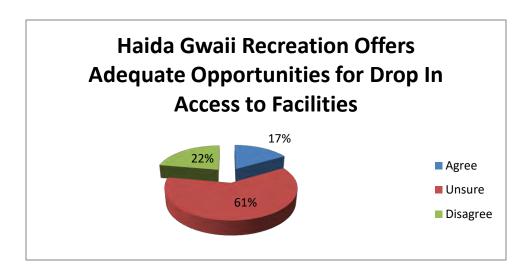
ATTITUDINAL

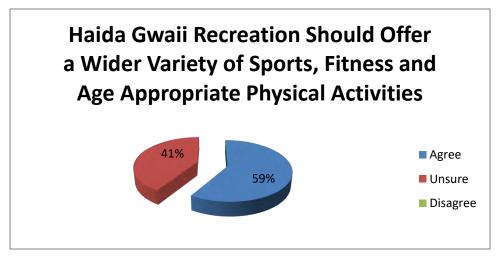


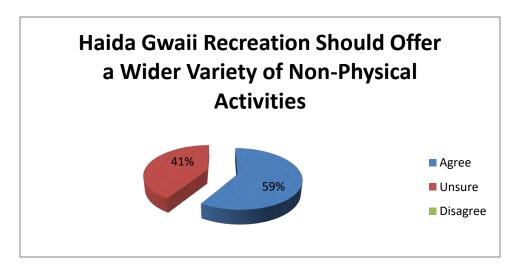


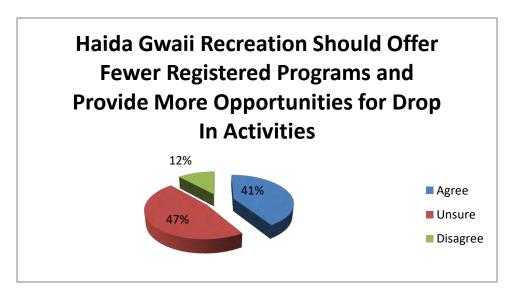


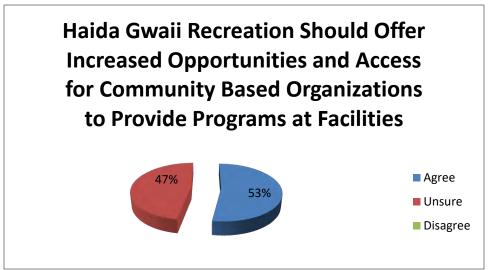


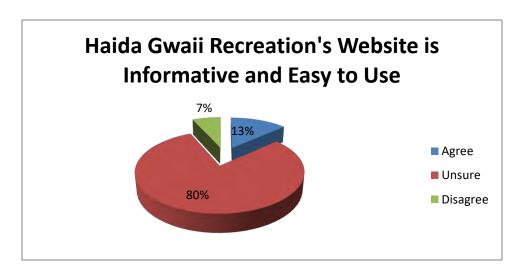


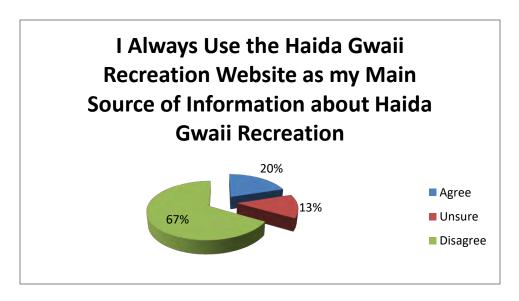


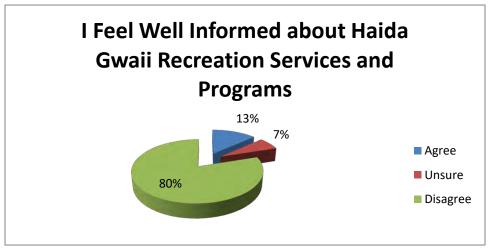




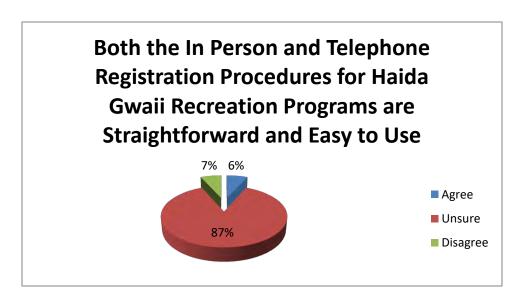


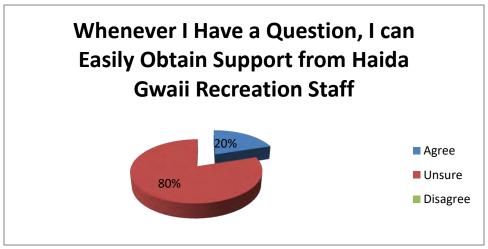


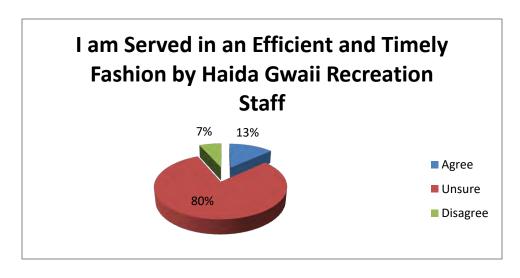












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- More awareness of the Haida Gwaii Recreation website;
- More programs in smaller communities;
- Hold more events in Tlell;
- More after hour programs;
- A space available to offer dance classes with proper acoustics;
- Advocate for a swimming pool on island; and
- Programs at more advanced levels.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

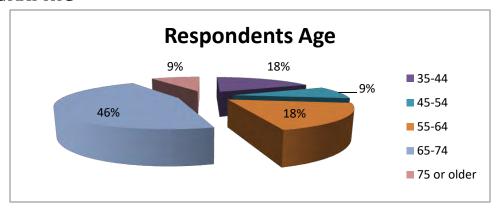
- Keep growing;
- Must be more advertisement flyers for larger events;
- Tlell and Port Clements are lacking for programming and events; and
- The community hall in Masset is a terrible place to hold physical activities.

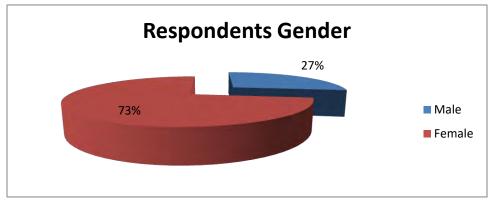
RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

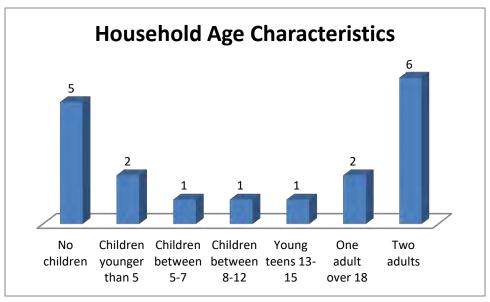
- Swimming skills development;
- Swimming pool; and
- More festivals and more events in Tlell.

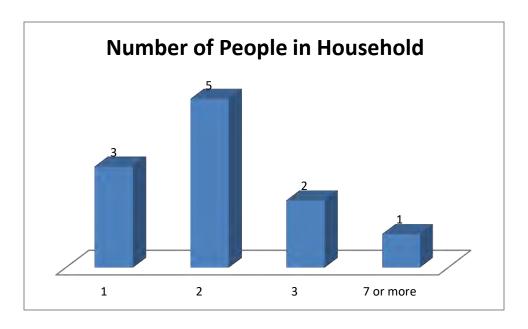
ELECTORAL AREA E

DEMOGRAPHIC

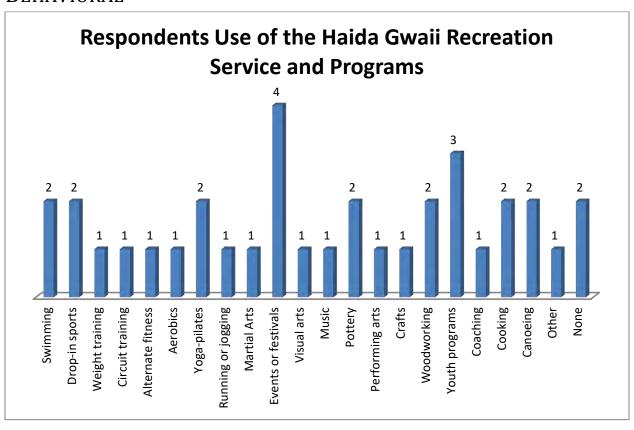


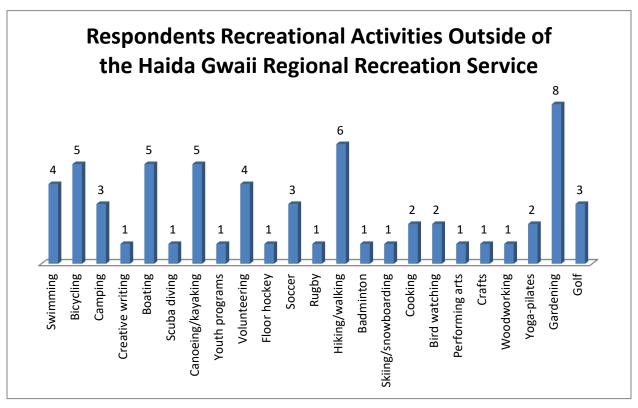


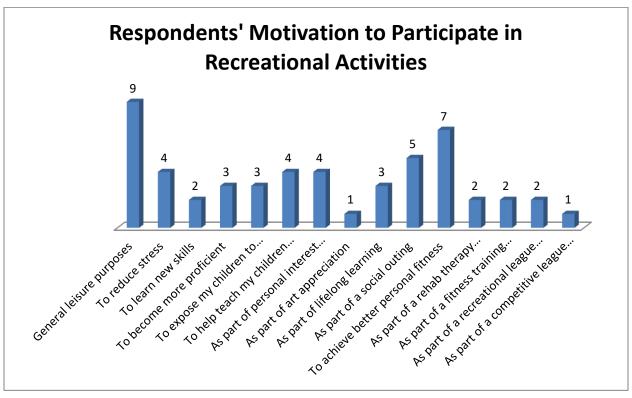


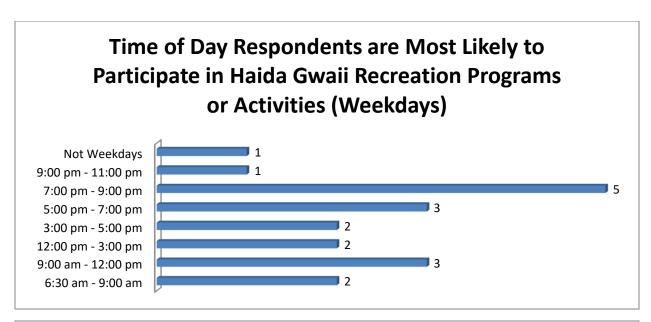


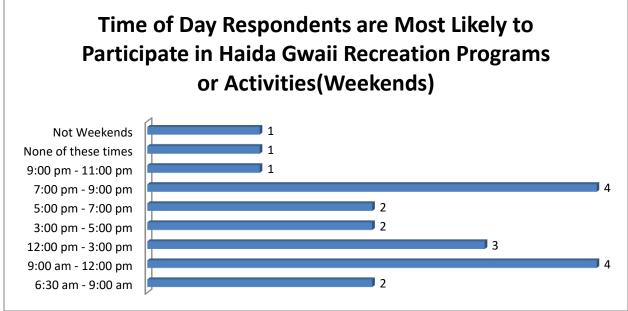
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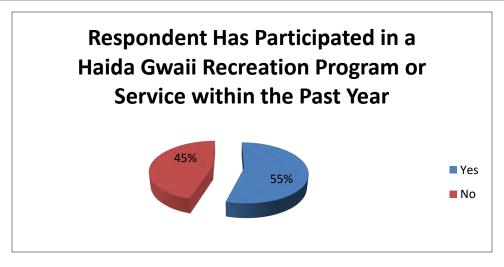


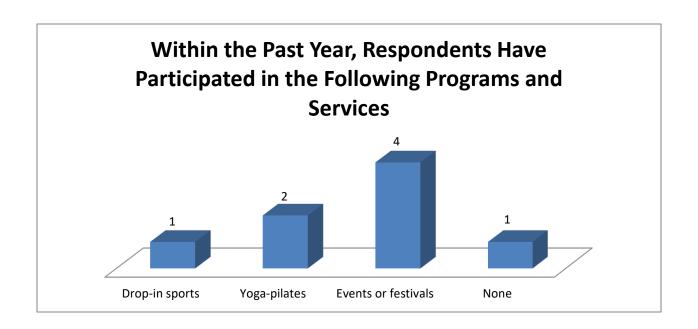


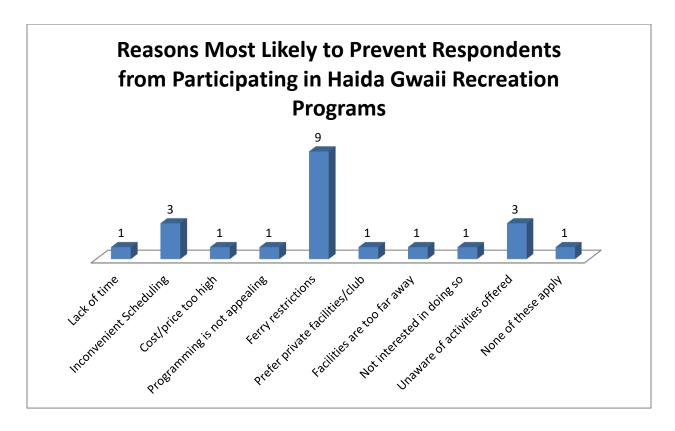




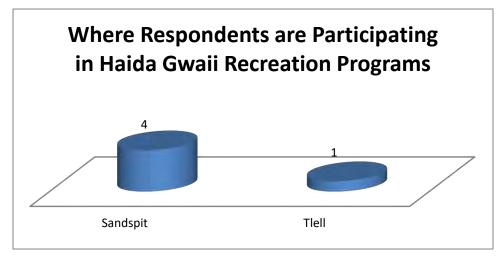


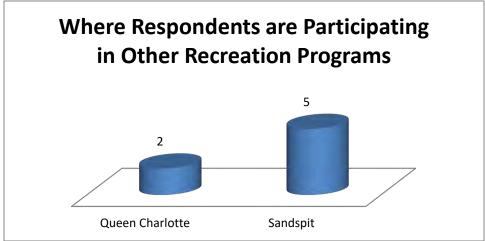




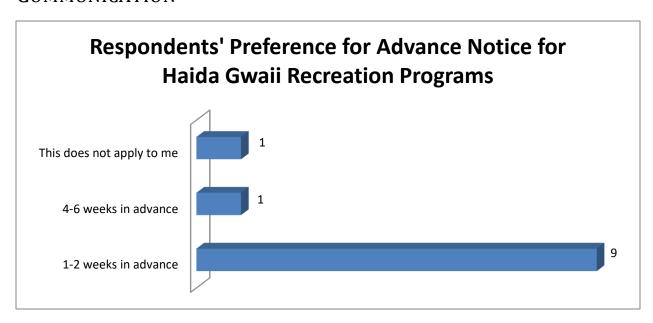


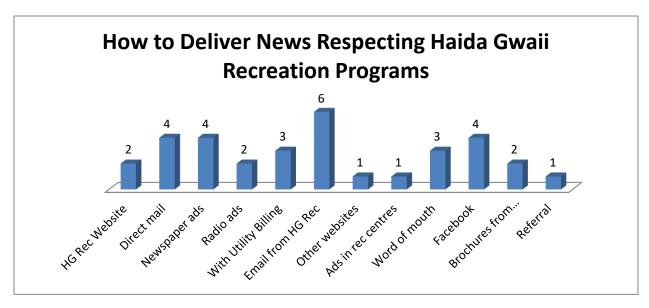
MOBILITY

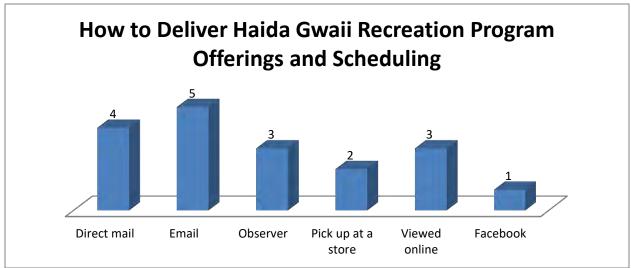


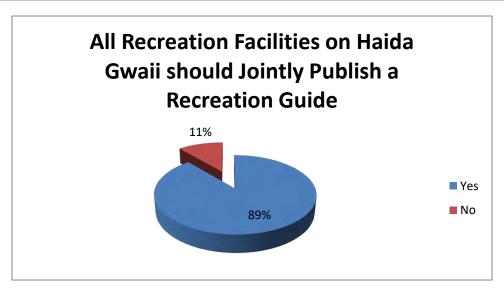


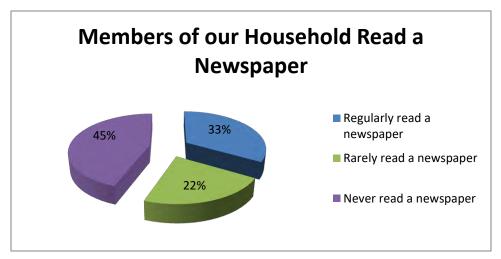
COMMUNICATION

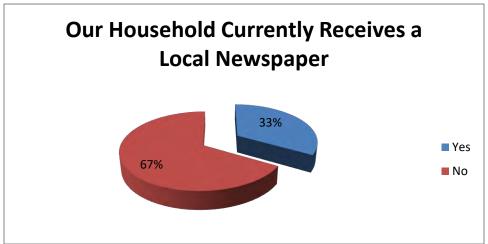




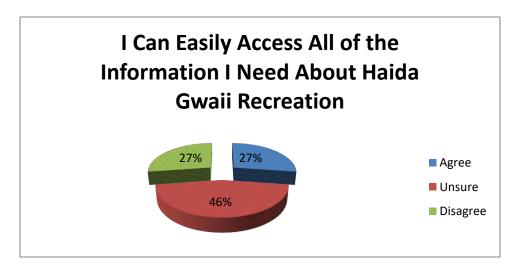


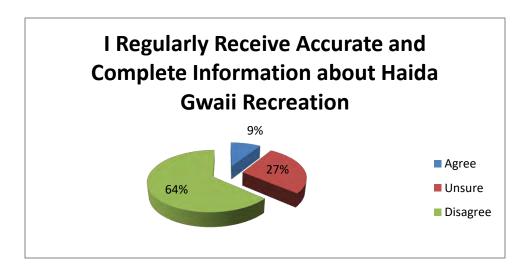


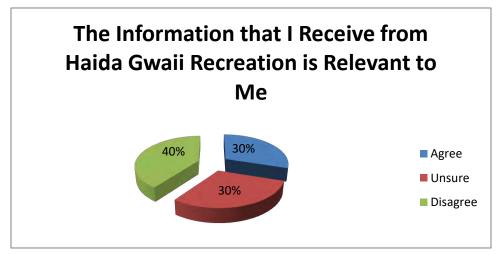


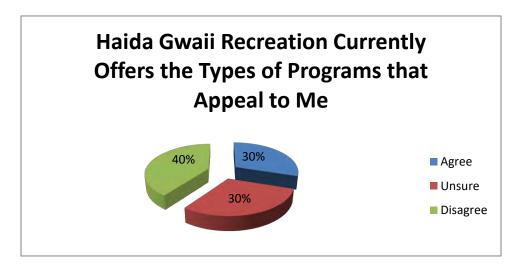


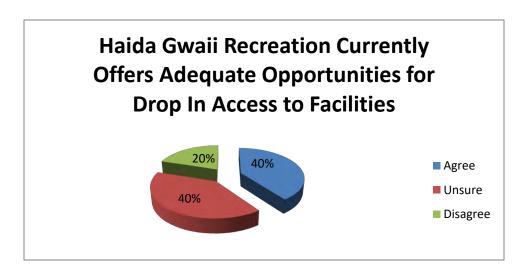
ATTITUDINAL

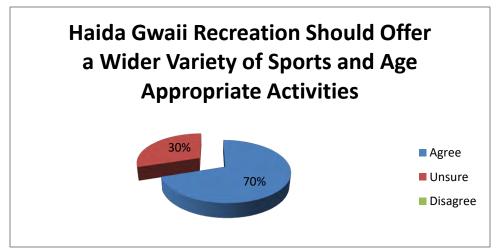


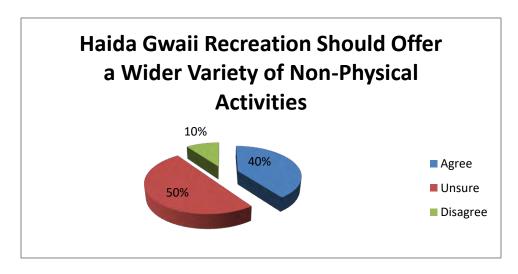


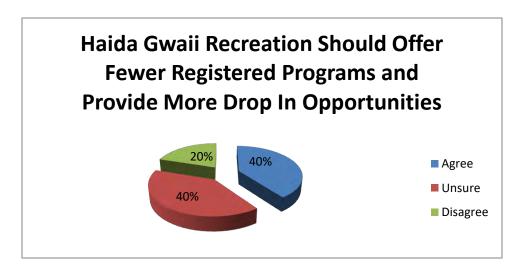


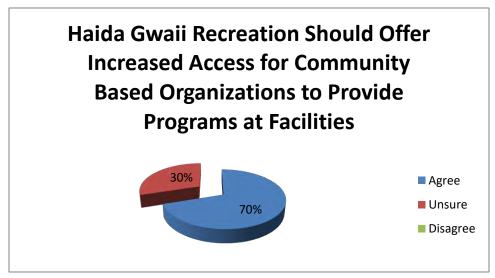


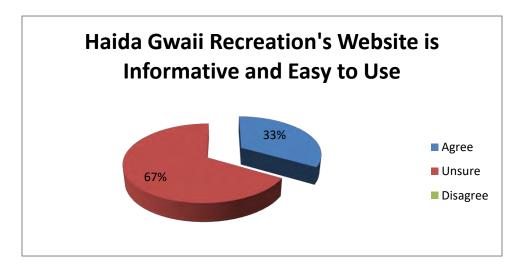


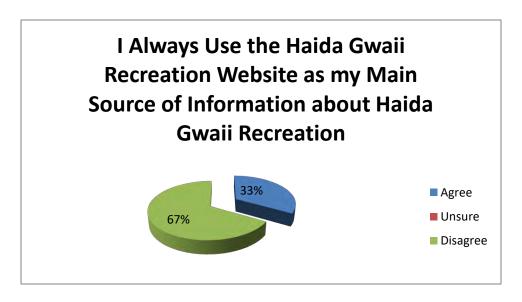


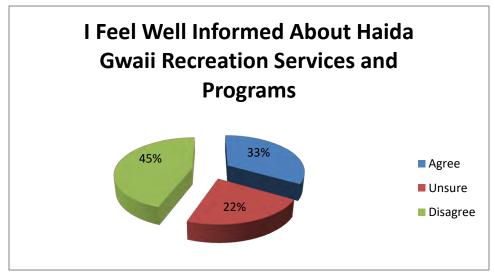




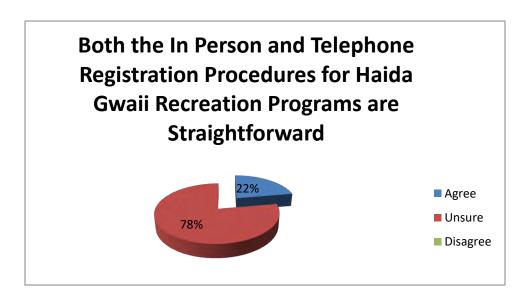


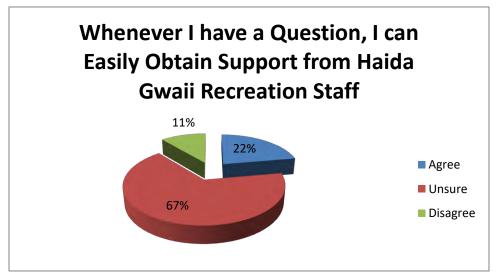


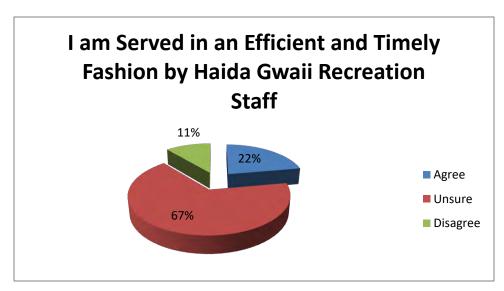












RESPONDENTS WERE ASKED HOW THE HAIDA GWAII RECREATION SERVICE MAY IMPROVE:

- Give the Moresby Island Management Committee a copy of the financial statements so it may know precisely what funding is allocated to the community;
- Sandspit is not really served by Haida Gwaii Recreation because of ferry restrictions. Allocate more funding for instructors to spend the night in the community; and
- I am not familiar enough with seeking out program offered by Haida Gwaii Recreation.

RESPONDENTS WERE ASKED TO PROVIDE COMMENT ON THE HAIDA GWAII RECREATION SERVICE:

- Have been very secretive over the years;
- Haida Gwaii Recreation used to do activities at Loggers Day Sports in Sandspit maybe they
 could bring down the go-carts from Masset; and
- Advertise upcoming opportunities in the Observer.

RESPONDENTS WERE ASKED TO PROVIDE SUGGESTIONS FOR NEW PROGRAMS AND SERVICES:

- Family involved activities:
- Programs for teenagers in Sandspit;
- Recreation for seniors;
- Sailing instruction and boat building; and
- Swimming pool (x2) and curling rink.

NORTH COAST REGIONAL DISTRICT BYLAW NO. 616, 2017

Being a bylaw to provide for the determination of various procedures for the conduct of local government elections and other voting.

WHEREAS under the *Local Government Act*, Regional District Board may, by bylaw, determine various procedures and requirements to be applied to the conduct of local government elections and other voting;

AND WHEREAS the Regional District Board wishes to establish voting procedures and requirements under that authority;

NOW THEREFORE, the Board of the North Coast Regional District, in open meeting assembled, enacts as follows:

1. CITATION:

This bylaw may be cited for all purposes as "2018 Local Government Election Bylaw No. 616, 2017."

2. REPEAL:

The Local Government Election Bylaw No. 578, 2014 is hereby repealed.

3. <u>USE OF PROVINCIAL LIST OF VOTERS AS THE REGISTER OF RESIDENTIAL</u> ELECTORS:

a. As authorized under section 76 of the Local Government Act, the most current available provincial list of voters prepared under the elections act, is deemed to be the register of resident electors on the 52nd day prior to the general voting day for elections held for electoral areas A, C, D and E of the Regional District.

4. ADDITIONAL ADVANCE VOTING OPPORTUNITIES:

- a. As authorized under section 108 of the Local Government Act, the Regional District Board authorizes the chief election officer to establish additional advance voting opportunities for each election to be held in advance of general voting day and to designate the voting places, and to establish the date and voting hours for these voting opportunities.
- b. In accordance with section 107(2) of the *Local Government Act* [population of jurisdiction less than 5,000], a second voting opportunity will not be established.

5. ADDITIONAL GENERAL VOTING OPPORTUNITIES:

a. The Regional District Board authorizes the chief election officer to establish additional general voting opportunities for general voting day for each election or other voting to designate the voting places and voting hours, within the limits set out in section 106 of the Local Government Act, for such voting opportunities.

6. SPECIAL VOTING OPPORTUNITIES:

- a. To give electors who may otherwise be unable to vote an opportunity to do so, the Board may provide a special voting opportunity as authorized under section 109 of the *Local Government Act* and authorizes the chief election officer to establish a special voting opportunity for each election and to designate the location, the date and the voting hours for the special voting opportunity.
- b. The following restrictions apply to persons who may vote at this special voting opportunity:
 - i. The only electors who may vote are electors who, on the date on which the special voting opportunity is held and before the end of the voting hours for the special voting opportunity, have been admitted as patients to a hospital within the region.
- c. The following procedures for voting and for conducting the voting proceedings only apply to the special voting opportunity:
 - i. A portable lap type voting booth is to be utilized.
 - ii. All other voting procedures are as per normal.
 - iii. Upon completion of the marking of the ballot it is to be deposited by the elector in the ballot box supplied by the presiding election official.
 - iv. Upon completion of the special voting the ballot boxes are to be sealed until the time of counting.
 - v. The Regional District Board authorizes the chief election officer to limit the number of candidate's representatives who may be present at the special voting opportunity.

7. MAIL BALLOT VOTING:

- a. As authorized under section 110 of the *Local Government Act*, the chief election officer may allow for voting and registration to be done by mail for those electors who reside in electoral areas A and C, as these areas are remote.
- b. Mail ballot voting and registration will only be allowed for electors residing in areas within electoral areas A and C where voting places are not established for the general voting day.
- c. The following procedures for voting and registration must apply:
 - Sufficient record will be kept by the chief election officer so that challenges of the elector's right to vote may be made in accordance with the intent of section 126 of the Local Government Act;
 - ii. A person exercising the right to vote by mail under the provisions of section 110 may be challenged in accordance with, and on the grounds specified in section 126 of the *Local Government Act*, until 4:30 p.m. two days before the general voting day.
- d. To vote using a mail ballot, the elector shall mark the ballot in accordance with the instructions contained in the mail ballot package provided by the chief election officer.
- e. The time limits in relation to voting by mail ballot will be determined by the chief election officer.

f. As provided in the *Local Government Act*, a mail ballot must be received by the chief election officer before the close of voting on general voting day in order to be counted for an election.

8. ORDERS OF NAMES ON BALLOT:

a. The order of names of candidates on the ballot will be determined by lot in accordance with section 117 of the *Local Government Act*.

9. NUMBER OF SCRUTINEERS AT VOTING PLACES:

a. As authorized under section 120(3) of the *Local Government Act*, the number of scrutineers for each candidate that may attend at an election is one (1) scrutineer for each ballot box in use.

10. RESOLUTION OF TIE VOTE AFTER JUDICIAL RECOUNT:

a. In the event of a tie vote after a judicial recount, the tie vote will be resolved by conducting a lot in accordance with section 151 of the *Local Government Act*.

	Daniel Fish Corporate Officer	_
	Barry Pages Chair	-
ADOPTED this	day of, 2	017.
READ A THIRD TIME this	day of, 2	017.
READ A SECOND TIME this	day of, 2	017.
READ A FIRST TIME this	day of, 2	017.

Daniel Fish

From:

Michael Racz <mikeracz3@gmail.com>

Sent:

Thursday, July 6, 2017 12:36 PM

To:

Daniel Fish

Subject:

Transportation Study

http://sd50.bc.ca/wp-content/uploads/2017/01/HG-Transportation-Study-Prepared-by-CoHost-2016-V2.pdf

Hi Daniel,

Carla from the Gwaii trust wanted me to forward this link to you regarding the transportation study that was done on island a little bit ago. This one was prepared by Co-Host on island. As well, In 1998 BC Transit also did a feasibility study on public transport here. GwaiiTrust is looking to get BC Transit to do a refresher/update on the study they did in 98'. We need a local government to initiate this for us with BC transit. BC transit knows about this and would cover half the cost, and GT the other half. Could the RD initiate this for us? Can this be added to the next agenda for discussion.

Thanks

Mike



Haida Gwaii Transportation Feasibility Study
Exploring School District 50 and Public Transportation Opportunities and Synergies

Prepared for: The Village of Port Clements

Prepared by: Co+Host

December 12, 2016



Acknowledgements

Thank you to the following individuals who provided information on public and school transportation on Haida Gwaii.

Andrew Merilees, Haida Gwaii Discovery Day Tours Bob Stratton, Gwaii Taxi and Tours Brian Lomas, Ministry of Transportation and Infrastructure Carlos Ormond, Haida Gwaii Higher Education Society Christopher Fudge, BC Transit Dawna Johnson-Day, School District 50 Debby Crosby, Eagle Transit Derick Sindell, First Truck Centre Doug Chapman, North Coast Regional District Heron Wier, Moresby Explorers Hudson McLellan, Sandspit Community Society James Cowpar, Haida Style Joe Cordeiro, Commercial Vehicle Safety and Inspection Kim Mushynsky, Village of Port Clements Lori Wiedeman, Village of Queen Charlotte Margaret Lovell, Passenger Transportation Branch Marilyn Wilkens, Previous Owner of Eagle Transit Residents of Haida Gwaii Shelley Sansome, School District 50

About Co+Host

Co+Host is a partnership of freelance facilitators who have come together as a collective in order to share skills and resources. Based on Haida Gwaii, we provide co-facilitation as way to combine our experience, skills and local knowledge.

For more information, see http://www.cohostcollective.ca. or e-mail cohostcollective@gmail.com

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Disclaimer

All the information included in this feasibility study is based on data/information gathered from various secondary and primary sources and certain assumptions. Although due care and diligence has been taken in compiling this document, the contained information may vary due to changes in the environment. The prospective user of this document is encouraged to carry out her/his own due diligence and gather any information she/he considers necessary

Co+Host and consultants Lindsay Seegmiller, Jennifer Dysart, Allison Smith and Kara Seivewright cannot be held liable for the outcomes of decisions made as a result of this study.

Terminology & Abbreviations

Commercial Passenger Vehicle: means a motor vehicle operated on a highway by or on behalf of a person who charges or collects compensation for the transportation of passengers in that motor vehicle

CHN: Council of the Haida Nation

CVSE: Commercial Vehicle Safety and Enforcement

Demand-Responsive System: A transportation system that allows users to book trip in advance. Schedules and routes are flexible, and service is often door-to-door.

General Authorization: means a commercial passenger vehicle when it is not operated as an intercity bus or as a passenger directed vehicle;

MIEDS: Misty Isles Economic Development Society

Para-transit System: A flexible and personalized transit system often used in smaller communities with a range of vehicles. This system may be entirely demand-responsive, but it may also include some fixed-route, fixed-schedule services.

School Bus: means a commercial passenger vehicle used by, on behalf of, at the request of or under a contract with the authority in charge of a school to convey students

(a) to or from the school, or

(b) to or from a school sponsored event;

SD50: School District 50

S.H.I.P.: Skidegate Haida Immersion Program

Special Authorization: when used in relation to a motor vehicle, means an authorization to operate the motor vehicle as

(a) an inter-city bus, or

(b) a passenger directed vehicle;

Taxi Saver: A program that allows certain clients the option to buy taxi coupons, which are applied to future travel, at a discounted rate.

Haida Gwaii Transportation

Feasibility Study Executive Summary



Purpose of the study:

To examine potential synergies between school bus services, other transit service providers, and the need for public transit options on Haida Gwaii.

Community profile

- Population of 4370 (in 2011)
- 8 communities (7 on Graham, 1 on Moresby) each governed by a different elected body.
- Majority of services (schools, medical services, grocery stores, banking services, social services) concentrated in the north and south ends.

SD50 Profile

- 554 students enrolled across 6 schools (K-12)
- FirstBus Canada Ltd has provided school bus service since 2004. This includes organizing and maintaining busses, co-ordinating drivers and determining routes.
- The FirstBus contract costs approximately \$500,000 annually and SD50 is interested in reducing that amount.

Current methods of transportation include:

Private vehicles, walking, cycling, BC Ferries, airports, Eagle Transit bus, rental cars, Northern Health Connections bus, Sandspit Community Society, health centre shuttles, taxis, water taxis, ridesharing, private charters, hitchhiking























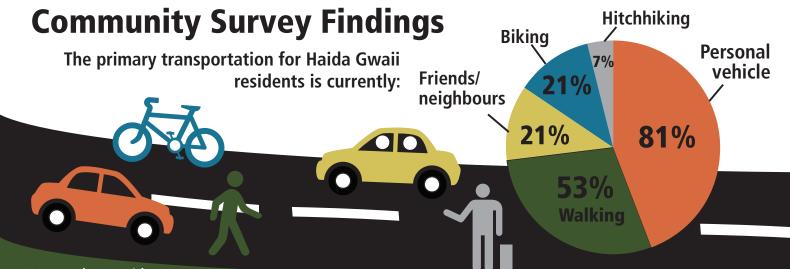
Research Methods

- **Literature Review & Environmental Scan:** What's working here, and what's working elsewhere?
- **Stakeholder Interviews:** What assets and interest do we have on Haida Gwaii?
- **Community Survey:** What does the public need for transportation?

This study was contracted by the Village of Port Clements with support from the BC Rural Dividend Fund. The study was conducted by Co+Host.







Respondents said they would use **public transportation** for **running errands**, **social activities and work**.

Only **7.3%** of respondents stated they would not use public transportation

The top 3 most important attributes of public transportation system were:

1. Reliability 2. Price 3. Frequency

Destination preferences showed the need for both, short haul routes and long haul routes.

83% of respondents preferred t**centralized bus stops** rather than door-to-door

The greatest motivation for utilizing public transportation is wanting to reduce their **environmental impact** (32%), and wanting to **save money** (21%).



Many local organizations already provide some form of transportation to students, patients, Sandspit residents, etc.



Some local organizations are well-positioned to support broader transportation systems.

Additional community benefits:

- Reduced drinking and driving
- Reduced youth and elderly isolation
- Increased youth engagement in school extracurricular activities
- Environmental sustainability

- Enhanced tourist mobility and access to all island communities
- Increased accessibility for individuals living on low-income
- Planning for future transportation needs as they age

Challenges of providing public transportation on Haida Gwaii

- Profitability
- Current habits of residents
- Competition with local businesses
- Cost incurred by riders
- Availability of qualified drivers
- Licensing requirements
- Service provider vs. public needs
- School bus timing & remote communities
- After-hours transportation



SD50 School Bus Service Solutions:

Solution 1: Keep existing contract with FirstBus Limited

Solution 2: On island contractor provides exclusive school bus service

Solution 3: SD50 provides exclusive school bus service

Solution 4: On island contractor provides public transportation system

Solution 5: BC Transit provides public transportation service



Additional Public Transportation Options:

Option 1: Northern Health Connections Bus Adjustment

Option 2: Evening Water Taxi

Option 3: Short Haul Routes Pilot Project

Option 4: Taxi Saver with Existing Providers











Recommendations



On island contractor provides exclusive school bus service



Recommendations for Public Transportation:

A combination of the following:

Option 1: NH Connections Bus Adjustment

Option 2: Evening Water Taxi

Option 3: Short Haul Routes Pilot Project

Option 4: Taxi Saver with Existing Providers



Solution 5: BC Transit provides public

transportation service

Additional Recommendations:

- Transportation committee
- Collaborative communication
- Software for scheduling
- List of on island drivers





















Introduction

At the request of the Village of Port Clements, and with funding from the BC Rural Dividend Fund, this study was conducted by consultants from Co+Host to examine potential synergies between school bus services, existing transportation service providers and public transportation needs on Haida Gwaii. This study focuses on the communities of Graham and Moresby Islands.

The primary objectives of this study are outlined below:

- Examine the existing SD50 bus service contract
- Identify on island transportation assets that are underutilized
- Assess the feasibility of contracting an alternative bus service provider for exclusive SD50 school bus services
- Identify public transportation needs in all island communities
- Explore synergies between SD50 service needs and public transportation needs
- Develop service options and outline associated costs
- Provide service option recommendations

This report presents the findings of this study and outlines service option recommendations.

Section 1: Community Profile

The study area included the communities of Graham and Moresby island of Haida Gwaii.

Population: Haida Gwaii is an archipelago of over 150 islands, 100 km off the north west coast of British Columbia. Haida Gwaii has a population of approximately 4,370 people (Statistics Canada, 2011). The majority of the population resides on Graham Island in the following 7 communities: Queen Charlotte, Skidegate, Tlell, Port Clements, Masset, Old Massett and Tow Hill. Of the total population, 297 individuals live in the community of Sandspit on Moresby Island.

Demographics: The median age of residents is 40.7 years old, with a median income of \$51,019. Education attainments include: 33.7% with less than a high school diploma, 24.8% with a high school diploma, 15.8% with a college/university certificate, 13.2% university bachelor's degree and 12.4% with apprenticeship/ trade certificate (Misty Isles Economic Development Agency, 2011)

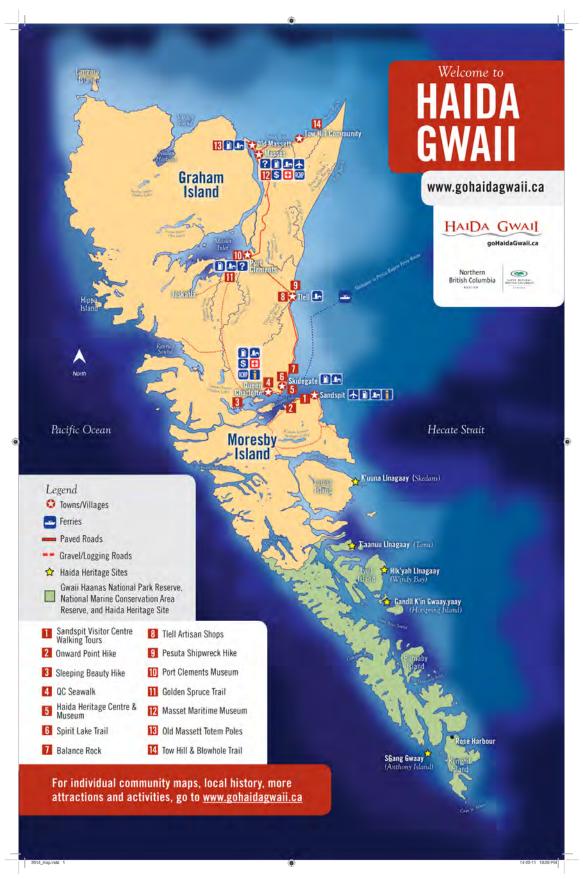


Figure 1: Map of Haida Gwaii (gohaidagwaii.com)

Political Structure: Haida Gwaii is unceded Haida territory and the Council of the Haida Nation (CHN) collectively holds Hereditary and Aboriginal Title and Rights to Haida Gwaii. It includes several small villages, each administered by a different elected body. The band members of Skidegate are governed by the Skidegate Band Council, and the band members of Old Massett are governed by the Old Massett Village Council. Haida Gwaii is also part of the North Coast Regional District previously known as the Skeena-Queen Charlotte Regional District. The North Coast Regional District is comprised of the Village of Queen Charlotte, the Village of Port Clements, the Village of Masset, Electoral Area D - Rural Graham Island (Miller Creek, Lawnhill, Tlell, Nadu, Tow Hill) and Electoral Area E - Sandspit.

Economy: Haida Gwaii's primary employment by industry is: tourism, forestry & logging, and government services (Misty Isles Economic Development Agency, 2011). Misty Isles Economic Development Society (MIEDS) is the economic development agency for 3 municipalities and the 2 regional districts on Haida Gwaii. The Haida Enterprise Corporation, HaiCo, is the economic development arm of the CHN and was created to manage, grow and govern the business enterprises of the Haida Nation with the goal of developing a sustainable economy.

Community Amenities: Haida Gwaii's main services are located in the north and south ends of Graham Island. These include grocery stores, libraries, post offices, medical services, visitor centres, banking services, social services, schools and museums. Services island-wide have limited hours of operation based on the community, with many services closing at 5:30PM, and with restricted hours on weekends.

The smaller communities of Port Clements and Sandspit both have grocery stores, elementary schools and some local jobs. However, many residents from these communities commute to the larger communities for work or secondary school.

Education: School District 50 provides k-12 education to the communities of Haida Gwaii. Students travel off island for secondary education. Distance learning is offered through the NorthWest Community College and periodic trades training from off island providers. The Skidegate Haida Immersion Program (S.H.I.P.) exists to preserve and revitalize Skidegate Haida Language through recordings and production of language resources. The Haida Gwaii Higher Education Society, in partnership with the University of British Columbia, provides two semester programs to on and off island students, and is based in Skidegate.

Healthcare: There are two Northern Health hospitals on island: Xaayda Gwaay Ngaaysdll Naay - Haida Gwaii Hospital and Health Centre in Queen Charlotte and the Northern Haida Gwaii Hospital in Masset. There are clinics, which include: Xaaynangaa Naay - Skidegate Health Clinic, Queen Charlotte Clinic, Masset Clinic, Port Clements Clinic and Old Massett Health Centre. Residents can travel via the Northern Health Connections for medical appointments. Residents travel off island for special services including emergency medical evacuation Helijet services.

Section 2: School District 50 Profile

School District 50 (SD50) provides k-12 education to the students of Haida Gwaii. SD50 is governed by the Board of Education, which is made up of 5 elected local representatives, and is a member of the BC School Trustee Association. There were 554 students enrolled in SD50 in the 2015/16 school year and the projected enrolment for the 2016/17 school year is lower, at 544 students. SD50 includes the following six schools:

- · Agnes L. Mathers Elementary in Sandspit
- Gudangaay Tlaats'gaa Naay Secondary in Masset
- Port Clements Elementary in Port Clements
- GidGalang Kuuyas Naay Secondary in Queen Charlotte
- Sk'aadGaa Naay Elementary in Skidegate
- Tahayghen Elementary in Masset

After school programming is provided by the teachers and in partnership with Haida Gwaii Regional Recreation Commission.

Service Provider History

Previous to the current partnership with FirstBus Canada Limited (based in Kitimat, British Columbia), two on-island service providers were contracted to provide transportation to students: GRM Bus Services (no longer in operation) and O'Brien & Fuerst (O'Brien) Logging Ltd (currently in operation). Routes offered were similar to what is currently provided. In addition, SD50 had a budget of \$15,000 for local shared-ride taxis in Masset-Old Massett and Queen Charlotte-Skidegate for students who stayed for after school activities.

In 2004 when the student transportation contract was put out to tender, O'Brien submitted a proposal to continue providing this service. However, SD50 selected a new company called FirstBus and O'Brien sold the assets previously used to deliver student transportation.

Current Service Provider

SD50 currently contracts the school bus service provider, FirstBus Canada Limited. This most recent agreement took effect as of September 1st 2014, and expires June 30th 2018, with an optional negotiated 5th year at the discretion of the Board of Education. SD50 has been contracting FirstBus since 2004. As part of the contract, FirstBus provides school buses for the purpose transporting school children to and from schools within the SD50 region and for charter purposes. As part of the agreement, FirstBus provides the following:

- Provides and maintain dispatch services
- Provides and maintains yellow/black school buses

- Hires, coordinates and orientates bus drivers
- Ensure drivers comply with *Motor Vehicle Act*
- Determines routes and schedules, in cooperation with The Board of Trustees
- FirstBus at its own expense, keeps in effect automobile and liability insurance

Routes are planned by the contractor, FirstBus, with the aim that no student travel for more than 95 minutes at a time each way. Students are to arrive no more than 30 minutes, and no less than 10 minutes, prior to school start time, and depart no more than 30 minutes after dismissal. Ridership is limited to students, staff and/or contractor staff.

The current school bus routes include:

- Route 1: Port Clements to Masset & Tow Hill to Old Massett to Masset: 288 Daily Kms
- Route 2: Port Clements to Tlell and Tlell to Port Clements: 115.6 Daily Kms
- Route 3: Tlell to Queen Charlotte and Queen Charlotte to Skidegate: 241.6 Daily Kms
- Route 4: Skidegate to Queen Charlotte and Queen Charlotte to Skidegate: 100.6 Daily Kms

Annual Cost of Routes 1-4 based on 181 school days per year: \$414,708.88, paid in equal instalments. Any extensions or reductions are calculated at a \$2.65 per Km basis.

FirstBus provides 5 school buses, and drivers are based in Port Clements.

In addition, SD50 leases a 6th bus from FirstBus during the school year to act as an emergency tsunami evacuation bus at the north end. This costs \$70,000/year. There is no evacuation bus at ALM because there is enough staff to transport the students to the tsunami evacuation zone.

The Superintendent of SD50 holds the transportation portfolio within the district and acts as the liaison between SD50 and FirstBus.

Based on the drop off and pick-up limitations in the FirstBus agreement, students that stay after school for extracurricular activities do not have a school bus transportation option and rely on parent volunteers. There is currently no additional funding available for transportation for after school activities.

FirstBus routes do not operate on Moresby Island in the Sandspit community. In Sandspit, students are driven by parent volunteers to and from the Alliford Bay ferry terminal. In 2016, the Sandspit Community Society began negotiations with SD50 to provide school bus services on Moresby Island, dropping students at the Alliford Bay ferry terminal. They have yet to reach an agreement. These students are then picked up by Eagle Transit (ET) from the Skidegate Landing ferry and taken to GidGalang Kuuyas Naay Secondary School (GKN).

Section 3: Public Transportation on Haida Gwaii, Past & Present

History of Public Transportation on Haida Gwaii

Due to Haida Gwaii's remoteness and population sprawl, it faces unique transportation challenges.

In the 1960s and 1970s, a public bus operated island wide. The service was operated daily with paid drivers, and traveled from the Sandspit Airport to Masset. In addition to providing public transportation, the bus also transported mail across the islands.

In 1999, the Skeena-Queen Charlotte Regional District contracted BC Transit¹ to conduct a feasibility study (available upon request). This study recommended the following three options, each of which builds on the former:

- 1. Local & Regional Paratransit System
- 2. Paratransit, Sandspit and Masset based service
- 3. Paratransit, Sandspit and Masset based service, and a taxi supplement

Option 3 best met the objectives set forth by the community at that time, given its range of scheduled and demand-responsive travel options across the islands. However, it was also the most costly (\$122,000 annually in 1999) (BC Transit, 1999). The Regional District suggested that while this proposal was not adopted when the study was first conducted, the proposal could be possible if additional funding sources for the system were introduced.

Eagle Transit, a local passenger transportation service provider, has attempted a variety of service models to meet the public transportation needs on Haida Gwaii, including scheduled evening and weekend bus services. However, since these were not municipally or provincially subsidized services, the attempts were not financially sustainable and were discontinued. The primary challenge was having an adequate volume of people traveling to the same place at the same time, in order to break even or make a profit. The previous owners noted that these attempts were made prior to the introduction of Facebook, and were marketed by posters and word of mouth. They also noted that residents' wants and behaviours do not always align. Although at the time Haida Gwaii wanted public transportation system, few individuals actually used it as they would prefer to travel with family and friends.

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¹ In order to receive financial and logistical support from BC Transit, an interested community or area must formally request a feasibility study through a local government resolution. The costs of this study are shared equally between the two bodies. A full study typically costs approximately \$20,000; however, elements of the former Haida Gwaii Feasibility Study may still be relevant. The exact cost would need to be negotiated directly.

Current Transportation Systems

The current transportation methods on Haida Gwaii are diverse, and meet some (but not all) of public transportation needs. A list of current transportation providers, routes and vehicle list is provided in Appendices A and B.

Roadways: Communities on Graham Island are connected via the Yellowhead highway 16 which stretches 110 km from north to south. Roadways are under the Ministry of Transportation and Infrastructure jurisdiction.

Walking and Cycling: Walking and cycling are primary methods of transportation within communities, rather than among. There are no formal bike or walking paths linking the communities of Skidegate and Queen Charlotte, therefore cyclists travel on the narrow highway shoulder. The Village of Queen Charlotte is currently pursuing a bike route feasibility study. A walking path connects the communities of Masset and Old Massett.

BC Ferries: BC Ferries sail from Prince Rupert to Skidegate twice a week, both ways, in the fall and winter season. Additional sailing times are added in the spring and summer. Sailing times are approximately 7 hours in length. BC Ferries also operates the ferry connecting Alliford Bay to Skidegate Inlet. This sails from 7:20AM until 6:10PM, with no evening schedule.

Airports: Haida Gwaii has two airports, one in Sandspit, and the other in Masset. Air Canada Jazz flies from Vancouver International Airport to the Sandspit Airport once a day, and twice a day in the summer season. In Masset, Pacific Coastal Air flies daily scheduled flights from the Vancouver South Terminal. HeliJet provides charter flights from Sandspit and Masset to fishing lodges. Inland Air is a commercial seaplane that provides charters between Prince Rupert, Haida Gwaii and Gwaii Haanas. Inland Air has a daily scheduled route from Masset to Prince Rupert Monday - Friday, and provides air cargo and delivery services.

Eagle Transit: Eagle Transit is a private business that holds a passenger transportation license to provide taxi, charters and freight delivery. They provide curb-to-curb airport shuttle transportation between Queen Charlotte, Skidegate, and the Sandspit Airport. The Masset Airport Shuttle provides transportation from all Graham Island communities to the Masset Airport with advanced reservation, with curb-to-curb service. The Island Ferry Connector provides transportation from the north end to the Skidegate landing for the Prince Rupert ferry. Both the Masset Airport Shuttle and the Island Ferry Connector rates are dependent on the number of passengers, with a minimum \$150 per trip to operate. As a demand-responsive service, advance reservations are required. In partnership with the Northern Health Authority, Eagle Transit operates a long haul route detailed below. Finally, Eagle Transit is available for hire for private charters and island wide taxi services. In 2016 Calvin and Debra Crosby purchased the business. See Appendix C for schedule.

Northern Health Connections: North Health Connections, a branch of the Northern Health Authority, contracts Eagle Transit to provide transportation to individuals with out-of-town medical appointments. The curb-to-curb service travels from Queen Charlotte to Masset and back once a day, Monday - Friday, and must be booked in advance over the phone. The service costs \$10 per direction for patients. Non-medical travelers are able to book a seat on the bus, space permitting, for \$30 per direction. This service also transports materials between hospitals. There is extremely limited local knowledge about this service and it appears to be underutilized.

Rental Cars: Budget Rent-A-Car (offices at Sandspit Airport and in Queen Charlotte), National Rent-A-Car (office at Masset Airport at Longhouse Gift Shop in Skidegate), and Rustic Rentals (office in Queen Charlotte) provide rental car options to locals and tourists. Rental cars are prohibited from traveling on logging roads.

Sandspit Community Society: In 2016 the Sandspit Community Society purchased 3 vehicles (14-seater, 19-seater and a Minivan) to serve the Moresby Island public transportation taxi, charter and school bus needs. At present, the service is available on-request. They are currently in discussions with SD50 regarding the provision of transportation services to high school students traveling to Graham Island. They also hope to provide a scheduled transportation service between Alliford Bay and Sandspit for the public. This is the only transportation service available for Sandspit residents.

Health Centres: Skidegate Health Centre owns and operates several private shuttles to support their programs and clients. The Old Massett Health Centre also owns a van and provides transportation mainly to clients of homecare. The Adult Day Program in Old Massett has a larger bus with an on-demand service for anyone who attends programs.

Taxi Services: Numerous private taxi companies currently service the communities of Masset/Old Massett (Haida Time), Queen Charlotte/Skidegate (Gwaii Taxi and Tours - 2 taxis), and Sandspit (Sandspit Community Society). A ride from Queen Charlotte to Skidegate (approximately 9 kilometers) costs approximately \$20; within either community, a ride costs approximately \$10. While taxis can drive passengers anywhere on the island, they are restricted from picking up passengers outside of their given areas, as dictated by their special authorization licenses. In 2016, Gwaii Taxi and Tours' license expanded, enabling them to pick-up passengers at both of Haida Gwaii's airports.

Water Taxi Services: Since the Alliford Bay ferry discontinued the evening ferry schedule, residents from Moresby Island are unable to travel Graham Island for evening events, and vice versa. Sasha Jones provides on-call water taxi service between Sandspit (Bridgeview Marine docks on the Alliford Main), Skidegate (BC Ferries dock) and Queen Charlotte (main docks).

RideSharing: Ridesharing occurs between friends and family. As well, an informal ridesharing network exists on Facebook called <u>Rides on Haida Gwaii</u> (see: https://www.facebook.com/groups/220260274789032).

Private Charters: A number of local operators offer private charter options to locals and tourists. This includes Gwaii Taxi and Tours, which has one 15-seater bus with a general authorization license in 2016, enabling them to provide custom tours and transportation. The Sandspit Community Society provides private charter services on Moresby Island to tour and school groups, and they provide day tours of Graham Island to tourists staying in Sandspit.

Hitchhiking: Hitchhiking between all communities on Haida Gwaii is practiced by some locals and tourists throughout the year.

Tourists: Haida Gwaii has experienced an increase in the number of Canadian and International tourists. Based on the 2015 Visitor Exit Survey conducted by MIEDS, the primary method of transportation to Haida Gwaii is BC Ferries. Secondary methods of transportation to Haida Gwaii are Air Canada and Inland Air. While on island, tourists rely on rental vehicles, hitchhiking and private charters to travel between communities.

Section 4: Methodology

Focus, Framing & Limitations

The primary focus of this feasibility study was to help SD50 reduce their annual spending on student transportation. A secondary focus was to improve transportation options for people on Haida Gwaii, including but not limited to youth, elders, commuters, and the most rural communities. As a result, certain considerations including tourist transportation preferences, environmentally conscious transportation technologies and alternative methods of transportation such as bike routes, were beyond the immediate scope of this study. They do however warrant future consideration.

Certain biases should also be noted when reviewing this study. Many efforts were made to ensure equal representation across communities and demographics on Haida Gwaii. However, south-end (Queen Charlotte and Skidegate) participation is marginally higher, putting emphasis on the needs of these communities. There is also a higher representation of individuals with computer access, which may bias results towards younger residents with middle and high incomes.

Methods

To understand transportation assets and needs on Haida Gwaii, Co+Host conducted a literature review and environmental scan, and administered a series of stakeholder interviews and a broad public survey.

Literature Review & Environmental Scan

Co+Host conducted a literature review and an environmental scan to contextualize this study within provincial, national, and global systems.

During the literature review, Co+Host examined a series of rural transportation case studies. The systems within these studies catered to both the general public and particular subsections of the community who face specific transportation challenges. During the environmental scan, Co+Host reviewed legislation and regulations related to the provision of school bus and public transportation. This included conversations with the Regional District, BC Transit, School District 50, The Passenger Transportation Board and departments within the Ministry of Transportation and Infrastructure.

Stakeholder Interviews

Co+Host conducted fourteen 30-minute semi-structured interviews with key stakeholders across Haida Gwaii. These interviews built a preliminary understanding of the transportation landscape on Haida Gwaii, including an inventory of current assets (physical, human and financial), current informal and formal collaborations, and perceived needs and opportunities.

Stakeholders selected were those who provide some type of transportation service to residents on Haida Gwaii, with vehicles they own or lease. This included private companies (taxis, tour buses), public services (hospitals, schools, health centres), and non-profits that require frequent transportation.

See Appendix D for questions asked and stakeholders consulted.

Following these preliminary interviews, Co+Host conducted a series of in-depth unstructured interviews with select stakeholders from whom more detailed information was obtained.

Public Survey

Co+Host administered a survey to the general public on Haida Gwaii, in order to understand island wide needs related to public transportation. The survey was distributed online and through paper copies at various distribution points, with the intention of reaching 5% of the local population. Co+Host selected distribution partners with connections to particular demographics and locations to ensure a diversity of respondents reflective of the local population as a whole.

The survey was divided into the following sections:

- Demographic Information: To build a basic profile of respondents.
- Current Transportation Habits: To understand current modes of transportation.

- Public Transportation Preferences: To understand local needs related to public transportation.
- Public Transportation Values: To understand what elements of public transportation are most important to local residents.

All who responded were provided the option of entering a draw for one of two \$50 gift certificates to the Co-Op.

The survey questions are available in Appendix E.

Section 5: Findings

Public Transportation Assets

Table 1 summarizes the opportunities and limitations associated with various transportation assets on Haida Gwaii. For a detailed list of vehicles and their respective sizes, owners and licenses, see Appendix A.

Table 1. Service Provider Opportunities and Limitations

Organization	Experience	Opportunities	Limitations	Interest in Supporting Public Transportation
Northern Health Connections	Offers a daily shuttle from South - North for patients, supplies and (space permitting) general public	Increase public awareness of services, reduce rates, alter/expand schedule	Schedule must meet particular needs between hospitals (ie. pharmacy deliveries)	Low - for alterations to existing service High - if schedule remains as is.
Sandspit Community Society	Provides demand- responsive transportation solutions to Sandspit	Has experience coordinating local charters and public transportation, has administrative capacity	Primary focus is on serving Sandspit residents and tourists, financial sustainability of fixed route service	High
Gwaii Taxi and Tours	Provides private taxi service to Queen Charlotte, Skidegate and airports. Also offers demand- responsive chartered bus services.	Could offer afterschool taxi service with taxi saver (coupon) reimbursement from SD50, funding bodies, and/or municipalities and band councils	Price, availability,	Medium
School District 50	Contracts a third party to provide daily bus service for all students on Haida Gwaii	Could use buses when not being used by students and/or combine public & student bus use	Preference is for buses to be exclusively reserved for students in morning and afternoon, schedule must meet student needs first	High, to reduce spending and support local school bus service provider

Haida Gwaii Higher Education Society	Currently leases a bus for student commute and field trip needs	Would like avoid offering transportation to students and have them ride a public transportation bus with a student bus pass, lease bus for field trips only	Organization does not have capacity to provide anything more than basic support to any public transportation solutions developed, student schedule	Low - in organizing a system. High - interest in utilizing
Eagle Transit	Over 22 years of operation experience on Haida Gwaii, leading local public transportation provider	Has physical assets and experience necessary for various transportation solutions	Has recently been acquired by new management and may not have administrative capacity	Medium
O'Brien	Local business that previously held SD50 bus contract	Has experience providing student transportation service; has administrative capacity	No longer owns necessary vehicle fleet to provider transportation solutions	High - Willing to investigate acquiring a new fleet of vehicles

Community Needs

Demographic Information

Over the 5-week period, 245 surveys were completed, with 191 completed online and 54 completed in-person. Old Masset had the lowest representation with 2.4% of the community completing the survey. Regional District E (Sandspit) had the highest community representation, with 9.8% of the community completing the survey. Overall, 6% of the total population on Haida Gwaii was surveyed.

Table 2. A comparison of community population and survey completion rate among all island communities.

Community	Population (2011)	Surveys Completed	Percentage of Community
Queen Charlotte	944	62	6.57%
Skidegate	709	38	5.36%
Port Clements	378	21	5.56%
Old Massett	614	15	2.44%
Masset	884	40	4.52%
Regional District D (Lawn Hill, Miller Creek Tlell, Tow Hill)	524	38	7.25%
Regional District E (Sandspit)	317	31	9.78%
Total	4370	245	5.61%

Survey respondents were primarily between the age of 30-55, with 17% between 19-29 and 18% between 56 - 70. There was low representation of individuals 71 and over.

There was approximately equal representation from income brackets within the \$0 - \$100,000 range, with only 5% of respondents having an income greater than \$100,000. It should be noted that those that were in the \$0-\$10,000 range were primarily youth between the ages of 0-18.

Current Transportation Habits

The primary methods of transportation were identified as:

- 81% personal vehicle
- 53% walking
- 21% friends/neighbours

- 21% biking
- 7% hitchhiking

Driving was the primary mode of transportation, with 83% of respondents having regular access to a vehicle. However, 67% of respondents from Old Massett do not own their own vehicle, in contrast to 100% of respondents in Tow Hill owning a vehicle. Additional methods of transportation noted included Eagle Transit and family members.

6% of respondents required some method of transportation assistance. Of those that identified needing assistance, they required primarily visual and mobility assistance. Two respondents needed assistance with oxygen and chemo-therapy.

Public Transportation Preferences

Overall, public transportation was identified as being primarily used for running errands, social and work activities. Only 7.3% of respondents stated they would not use public transportation. Additional reasons for using public transportation included: health benefits, transportation for their children, and to visit family.

83% of respondents preferred centralized bus stops rather than door-to-door service and 6 individuals identified they would use it to travel to airports and the ferry terminals.

79% of respondents between 0-18 stated they would use public transportation to travel to school and 71% of which would prefer

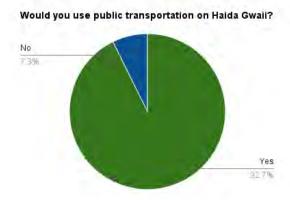


Figure 1: Percentage of population that would use public transportation.

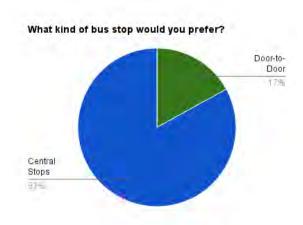


Figure 3: Public transportation system style preferences.

centralized bus stops. These individuals are primarily from Sandspit, Masset and Old Massett. 71% of these individuals do not have a driver's license or have access to a vehicle. These individuals also state that they are unable to participate in school activities, are dependent on others for transportation, or have difficulty getting around.

Based on destination preferences two distinct needs were apparent: short haul routes and long haul routes.

See Appendix F for community destination preferences.

The primary short haul routes included:

- Queen Charlotte Skidegate
- Old Massett Masset Tow Hill
- Sandspit Queen Charlotte/Skidegate

The long haul route included:

Masset - Port Clements - Tlell - Lawn Hill - Miller Creek - Skidegate - Queen Charlotte

Overall, only 23% of respondents would use public transportation every day, with 32% stating they would use it once a week and 32% stating sporadically. However, depending on why public transportation was being used, there were differences in frequency of use.

- Primarily for work (105 individuals), 40% stated they would use it everyday
- Primarily for social (153 individuals), 35% stated they would is once a week
- Primarily for errands (134 individuals), 39% stated they would use it once a week
- Primarily for school (47 individuals), 43% stated they would use it everyday

Public Transportation Values

Reliability, price and frequency were identified as the top 3 most important attributes of public transportation respectively.

Overall, the greatest motivation for utilizing public transportation is wanting to reduce their environmental impact (32%), and wanting to save money (21%).

Those that were not motivated to use public transportation (4.9%) were primarily within the income bracket of \$50,000 and up, with 100% owning their own vehicle and required no travel

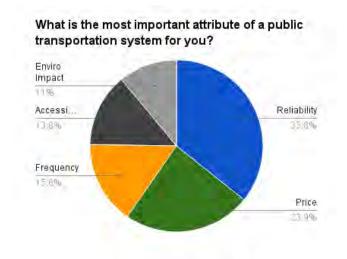


Figure 4: Important attributes of a public transportation system

assistance. They stated that they would never or sporadically use public transportation and are not affected by the lack of transportation. However, some see it as an opportunity to save money, support youth, and limit their environmental impact.

The *lack* of public transportation has impacted respondents in the following ways:

- Drive more frequently than would like to
- Reliant on friends and family
- Lack of independence
- Youth social isolation
- Disengagement from community

- Lack of transportation to work, school, community amenities
- Limits job opportunities
- Increased gas expenses
- Increased environmental impact
- Tourist isolation

A primary value that emerged was the importance of community engagement in social events and work. Respondents were willing to support a public transportation system, even if they had their own vehicle, so that those individuals that do not have a vehicle could engage with the community. Island wide connection, engagement and attendance at community events was important to respondents.

Due to the geography and location of communities, some community members, especially elderly and youth, experience isolation. Sandspit students are reliant on parent volunteers to carpool them to the Alliford Bay ferry terminal, and are not able to engage in after school programming on Graham Island since the ferry does not operate in the evenings. Island-wide, students rely on carpooling and/or walking to participate in after school activities.

Respondents also perceived additional community benefits in having public transportation, which include:

- Reduce drinking and driving
- Reduce youth and elderly isolation
- Increase youth engagement in school extracurricular activities
- Enhanced tourist mobility and access to all island communities
- Increased accessibility for individuals living on low-income
- Planning for future transportation needs as they age
- Environmental sustainability

Additional Public Transportation solutions emerged, which included:

- Social services provide travel vouchers for taxi's and Eagle Transit
- Electric public transportation system
- Need for safe bike lanes
- Exploration of a train system integrated with roadway
- Reduced rates and/or bus passes for locals
- Surf shuttle between Tow Hill and Queen Charlotte
- Transportation to Rennell Sound

Below are public transportation preferences and values by community:

Table 3. Queen Charlotte Preferences

Queen Charlotte	
Reason	Social, Work
Frequency Use	Sporadically, Once a week
Destination	Skidegate, Masset
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$10.00 - \$14.99
Most Important	Reliability
Greatest Motivation	Reduce Environmental Impact

Table 4. Skidegate Preferences

Skidegate		
Reason	Social, Work	
Frequency Use	Once a week, Everyday	
Destination	Queen Charlotte, Masset, Sandspit	
Willing to Pay Short Route	\$2.00 - \$4.99	
Willing to Pay Long Route	\$20.00 - \$29.99	
Most Important	Reliability, Price	
Greatest Motivation	Reduce Environmental Impact	

Table 5. Sandspit Preferences

Sandspit	
Reason	Social, Errands, School
Frequency Use	Once a week, Everyday
Destination	Queen Charlotte, Skidegate
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$15.00 - \$19.99
Most Important	Frequency, Price
Greatest Motivation	I want to save money

Table 6. Old Massett Preferences

Table o. Old Massett Freierences		
Old Massett		
Reason	Social, Work,	
Frequency Use	Everyday, Once a week	
Destination	Masset, Skidegate, Port Clements	
Willing to Pay Short Route	\$2.00 - \$4.99	
Willing to Pay Long Route	\$35.00 - \$50.00	
Most Important	Price	
Greatest Motivation	I want to save money	

Table 7. Masset Preferences

Masset	
Reason	Social, Errands
Frequency Use	Sporadically, Once a week
Destination	Queen Charlotte, Tow Hill
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$20.00 - 29.99 or \$10 - \$14.99
Most Important	Reliability
Greatest Motivation	Reduce environmental impact

Table 8. Port Clements Preferences

Port Clements	
Reason	Errands
Frequency Use	Sporadically
Destination	Tlell, Queen Charlotte, Masset
Willing to Pay Short Route	0 - \$1.99 or \$2.00 - \$4.99
Willing to Pay Long Route	\$15 - \$19.99
Most Important	Reliability
Greatest Motivation	Reduce environmental impact and other (unable to drive, unreliable vehicle, prefer not to drive)

Table 9. Tow Hill Preferences

Tow Hill	
Reason	Social, Errands
Frequency Use	Sporadically
Destination	Masset
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$10 - \$14.99
Most Important	Environmental Impact
Greatest Motivation	Save money, reduce environmental impact

Table 10. Tiell Preferences

Tlell	
Reason	Social, Work
Frequency Use	Sporadically
Destination	Queen Charlotte
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$10 - \$14.99 or \$20 -\$29.99
Most Important	Reliability
Greatest Motivation	Other (prevent drinking & driving, health)

Table 11. Lawn Hill Preferences

Lawn Hill	
Reason	Social, Errands
Frequency Use	Once a week
Destination	N/A
Willing to Pay Short Route	\$2.00 - \$4.99
Willing to Pay Long Route	\$15 - \$19.99
Most Important	Reliability
Greatest Motivation	Reduce Environmental Impact

Challenges

In reviewing local assets and needs, a number of challenges emerged related to transportation on Haida Gwaii. These challenges have been considered when drafting delivery options and recommendations.

Profitability: Haida Gwaii has a small resident population with seasonal tourist influxes, large distances between communities and a high cost of fuel. The combination of these factors means that providing public transportation is a costly undertaking. Current transportation providers have responded to these challenges by offering demand-responsive travel routes rather than fixed schedules. Some also share costs between services, and by pay staff a commission rather than a salary.

Cost incurred by Riders: A primary concern was the potential cost incurred by riders, and that the current Eagle Transit fees were too high.

Competition with Local Businesses: Community members identified the need for regular, affordable transportation island wide and to both airports. However, the implementation of a public transportation system could compete with the local business Eagle Transit, who currently provides door-to-door shuttle services.

Current Habits of Residents: The majority of residents on Haida Gwaii are accustomed to using a personal vehicle for travel. 81.8 % of survey respondents use a personal vehicle as a primary mode of travel (75.6% own a vehicle), and 21.5% rely on friends. Although only 7.3% of respondents indicated that they would not use public transportation on Haida Gwaii, current reliance on personal vehicles suggests that a significant behavioural change must occur if residents are to successfully transition to public transportation options. There appears to be an appetite for public transportation; however, the system must accommodate the variety of user preferences if it is to become more appealing than personal vehicles.

Availability of Qualified Drivers: Numerous businesses currently providing transportation services cited recruitment and retention of qualified drivers as a primary challenge.

Licensing Requirements: The Passenger Transportation Branch approves and administers a variety of licenses required for transporting the public, and is legislated by the Passenger Transportation Act.² These licenses stipulate requirements regarding vehicle size, maintenance and allowable activities and fall within three commercial passenger vehicle categories: General Passenger Vehicle (General Authorization), Passenger Directed (Special Authorization) and

For additional information on school bus permits and the Commercial Vehicle Safety and Enforcement, see: http://www.cvse.ca/ For additional information on Division 11 of the Motor Vehicle Act.

² For additional information on licenses and regulations, see: http://www.th.gov.bc.ca/rpt/. For additional information on qualifications for auxiliary licenses, see: http://www.th.gov.bc.ca/rpt/Documents/Aux Pass Vehicle Exempt.pdf.

Inter-city Bus (Special Authorization). Eagle Transit is the sole company on-island that currently has the appropriate license to offer scheduled public transportation.

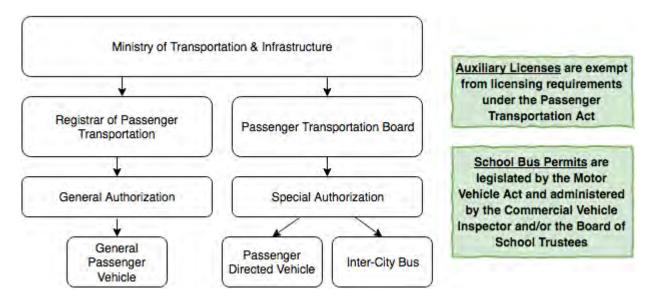


Figure 5. Passenger Transportation Licenses

Service Provider Versus Public Needs: The organizations currently providing transportation to subsets of the population have a variety of highly specific needs that do not necessarily align with the general public demand indicated through survey results. For example, the buses operated by SD50 must be reserved for exclusive student use in the mornings and afternoons. The bus operated by Northern Connections vis-a-vis Eagle Transit must have a schedule that aligns with pharmacy and hospital timing. Within the general public, there are equally diverse needs (timing, destinations) within a small population which makes coordinating solutions that work for many extremely difficult, particularly in regards to evening travel.

School Bus Timing & Remote Communities: Students traveling from Port Clements and Tlell to school spend a substantial amount of time on the school bus. FirstBus mandates that students spend no more than 95 minutes on the bus each direction, and that they arrive between 30 and 10 minutes before school start time. These regulations, combined with a small population of students who live across a large geographic area, means that some elementary students from Tlell and Port Clements will bypass their school in Skidegate to collect students in Queen Charlotte before returning to Skidegate in time for their class. They spend nearly the maximum allowable time on the bus in each direction.

Community Events: Annual community events are held within each community, and attract all island residents. Transportation to and from events is either coordinated by the event organisers or is the responsibility of attendees. Volunteers often provide designated driver services. Lack of safe evening public transportation can be a barrier for individuals to engage in community events island wide, if the organizers have not arranged for service.

After Hours Transportation: Many community members expressed a desire to have evening and late night transportation options that would run both independently and in conjunction with community events. This could increase community participation at events and lead to safer road conditions.

Section 6: SD50 School Bus Service Solutions

This study outlines 5 SD50 School bus service solutions, and their strengths and challenges.

Service Solution 1: Keep Existing Contract with FirstBus Limited

Table 12. Service Solution 1

Provider	FirstBus Limited
License	School Bus Permit
Funding Model	SD50 operations budget
Estimated Cost	\$414,708.88 + tsunami bus and any added student travel
Estimated Cost Reduction	\$0 with potential of cost increase in subsequent contract negotiations.
Service Routes	Same as existing routes
Staff Requirements	5 drivers, Superintendent Liaison
Vehicle Requirements	5 school buses + 1 tsunami evacuation bus

Strengths:

- FirstBus has years of experience delivering transportation to students across the province and on Haida Gwaii.
- SD50 has an existing relationship with FirstBus.
- First Bus has infrastructure (physical and administrative) to deliver a complete school bus transportation system.

Challenges:

- Associated costs are higher than other options.
- As a large off-island provider that manages multiple school bus systems, some local student needs are not accommodated for and there is less flexibility for change.
- School bus services cannot be altered to accommodate public transportation needs.

Service Solution 2: On island contractor provides exclusive school bus service

Some local businesses have expressed interest in providing an exclusive school bus service and have stated that they could likely provide the service for less than the current contract. For this solution, SD50 would need to coach local providers on the contract requirements prior to expiration (June 2018). The coaching component is essential to building local understanding of needs and opportunities. SD50 would then put the contract out for tender and review all bids.

Table 13. Service Solution 2

Provider	Eagle Transit, O'Brien or alternative					
License	School Bus Permit					
Funding Model	SD50 operations budget					
Estimated Cost	To be negotiated with providers; contingent on organizational capacity and assets. Actual cost must be determined on a case-by-case basis.					
SD50 Estimated Cost Reduction	15 - 30%. ³					
Service Routes	Same as existing routes or created with potential provider					
Staff Requirements	Number of drivers and administrators to be determined with specific provider.					
Vehicle Requirements	Number of buses to be determined with specific provider.					

Strengths:

- Financially appealing contract for on island service provider.
- Significant investment into the local economy.
- SD50 and local service provider may be able to better coordinate service to cater to student needs, as this would be the only student transportation contract the service provider is responsible for.
- Estimated cost savings of 15 30% for SD50. Firm figures must be negotiated with local service provider.

Challenges:

• Would not be open to public ridership, thus limiting broader public benefit.

³ This range is based on conversations with prospective providers, historical financial data, and future projections.

- No potential contractors have the capacity to currently bid, but could prepare to bid on the contract. Would need to collaborate with prior to help with preparedness.
- A tsunami evacuation vehicle will need to be available.

Service Solution 3: SD50 provides exclusive school bus service

SD50 could create a position internally or re-organize its current structure in order to support the delivery of transportation solutions to schools on island. SD50 would need to purchase 6 new buses.

Table 14. Service Solution 3

Provider	SD50
License	School Bus Permit.
Funding Model	SD50 Operations budget
Estimated Cost	\$416,042 per year, with an initial investment of \$810,000 to purchase 6 buses
SD50 Desired Cost Reduction	0%
Service Routes	Same as existing routes
Staff Requirements	5 Drivers ⁴ 1 Full Time Administrator
Vehicle Requirements	5 buses in operation + 1 bus for tsunami evacuation

Strengths:

- Maximum flexibility for SD50 and the students.
- SD50 retains total control over costing, no profit margin incorporated into the budget.

Challenges:

Union restrictions may limit staffing opportunities.

- SD50 has no experience providing transportation services; could make operations less efficient and more costly.
- Administrative responsibilities are substantial and start-up costs are extensive.
- Vehicle depreciation and maintenance will be the responsibility of SD50.
- Vehicles may need to be replaced every 7-10 years.

⁴ SD50 could re-organize the transportation system from its current model, which could allow for staffing reductions.

- Vehicles need to pass annual school bus inspection by the commercial vehicle safety and enforcement.
- Can be difficult to receive a school bus permit if it is not a yellow/black school bus.
- If vehicles are used for purposes outside of student transportation, they will need appropriate licenses and approval.

Service Solution 4: On Island Contractor provides public transportation system

In this solution, SD50 does not operate a school bus system. Instead, SD50 helps subsidize a third party (business or not-for-profit organization) to provide an inter-city bus that is open to the public and students to ride, but would be primarily modeled around SD50 needs.

Table 15. Service Solution 4

Provider	Regional district contracts on-island provider				
License	Special Authorization Inter-city Bus License				
Funding Model	 Subsidized by Regional District, Municipalities and Band Councils. Further potential subsidies from local funders and service providers. SD50 Taxi Saver Pay-per-ride for the public. 				
Estimated Cost:	\$554,890 per year for operational expenses. \$194,016 generated per year from user fees (conservative). Therefore, it would cost \$360,874 per year to operate this system.				
SD50 Estimated Cost Reduction:	SD50 would contribute a percentage of the total system cost to cover student ridership. This percentage would need to be negotiated with service providers.				
Service Routes:	See Option 3: Short-Haul Pilot Project in Public Transportation Options section (below) for detailed potential routes in Old Massett, Masset, Tow Hill, Skidegate, Queen Charlotte and Sandspit. Additional stops would be needed in Port Clements, Tlell and Lawn Hill to accommodate all students.				
Staff Requirements	5 Drivers, 1 Full Time Administrator				

Strengths:

- Potential cost savings for SD50.
- Added social value by providing public transportation.
- Locally-owned public transportation solution allows for schedule coordination that accommodates SD50 needs and other specific community or tourist needs.
- Opportunities for municipality, band council and/or regional district financial support for the public service.

Challenges:

- Finding a contractor to provide this that does not compete with private businesses.
- Not likely a profitable venture; contractor would be heavily subsidized and perhaps required to be a non-profit organization.
- Infrastructure maintenance (bus stops, signage) requires additional financial and logistical support.
- Students would not be door-to-school, but would be picked up at identified bus stops.
- Parents are reluctant to have a school bus service that is open to the public.

Student-Only Alternative: This solution could be altered to restrict ridership around school hours to students only. This would limit public use of the transportation system to non-school hours, thereby making the system inaccessible to commuters and others who wish to travel in the morning and afternoon. This alteration would better accommodate the wishes of local parents, but would likely require a greater financial contribution from SD50 given that the system would generate less revenue through public ridership and have less of a island wide benefit.

Service Solution 5: BC Transit provides public transportation service

In this solution, SD50 does not operate a school bus system. Instead, students take advantage of an island-wide public transportation system organized by BC Transit, which include a fixed route service and a paratransit system with taxi saver options as initially proposed in the 1999 feasibility study. SD50 could contribute financially to this system and in exchange, students could receive a discounted fare.

Table 16. Service Solution 5

Table 16. Service Solution 5					
Provider:	Regional District, BC Transit and a contracted local transportation company ⁵				
License:	Special Authorization Inter-city Bus				
Funding Model	Subsidized by BC Transit ⁶ , Regional District, Municipalities and				

⁵ For details on a BC Transit partnership and the division of roles and responsibilities, see: https://bctransit.com/cowichan-valley/about/funding-and-governance/regional.

	 Band Council through tax increases. Further subsidized through local partners who would benefit from public transportation such as SD50, Gwaii Trust and smaller business and organizations SD50 Taxi Saver (bus passes for students) Pay-per-ride public 			
Estimated Cost	Like Service Option 4, SD50 would contribute a percentage of the total cost. Specifics to be determined by BC Transit feasibility study.			
Estimated Cost Reduction	Determined by BC Transit through a feasibility study.			
Service Routes	Determined by BC Transit through a feasibility study.			
Staff Requirements	Determined by BC Transit through a feasibility study.			

Strengths:

- Cost savings for SD50
- Added social value providing public transportation
- Substantially subsidized by BC Transit
- BC Transit plans, funds and markets the system. They also provide transit vehicles and professional services.

Challenges:

- o Given the small ridership and the low revenue from fares, this system would place a heavy, if not impossible, financial burden on the Regional District. Added financial support from SD50 and other local funding partners is essential to bringing this system into fruition.
- Students would not be door-to-school, but would be picked up at identified bus stops.
- o Students would ride the bus with the public. Parents are reluctant to have a school bus service that is open to the public.
- The service would be subject to BC Transit rules and regulations and may, as a result, be less flexible to local needs and options.
- This service could compete with Eagle Transit.

⁶ The British Columbia Transit Act and the British Columbia Transit Regulation stipulate cost sharing regulations between BC Transit and the Regional District. Currently, BC Transit funds 46.69% of conventional transit systems and 66.69% of paratransit systems. The Regional District share is made up of revenue from fares, local property taxes and other local contributions (funding partners, advertising).

Section 7: Public Transportation Options

While exploring transportation solutions for SD50, public transportation needs and opportunities also surfaced. The following options could be adopted in addition to the SD50 solutions to better serve the general public of Haida Gwaii.

Option 1: Northern Health Connections Bus Adjustment

Eagle Transit is currently contracted by Northern Health to provide daily service to and from Queen Charlotte to Masset. This service is under utilized, with few community members aware of the service. In addition, based on the community survey all island transportation at a reliable and affordable rate was identified as a need. A few options could be implemented to better utilize the Northern Health Connect service and better meet the community's needs:

- A. Increase promotion and awareness of daily service;
- B. Provide a resident rate or pass for frequent users;
- C. Explore opportunities to alter Northern Health Connections times to better match community needs.

Option 2: Evening Water Taxi

Sandspit residents are unable to participate in community events and school activities in the evenings due to the lack of transportation from activities to the ferry terminal, and the ferry not operating in the evening. A solution could include a regular evening water taxi from the Skidegate ferry landing or Queen Charlotte harbour to Moresby Island. Currently, Sasha Jones provides this service on-demand.

Band Councils, Municipalities and SD50 could help subsidize this service for students and community members traveling in the evening.

Option 3: Short Haul Routes Pilot Project

There is a high demand for local short routes in the south and north end, that would be frequently used. Short-haul routes could also inspire a shift away from relying on personal vehicles, since many individuals indicated that reducing their environmental impact was central to their motivation for using public transportation.

Short haul routes were identified as primarily being used for work and social purposes, and respondents indicated that \$2.00 - \$4.99 would be an appropriate price point for a one-way trip. Municipalities and Band Councils would be responsible for subsidizing short routes to offer as a public service and improve quality of life. These routes could include:

- Queen Charlotte Skidegate
- Old Massett Masset Tow Hill

Sandspit - Queen Charlotte/Skidegate

A pilot project should include 5 - 10 stops in each community on a fixed route, and it should have a minimum of 3 round trips per day (morning, mid-day, evening). These routes could be completed with smaller buses or vans. Potential stops in each community could include the following:

- Sandspit: Airport, Moresby Explorers, Golf Course, Bridgeview Marina, Alliford Bay Ferry Terminal
- **Skidegate:** Skidegate Ferry Terminal⁷, Haida Heritage Centre at Kay Llnagaay, Longhouse Gift Shop, S.H.I.P., Co-Op, Sk'aadgaa Naay Elementary School, Skidegate Super Heights
- Queen Charlotte: GidGalang Kuuyas Secondary School, Sun Studio, City Centre, Northern Savings Credit Union, Existing Bus Stop near Forestry Hill, Boat Launch
- Old Massett: Masset Hospital, Old Masset Village Council, Sara's Gift House, Old Massett Youth Centre, Gin Kuyaas, Massett Hospital
- Masset: Northern Savings Credit Union, Teal Blvd, Masset Grocery, Copper Beach House, The Ground
- Tow Hill: Tow Hill Community Sign

Option 4: Taxi Saver with Current Providers

In order to provide transportation to the segments of the population without reliable personal transportation (non-drivers, individuals without personal vehicles), some small and remote communities adopt a taxi saver program (McCue, Tolentino, & MacDonald, 2014). In this style of program, individuals that meet a list of pre-established criteria receive subsidized transportation with current providers, namely taxis (land and water). Typically, eligible participants are able to buy a book of coupons with a face value of \$50 for \$25, for example. Transportation providers are fully compensated by system funders. They can then apply these coupons to future travel as needed. Some communities place restrictions around when coupons can be used, and how many can be used per month.

In the case of Haida Gwaii, this program would provide support to students who participate in extracurricular activities (particularly those in Sandspit), to the elderly, and to low-income individuals or families.

Funding for the program could come from a variety of sources including Band Councils and local governments, social service organizations, the school district and local funding bodies. It would require the development of partnerships with local transportation providers.

⁷ Stops at the ferry landing would need to be coordinated with Skidegate - Alliford Bay ferry departures. See: http://www.bcferries.com/m/schedules/inside/absk-current.php

Service Recommendations

1. SD50 School Bus Service Recommendations:

Service Solution 2

2. Public Transportation Recommendations:

A combination of the following

- Option 1: Northern Health Connect Adjustment
- Option 2: Evening Water Taxi
- Option 3: Short Haul Routes Pilot Project
- Option 4: Taxi Saver with Existing Providers

AND

Service Solution 5

Additional Public Transportation Recommendations:

The following list includes options that could be easily implemented in the short-term, and could precede and/or facilitate recommended service solutions and options.

Transportation Committee: A key component to the success of public transportation on Haida Gwaii will be finding a local champion or group of individuals to move this initiative forward. This committee could be responsible for initiating the recommendations.

Collaborative Communication: Based on the survey feedback, community members are unaware of the diversity of transportation options currently available. In addition, there is not a clear, unified location for tourists or residents to find transportation information. A collaborative communication effort to disseminate this information, and that is updated regularly could be created. This could include:

- A two page public transportation brochure updated annually, which could include graphics from the Executive Summary and/or Appendix B.
- A webpage housed on the village(s) websites with current information
- A webpage housed on GoHaidaGwaii

List of on island drivers: Many of the service providers on island identified the challenge of finding and hiring qualified bus drivers on island. A comprehensive list of qualified drivers could be developed by the transportation committee or potentially local employment agencies.

Coordination of Designated Drivers: Community members are concerned by the lack of transportation options available in the evenings to prevent drinking driving. However, a public transportation system is unlikely able to accommodate this need on a scheduled basis. There could be a coordinated and intentional effort by community members to arrange for volunteer designated drivers after events. As well, a greater responsible could be placed on event organizers to have public transportation available.

Software for scheduling: Various technologies have been developed that aid multiple partners deliver a cohesive transportation system to rural communities. These technologies (see Trapeze Novus Transportation Management System for an example) include web-based scheduling options, and various management systems.

Implementation Plan

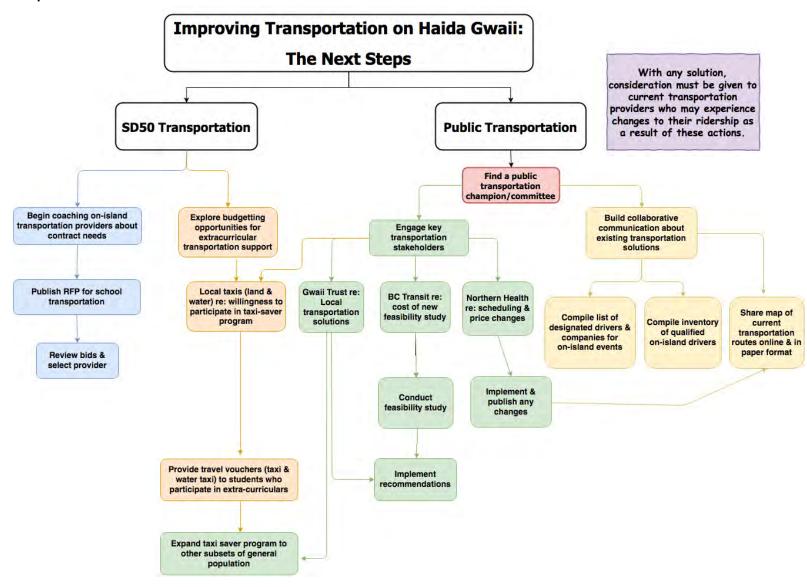


Figure 6. School Bus Service and Public Transportation Service Implementation Plan

References

- About Money. (2016). How Much Does a Bus Cost to Purchase Operate? Retrieved December 1, 2016, from http://publictransport.about.com/od/Transit_Vehicles/a/How-Much-Does-A-Bus-Cost-To-Purchase-And-Operate.htm
- BC Transit. (1999). Haida Gwaii Feasibility Study.
- FreightMetrics.com. (n.d.). Bus Operating Cost Calculator. Retrieved December 1, 2016, from http://www.freightmetrics.com.au/Calculators%7CRoad/BusOperatingCost/tabid/671/Defaul t.aspx
- McCue, L., Tolentino, L., & MacDonald, R. (2014). Accelerating Rural Transportation Solutions: Ten Community Case Studies from Ontario.
- Misty Isles Economic Development Agency. (2011). Haida Gwaii Investment-Ready Community Profile. Retrieved from http://www.mieds.ca/images/uploads/Community Profile-Haida Gwaii.pdf
- Statistics Canada. (2011). Census Profile: Haida Gwaii. Retrieved December 11, 2016, from http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E

Appendices

Appendix A: Inventory of Haida Gwaii Transportation Assets

Table 17. Inventory of Haida Gwaii Transportation Assets

Owner/Operator	Model	# of Seats	Licences	Primary Purpose	Primary Region	Available for Rent?	Contact
Moresby Explorers	Van	15 passenger	Auxiliary License	Tourism	Sandspit	No	Heron Weir
Moresby Explorers	Van	15 passenger	Auxiliary License	Tourism	Sandspit	No	Heron Weir
Moresby Explorers	Van	15 passenger	Auxiliary License	Tourism	Sandspit	No	Heron Weir
Moresby Explorers	Van	15 passenger	Auxiliary License	Tourism	Sandspit	No	Heron Weir
Eagle Transit	Bus	24 passenger	General Authorization	Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Bus	24 passenger	and/or Special Authorization	Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Bus	40 passenger	Authorization	Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Bus	14 passenger		Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Bus	16 passenger		Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Van	10 passenger		Charters	All Island	Yes	Debbie Crosby
Eagle Transit	Car	4 passenger		Charters	All Island	Yes	Debbie Crosby
Sandspit Community Society	Van	14 passenger	General Authorization	Taxi/Touris m	Sandspit	Yes	Hudson McLellan
Sandspit Community Society	Bus	19 passenger	General Authorization	Taxi/Touris m	Sandspit	Yes	Hudson McLellan
Sandspit Community Society	Sienna Minivan	7 passenger	General Authorization	Taxi/Touris m	Sandspit	Yes	Hudson McLellan
Haida Style	Van	14 passenger	Auxiliary License	Tourism	QC & Skidegate	No	James Cowpar

Gwaii Taxi and Tours	Taxi	4 passenger	Special Authorization	Taxi	QC & Skidegate	No	Bob Stratton
Gwaii Taxi and Tours	Taxi	4 passenger	Special Authorization	Taxi	QC & Skidegate	No	Bob Stratton
Gwaii Taxi and Tours	Bus	15 passenger	General Authorization	Taxi/Touris m	QC & Skidegate	Undecided	Bob Stratton
HGHES (leased from QC Tire)	Bus		Auxiliary License	Private	QC & Skidegate	No	Carlos Ormond
Haida Gwaii Discovery Day Tours	Bus	17 passenger	Auxiliary License	Tourism	All Island	No	Andrew Merilees
Haida Gwaii Discovery Day Tours	Van	13 passenger	Auxiliary License	Tourism	All Island	No	Andrew Merilees

Appendix B: Current Transportation Routes on Haida Gwaii

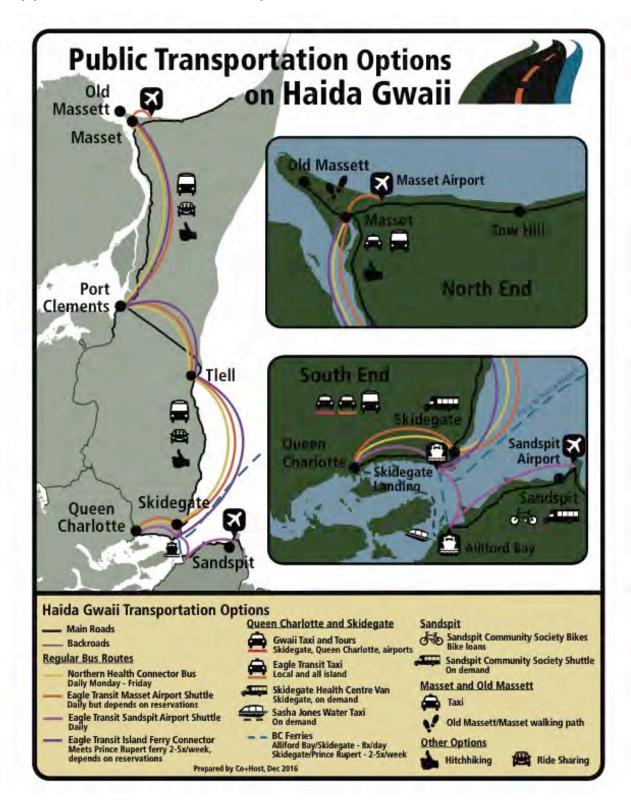


Figure 7: Public Transportation Options on Haida Gwaii

Appendix C: Eagle Transit Schedule between Queen Charlotte and Masset

EAGLE TRANSIT TRANSIT SERVICES BETWEEN QUEEN CHARLOTTE and MASSET

September 15	eptember 15, 2016 to February 7, 2017										
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday			
Depart	Α	11:15 a.m.									
Queen	В	8:30 a.m.	9:15 a.m.	9:15 a.m.							
Charlotte	С				6:00 p.m.						
A	Α	1:00 p.m.									
Arrive Masset	В	9:50 a.m.	10:45 a.m.	10:45 a.m.							
Masset	С				7:30 p.m.						
Damant	Α	1:15 p.m.									
Depart Masset	В	9:50 a.m.	11:45 a.m.	11:45 a.m.							
Masset	С				7:30 p.m.						
Arrive	Α	3:00 p.m.									
Queen	В	11:15 a.m.	1:00 p.m.	1:00 p.m.							
Charlotte	С				9:00 p.m.						

NH Connections Haida Gwaii

Figure 8. Eagle Transit Transportation Schedule (Queen Charlotte and Masset)

Note: Route A has a maximum of 3 passengers per direction with 1 piece of luggage each. Routes B and C do not operate if there are no advance reservations. This schedule does not include the regularly scheduled route between Queen Charlotte, Skidegate and the Sandspit Airport.

Masset Airport Shuttle

Island Transit Ferry Connector

Appendix D: Stakeholders Consulted & Interview Questions

Stakeholders Consulted (Interviews):

- Area E (Mike Racz)
- Village of Queen Charlotte (Lori Wiedeman)
- Sk'aadgaa Naay Parent Council (Jo Brunsden)
- Northern Health (Ellen Cranston)
- Sandspit Community Society (Hudson McLellan and Heron Weir)
- Gwaii Taxi and Tours (Bob Stratton)
- School District 50 (Johnson Day)
- Port Air Cargo (Leah Croft)
- Eagle Transit (Debbie Crosby and Marilyn Wilkens)
- Village of Port Clements (Kim Mushynsky)
- Haida Gwaii Higher Education Society (Carlos Ormond)
- Moresby Explorers (Heron Weir)
- Haida Style (James Cowpar)
- Haida Gwaii Discovery Day Tours (Andrew Merilees)

Stakeholders Consulted (Conversation):

- North Coast Regional District (Doug Chapman)
- BC Transit (Chris Fudge)
- Passenger Transportation Inspector, PT Branch (Margaret Lovell)
- Roads, Ministry of Transportation and Infrastructure (Brian Lomas, Area Manager)
- Commercial Vehicle Safety and Enforcement (Joe Cordeiro)

Table 18. Stakeholder Interview Ouestions

Question	Rationale
How are you providing transportation (to the public or to your client)? Tell us about it.	Assets - Physical, Human
Who are you doing it with (contract? informal?)? Tell us about it.	Collaborations & Relationships with the System
What are your challenges?	Needs and Opportunities
How could you benefit from public transport in HG?	Perceived Value
What opportunities do you see related to public transportation?	Opportunities
What attempts have been made to provide public transportation in the past? Tell us about it.	Context and Improvements
Would you be interested in collaborating on a public transit system? What role do you see yourself playing?	Collaboration and Assets

Appendix E: Public Survey

☐ Other: _____

		11. How often do you think you would us	se public transportation?
Your Demo	<u>graphics</u>	□ Every day	□ Sporadically
- 1 1 1 1 1 1 1		☐ Once a week	□ Never
These questions help us build an anonymous		☐ Once a month	
answering this survey. It helps us make sure		12. Is there a time of year you would use	the public transportation system more
population participating, and may help with	grant applications in the future.	frequently (select all that apply).	
		☐ Winter	☐ Summer
Which community are you a member		☐ Spring	☐ Fall
\square Sandspit	□ Port Clements	13. What is the most you would pay for p	public transportation per short-distance
□ Skidegate	☐ Masset	<u>ride</u> (ie. Skidegate – QC, Masset – Olo	d Massett)?
☐ Queen Charlotte	☐ Old Massett	□ \$0 - \$1.99	□ \$10 - \$20
☐ Lawn Hill	☐ Tow Hill	□ \$2 - \$4.99	□ NA
□ Tlell		□ \$5 - \$9.99	
2. How old are you?			
□ 0-18	□ 56-70		
□ 19-29	□ 71+	14. What is the most you would pay for p	public transportation per long distance
□ 30-55		ride (ie. Skidegate to Masset)	
		☐ Less than \$9.99	□ \$30 - \$34.99
		□ \$10 - \$14.99	□ \$35 - \$50
3. What is your annual income?		□ \$15 - \$19.99	□ NA
□ 0 - \$10,000	□ \$50,000 - \$100,000	□ \$20 - \$29.99	
□ \$10,000 - \$30,000	□ \$100,000+	Your Public Transp	portation Values
□ \$30,000 - \$50,000	<u> </u>	Tour rubile Truits	ortation values
L \$30,000 \$30,000		These questions help us understand what yo	u value in a public transportation system
		and what motivates you to use it. These resp	
Your Current Trans	nortation Habits	recommendations around design.	ionses will also help as create
Tour Current Trans	portation riabits	recommendations around design.	
These questions help us understand how ped	ople are currently getting around Haida	15. What is the most important part of pu	ublic transportation to you? Please rank,
Gwaii.		using 1 as most important and NA for	r factors that do not matter to you.
		 Price: 	
4. What are your 2 primary methods of t	ransportation on Haida Gwaii?	 Reliability: 	
☐ Biking	☐ Personal Vehicle	 Frequency: 	
☐ Walking	☐ Friends/Neighbours	 Accessibility: 	
☐ Hitch Hiking	☐ Taxi	 Environmental Impact: 	
☐ Other:		16. What would be your greatest motivat	ion to use public transportation on Haid
5. Do you have regular access to a vehic	le?	Gwaii?	·
□ Yes	□ No	☐ I do not have access to a vehic	cle
6. Do you own a vehicle?		☐ I do not have a driver's license	·.
□ Yes	□ No	☐ I want to reduce my environment	
7. Do you require the following while tra		☐ I want to save money.	
7. Do you require the following while tra ☐ Visual assistance	Hearing assistance	☐ I am not motivated to use pub	lic transportation.
	5	☐ Other:	
☐ Mobility assistance	 No assistance needed. 		



Your Public Transportation Preferences

8. If Haida Gwaii had public transportation, what would you use it for? Select all

These questions help us understand what you need from a public transportation system on Haida Gwaii. They will contribute to our recommendations around appropriate system design.

or ser	n syster	n, do yo	u want		would	not use	it.
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want t	the publ	lic trans	portatio	n syste	m to go	?	
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 How does not having access to public transportation on Haida Gwaii affect your daily activities? Please describe.
18. Is there anything else you would like to tell us about public transportation on

Haida Gwaii?

Appendix F: Destination Preferences

Table 19. Community Destination Preferences

	Old Massett-	Masset-	Tow Hill-	Port Clements-	Tlell-	Skidegate-	Queen Charlotte-	Sandspit-
-Sandspit to	37.98%	49.61%	30.23%	37.98%	35.66%	58.91%	74.42%	16.28%
-Queen Charlotte to	50.34%	73.10%	37.93%	57.24%	57.93%	70.34%	28.97%	46.21%
-Skidegate to	60.87%	68.70%	39.13%	53.91%	52.17%	24.35%	73.91%	49.57%
-Tiell to	50.48%	68.57%	38.10%	64.76%	27.62%	60.95%	78.10%	40.00%
-Port Clements to	56.12%	83.67%	45.92%	25.51%	63.27%	64.29%	73.47%	45.92%
-Tow Hill to	61.70%	80.85%	22.34%	45.74%	38.30%	42.55%	48.94%	38.30%
-Masset to	62.83%	25.66%	58.41%	60.18%	50.44%	60.18%	71.68%	41.59%
-Old Massett to	28.71%	84.16%	50.50%	55.45%	47.52%	57.43%	55.45%	43.56%

Northern Short Haul Route
Sandspit Short Haul Route
Southern Short Haul Route
Long Haul Route

Appendix G: Financial Projections

Table 20: Costing Projections for Option 3: SD50 provides exclusive school bus service

OPERATING EXPENSES									
Fuel Expenses							Notes		
Current fuel cost	1.40	\$/L					Current cost of diesel on Haida Gwaii (Dec. 2016)		
Average fuel burn rate	3.5	km/L					(FreightMetrics.com, n.d.)		
Distance and Driver expenses									
Driver wage	23	\$/hr					Based on average rate in BC		
School Bus Route (homes - schools)	5	drivers	6	hours/driver	750	km	7 - 10am, 2-5pm		
Operating days	181	days/yr							
Financing bus purchase									
Bus purchase (first year only)	135,000	\$/bus	6	780,000			(New EFX Model, FirstTruck BC)		
Financing bus purchase (for 7 years)	26,472	\$/year		Per bus			Based on interest rate of 9.5% and a loan period of 7 years (RBC)		
Fixed costs									
Insurance (yearly)	2,000	\$/vehicle					Based on estimation from KeyWest Insurance and bus calculator		
Licences (yearly)	200	\$/vehicle					Based on conversation with Vehicle Inspector Officer		
Registration (yearly)	500	\$/vehicle					Based on ICBC quote		
Mobile phone cost (yearly)	720	\$/vehicle							
Office Expenses	500	\$/yr							
Administration	40,000	\$/yr					1 Full time position hired by SD50		
Service and Maintenance costs									
Vehicle service and maintenance	15,000	\$/yr					(About Money, 2016)		
Cleaning	2,000	\$/yr					(About Money, 2016)		
OPERATING EXPENSES \$416,042 per year Note: In Year 1, this amount would also include \$810,000 for the purchase of 6 buses.									

Table 21: Financial Projections for Option 4: On Island Contractor provides public transportation system

OPERATING EXPENSES							
Fuel Expenses							Notes
Current fuel cost	1.40	ċ /ı					Current cost of diesel on Haida Gwaii (Dec. 2016)
	3.5	\$/L					(/
Average fuel burn rate	3.5	km/L					(FreightMetrics.com, n.d.)
Distance and Driver expenses							
Driver wage	23	\$/hr					Based on average rate in BC
School Bus Route (homes - schools)	5	drivers	3	hours/driver	750	km	7 - 10am
Short Haul Route A (QC - SKG & M - OM) ⁸	2	drivers	1	hours/driver	15	km/day	10 - 11am
Short Haul Route B (SKG - QC & OM - M)	2	drivers	1	hours/driver	15	km/day	11am - noon
Short Haul Route C (QC - SKG & M - OM)	2	drivers	1	hours/driver	15	km/day	12 - 1pm
Short Haul Route D (SKG - QC & OM - M)	2	drivers	1	hours/driver	15	km/day	1 - 2pm
School Bus Route (schools - homes)	5	drivers	3	hours/driver	750	km	2 - 5pm
Operating days	181	days/yr					
Weekend/Summer Short Route E (OM - M - OM and QC -							
SKG - QC in AM & PM)	2	drivers	2	hours/driver	60	km/day	7:30 - 8:30am, 5:30 - 6:30pm
Weekend/Summer Short Route F (QC - SKG - QC and OM - M - OM at lunch)	2	drivers	1	hours/driver	30	km/day	11:30 - 12:30pm
Weekend/Summer Long Route A (OM - QC - OM and QC -				,			9 - 11am, 3 - 5pm (based on 120km
OM - QC) ⁹	2	drivers	4	hours/driver	480	km/day	between Old Massett and QC)
Operating days	184	days/yr					
Financing bus purchase							
Bus purchase (first year only)	135,000	\$/bus					(New EFX Model, FirstTruck BC)
							Based on interest rate of 9.5% and a
Financing bus purchase (for 7 years)	26,472	\$/year		Per bus			loan period of 7 years (RBC)
Fixed costs							
							Based on estimation from KeyWest
Insurance (yearly)	2,000	\$/vehicle					Insurance and bus calculator
Licences (yearly)	200	\$/vehicle					Based on conversation with Vehicle

Long haul option on school days could be provided by Northern Health Connections.
 Long haul routes assume short stops in small communities

		II .	1	l e e e e e e e e e e e e e e e e e e e	1	1
REVENUES GENERATED	\$194,016	per year				
Long haul revenues	176,640	\$/year				
Weekend/Summer Long Route A (OM - QC - OM and QC - OM - QC)	10	riders/ route	20	\$/rider		
Weekend/Summer Short Route B (QC - SKG - QC and OM - M - OM at lunch)	7	riders/ route	20	\$/rider		
Weekend/Summer Short Route A (OM - M - OM and QC - SKG - QC in AM & PM)	7	riders/ route	20	\$/rider		
Short haul revenues	57,920	\$/year				
Short Haul Route B (SKG - QC & OM - M)	3	riders/ route	4	\$/rider		These are conservative projections
Short Haul Route A (QC - SKG & M - OM)	3	riders/ route	4	\$/rider		estimations based on Haida Gwaii's population and survey results.
Short Haul Route B (SKG - QC & OM - M)	3	riders/ route	4	\$/rider		These ridership and fees are
Short Haul Route A (QC - SKG & M - OM)	3	riders/ route	4	\$/rider		
REVENUES: HIGH ESTIMATE						
OPERATING EXPENSES	\$554,890	per year				the purchase of 6 buses.
						Note: In Year 1, this amount would include approximately \$810,000 for
Cleaning	2,000	\$/yr				(About Money, 2016)
Vehicle service and maintenance	15,000	\$/yr				(About Money, 2016)
Service and Maintenance costs	40,000	<i>7</i> / y1				Truit time position fined by 3030
Administration	40,000	\$/yr				1 Full time position hired by SD50
Office Expenses	500	\$/yr				
Registration (yearly) Mobile phone cost (yearly)	500 720	\$/vehicle \$/vehicle				Based on ICBC quote
						Inspector Officer

Available On Request

- Consolidated survey data
- BC Transit Haida Gwaii Feasibility Study



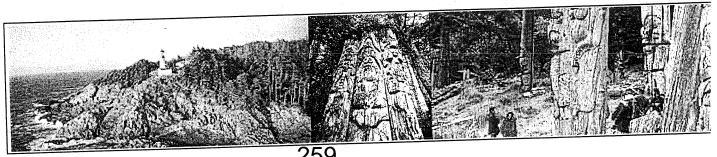
Transit Feasibility Study for the **Queen Charlotte Islands**

Working Paper

September 1998

BC Transit

Regional District of Skeena-Queen Charlottes



Feasibility Study for the Queen Charlotte Islands

1.0 Introduction

This study was conducted by BC Transit staff at the request of the Skeena-Queen Charlotte Regional District. The potential for a local transit system on the Queen Charlotte Islands was examined and service options were developed. The study findings are based on a site visit to the area by BC Transit staff, interviews with various stakeholders, demographic statistics, inventory of current transportation providers and analysis of demand for transit. The experiences of other communities with similar characteristics were used in the development of service options.

2.0 Objectives

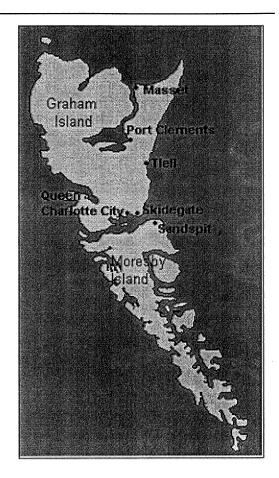
The following study objectives were developed in consultation with the Regional District and other stakeholders:

- 1. To develop an integrated local transit system which is accessible to and emphasizes the needs of seniors, youths and persons with disabilities.
- 2. To develop a transit system which primarily serves local residents, but which also provides travel options for tourists and other visitors to the Islands.
- 3. To accommodate the demand for non-discretionary trips (work, medical, education) and discretionary trips (social, shopping, recreation, etc.).
- 4. To focus local and regional transit service on the areas of Masset, Old Masset, Port Clements, Skidegate, Queen Charlotte City, and Sandspit.
- 5. To provide regional access to Masset and Queen Charlotte City for medical appointments, shopping, and recreation opportunities.
- 6. To determine the feasibility of a regional transit service operating between Masset, Skidegate, and Sandspit, which would serve ferry and airport connections.
- 7. To make use of existing transportation services and integrate these into the transit system where possible.
- 8. To set service concepts and costs which are in line with the size of the population and area served, as based upon experience in similar communities throughout B.C. To include all forms of transit including vanpools, water taxis, and subsidies for existing transportation networks.

3.0 The Study Area

The Queen Charlotte Islands or Haida Gwaii consist of 160 islands stretching 250 km located 100 km off the North coast of British Columbia. There are two main islands: Graham Island in the north and Moresby Island in the south. On Graham Island, there is one main highway connecting Masset and Queen Charlotte City. Nearly all settlement on the Queen Charlottes is located along this corridor and in the Sandspit area of Moresby Island. The highway is well-maintained and suitable for transit vehicles. The driving distance from Masset to Queen Charlotte City is about 110 km and takes about 90 minutes. Ferry service connecting the two island operates between Skidegate and Alliford Bay, which is just east of Sandspit.

Access to the mainland is via BC Ferries from Skidegate to Prince Rupert. The main airport is located in Sandspit, but Masset and several other communities are also served by air.



4.0 Population and Demographic Analysis

The total population of the Queen Charlotte Islands was estimated to be 5,600 according to the 1996 Census. Ninety percent of the population lives on Graham Island. There are two major areas of settlement on Graham Island, each with about 2,000 people. The Village of Masset and the nearby Indian Reserve of Old Masset form one area at the north end of the Island. Queen Charlotte City (unincorporated) and the Indian Reserve of Skidegate form the second area at the south end of the Island.

Population Distribution

	1991	1996
Masset	1,476	1,293
Old Masset	632	692
Queen Charlotte City	*	1,222
Skidegate	469	695
Port Clements	483	550
Other Graham Island	1,492	528
Sandspit	**	584.
Moresby Island	764	34
Total	5,316	5,598

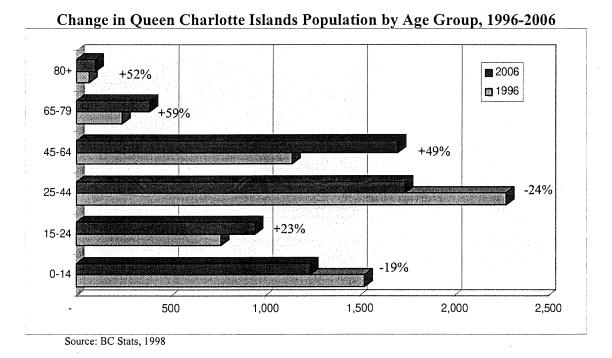
^{*}Included with other Graham Island

^{**}Included with other Moresby Island

The Village of Port Clements (population: 550) is the only other incorporated municipality on the Queen Charlottes. There are about 500 residents in the remaining areas of Graham Island, including about 220 in Tlell and about 125 in the Tow Hill Road Area east of Masset. Nearly all of the population of Moresby Island lives in the unincorporated community of Sandspit. Population for these areas in 1991 and 1996 is shown in the accompanying chart.

The Queen Charlotte Islands grew modestly between 1991 and 1996. The population increased by 5%, which is less than half of the provincial average. Masset's population declined by 12% during the period due to the downsizing of the Canadian Forces Station. Other parts of the region generally increased in population, with the fastest growth occurring in Skidegate. The total population of the islands is forecast to increase by about 0.5% annually over the next 5 years, which is well below the provincial average. Total population growth over the next decade is forecast at less than 5%.

Transit use varies significantly with age, so the relative size and growth of different age groups can have a large impact on the demand for transit service. The chart below shows forecast changes in the Queen Charlotte Islands population between 1996 and 2006 for different age groups.



There are two age groups that form key transit markets: youth (those aged 15-24) and seniors, particularly older seniors (80+). The Queen Charlottes has a younger population compared with the province as whole, with a particularly high proportion in the 0-14 age group. Over the next 10 years, many of these will move into the key 15-24 year old group, which is forecast to grow by 23%, much faster than the overall population growth on the Queen Charlottes. This group has the highest rate of transit use so there will be a

positive impact on transit use. Seniors also have a higher than average rate of transit use, and they tend to be more dependent on transit than other age groups. Only 5% of the Queen Charlotte Islands population is older than 65 (about 300 people) compared to 13% provincially, and only 1% is over 80 versus 3% province-wide. Although the elderly population is relatively small, it is fast-growing. Both the over 65 and the over 80 groups are forecast to grow by more than 50% over the next 10 years.

The Health and Activity Limitation Survey (HALS) done by Statistics Canada as part of the 1991 Census found that the rate of mobility disabilities increases with age from 2% of those under age 15 to 29% of those over age 65. Based on the age distribution of the population on the Queen Charlottes and these disability rates for the British Columbia population as a whole, it is estimated that there are about 350-400 people on the Queen Charlottes with some form of disability that affects their mobility. This group is another key target market for transit.

5.0 Existing Transportation Providers

There are a number of transportation services already being provided on the Queen Charlotte Islands by a variety of private and public operators:

Air Transportation

The main air link to the Queen Charlottes is scheduled service from Vancouver to Sandspit Airport. Canadian Regional Airlines provides two daily trips during the summer and one trip during the winter. The schedule to and from Vancouver for Summer 1998 is as follows:

Arrive S	Sandspit	Leave Sa	ndspit
9:37 AM	Daily	10:10 AM	Daily
9:00 PM	Sun-Fri.	9:30 PM	Sun-Fri.

Because the airport is located on Moresby Island, travelers must take a ferry to get to Graham Island and most major destinations.

BC Ferries

BC Ferries provides vehicle and passenger service connecting the two main islands between Skidegate and Alliford Bay. People traveling to and from the airport at Sandspit comprise a major component of the ferry traffic. The service operates nearly every hour, and the crossing time is approximately 20 minutes.

There is also ferry service to the mainland connecting Skidegate and Prince Rupert. The service operates six days per week and takes 6½ to 8½ hours. The schedule for this service is outlined below (Summer 1998).

Arrive S	Skidegate	Leave	Skidegate
5:30 PM	Wed-Sun	11 PM	Wed-Sat
6 AM	Tue	11 am	Mon-Tue

Airport Shuttle Service

Eagle Cabs provides an airport shuttle service between Queen Charlotte City and Sandspit using a 20-passenger minibus. The schedule is designed to meet all Canadian Regional Flights. The fare is \$12 for adults, \$10 for seniors, and \$5 for children. For Summer 1998, the shuttle operates on the 8:30 AM and 7:30 PM ferry trips from Skidegate. The shuttle drops off departing passengers, picks up arriving passengers, and returns on the 10:30 AM and 10 PM ferry trips to Skidegate.

School Transportation Services

GRM Bus Services (Twin Services) operates six school buses for School District 50. The school bus service operates between Queen Charlotte City and Skidegate, with some trips extending to Tlell. There is also service from Tlell to Port Clements and from Port Clements to Masset. In addition, the School District has a budget of about \$15,000 to provide shared-ride taxis for students who stay late for school activities. This can be used for local travel (e.g. between Masset and Old Masset and between Queen Charlotte City and Skidegate). The Old Masset Village Council provides transportation for students attending school in Masset.

Local Taxi Companies

There are several local taxi companies operating on the Queen Charlotte Islands. Jerry's Taxi and Vern's Taxi operate in the Masset area and primarily serve trips between Masset and Old Masset. Jerry's Taxi Service is based in Old Masset operates 2 regular taxis, one van and two school buses which are used for field trips. Pete's Taxi and Eagle Cabs operate in the Queen Charlotte City-Skidegate area and Island Taxi is based in Port Clements. Taxi fares currently average about \$4 for a one-way trip between Old Masset and Masset, about \$8 for a trip between Skidegate and Queen Charlotte City, and \$125-150 for a trip between Queen Charlotte City and Masset.

Charter Bus Services

There are several companies operating charter bus services on the Queen Charlottes. Twin Services operates charters for fishing lodges, and occasionally for recreation trips for locals. Vern's Taxi also operates a charter bus service using a 15-passenger van and a 32-passenger minibus. During the summer, Vern's taxi provides a daily service between Masset and Sandspit for a fare of \$40 each way. Visitors staying in fishing lodges in Masset form the main market for this service, although there has been some use among locals.

Services operated by Native Bands

The Old Masset Village Council operates a 20 passenger minibus that is used to provide outings for elders. The vehicle is currently under-utilized and there is interest in using the vehicle more extensively in co-operation with any transit service that is introduced.

The Skidegate Band Council operates the Skidegate Inlet Adult Day Program, which is co-funded by the Province and sponsored by the Queen Charlotte Island General Hospital (where the program is located). The program is open to Natives and non-Natives and currently has 11 clients. The program operates a 7-passenger wheelchair accessible van which is used to transport clients to the program and for outings. There has been demand for use of this vehicle by people not in the program, and there is interest in expanding the van service in co-operation with whatever transit service is introduced.

6.0 Travel Demand

This section looks at patterns of demand for travel on the Queen Charlottes. The analysis was based on interviews, demand on existing transportation providers, and the location of major regional residential, commercial, institutional, and recreational areas and facilities.

Travel demand among seniors and disabled residents

There is a strong demand for travel among elderly disabled residents on the Queen Charlottes, and currently there are very limited travel options available. The minibus and the van operated by the two Native Bands are the only vehicles currently available for this kind of travel (other than private vehicles). As noted above, the Skidegate Inlet Adult Day Program gets many request for travel from disabled residents, but they rarely have the space to provide this.

As part of a study to develop a plan for long term care of the elderly on the Queen Charlottes (A Comprehensive Community Plan of Services for Seniors, 1991), a survey of the elderly residents was undertaken, including several questions on mobility needs. A total of 338 seniors (defined as those aged 60 years and over) were identified and interviewed. Access to transportation was a major concern of this group. Just over one third did not have access to a vehicle, although this was as high as 41% in Skidegate and 63% in Old Masset. While two-thirds of those without access to a vehicle could sometimes rely on family or friends for transportation, there was often a strong reluctance to ask for this help. Overall, 40% of respondents had some difficulty in getting where they wanted to go. The problem was worse than average in Skidegate, Old Masset, and Port Clements, and significantly more women than men had difficulty getting to where they wanted to go.

Shopping trips

Most shopping facilities are located in Queen Charlotte City and Masset. These facilities draw people from all over the Island, and from the Sandspit area. The peak demand times

for shopping trips are between 10 AM and 4 PM. Although residents tend to do most of their shopping at the community located nearest to where they live, there is demand for residents at the south end of the Island to travel to Masset to shop and vice versa, especially on Saturdays.

Medical/dental trips

There are hospitals located in Masset and Queen Charlotte City. There is also a clinic located in Port Clements. These facilities draw people from the surrounding areas for medical appointments. The hospital in Queen Charlotte City is closing and a new hospital is planned for Skidegate. This will tend to reverse the travel patterns for medical trips at the south end of the Island.

School trips

There are elementary schools in Queen Charlotte City, Port Clements, Masset, and Old Masset (operated by the Native Band). A new elementary school is planned to open in Skidegate in September 1999 which will replace the school in Queen Charlotte City. There are secondary schools in Sandspit, Queen Charlotte City, and Masset. There are also two adult learning centres, in Masset and Skidegate, and a campus of Northwest Community College located in Queen Charlotte City.

Most elementary and secondary school trips are currently served by the School District service. However, although the School District provides local service for students involved in school-related activities after school, this does not allow for students who want to stay in town after school for other reasons, such as using recreation facilities. There is a demand for this type of service.

Recreation trips

There are numerous recreation facilities located in Masset, that were turned over to the Village of Masset as a result of the downsizing of the Canada Forces Station there. This includes the Island's only covered pool. There is demand for travel into Masset to use these recreation facilities. The facilities are open from 8:30 AM to 9 PM Monday to Friday, and from 12 noon until 9 PM on weekends. A variety of programs are offered, including swimming lessons, volleyball, basketball, floor hockey, and badminton. There is the potential for programs to be scheduled to match the transit service that is provided. Peak demand times are from 4 to 8:30 PM on weekdays and from 1 to 5 PM on Saturday and Sunday. The facilities are heavily used by the youth market at these times, and this is when the need for transportation is the greatest. Currently most users from outside Masset must travel to the facility in private automobiles.

The Queen Charlotte Islands Recreation Commission, which is funded by the Regional District, helps to coordinate recreation activities on the Islands. Many of these activities could also be coordinated with the proposed transit schedule to improve access for residents.

Ferry and Airport Connections

Connections to the airport at Sandspit and the ferry terminal at Skidegate were often mentioned as desired transit markets. Eagle Taxi currently provides service to Queen Charlotte City, but people traveling to up-Island destinations must rely on private transportation. Any service to Skidegate for ferry and airport connections would serve both locals and visitors.

7.0 Summary of Travel Needs

There is strong demand for travel among youth, the elderly, and disabled residents of the Queen Charlottes which is currently not being met by existing transportation providers. Based on the above assessment of travel demand and existing provision, the following the primary needs which have been identified:

- Local travel between Queen Charlotte City and Skidegate, and between Old Masset and Masset, primarily for shopping and medical trips
- Travel from Port Clements primarily to Masset for shopping and medical trips
- Travel from Sandspit primarily to Queen Charlotte City for shopping and medical trips
- Travel to Masset to use the recreation facilities
- Travel to Skidegate for ferry connections to Prince Rupert and Sandspit (airport)

8.0 Service Concepts

The Queen Charlotte Islands present some unique challenges for transit provision. The total population is lower than any other community currently served by transit in British Columbia (excluding some cases where transit is provided to a larger nearby regional centre). In addition, the population is spread out into a number of communities and on two separate islands. The closest model may be the Hazeltons, where a transit system was implemented in 1998. Other similar systems might be Princeton and Nakusp. In all these cases, however, there is some service to a larger regional centre. The situation is unique in the Queen Charlottes where the nearest regional centre, Prince Rupert, is a six hour ferry trip away.

There are a number of service concepts which might be useful:

Paratransit

Paratransit is a general term for transit service that is more flexible and personalized than conventional transit. Paratransit systems can consist of purely demand-responsive, door-to-door service or they may include some fixed-route, fixed-schedule service. A range of vehicle types can be used, ranging from vans to minibuses to larger buses. Regardless of type, the vehicles used will be accessible for people using mobility devices such as

wheelchairs. Paratransit is commonly used in smaller communities and rural areas where the population and demand for transit is not sufficient to support a conventional transit system. In these communities, paratransit serves the need for both conventional transit service and for custom transit service that is directed towards people with disabilities.

Demand-responsive service allows users to phone the operator and book trips in advance. Routing and schedules are flexible depending on the trips which have been booked. Service is usually door-to-door, but the dispatcher usually attempts to build shared-ride trips and sometimes there are common pick-up or drop-off points. Eligibility for this type of custom transit service can vary depending on service alternatives that are available in the community. When demand responsive transit is the only type of transit available in a community, it is usually available to anyone who requires the service. When there is fixed route transit service available, eligibility for demand-responsive service is often limited to those who are unable to use the fixed-route service due to a physical or mental disability. In some communities, all seniors are eligible for demand-responsive service regardless of their level of mobility. When there are eligibility requirements, users must register with the system.

Paratransit systems can include a fixed-route, scheduled component, especially when the demand for travel is concentrated along particular corridors at particular times of the day. There are no restrictions on eligibility for this type of service; any member of the general public may use it. There may be designated bus stops, or passengers may flag down the bus at a location where it is safe to do so. Fixed routes and schedules can often encourage greater use since people can travel more spontaneously without having to book a trip in advance if they know that a trip is provided at a specific time. A variant on this form of service is flex routing, in which the bus may deviate a certain distance on either side of a scheduled route to pick up passengers. In this case, the customers must let the dispatcher know in advance where they want to be picked up. In effect, flex routing expands the service area for a given route and allows a greater number of potential users to be served.

Paratransit is the most expensive service option being considered, but it also provides a high level of service and a high level of visibility for the transit system. In addition, paratransit can be used to serve a broader range of market groups than other service options; it is not limited to seniors and persons with disabilities.

Taxi Supplement

Taxi Supplement is a program that operates in conjunction with paratransit service and allows some door-to-door trips to be dispatched to taxis when the paratransit vehicle is fully booked for a particular time slot. Taxi supplement is a good way to increase capacity for providing door-to-door trips without taking the major step of adding an additional vehicle. The cost per trip is generally lower than that for paratransit trips. On the negative side, Taxi Supplement can be difficult to administer, especially when there are many small taxi companies.

TaxiDART

TaxiDART is a new service concept that is best suited to areas where potential ridership does not warrant an additional vehicle in the community. In this case, the service is provided by a local taxi company for a negotiated fixed rate per trip. The passenger pays a fixed fare and the remaining portion of the rate is cost-shared between the Municipality and BC Transit. Passengers must call the taxi company to book trips in advance, and the taxi company attempts to use shared ride trips where possible. Whereas paratransit service is limited by the number of hours of service provided, TaxiDART is limited based on the number of trips which have been budgeted. This service is targeted at persons with disabilities and may be extended to seniors, but youths and other market groups would not be eligible for a door-to-door type of service.

Taxi Saver

Taxi Saver is a program that allows eligible clients to buy taxi coupons or scrip at a discount for use on local taxis. The program was first launched in Vancouver in 1991 and is now available in about a dozen other communities in British Columbia. The scrip is subsidized at a rate of 50%. Thus a book of coupons with a face value of \$40 is sold to eligible clients for \$20. Once the individual has a book of coupons, they contact the taxi service directly to book their ride. There is typically a limit on the amount of taxi coupons that an individual can purchase each month.

This program provides a flexible travel option that is more affordable than private taxi. It is most suitable for occasional, spontaneous travel. It is not limited to the operating times of a paratransit service, so it can be used for weekend and evening travel. The program encourages taxi companies to acquire accessible vehicles. Because of the door-to-door nature of this service, and to prevent abuse of the system, eligibility for Taxi Saver is generally restricted when there are other transit options available in the community. In some cases, only people with disabilities are eligible, while in other cases seniors are also eligible.

9.0 Service Options

Based on the demand profile and the service types that are available, a number of service options have been developed:

Local Paratransit service

There is a strong demand for local travel between Queen Charlotte City and Skidegate, and between Masset and Old Masset and this will likely form the core of the proposed transit service. This will primarily serve medical and shopping trips. These trips can be served with a combination of fixed-route, scheduled service and demand-responsive or custom transit service. It is proposed that local paratransit service operate in the Queen Charlotte City area for 8 hours per day, 2 days per week. This would include three scheduled round trips on each day and custom transit service at other times. In the

Masset area, local paratransit would operate 3 hours per day, 2 days per week (3 days during the summer) in conjunction with the regional service described below. This would include, perhaps, 2 scheduled fixed-route trips per day, with the remainder as custom service. There might also be some local service in the Queen Charlotte City Area prior to the regional service. This is a total of 24 hours per week of local paratransit service, about one third scheduled and two thirds demand responsive.

The scheduled, fixed-route paratransit would be available to all users, with no eligibility requirements. As noted above, there often are eligibility requirements for demand-responsive paratransit when scheduled fixed-route service is also available. However, given the limited nature of the scheduled service, it is recommended that the demand-responsive service in the Queen Charlottes also be available to all users. However, if demand for the service exceeds the capacity, priority would be given to those who are unable to use the fixed-route service.

Regional Paratransit service

Regional Paratransit service between Queen Charlotte City, Port Clements, and Masset would primarily serve seniors and youth for shopping, recreation, and medical trips. During the summer months, tourists and other visitors would also use this service when it is available. The greatest demand for travel among the target markets appears to be from south to north, especially when demand from Port Clements residents is factored in. Demand for travel into Masset for shopping and recreation trips is particularly strong on Saturdays. Because of the distance involved, only scheduled, fixed-route (or flex-route) service would be feasible. A possible schedule for the regional service is outlined below. Exact times and days of travel will be determined following further consultation with stakeholders.

Example Regional Paratransit Schedule

	Saturday	Tue., Thur.*
Leave Queen Charlotte City	11:00 ам	12:00 рм
Leave Skidegate	11:15 ам	12:15 РМ
Leave Port Clements	12:15 PM	1:15 PM
Arrive Masset	1:00 pm	2:00 РМ
Leave Masset	4:00 PM	5:00 РМ
Leave Port Clements	4:45 PM	5:45 PM
Leave Skidegate	5:45 PM	6:45 PM
Arrive Queen Charlotte City	6:00 рм	7:00 рм

^{*}Thursday trips operate July-August only

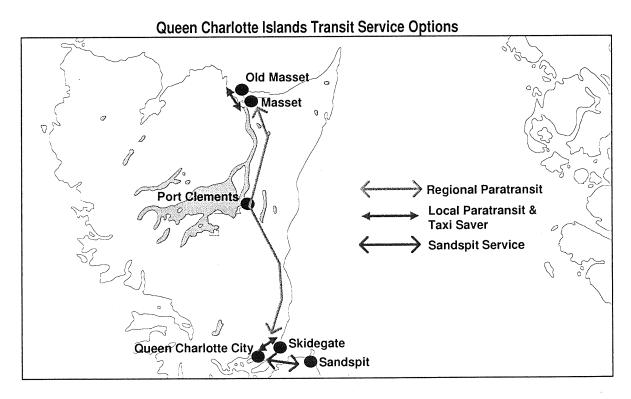
As a result of the relatively small market and the time and distance involved, the service will be quite limited initially. It is proposed that regional paratransit service operate two days per week (Saturday and one other day) with one round trip on each day, originating in Queen Charlotte City. During the summer, when demand for regional travel is higher among both residents and tourists, the regional service could increase to three days per

week. The service would link all major communities on Graham Island and would take approximately two hours for a one-way trip. There would be an approximately three hour stopover in Masset to allow passengers time to attend to their business. During this stopover time, local service between Masset and Old Masset would be provided as described above.

The regional paratransit would require 4 hours of service per round trip or 12 hours per week during the summer and 8 hours per week during the rest of the year.

Options for the Paratransit Service

The local and regional paratransit service will require a vehicle to operate. Given the relatively small service area population, the most cost-effective way of providing this service would be to use an existing vehicle or vehicles. A number of vehicles being used locally by private companies or public agencies have been identified, and the feasibility of using these for the service will be further investigated. Another option would be to seek a partner to fund the required vehicle. The Gwaii Trust, whose All Island Infrastructure Program provides funding for infrastructure improvements that benefit local residents, may be one possibility.



Taxi Saver

Taxi Saver can be used to provide travel options at times when the paratransit service is not available, including evenings. Taxi Saver would be used for local travel only. (The current cost of a taxi ride between QCC and Masset is \$125-150.) There needs to be some eligibility restrictions for Taxi Saver in order to prevent abuse of the system, but

given the limited travel options for many residents it is proposed that eligibility remain quite broad to include people with disabilities, seniors, and youth. It is estimated that between 100 and 200 people would register for the Taxi Saver program. The maximum amount of Taxi Saver per registrant would be \$60 per month, but most registrants would use considerably less than this. It is proposed that \$4,000 in Taxi Saver coupons be made available each month. For this, the users would pay \$2,000 so the net cost would be \$2,000 per month or \$24,000 annually. This would allow for about 6-8,000 trips annually. Typically, it takes at least 2-3 years for a new Taxi Saver program to develop, so it is anticipated that Taxi Saver use would initially be below the budgeted amount.

Service to Sandspit

Sandspit represents a particular challenge to serve with transit since it requires a ferry trip to get to Graham Island where most other settlement on the Queen Charlottes is located. Most demand among Sandspit residents is for travel to Queen Charlotte City for medical and shopping trips. With a vehicle based in Queen Charlotte City, it would require two round trips via the ferry to serve customers from Sandspit who want to travel into Queen Charlotte City. This would not be very practical.

There are some alternatives to van paratransit service. As noted above, there is an existing service between Queen Charlotte City and Sandspit operated by Eagle Cabs. It operates one round trip in the morning and one in the evening. The cost for a one-way trip is \$10 for adults and \$8 for seniors. It is proposed that one day per week eligible clients would be able to use the service with a 50% subsidy similar to the Taxi Saver program described above. Eligibility could be the same as what is proposed for Taxi Saver: seniors, youth, and persons with disabilities. Eagle Cabs could provide an additional trip in the early afternoon on this day. This would allow for Sandspit residents to travel to Queen Charlotte City, attend their business, and return to Sandspit. If the Sandspit service operated the same day as the regional paratransit service to Masset, there would be an opportunity for Sandspit passengers to travel all the way to Masset and back.

There is an existing local taxi service in Sandspit, and as a second alternative, residents could use a taxi to get to Alliford Bay then travel on the ferry as a foot passenger. However, the cost for this service is \$28, so even with a 50% subsidy, some form of ridesharing would be required. On days when the local paratransit service is operating between Skidegate and Queen Charlotte City, passengers would be able to use this service to complete their trip. The paratransit service meets 3 ferry trips at Skidegate, so Sandspit passengers would need to time their trips to coincide with these if they want to use the paratransit service to travel into Queen Charlotte City. Designated shared-ride taxi trips between Sandspit and Alliford Bay could be scheduled to meet these trips. Seniors can travel for free on the ferry between Alliford Bay and Skidegate from Monday through Thursday (excluding holidays), so one of these days would be the best choice. The Taxi Saver program would be available to Sandspit residents to use for local travel and travel to Alliford Bay.

Fares

In most communities, fares are generally set to recover between 10% and 30% of costs. The average cost recovery for paratransit systems in the province is about 14%. Fares for local travel typically range from \$1.25 to \$2.00. Fares for longer regional trips, such as between Queen Charlotte City and Masset, range from \$2.00 to \$4.00.

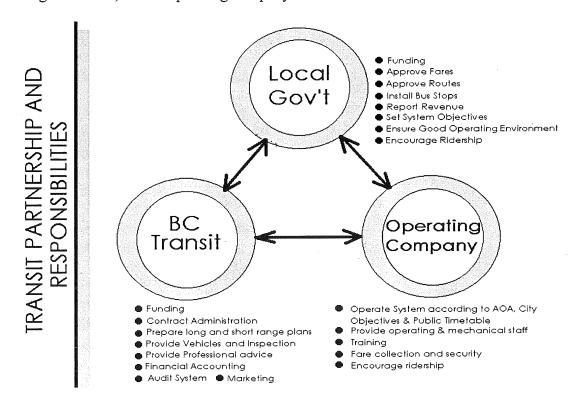
A local fare of \$1.50 for each one way trip is suggested (for travel between Queen Charlotte City and Skidegate or between Masset and Old Masset). Given the distance involved, the fare for travel between Queen Charlotte City and Masset is suggested at \$4.00. A fare of \$2.00 is suggested for travel between Port Clements and Masset. A summary of fares within the Municipal Systems Program is included in the Appendix.

Future Expansion

The proposed service targets those groups in the community that offer the greatest potential for ridership and success of the system. Ridership will be monitored on a monthly basis and the system will be subject to regular reviews including the need for future expansion. If such a need were identified, a service plan would be developed and expansion would be subject to local and provincial approvals.

10.0 The Transit Partnership

The Municipal Systems Program is provided through a partnership between BC Transit, local government, and an operating company.

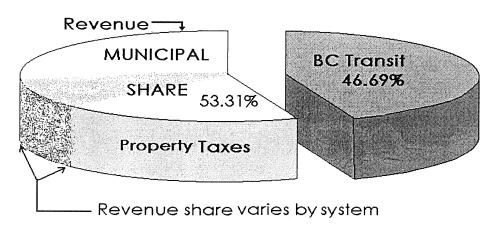


This partnership is formalized through an annual operating agreement (AOA). This agreement is renewed on an annual basis. The selection of the operating company is conducted through a public Request For Proposal process and is undertaken on a five year cycle. There are some systems in the province, including Nanaimo, Sunshine Coast, and Nelson, where the municipal partner (local government) also operates the service. See the Appendix for a complete list of transit partner responsibilities.

Funding

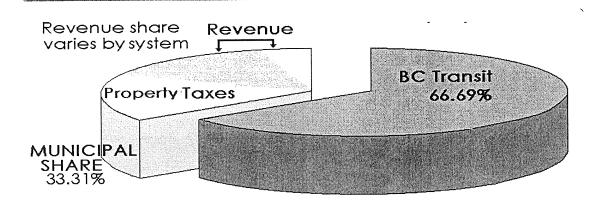
The Regulations of the BC Transit Act set out the formula for sharing costs of transit. The BC Transit share of funding is provided by the Provincial Government. The Municipal share is made up of revenue from fares and property taxes. The Municipality uses revenue collected from the transit system (fares, advertising, etc.) to reduce the property tax share of costs. The proportion of total expenditures paid for by fares varies significantly from system to system, therefore, the percentage of expenditures paid from property taxes also varies by system.

Cost Sharing Formula for Conventional Transit



The cost sharing formula shown is for the fourth year and beyond of a contracted transit service. The BC Transit share in years 1 & 2 is 52.5%, in year 3 it is 49%. Revenue is used to reduce the Municipal share of property tax costs and can vary from 18% to 45+% depending upon ridership on the system.

Cost Sharing Formula for Custom Transit



The cost sharing formula shown is for the fourth year and beyond of a contracted transit service. The BC Transit share in years 1 & 2 is 72.5%, in year 3 it is 69%. Revenue is used to reduce the Municipal share of property tax costs and can vary from 6% to 25+% depending upon ridership on the system.

A system that is a combination of custom and conventional service (as will be the case with the Queen Charlotte Islands) will have a cost sharing percentage that reflects the level of each type of service.

Operating Company Selection

The selection of a company to operate the transit system is conducted through a public Request for Proposal process. The municipality and BC Transit request proposals from companies, organizations or individuals to operate the transit system. BC Transit staff evaluate each proposal on the proposer's overall ability to operate the transit system by examining three main criteria:

- 1. Cost
- 2. Management
- 3. Service Delivery

A recommendation on the successful proposal is made to the Municipality and then the Municipal Systems and Environment Committee of the BC Transit Board. As earlier noted, this process is conducted every five years.

Since 1994, the Request for Proposal states that the successful company must offer employment to all non-management and non-supervisory employees required by the successful company and that the existing seniority, wages and specified benefits form part of the offer of employment. Work rules of an incumbent operating company are not part of these conditions. As a result, any changes in operating companies will be the direct result of the efficiencies within the company that allow the company to control

administrative costs, and upon the abilities of the management team to operate at a highly competitive and responsible level.

The Taxi Saver Program can be administered by either the Operator of the transit system or the municipality. For example, Prince George, and Summerland are administered by the municipality while the Prince Rupert program is administered by the handyDART Operator. Kamloops is jointly administered by the city and handyDART Operator.

The Program includes issuing photo ID to eligible users wishing to purchase Taxi Savers and keeping track of sales. Payment to the participating taxi companies is also included. These options can be reviewed in more detail closer to implementation.

11.0 Summary

The chart below summarizes costs, ridership, and revenue for the different service options. Option 3 best meets the objectives that were set by the community. It includes local service in the Queen Charlotte City/Skidegate and the Masset/Old Masset areas provided by both paratransit and taxis, as well as some regional service linking Queen Charlotte City with both Sandspit and Queen Charlotte City, along with some airport and ferry connections at Skidegate.

	Option 1 Local Paratransit	Option 2 Local and Regional Paratransit	Option 3 Local/Regional Paratransit and Taxi Saver
Total Cost Total Revenue Provincial share Net RD share	\$73,160	\$93,680	\$117,680
	\$5,550	\$10,950	\$10,950
	\$45,725	\$58,550	\$73,550
	\$20,762	\$22,646	\$31,166
Hours of service	1,248	1,704	1,704
Forecast ridership	3,700	5,500	11,900

The proposed service should meet much of the demand for local travel in the Queen Charlotte City/Skidegate and Masset/Old Masset areas. The combination of scheduled paratransit, demand-responsive paratransit, and Taxi Saver would provide residents with a wide range of travel options for medical and shopping trips. The regional paratransit service allows for travel from the Queen Charlotte City/Skidegate area and from Port Clements into the Masset area for medical, shopping, and recreation trips. It is not feasible for the transit service to meet all sailings to Prince Rupert since some departures are at 11 PM and one arrival is at 6 AM, but the schedule should be able to meet nearly half of the arrivals and departures. Similarly, transit can meet some but not all of the ferry trips timed with flights to and from Vancouver. The Eagle Cabs service meets all these trips. Although the proposed service is quite limited, this does not preclude future expansion in the service as the market becomes more developed.

APPENDIX A - Responsibilities

ASSIGNMENT OF RESPONSIBILITY FOR THE ON-GOING OPERATION OF TRANSIT IN THE MUNICIPAL SYSTEMS PROGRAM*

Municipality
Operator

Function

Activity

1.	Management	A) Management and Supervision of system operation and payroll, including			
		records and reports of operation		•	
		B) Provision of trained competent, uniformed and licensed drivers			
		C) Provision of Passenger and Public Relations for Staff			
		D) Fare Collection and Security		•	
		E) Farebox Collection, Security, and Reporting	•	1	
		F) Accounting Controls, Reports, Analysis			
		G) Audits, Ridership Counts, & Performance Trends	+	├	•
2.	Operations	A) Physical Inspection of the On-street Facilities	•	•	
		B) Compliance with Service Specification		•	•
		C) Conduct performance checks		•	
		D) Maintain a transit telephone number		•	
		E) Maintain a log of Complaints, Suggestions, and Recommendations		•	
		F) Maintain a Lost and Found		•	
		G) Install Bus Stop Signs and make Bus Stop Improvements	•		
		H) Notify Operating Company of street closures or traffic disruptions	•		
		I) Install and Replace Bus Advertising material		•	
		J) Make Necessary Traffic Control By-laws	<u> </u>	ļ	ļ
3.	Vehicles	A) Provide Vehicles, Destination Blinds, and Fareboxes			•
		B) Maintain and Service Vehicles		•	
		C) Conduct Maintenance Inspections		•	•
		D) Insure Vehicles		•	•
4.	Finances	A) Fix and Amend Fares	•		
		B) Negotiate Annual Operating Agreement Budget	•	•	•
		C) Approve Annual Operating Agreement Budget		6	•
5.	Marketing	A) Prepare, Provide, and Control Merchandising Plans	•		•
		B) Provide Bus Stop signs, public timetables, timetable posters			•
		C) Maintain a public profile and seek new riders	•	•	•
6.	Service Planning	A) Prepare plans with Routes, Schedule, Stops and Budget			•
		B) Review, Amend, or Approve plans	•		
		C) Amend the Annual Operating Agreement	•	•	•
		D) Implement Service		•,	•
7.	Comprehensive	A) Set City Transit Objectives	•		
	Planning	B) Prepare Service Plans, vehicle and capital improvement plans, Merchandising			
	-	plans, and budget forecasting and analysis			•
		C) Approve Plan			•

1998/99 CONVENTIONAL TRANSIT INFORMATION & PERFORMANCE SUMMARY Approved Annual Operating Agreement Budgets

	Population	Buses in	Revenue Hrs	Revenue	Total	Total	BC Transit	Net Municipal	Cost	Rides/	Rides/	Cost/
	Served	Service 1	of Service	Passengers	Revenue (\$)	Cost (\$)	Share (\$)	Share (\$)	Recovery	Capita	Hour	Ride (\$)
7.01	772 000		1				,					
1 191 1	4 / 2,900	131	391,515	8,260,000	\$8,613,082	\$28,464,953	\$13,290,287	\$6,137,352	30.3%	17.5	21.1	\$3.45
Central Fraser Valley	120,700	4	46,890	950,000	\$926,301	\$3,344,070	\$1,561,347	\$807,562	27.7%	7.9	20:3	\$3.52
Kamloops	76,900	34	81,313	2,039,000	\$1,992,598	\$6,325,430	\$2,953,343	\$1,288,561	31.5%	26.5	25.1	\$3.10
Kelowna Regional	123,100	30	95,750	1,916,000	\$1,843,728	\$7,155,694	\$3,340,994	\$1,864,525	25.8%	15.6	20.0	\$3.73
Nanaimo Regional *	75,300	27	86,553	1,600,000	\$1,744,434	\$5,843,417	\$2,728,291	\$1,282,313	29.9%	21.2	18.5	\$3.65
Prince George	68,400	18	46,986	000,089	\$839,497	\$3,322,362	\$1,551,211	\$878,726	25.3%	6.6	14.5	\$4.89
Whistler	8,500	∞	34,024	1,075,000	\$1,266,524	\$2,473,979	\$1,155,101	\$15,664	51.2%	126.5	31.6	\$2.30
Tier 2	238,900	32	104,255	1,856,000	\$1.913.431	86.908.759	\$3,225,700	\$1 663 355	%L LC	7	17.8	63 73
Campbell River *	31,200	7	17.730	350,000	8381 959	\$1 294 091	\$604.211	\$280 A10	20 400			47.56
Chilliwack *	49,800	4	16,560	280,000	\$248.260	\$1.078.546	\$503,573	\$309 904	23.0%	7 4	17.7	\$3.70
Comox Valley *	36,500	. Υ	14,542	215,000	\$217.392	\$999.561	\$466 695	8300 868	21.278	0.0	14.8	27.65
Cowichan Valley / Youbou	37,500	5	12,757	107,000	\$146,879	\$722,379	\$337.279	\$226,339	20.3%	0.0	. ×	57.73
Penticton	28,000	4	15,786	343,000	\$318,343	\$1,016,601	\$474,651	\$207,654	31.3%	12.3	21.7	\$2.96
Sunshine Coast *	22,000	د	12,765	313,000	\$334,814	\$800,993	\$373,983	\$79,934	41.8%	14.2	24.5	\$2.56
Vemon Regional	33,900	4	14,117	248,000	\$265,784	\$996,588	\$465,307	\$249,546	26.7%	7.3	17.6	\$4.02
75	167,600	41	900'96	2,007,000	\$1.783.478	\$7,050,718	\$3,291,980	\$1 860 473	75 30%	12.0	0.00	62 61
Dawson Creek	11,800	2	6,022	000'86	\$105,096	\$427.749	\$199,716	\$115.790	22.576	0.4 × ×	163	15.50
Fort St. John *	16,000	m,	5,917	126,000	\$97,756	\$440,960	\$205,884	\$129,897	22.2%	7.9	21.3	83.50
Kitimat	11,500	5	12,391	220,000	\$211,875	\$914,815	\$427,127	\$260,383	23.2%	19.1	17.8	\$4.16
Kootenay Boundary *	16,200	6	12,039	336,000	\$274,848	\$1,164,305	\$543,614	\$328,397	23.6%	20.7	27.9	\$3.47
Nelson	12,900	2	12,602	275,000	\$219,447	\$838,704	\$391,591	\$214,124	26.2%	21.3	21.8	\$3.05
Parksville-Qualicum Beach *	17,600	2	3,558	42,000	\$52,302	\$284,906	\$133,023	\$95,375	18.4%	2.4	11.8	\$6.78
Fort Alberni	19,300	3	11,546	209,000	\$198,450	\$815,064	\$380,553	\$221,870	24.3%	10.8	18.1	\$3.90
Powell River	13,900	4	8,367	155,000	\$156,430	\$657,619	\$307,042	\$184,179	23.8%	11.2	18.5	\$4.24
Prince Rupert	17,600	4	9,834	345,000	\$278,971	\$668,974	\$312,344	\$66,468	41.7%	19.6	35.1	\$1.94
	12,800	2	7,675	106,000	\$114,382	\$493,172	\$230,262	\$140,223	23.2%	8.3	13.8	\$4.65
l errace Kegional *	18,000	2	950'9	95,000	\$73,920	\$344,453	\$160,825	\$103,767	21.5%	5.3	15.7	\$3.63
Total	879,400	204	591.776	12,123,000	\$12 309 990	\$42 424 431	610 807 067	\$0.521.100) 00 OC	;		
			2		~ / / 6 / 2 / 6 - 4 +	102627426420	317,001,701	37,001,100	79.0 <i>%</i> 0	13.8	50.5	\$3.50

^{*} Conventional portion only of systems that include a custom or paratransit portion.

Revised: Sep 3, 1998

Source: BC Transit (Based upon existing 1998/99 AOA's, June 1998).

¹ In-service vehicles; does not include spares

1998/99 CUSTOM/PARATRANSIT INFOR FION & PERFORMANCE SUMMARY Approved Annual Operating Agreement Budgets

TOTAL	Parat																											Tier 3				Tier 2	0	Custo				Her 3	<u>.</u>				Tier 2					Tier 1	CHET	
	Paratransit Subtotal	Williams Lake	Terrace Regional *	Sunantina	Smithers	Salmon Arın	Revelstoke	Quesnel	Princeton	Powell River	Port Edward	Parksville-Qualicum Beach *	100 Mile House	Okanagan-Similkameen	North Okanagan	Nelson - Playmor	Nelson and Area	Nakusp	Kimberley	Kaslo	Hazeltons	Fort St. John *	Creston Valley	Cranbrook	Columbia-Shuswap	Castlegar Regional	Boundary		Sunshine Coast *	Cowichan Valley	Comox Valley *	FARATRANSII	TRANST	Custom Transit Subtotal	Prince Rupert	Kootenay-Boundary *	Kitimat	Alberni-Clavoquot	Vernon Regional	Penticton	Chilliwack *	Campbell River *		Prince George	Nanaimo Regional *	Kamiloops	Central Fraser Valley		TISN Y GT MO	
1,224,250	420,150	11,200	18,000	11,700	10,600	16,100	8,500	16,200	4,800	18,200	800	25,400	11 500	3,300	14,700	2,750	17,300	10,600	6,900	1,600	7,000	16,000	11.000	001.01	2,900 4 500	8,000	6,300	300,750	27,400	32,400	59,600	119,400		804,100	17,600	21,100	11.500	79,700 79,700	44,400	32,900	65,300	31,200	173,800	80,500	91,500	63,100	147,600	550,600	Population	
18,351	3,576	353	140	133	0	200	75	200	0	368	0	100	250		0	10	0	0	0	0	0	275	0	050	0	0	0	2,356	120	200	900	1,220		14,775	200	0	175	3/S	1,000	200	1,500	600	3,300	1,500	2,200	2,400	2,500	11,100	Users	ă
109	42	2		- -		2	_	_	_	2	-		- -		2	_	_	_	2	-		_ .		- -		2	. –	35	J.	_	ر ي	7		67	_	2	0 (ہ د	, 0		4	2	· 12	6	∞ :	13 0	12	49	Vehicles '	Number of
214,603	81,546	6,196	2,236	2,120	2,192	5,329	3,067	2,248	2,152	4,256	2,277	2,424	2 068	1,587	3,293	777	2,008	2,120	3,831	568	1,260	2.008	3.788	1 070	1 883	3,693	1,578	69,730	2,932	2,260	6,624	11,816		133,057	1,997	3,024	0	5 762	10,059	2,008	8,472	4,416	24,955	11,328	18,496	75.770	22,380	97,319	Revenue Hrs	Annual
1,015,705	406,168	50,000	7,300	020,1	7,700	48,850	27,500	6,800	6,500	12,500	13,000	4,800	7 700	8,450	22,500	5,000	5,053	4,871	9,380	1,963	6,710	5.000	17.614	051.9	2,100 6,500	33,700	4,500	357,568	11,300	9,100	28,200	48,600		609,537	7,200	6,900	4,700	42,463 23,663	61,300	7,500	38,015	16,100	122,915	59,600	67,400	107 639	95,790	444,158	Passengers *	Revenue
\$1,415,194	\$564,574	\$55,942	\$11,960	30,400	\$11,600	\$60,390	\$30,968	\$10,300	\$14,800	\$18,730	\$21,782	\$8,700	\$9.467	\$15,192	\$39,821	\$7,000	\$10,600	\$11,300	\$16,000	\$5,200	\$13,800	\$11.300	\$20.573	\$0.700	\$3,900 \$11,400	\$34,650	\$6,200	\$492,974	\$14,700	\$12,700	\$44,200	\$71,600		\$850,621	\$9,000	\$10,400	\$9,900	\$/1,000 \$41,700	\$91,200	\$11,221	\$47,700	\$27,300	\$177,421	\$75,500	\$92,800	\$130,700	\$136,100	\$602,200	Revenue (\$)	Total
\$10,825,521	\$4,006,025	\$286,017	\$138,834	212,4016	\$86,588	\$274,655	\$189,137	\$101,060	\$94,556	\$163,699	\$109,369	\$129,808	\$79.658	\$/3,797	\$193,227	\$48,019	\$93,119	\$89,450	\$118,846	\$43,601	\$87,665	\$62.941	\$188.365	518 ULS	\$30,057	\$263,617	\$64,907	\$3,366,454	\$210,876	\$111,579	\$317,116	\$639,571		\$6,819,496	\$88,037	\$180.810	\$48,720	\$334,857	\$523,481	\$75,037	\$466,478	\$229,115	\$1,294,111	\$603,139	\$1,265,103	\$1,265,103	\$1,107,147	\$4,972,966	Cost (\$)	Total
\$6,893,528	\$2,359,435	\$162,143	\$92,588	3/1,/01	\$53,416	\$149,110	\$98,786	\$67,397	\$59,277	\$92,801	\$52,748	\$86,569	\$45.158	\$34,456	\$97,058	\$26,170	\$62,101	\$55,182	\$73,316	\$25,589	\$54,791	\$39,457	\$106.784	\$44 406	\$18,241	\$136,000	\$40,041	\$1,955,141	\$132,198	\$73,296	\$198,800	\$404,294		\$4,534,093	\$58,712	\$120,582	\$32,492	\$156,671	\$349,109	\$50,042	\$306,429	\$143,632	\$849,213	\$402,233	\$696,524	\$655,001	\$738,356	\$3,316,471	Share (\$)	_
\$2,341,532	\$1,017,869	\$63,613	\$32,022	\$10.7,704	\$20,223	\$60,913	\$56,164	\$21,694	\$19,012	\$49,485	\$33,073	\$32,453	\$23.881	\$22,855	\$53,276	\$13,980	\$19,004	\$21,627	\$27,342	\$12,221	\$17,726	\$11.032	\$58.174	\$15,028	\$18.758	\$88,666	\$17,484	\$863,996	\$61,304	\$23,830	\$68,739	\$153,874		\$1,323,663	\$18,938	\$46,783	\$5,436	\$103,877	\$74,808	\$12,691	\$104,856	\$54,682	\$247,038	\$115,127	\$238,262	\$140,099	\$214,737	\$972,748	Share (\$)	Net Municipal
13.1%	14.1%	19.6%	8.6%	15 10/	13.4%	22.0%	16.4%	10.2%	15.7%	11.4%	19.9%	6.7%	11.9%	20.6%	20.6%	14.6%	11.4%	12.6%	13.5%	11.9%	15.7%	18.0%	10.9%	700 1.1	13.0%	13.1%	9.6%	14.6%	7.0%	11.4%	13.9%	11.2%		12.5%	10.2%	5.8%	20.3%	17.9%	17.4%	15.0%	10.2%	11.9%	13.7%	12.5%	8.9%	11.0%	12.3%	12.1%	Recovery	Cost
\$10.66	\$9.86	\$5.72	\$19.02	20.416	\$11.25	\$5.62	\$6.88	\$14.86	\$14.55	\$13.10	\$8.41	\$27.04	\$10.35	\$8./3	\$8.59	\$9.60	\$18.43	\$18.36	\$12.67	\$22.21	\$13.06	\$12.59	\$10.69	\$11.50	\$14.31	\$7.82	\$14.42	S9.41	\$18.66	\$12.26	\$11.25	\$13.16		\$11.19	\$12.23	\$26.20	\$10.37	\$13.01	\$8.54	\$10.00	\$12.27	\$14.23	\$10.53	\$10.12	\$15.50	30.30	\$11.56	\$11.20	Ride	Cost/
\$47.10	\$47.90	\$46.16	\$59.41	\$30.01	\$39.50	\$50.41	\$51.89	\$44.96	\$43.94	\$38.46	\$48.02	\$53.55	\$38.52	\$46.50	\$58.68	\$61.80	\$46.37	\$42.19	\$31.02	\$76.76	\$60.06	n/a	\$49.73	\$1.513	\$56.29	\$71.24	\$41.13	\$47.02	\$71.92	\$49.37	\$46.06	\$53.11		\$46.60	\$42.58	\$59.79	n/a	\$40.81	\$47.41	\$37.37	\$51.28	\$49.17	\$48.23	\$48.21	\$51.01	\$44.10	\$45.36	\$46.16	Hour	Cost/
4.1	4.7	8.1	3.0	300	3 3.5 * 5	9.0	8.2	3.0	3.0	2.9	5.7	2.0	3.7	5.5	6,8	6.4	2.5	2.3	2.4	3.5	4.0	n/a	4.6	30	3.9	9.1	2.9	4.9	3.9	4.0	3.7	3.8		3.6	3.0	2.3	n/a	4 - 4	4.9	3.7	3.6	3,1	4.1	4.0	. 2.6	0.0	5.3	3.6	Hour	Rides/

conventional portion.
A non-cost shared transit system. * Custom/paratransit portion only of systems that include a

Source: BC Transit (Based upon existing 1998/99 AOA's, June 1998).

Revised: Sep 3, 1998

CURRENT FARE STRUCTURES
MUNICIPAL SYSTEMS PROGRAM: Conventional Transit Systems
Effective: September 1, 1998

+1 1.

	Cash Fares			Monthly Passes	Passes					Day Passes	S		Tickets	Comments	
	Adult	Senior	Student	Adult	Senior	Student	College	Semester	School Days Only	Adult	Senior	Student			Change
Zones:	: 1 2 3	1 2 3	1 2 3	-	~ -		П	- -	1 2	1 2	1 2	1 2			
Campbell River	\$1.25 \$1.50	\$1.00 \$1.25	\$1.00 \$1.25	95\$ 574	523 523	530 \$37	\$35 \$43	\$112 \$138		\$3.00	\$2.50	\$2.50	20 for the price of 19		97/08/18
Central Fraser Valley	\$1.25	\$1.00	\$1.00	823	830	230			\$20	\$3.00	\$2.50	\$2.50	\$2 off 20 tickets		98/01/01
Chilliwack	\$1.00	\$0.75	\$0.75			818				\$2.50	\$1.75	\$1.75	\$1 off 20 tickets		96/04/01
Comox Valley	\$1.25	\$1.00	\$1.00	\$45	\$34	\$28	\$34	\$109	\$18	\$3.25	\$2.50	\$2.50	\$1 off 20 tickets	In summer, \$28 for Student combined July/August pass.	10/20/96
Cowichan Valley		\$1.00 \$1.50 \$2.0	\$1.25 \$2.00 \$3.00 \$1.00 \$1.50 \$2.00 \$1.00 \$1.50 \$2.00	\$45 \$68	25 \$ 9C \$ 8	536 \$52	755 965			\$3.00 \$5.00	\$2.50 \$3.75	5 \$2.50 \$3.75	\$1 off 20 tickets		98/06/24
Dawson Creek	\$1.25	\$1.00	\$1.00	\$45	\$36	\$28							\$1 off 20 tickets		96/01/01
Fort St John	\$1.00	\$0.75	\$0.75			\$24	•						\$1 off 20 tickets		93/09/01
Kamloops	\$1.25	\$0.90	\$1.00	\$45	\$32	536		-7	\$22.50	\$3.50	\$2.50	\$2.75	\$1 off 20 tickets	-	96/01/01
Kelowna Regional	\$1.25 \$1.50 \$1.75	\$1.00 \$1.25 \$1.50	\$1.25 \$1.50 \$1.75 \$1.00 \$1.25 \$1.50 \$1.00 \$1.25 \$1.50	\$38	ā	ā		\$106	\$25	\$3.25 \$4.25	\$3.00 \$4.00	\$3.00 \$4.00	\$1 off 20 tickets		96/09/01
Kitimat	\$1.25 \$1.50	\$1.00 \$1.25	\$1.00 \$1.25						\$25				no discount		97/07/01
Kootenay Boundary Nanalmo	\$1.25 \$1.50 \$2.00 \$1.50	\$1.00 \$1.25 \$1.50	51.00 \$1.25 \$1.50 \$1.26	\$38 \$45 \$46	\$25 \$28 \$25	\$25 \$28	923	\$115	8	\$2.76	\$3.00	13. 8.3	\$1 off 20 lickets 10 for the price of 9	Zone 3 applies to service between Rossland & Red Mountain Ski Hiti, available 4 months in the year. Coleope studens elitible for concession ticket tricks.	97/08/01
Nelson	\$1.25 \$1.50 \$2.00	\$1.00 \$1.25, \$1.50	\$1.25 \$1.50 \$2.00 \$1.00 \$1.25, \$1.50 \$1.00 \$1.25 \$1.50			053 225	\$22 \$30			\$3.00 \$4.00	\$2.50 \$3.00		6 for \$6.00/\$5.00	Multiride cards also availabe: 23 rides for the price of 20.	97/09/02
Parksville-Qualicum	\$1.25 \$1.75	\$1.00 \$1.50	\$1.00 \$1.50	\$38 \$45	\$25 \$30	\$25 \$30				\$3.00 \$4.00	\$2.25 \$3.25	5 \$2.25 \$3.25	10 for the price of 9		98/09/01
2 8	\$1.35	\$1.10	\$1.10	3	ដ	52		·····	\$24	\$3.25	\$2.75	\$2.75	no discount		97/07/07
Port A Derni	\$1.25	\$1.00	\$1.00		\$15	\$22	\$22						\$1 off 20 tickets		98/01/01
Powell River	\$1.25	\$1.00	\$1.00	\$	\$25	\$25	8			\$2.75	\$2.25	\$2.25	\$1 off 20 tickets	Book of 20 tickets for full time college students: \$23.	98/05/01
Prince George	\$1.50	\$1.00	\$1.00				1						no discount	Concession fares also apply to full time college students.	10/20/86
Prince Rupert	\$1.00	20.60	\$0.75	ž	See Com.	223	\$28	\$92		\$2.50		\$2.00	\$2 off 20 tickets	Senior annual bus pass available for \$12.00.	91/07/02
Squamish	\$1.25	\$1.00	\$1.00	60\$	\$30	\$30			\$20				\$1 off 20 tickets		96/02/01
Sunshine Coast	\$1.50	\$1.00	\$1.00	3	83	83							\$1 off 20 tickets		96/12/01
Terrace	\$1.25	\$1.00	\$1.00	\$26	\$20	\$20	\$20	\$70					\$1 off 20 tickets		96/07/02
Vernon Regional	\$1.25	\$1.00	\$1.00	2 4	ឌឹ	ž		-	\$25	\$3.00	\$2.50	\$2.50	\$1 off 20 tickets		93/08/01
Whistler	\$1.50	\$1.25	\$1.25	\$50	\$25	\$35				\$7.00	\$6.00	\$6.00	20 rides for \$26/\$21	Blackcomb Housing cash fare: \$0.50; Monthly Pass, Day Pass and Tickets replaced by 30 day, 5 ride and 20 ride cards, respectively. No lare required for Villane Shuttle	9070/26

	\$0.99	\$0.75	\$1.25	
	\$0.98	\$0.00	\$1.25	
	\$1.26	\$1.00	\$1.50	
I		Ë	Ë	

Highlighting denotes recent change.

G:\MSystems\planners\tania\fares\{concus98.xls}|Conv98

Average: Range - Minimum Range - Maximun

Notes:

- When accompanied by an adult, children under 5 ride free in all systems except Penticton, where children under the age of 4 ride free.
- BC Bus Passes are available to qualified users in all of the above communites for an annual fee of \$45.00.
- Conadian National Institute for the Blind (CNIB) passes are available in all communities for an annual fee of \$4.00.
- "College" refers to special pass rates available to students in full time attendance at a University or College to "Semester" refers to special pass of four monthly passes available at special rates to students in full time attendance at a University or College.
- "Semester" refers to bundles of four monthly passes available at secondary school students, and are valid only on school days, usually until 5:30 pm.

Summerland
Sunshine Coast
Terrace Regional
Williams Lake

Smithers

\$1.50 \$3.00 \$4.00 \$1.25 \$2.25 \$1.50 \$1.50 \$1.50 \$1.25 \$1.75 \$2.25 \$1.25 \$2.00 \$1.50 \$2.00 \$1.50 \$2.00

Squamish

Salmon Arm/Columbia Shuswap

Revelstoke

Average: Range - Minimum: Range - Maximum:

\$1.44 \$1.25 \$1.75

CURRENT FARE STRUCTURES
MUNICIPAL SYSTEMS PROGRAM: Custom Transit and Paratransit Systems
Effective: September 1, 1998

					ı		
	Cash Fares	ares			Z.	Monthly	Tickets
Zones:	1	2	3	4	Pa	Passes	
Alberni-Clayoquot	\$1.50	\$1.50 \$2.25 \$3.00 \$4.25	\$3.00	\$4.25			no discount
Campbell River	\$1.50	\$2.00					no discount
Central Fraser Valley	\$1.50	\$1.50 \$1.75 \$2.00	\$2.00				no discount
Chilliwack	\$1.50				Г		5 for \$7.50/
Fort St. John	\$2.00						
Kamloops	\$1.50				Γ		
Kelowna	\$1.25	\$ 1.50	\$1.50 \$1.75 \$2.00	\$2.00			
Kitimat	\$2.00	\$3.00			Γ		
Kootenay-Boundary	\$1.50	\$1.50 \$1.75	The Second	9000 A LANGE AND	Š		
Nanalmo	\$1.75				186		no discoun
Penticton	\$1.50				Г		
Prince George	\$1.50 \$1.75	\$ 1.75					no discount
Prince Rupert	\$1.50				_		
Vernon	\$1.75				Г	L	

ts		Comments
count	,	Institutional Fares: \$2.00/\$2.75/\$3.75/\$5.75
count \$7.50/\$11.00	,	
		Kelowna Diversified Industries Subscription - \$46.00/mon
count		
count		

Change Enacted 9:060101 9:0602 95:04001 92:0501 96:100

\$2,00	Range - Maximum:
\$1.25	lange - Minimum:
\$1.59	\verage:

Door-to- Door Service

Paratransit Systems

Castlegar Regional

\$1.75 \$1.50 \$1.50

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		Cash Fares			Monthly Passes	Passes			Tickets	Comments	
Monthly	Tickets	Adult	Senior	Student	Adult	Senior Student College	Student	College			Change 2
Passes		1 2 3	1 2 3	1 2 3							8
		\$1.25 \$1.50 \$2.00 \$2.50	\$1.00	\$1.00	\$36	\$27	\$27	\$27	\$1 off 20 tickets		98/04/01
\$63.00	no discount										96/07/01
										BC Bus Pass Holders: \$3.75/round	
										trip	93/04/01
										Institutions: \$3.75/round trip;	
		\$1.00								\$60/Monthly Pass	95/01/01
											92/08/24
		\$2.00 \$2.50	\$1.50 \$2.00	\$1.50 \$2.00							98/06/17
											95/01/01
											83/01/01
									-		95/01/01
											95/01/01
		\$1.50	\$1.25	\$1.25							98/05/25
A company of the contract of t		\$1.25	\$1.00 \$4.00	\$1.00					\$18 for 10 adult	Zone 3 applies to Enderby & Lumby	98/01/01
				\$1.00 \$1.50	\$44		\$35		21 for the price of 20		95/04/0
		\$1.25 \$1.50	\$1.00 \$1.25	\$1.00 \$1.25					20 for the price of 19		96/04/01
	no discount	£1 75	\$ 1 95	\$1.25					20 for the price of 19		95/01/01
		\$1.50 \$2.00									93/07/01
											95/01/01
	no discount										90/01/01
		\$1.25	\$1.00	\$1.00	\$40	\$30	\$30		20 for the price of 19		95/11/28
		\$1.25		\$1.00							91/10/15
											91/02/13
		-									90/08/20
	no discount									Penticton Subscription Services: \$45	95/01/01
											95/08/27
	\$1 off 20										96/07/01
		\$1.00	\$0.75	\$0.75	\$32	\$24	\$24		\$1 off 20 tickets		93/07/02
			¥.	•	,	/					

Hazeltons
Kaslo
Kimberley
Nakusp
Nelson - Playmor
Nelson - Playmor
North Okanagan
Okanagan-Similkameen
100 Mile House
Parksville - Qualicum Beach
Port Edward
Powell fliver
Princeton
Quesnel

\$1.50 \$1.75 \$2.00 \$1.50 \$1.75 \$2.00

\$1.35 \$3.60 \$4.35 \$1.25 \$1.25 \$2.00 \$2.50 \$4.00 \$1.35 \$2.10 \$2.85

Creston Boundary

\$1.50 \$1.50

\$1.75 \$2.00

\$1.50 \$2.00 \$2.00

Cranbrook Cowichan Valley

						ú					
	\$60/Monthly Pass	Institutions: \$3.75/round trip;	BC Bus Pass Holders: \$3.75/round							Comments	
92/08/24	95/01/01	0000	930	96/01/01	96/07/01	98/04/01	89/01/10	Enacted	Change		
) (7	7	-	

FABULOUS FESTIVALS AND EVENTS

ITEM 191 BATION

Adobe Reader 8.0+ is required to complete this application form.

If you are using an earlier version, you will not be able to save any information you enter into the form. Adobe Reader is a free download available at: http://www.adobe.com/products/acrobat/readstep2.html



NOTICE: You must fill out and submit a pre-qualification form before you submit an application unless your festival or event has previously been approved for funding.

1. Project Name

Provide the name of the festival or event: 9th Annual K_ay Anniversary	Provide the date(s) of the festival or event: August 19, 2017
	Applications must be submitted at least 6 weeks before the festival or event is scheduled to take place.

2. Applicant Profile

Applicant organization (legal name): Qay'llnagaay Heritage Centre Society	Non-profit society registration no.: S-34143	
Address (mailing address including street, city, postal code):		
PO Box 1523 #2 Second Beach Rd, Skidegate, BC, V0T1	S1	
Telephone:	Fax:	
250-559-0014	250-559-0013	
Email: gncasst@gmail.com	Website (URL): www.haidaheritagecentre.com	

Primary Contact Information

Primary contact (for this application):	Position/title:	
Lin Armstrong/Saraphine Pryce	Executive Director/Executive Assistant	
Complete the following if different from applicant organization contact inf	ormation:	

Address (mailing address including street, city, postal code): PO Box 1297, #3-888 Highway 16, Skidegate, BC, V0T1S1	Email: gncasst@gmail.com
Telephone:	Fax:
250-559-0014	250-559-0013

Northern Development Initiative Trust

301 - 1268 Fifth Avenue, Prince George, B.C. V2L 3L2

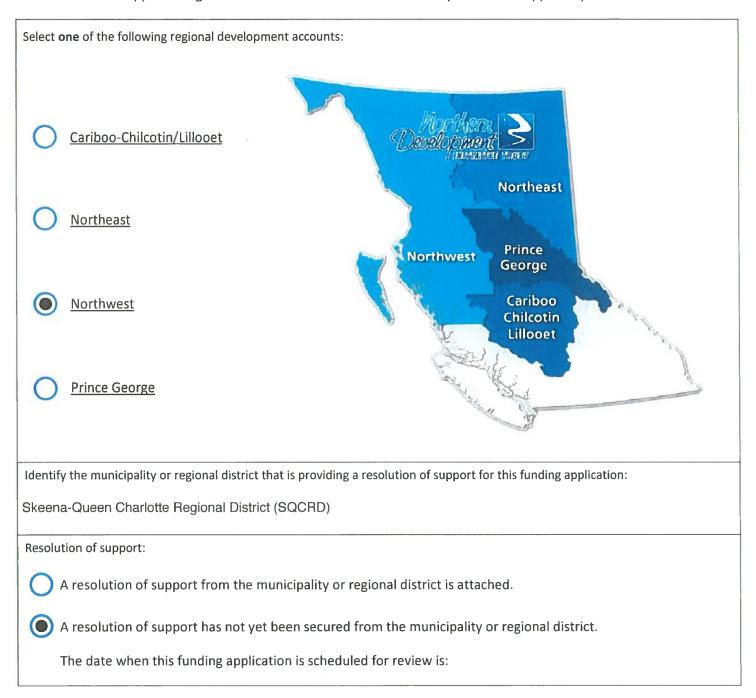
Tel: 250-561-2525 250-561-2563 Fax:

info@northerndevelopment.bc.ca Email: Website: www.northerndevelopment.bc.ca



4. Select the Appropriate Account

Northern Development accepts Fabulous Festivals and Events funding applications to each of the following trust accounts. See the application guide for more information on the advisory review and approval process.



Applicants are responsible for securing a resolution outlining support for the Northern Development funding request from a municipality or regional district. The applicant must provide a copy of the resolution of support to Northern Development before an application can be considered for funding.

Sample Resolution:

THAT, the (insert local government name) supports the application to Northern Development Initiative Trust from the (insert applicant organization name) for a grant of up to \$(insert amount) for the (insert festival or event name) from the (insert regional development account name).

5. Eligibility Confirmation

Please check all that apply:
I have filled out the <u>pre-qualification form</u> available online. (If not, you must fill out this form before submitting an application.)
The event is not in its first year of operation.
The event is held in a concentrated time period.
For example, the event is not a series of summer music concerts, multi-weekend regional mountain bike race, etc.
The event is not a fundraiser.
For example, Terry Fox Run, Relay For Life, Festival of Trees, etc.
The event is not political in nature.
For example, a partisan rally or gathering, an issue-based fundraiser, etc.
The event is not religious in nature.
For example, Christmas, Halloween, Thanksgiving, or Easter event, etc.
The event is not held annually in communities across the province or country.
For example, Canada Day celebrations, Remembrance Day memorials, May Day parades, etc.
The event is not a league or club event.
For example, sports training camps, provincial sport tournaments, bonspiels, etc.
The event is not solely an artisan and craft fair.

6. Festival/Event Overview

Provide a description of the festival or event:

The Kay Anniversary is an cultural event hosted annually by the Qay'llnagaay Heritage Centre Society, located at the Haida Heritage Centre in Skidegate on Haida Gwaii. For eight years, going on its nineth this August. This event has celebrated Haida culture, language and arts, promoting the knowledge exchange for Haida and non-Haida residents and visitors to the islands for all ages, building a shared understanding and appreciation of local culture. The day begins with a clan parade, showcasing traditional regalia, song and dance. All-day activities include traditional Haida games: Indian leg wrestling, slippery stick and Haida bingo. The day ends with dance performances, a salmon bbq, and the popular children, womens and mens dance competitions. All games and exhibits weave in Haida culture and language lessons. The Kay Anniversary is the primary annual event celebrating Haida culture for local engagement and works to promote the islands via cultural tourism.

Please describe how the festival or event promotes or strengthens the unique character of the community:

For the past eight years, this event has relied on the generosity and volunteer hours of residents for implementation. To provide a sense of the community efforts: the Council of the Haida Nation (CHN) has donated fish for the salmon bbq, the Kay Bistro provides volunteer hours for cooking, sales and serving of the dinners, , musicians have played for free for the enjoyment of the attending elders, and all prizes have been donated in the past for every game facilitated from local businesses in Skidegate and other island communities. Key stakeholders taking part in this event to ensure its success include Parks Canada, Kay Bistro and the Haida Gwaii Museum. The Haida culture is to be shared and celebrated, to ensure cultural continuity and an appreciation for Haida culture worldwide. It is the hopes of the Society that the Centre be used to foster an appreciation of language, arts and culture in various forms. Events such as Kay Anniversary are not only celebratory, but are social gatherings for locals, and are inclusive, educational and sustainable.

Has your organization previously been funded under this program? Yes. August 2016	If so, what year(s)?
Do you have any paid staff for this festival or event? If so, how mar Yes. 3 full time heritage centre employees, 4 youth summer students activities throughout the day and run a smooth fun family event.	
Do you have any volunteers for this festival or event? If so, how may Yes. Estimated 80 persons. Children's dance group, clan parade atte canoe steersman, student teachers helping with the childrens games	endees from each clan, musicians providing entertainment, Haida
7. Direct Economic Benefits	
Outline the economic benefits to the local or regional economy:	
Local vendors are invited for zero cost to set up shop on-site and scontributing prizes are explicitly recognized at the event for advertising Society the ability to pay or contribute to prizes, extended advertising the community businesses and groups who've worked to establish a be purchased locally in Skidegate (Longhouse Gift Shop, Haida Gwarequired.	ng and to give thanks for their contributions. Funding will grant the g and collaborative efforts with other island events, giving back to successful event for nearly a decade. Prizes and food items would
Outline how the festival or event will attract tourism to the common As stated previously, this event is the only event on-island that fully elanguage and arts. Continuity and further expansion of this event has The annual nature of this event makes for easy promotion for the So is amidst the peak of tourist season. It may attract visitors to the islant already on-island for other August events, including Edge of the Work Gwaii also means an increase in consumption of tourism products in	encompasses celebration and knowledge sharing of Haida culture, s the ability to attract a greater number of tourists to the islands. ociety and planning for local and visitor attendance. The celebration and for attendance, or may spark extended stays by visitors and Music Festival and the Tlell Fall Fair. Bringing tourists to Haida
Does your festival or event feature artistic performances?	If yes, do you compensate artists and arts professionals by paying fess at industry standards and adhere to international intellectual property rights standards?
Yes No	Yes No
Number of people who attended or participated in the previous festival or event: 250+	Number of people projected to participate or attend the festival or event this year: 300+
Do you track where attendees and participants are from (e.g. their home community)? Yes No	What percentage or number of last year's attendees was from outside the community in which the festival or event was held? 125

8. Festival/Event Financials

Actual expenses for last year's festival or event:	Actual revenue for last year's festival or event:
\$ 5096.84	\$ 4490.00
Budgeted expenses for this year's festival or event:	Estimated revenue for this year's festival or event:
\$ 6354.63	\$ 3100.00

Complete the above, however if you wish to provide a more detailed project budget, please attach separately to this application.

Please refer to the Fabulous Festivals and Events Application Guide for ineligible costs.

9. Funding Request

The following funding is requested from Northern Development:

Funding type: Amount (\$):

Grant \$2500 Maximum allowable grant is \$2,500 per festival or event.

Describe how will the funding be used to increase the event hosting capacity:

As this event has run primarily off of the generosity of the island communities, funding will be used to ensure sustainability and evade burn-out. An honorarium will be provided to the children's dance group, who practice year-round to provide entertainment at events, accepting donations for their services. Prizes for educational games will be purchased locally with a portion of the funding, along with food for the salmon bbq. Sales of the salmon bbq plates are generally used only for cost-recovery of the purchase of buns and potato salad ingredients. Paying for fish locally from CHN or Haida Wild would contribute to the local economy. Of the \$2,500.00, a portion will be used for advertising locally and regionally. Money can be spent on advertisements in the local papers (Haida Laas, The Observer), online on Haida Gwaii Trader, Aboriginal Tourism BC and in magazines (e.g. NorthWord). There is a need for mentorship among the community as well. In 2016, events that promote mentorship between elders and youth are being sought and funding will be required.

10. Other Funding Sources (if applicable)

Funding source:	Amount (\$):
	\$
	\$
	\$
	\$
	\$
TOTAL OTHER FUNDING:	\$ O

11. Attachments

List all documents attached to this application:

Document name:	
1) Required: Financial statements from the last festival or event.	
2) Required: A copy of the most recent festival or event brochure.	
3) Required: Society incorporation document.	
4)	
5)	

12 Au	thorization
12. Au	
✓	I have read and understand the <u>Fabulous Festivals and Events Application Guide</u> including the ineligible costs.
✓	I confirm that the information in this application is accurate and complete, and that the project proposal, including plans and budgets, is fairly presented.
✓	I agree that once funding is approved, any change to the project proposal will require prior approval of Northern Development Initiative Trust (Northern Development).
✓	I also agree to submit a report using Northern Development's reporting form to verify performance measures for the event within 30 days of the festival or event's completion and where required, financial accounting for evaluation of the activity funded by Northern Development.
/	I agree to provide photos of the festival or event and permission for Northern Development to use the photos for promotional purposes.
✓	I understand that the information provided in this application may be accessible under the Freedom of Information (FOI) Act.
✓	I agree to publicly acknowledge funding and assistance by Northern Development.
✓	I authorize Northern Development to make enquiries, collect and share information with such persons, firms, corporations, federal and provincial government agencies/departments and non-profit organizations, as Northern Development deems necessary for decision, administration, and monitoring purposes for this project.

I agree that information provided in this application may be shared with the appropriate regional advisory committee(s), board of directors, Northern Development staff, and consultants.

Name: LINDA (LIN) ARMSTRONG

Q25/17

13. Submitting Your Application

Completed funding application forms (with all required attachments) should be provided electronically to Northern Development by email.

Email:

info@northerndevelopment.bc.ca

2017 Kaay Anniversary

Revenue	
Table Rentals	300.00
Salmon Dinner	1,800.00
Donations	1,000.00
Total	\$ 3,100.00
Expenses	
Supplies	2,000.00
wages	2,854.63
Prizes	1,500.00
111200	1,300.00

Qay'llnagaay Heritage Centre Society Transaction Detail By Account April 2016 through March 2017

	Tota TOTAL										579		TOTAL	Tota						402:	
	Total 5795 Event Expenses AL	General Journal	General Journal	General Journal	General Journal	General Journal	Bill	Bill	Bill	Bill	5795 Event Expenses	Туре		Total 4023 Event Revenue	Deposit	Invoice	Invoice	Іпуоісе	General Journal	4023 Event Revenue General Journal	Туре
Total revenue Expenses Wages Other Total Expenses	S	09/30/2016 2015195	08/31/2016 2015171	08/31/2016 2015171	08/31/2016 2015171	08/31/2016 2015171	08/18/2016 Kaay Days	08/18/2016 Kaay Days	08/15/2016 3757	08/14/2016 expenses		Date			08/22/2016	08/20/2016 2015367	08/20/2016 2015367	08/19/2016 2015366	08/15/2016 2015149	04/20/2016 2015121	Date Num
*								/s Greg Williams - AP	HG Coop	Ryland, Raven - AP		Num Name				Daily Sales	Daily Sales	Daily Sales			ım Name
4,490.00 2668.45 2,428.39 5,096.84		kaay days	kaay days	kaay days	kaay	kaay anniversary	Kaay Days performance	- AP performing at kaay days	Kay Annaversery	1 - AP water and ice		ne Memo			Kaay days	table rental	Kaay days fish dinner	kaay days table rental	donation kay days RLWP contracting	NDIT 2016 KAY DAYS CELEBRATION	ne Memo
		5700 Office Supplies	2200 Due To/From Gwaalagaa Naay	2100 Accounts Payable	2100 Accounts Payable	2100 Accounts Payable	2100 Accounts Payable		Split	,		1060 NSCU	1200 Accounts Receivable	1200 Accounts Receivable	1200 Accounts Receivable	acting 1060 NSCU	PATION 1060 NSCU	Split			
	2,428.39 2,428.39	365.09	10.89	132.80	30.95	1,140.41	200.00	300.00	215.25	33.00		Amount	4,490.00	4,490.00	90.00	15.00	1,720.00	15.00	150.00	2,500.00	Amount
	2,428.39 2,428.39	2,428.39	2,063.30	2,052.41	1,919.61	1,888.66	748.25	548.25	248.25	33.00		Balance	4,490.00	4,490.00	4,490.00	4,400.00	4,385.00	2,665.00	2,650.00	2,500.00	Balance

Number: S-34143



SOCIETY ACT

CANADA
PROVINCE OF BRITISH COLUMBIA

CERTIFICATE OF INCORPORATION

I Hereby Certify that QAY'LLNAGAAY HERITAGE CENTRE SOCIETY

has this day been incorporated under the Society Act



Issued under my hand at Victoria, British Columbia on August 31, 1995

JOHN S. POWELL Registrar of Companies

Join the Haida Heritage Centre and Haida Gwaii Museum in celebrating the opening of the Heritage Centre at the...

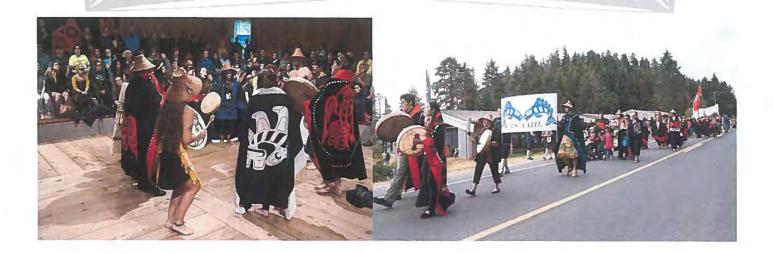
9THANNUAL KAY ANNUERSARY

When August 19th 2017

Where
The Haida Heritage Centre

Kids Games, Salmon Dinner, Cultural Performances, and Dance Competitions

SCHEDULE TO BE RELEASED CLOSER TO DATE

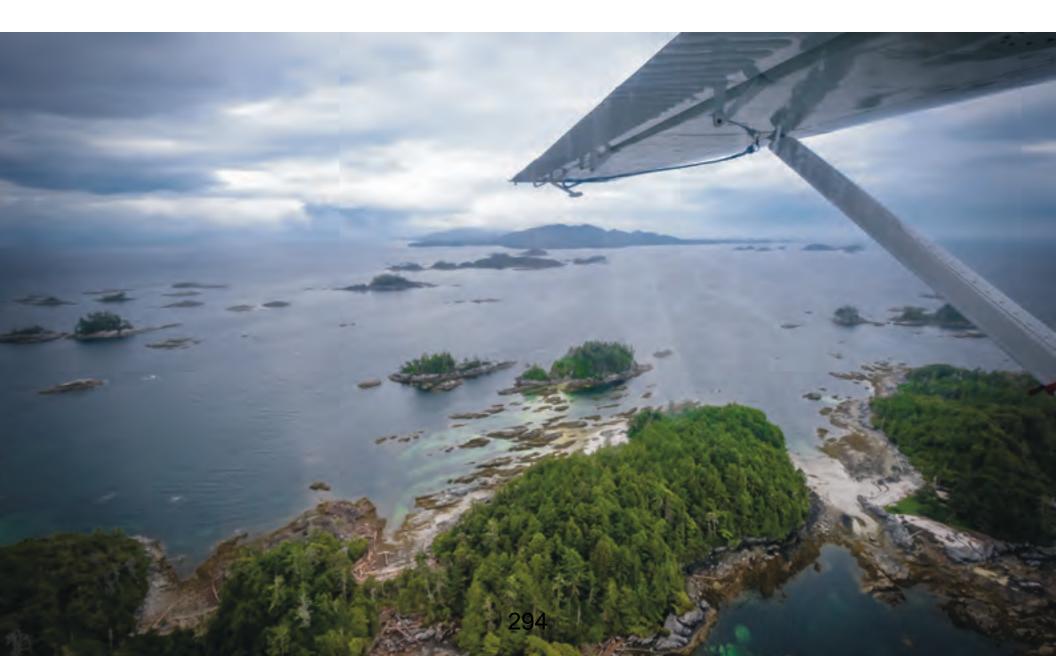


NORTH COAST REGIONAL DISTRICT

Rebranding Strategy

July 20, 2017 | Submitted by: Eddie Morris & Danielle Benacquista

ITEM 11.4 UPANUP



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A brand is not so much about rational arguments, but the way that the company resonates with people emotionally.



Steve Jobs



I.	Introduction
II.	Brand Promise
III.	Brand Vision
	Values
	Purpose
	Goals
IV.	Brand Story
V.	Audience Profile
VI.	Brand Identity
VII.	Conclusion



The purpose of this rebranding strategy is to plan for the development and deployment of a successful rebrand for the North Coast Regional District (NCRD). When completed, this brand strategy will connect the NCRD to the public in a more resonant and purposeful manner.



Using our learnings from phase 1, we will define the key aspects of the North Coast Regional District brand. These aspects include the following:

- **Brand Promise:** This is your guarantee to your audience—what you'll do for them. It guides the way your organization creates strong, meaningful connections with people.
- **Brand Vision:** This is how the NCRD wants to be viewed by the public, and includes values, purpose and goals.
- **Brand Story:** This is the complete picture of who you are. Everything you do, and each element of your brand should align your brand story back to your audience in an emotional way.
- 4 Audience Profile: This is the target market for the brand.
- **Brand Identity:** This is how your organization or region wants to be perceived by the public though elements such as logo, tagline, website, business cards, etc.

Brand Promise

Your promise to your audience, what you will do for them.

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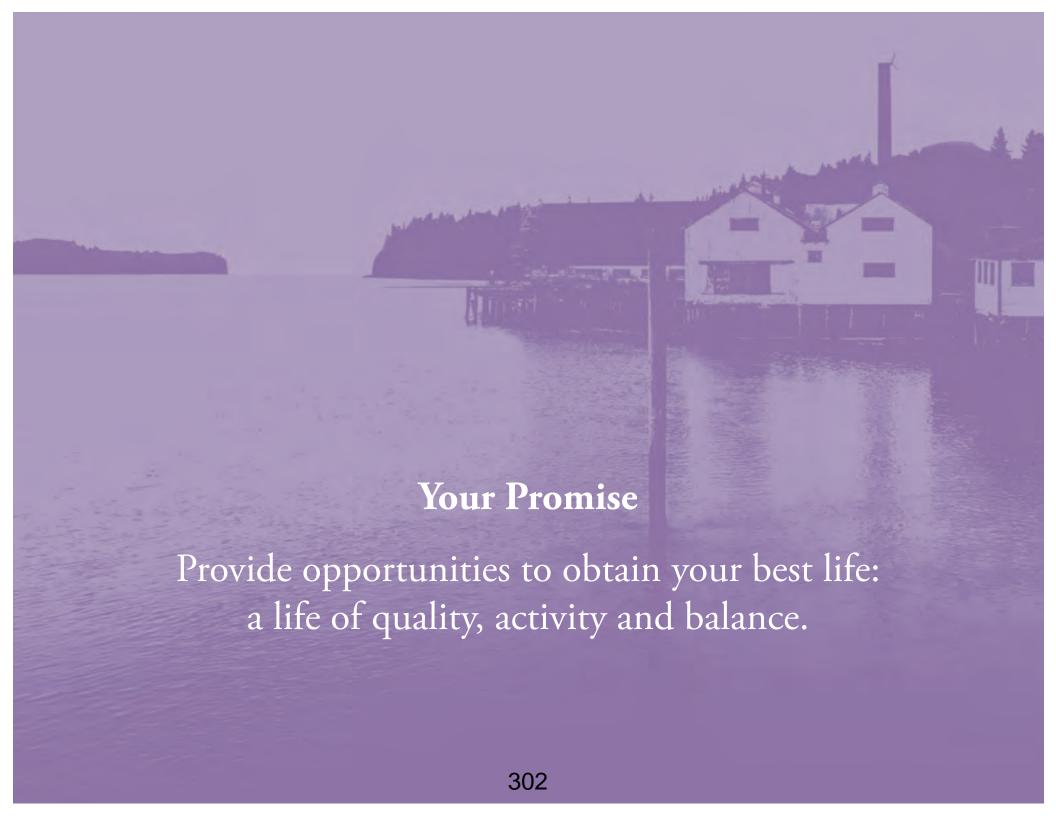
A brand is a promise made, but a great brand is a promise kept.



– Bea Perez



A strong **brand promise** should connect your strategy and your audience's needs to deliver your brand in a way that elicits an emotional connection.



Brand Vision

How you want your brand to be viewed by the public.

66

A great vision is like a national anthem: it has the power to pull together, emotionally connect and inspire great things.



- David Newbery



Brand vision is made up of the following elements. In combination, these elements represent how you want your brand to be interpreted publicly.



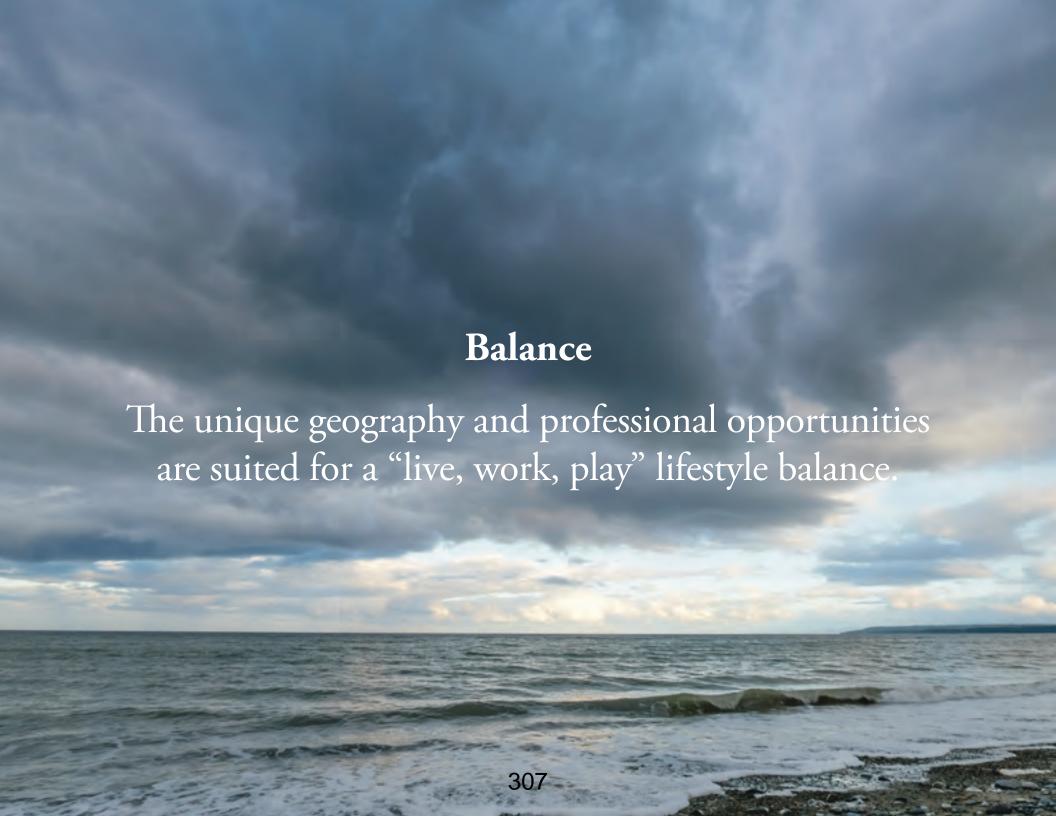


Values are the core beliefs that guide your brand in the direction you want to go. These values go beyond this page; they will become part of your organization, shape your interactions, influence your decisions and reflect your priorities.

These values should reflect:

- what NCRD stands for;
- what NCRD values most;
- 3 and what NCRD believes in as a region.

The following three pages define NCRD's three values: Balance, quality and connection.



Quality We maintain an affordable and high quality lifestyle.





Purpose identifies unique qualities that are distinctive to the NCRD.

NCRD is a large and **remarkable region** of the province, consisting of five municipalities and four electoral areas, including parts of both the North Coast mainland as well as the islands of Haida Gwaii. It provides services to more than 19,000 residents, a large number of whom belong to the Tsimshian and Haida First Nations.

The First Nations **heritage and culture** is a proud and prominent aspect of this region, with much effort made to educate about the past, as well as to keep practices alive for future generations.

This region is home to a **unique geography**, with the mainland's mountains, ocean, lakes, rivers and forests within quick proximity. In addition there is Haida Gwaii, the "Galapagos of the North," with its lush landscapes and pristine wilderness.

In comparison with other regions of the province, the NCRD provides an extremely **high quality of living**. Opportunities to live, work and play in the region are almost limitless.



Goals are defined as what you want to achieve through branding.

- 1 Strengthen brand recognition among audiences
- 2 Differentiate NCRD from surrounding areas
- **3** Create a consistent message
- Promote a connection between residents and nature
- 5 Attract new businesses, tourists and residents

Your Brand Vision

NCRD will provide quality services to residents and visitors while harmoniously representing the region, history and culture. We aim to attract new visitors, residents and investors to this unique region.

Brand Story

The complete picture of who you are.

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Your brand is a story unfolding across all customer touch points.



Jonah Sachs



The **brand story** goes beyond what you tell people—your story is everything you do. From representing your region to connecting to your audience, it is all part of the bigger picture of who the NCRD is right now. It is imperative to create a brand story that inspires people to explore the North Coast Regional District.

The previous pages include elements that all contribute to NCRD's complete story:

Promise: Provide opportunities to obtain your best life: a life of quality, activity and balance.

Vision: To provide quality services to residents and visitors while harmoniously representing the region, history and culture. We aim to attract new visitors, residents and investors to this unique region.

Values: Balance, Quality, Connection

Purpose: Heritage & Culture, Unique Geography, High Quality Living

Goals: Strengthen, Differentiate, Create, Promote, Attract

Audience Profile

The target markets for your brand.

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The most important thing to remember is you must know your audience.



– Lewis Howes



The key to effective branding starts with knowing your audience. In order to target the NCRD branding and marketing more effectively, we need to determine who to direct it towards. To craft our brand, we need to understand what our key audiences need and want.

Residents - Part time & permanent

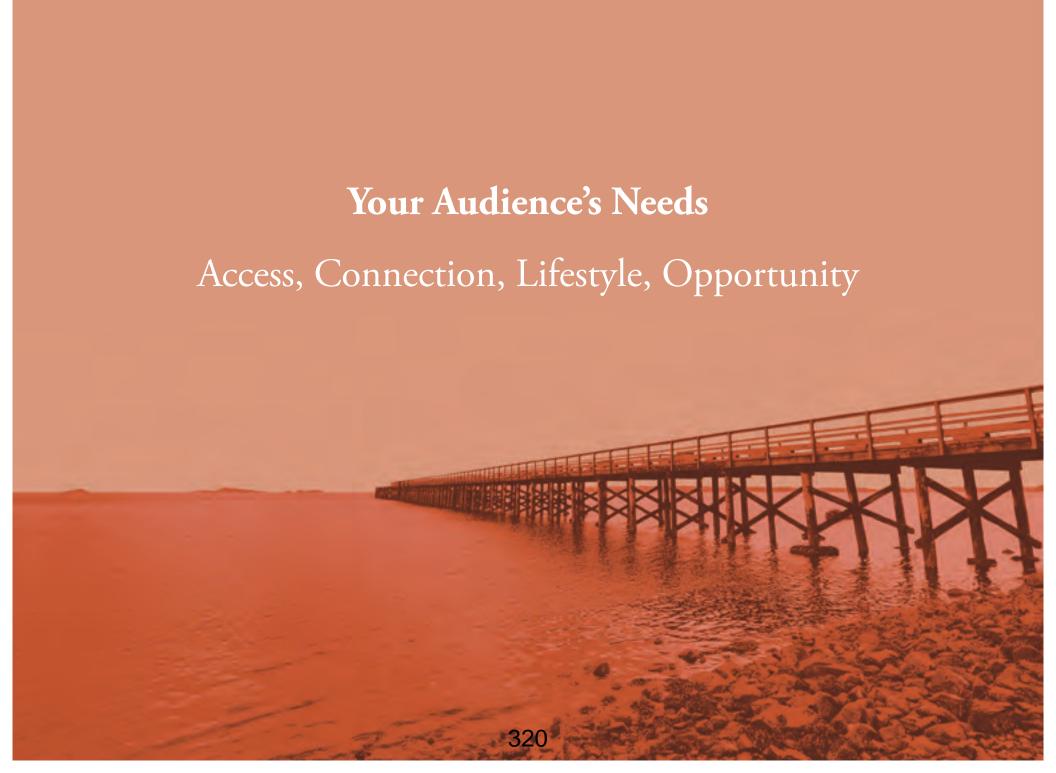
- City of Prince Rupert
- District of Port Edward
- Village of Masset
- Village of Queen Charlotte
- Village of Port Clements
- Electoral Area A (Dodge Cove; Metlakatla; Lax Kw' alaams)
- Electoral Area C (Oona River; Kitkatla; Hartley Bay)
- Electoral Area D (Graham Island; Skidegate; Old Massett)
- Electoral Area E (Sandspit)
- New industry, businesses, investors and prospective residents
- **3** Tourists & visitors



Now that we know the three main audience profiles, we can determine what their needs are. This will define the purpose the NCRD needs to facilitate.

The common needs of the NCRD's audiences include;

- **Access** to services and ammenities
- **Connection** to each other, culture, history and the environment
- **3 Lifestyle** and recreation options
- **Opportunity** to build an ideal life



Brand Identity

Elements that will carry your brand.

66

Your brand identity is the icon of your company and product. It is the badge that represents the brand and the relationship with the consumer.



- The Russo Group

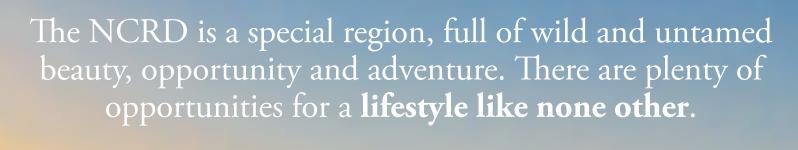


The new identity will resolve issues presented by the current logo. The logo in use no longer represents the NCRD's corporate name or design needs. In order for the new brand identity to be successful it must be identifiable, consistent, contemporary and adaptable.

The overarching theme of the NCRD being a great place to live, work and invest will be present in both the proposed logo and tagline.

The new identity could incorporate definable aspects of the region, such as the coastal landscape, and relate to residents on both geographic divisions, the mainland and Haida Gwaii. The new identity will satisfy the brand strategy and NCRD's values. The identity approach will represent the region and the residents in its entirety.





We at Upanup look very forward to bringing a brand identity to the NCRD that encapsulates who you truly are.



Skeena-Queen Charlotte Regional District

BOARD POLICY

Title:	Delegations		
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1.0 PURPOSE

To provide direction in the handling of requests to appear as a delegation before the Board of the Skeena-Queen Charlotte Regional District (SQCRD).

2.0 POLICY

Requests to appear before the SQCRD Board shall be dealt with in the following manner:

- 2.1 Delegations must notify the Corporate Officer no later than two weeks prior to the Board meeting in writing, utilizing the Delegation Request Form (Appendix 1) or other form of written communication including email.
- 2.2 The number of Delegations allowed per meeting will be limited to two.
- 2.3 Requests to appear as a delegation received after the two-week deadline prior to the Board meeting may be considered and will be subject to the approval of the Corporate Officer, based on the following criteria:
 - Time-sensitive;
 - High community/public interest; and
 - Important additional information pertinent to items on the agenda.
- 2.4 Delegations that have previously appeared before the Board on a subject matter are to provide new information only in any subsequent presentation relating to the matter.
- 2.5 Organizations requesting to address the Board are limited to a maximum of ten minutes regardless of the number of representatives of the group wishing to speak.
- 2.6 Delegations by invitation of the Board may, at the discretion of the Corporate Officer and/or Chair:
 - i. have the 10 minute maximum time limit extended.
 - ii. have a special meeting arranged for the sole purpose of receiving the presentation.
 - iii. have the delegation limit for that particular meeting reduced to one.

3.0 TERMS/DEFINITIONS

"delegation" refers to a person or group of persons or representatives for an organization appearing before the Board to provide information relevant to Regional District business.

"Regional District" refers to the Skeena Queen Charlotte Regional District.

4.0 SCOPE

- 4.1 This Policy applies to all requests to appear as a delegation before the Board.
- 4.2 Where a delegation is specifically invited by the Board, the Corporate Officer has the discretion to waive any limitations within this policy.

5.0 RESPONSIBILITY

The Corporate Officer is granted the authority to screen and, if deemed appropriate, deny a request to appear as a delegation if:

- 5.1 the issue is not within the mandate or jurisdiction of the Regional District; or
- 5.2 if a delegation has addressed the Board on a particular issue and no new significant information is being provided.

6.0 PROCEDURE

The following procedure will be followed for all requests to appear before the Board:

- 6.1 Written requests will be directed to the Corporate Officer for review.
- 6.2 <u>At the time the delegation request is received, the Corporate Officer shall notify the Board of the Regional District.</u>
- 6.3 The delegate will be notified of the decision.
- 6.4 Delegations approved to appear before the Board will be:
 - i. notified of the scheduled time and date of the delegation;
 - ii. requested to forward any supporting documentation for publication in the Board Agenda no later than the Monday of the week prior (10 days) to the meeting at which they will be appearing; and
 - iii. provided a copy of the information on ground rules as outlined on the Delegation Request Form.

- 6.5 Delegations denied the opportunity to appear before the Board will be:
 - i. offered the opportunity to provide written information for distribution to the Board through an Agenda or Directors' Reading file as appropriate; or
 - ii. informed, in writing, of their right to appeal the decision to the Chair of the Board.

7.0 REFERENCES

Appendix 1 - Delegation Request Form

Approval Date:	October 26, 2012	Resolution No.	371-2012
Amendment Date:		Resolution No.	



NEWS RELEASE

For Immediate Release 2017FLNR0218-001413 Aug. 10, 2017

Ministry of Forests, Lands, Natural Resource Operations and Rural Development Office of the Chief Forester

New allowable annual cut level set for portion of Pacific TSA

VICTORIA – Effective immediately, the allowable annual cut for the portion of the Pacific Timber Supply Area (TSA) outside of the Great Bear Rainforest is 803,300 cubic metres, chief forester Diane Nicholls announced today.

It is the first allowable annual cut determination by the chief forester for this portion of the Pacific TSA, which consists of 30 timber supply blocks covering 698,000 hectares across Vancouver Island, the Sunshine Coast, the Mainland Coast and the Douglas Channel.

The Pacific TSA and allowable annual cut were established in July 2009 by amalgamating areas removed from nine tree farm licences. They were taken back by the Province to support BC Timber Sales and the market-based timber-pricing system.

While the new cut level is 37% lower than the current allowable annual cut of 1.3 million cubic metres, it is higher than the average annual harvest of 600,000 cubic metres between 2010 and 2015.

In her determination, Nicholls specified two partitions to promote harvest activity in areas of the timber supply area that are marginally economic and currently underused. The volume attributed to these partitions cannot be harvested outside of the partition areas.

The allowable annual cut for the portion of the Pacific TSA inside the Great Bear Rainforest remains unchanged at 62,400 cubic metres—as specified by regulation on Jan. 1, 2017, in the *Great Bear Rainforest (Forest Management) Act*.

Quote:

Diane Nicholls, chief forester -

"I based the new allowable annual cut on a careful review of all the available information on timber and non-timber resources in the portion of the Pacific Timber Supply Area outside of the Great Bear Rainforest, and consultation with First Nations. I am satisfied it reflects government's objectives for forest resources in the Pacific TSA over the next 10 years, and will continue to meet the current best management practices."

Quick Facts:

The chief forester's allowable annual cut determination is an independent, professional judgment based on information ranging from technical forestry reports, First Nations and public input to the government's social and economic objectives.

Under the *Forest Act*, the chief forester must determine the allowable annual cut in each of the province's 37 timber supply areas and 34 tree farm licences at least once every 10 years.

Learn More:

A copy of this allowable annual cut decision is available online: http://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/timber-supply-review-and-allowable-annual-cut/timber-supply-areas/pacific-tsa

Information on how allowable annual cuts are determined in the Great Bear Rainforest: https://news.gov.bc.ca/releases/2016FLNR0302-002869

Contact:

Media Relations Ministry of Forests, Lands, Natural Resource Operations and Rural Development 250 356-5261

Connect with the Province of B.C. at: www.gov.bc.ca/connect

BRITISH COLUMBIA MINISTRY OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT

Pacific Timber Supply Area

Rationale for Allowable Annual Cut (AAC) Determination

Effective August 10, 2017

Diane Nicholls, RPF
Chief Forester

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Objective of this Document

This document provides an accounting of the factors I have considered and the rationale I have employed in making my determination, under Section 8 of the *Forest Act*, of the allowable annual cut (AAC) for the Pacific Timber Supply Area (TSA). This document also identifies where new or better information is needed for incorporation in future determinations.

Acknowledgement

For preparation of the information I have considered in this determination, I am indebted to staff of the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development ("the Ministry") in several district offices across the south and north coast, BC Timber Sales (BCTS), and the Forest Analysis and Inventory Branch (FAIB). I am also grateful to local residents, First Nations, and stakeholders who contributed to this process.

Statutory framework

Section 8 of the *Forest Act* requires the chief forester to consider a number of specified factors in determining AACs for TSAs and TFLs. Section 8 of the *Forest Act* is reproduced in full as Appendix 1 of this document.

Description of the Pacific Timber Supply Area

The Pacific TSA overlaps with five of the Ministry's natural resource districts: Coast Mountains (DKM), North Island Central Coast (DNI), Campbell River (DCR), Sunshine Coast (DSC), and South Island (DSI). The TSA consists of 30 timber supply blocks ('supply blocks') on Vancouver Island, the Sunshine Coast, the Mainland Coast and Douglas Channel, each ranging in size from 76 hectares to over 400 000 hectares. The total area of the TSA is 698 041 hectares spread over four BCTS business areas, which are the Strait of Georgia (TSG, encompassing Vancouver Island from Campbell River area south, and portions of the discovery islands and the adjacent mainland), Seaward-Tlasta (TST, located in northern Vancouver Island and in the Central Coast area of the mainland), Skeena (TSK, located around Terrace and north in the North-Western portion of BC) and Chinook (TCH, extending from the Sunshine Coast to Chilliwack in the BC Lower Mainland) business areas.

In March 2016, BCTS transferred the management of the timber supply blocks on the Sunshine Coast (supply blocks 21, 22, and 23) from the TSG business area to the TCH business area. However, for the purpose of the timber supply analysis and this rationale document, these blocks are assumed to be among the supply blocks in the TSG Business Area.

The TSA is largely within the Coastal Western Hemlock (CWH) biogeoclimatic zone, with smaller area within the Mountain Hemlock (MH) and Coastal Mountain-Heather Alpine zones. Dominant tree species in the forests are western hemlock, western redcedar and Douglas-fir, with smaller components of amabilis fir, sitka spruce, big-leaf maple and red alder. The area provides rich habitat for wildlife and fish.

Many of the larger coastal towns outside the BC Lower Mainland are in or near the TSA. Many smaller coastal communities in the Sunshine Coast, North Island, Central Coast and Coast Mountain areas have significant dependence on forest related industries, as well as public sector and tourism. Thirty First Nations have traditional territory that overlaps at least one of the 30 blocks of the Pacific TSA. At least one of the Pacific TSA blocks overlaps with

the Maa-nulth Final Agreement Areas. The TSA also overlaps with the traditional territories of five of the six signatory Nanwakolas Strategic Engagement (SEA) First Nations.

A portion of the Pacific TSA, totalling 56 605 hectares, is located within the Great Bear Rainforest (GBR) forest management area that was designated under Section 6 of the *Great Bear Rainforest (Forest Management) Act* in January 2017. This area is managed under the Great Bear Rainforest Land Use Order using Ecosystem Based Management (EBM) practices.

History of the AAC for the Pacific TSA

The Pacific TSA was established in July 2009 from an amalgamation of areas removed from nine TFLs. These areas were taken back by the Province through the *Forestry Revitalization Act* (Bill 28, 2003) to support BCTS and the establishment of the market pricing system (MPS) for setting stumpage rates. The areas taken back were delineated as 30 supply blocks for the Pacific TSA, with boundaries determined through the Bill 28 process.

At its creation in 2009, the AAC for the Pacific TSA was 958 154 cubic metres. This original AAC was determined by prorating the AAC of the contributing TFLs by the proportion of timber harvesting land base that was transferred to the Pacific TSA. Since 2009, the AAC has been adjusted several times as blocks were added and an area was removed to create a First Nations Woodland licence. The current AAC for the Pacific TSA was set on January 1, 2017, by regulation under the *Great Bear Rainforest (Forest Management) Act*. The regulation set the AAC for the GBR part of the TSA at 62 400 cubic metres and the AAC for the non-GBR part of the TSA at 1 279 700 cubic metres.

Over 95 percent of the harvest is allocated to BCTS, with the remaining either apportioned to or allocated for First Nations tenures.

With the establishment of the GBR forest management area, I have the authority to determine the AAC and specify AAC partitions for the for the non-GBR part of the Pacific TSA. For this reason, the contribution of the GBR part of the Pacific TSA has been excluded from the base case and from my considerations in this document.

New AAC determination

Effective August 10, 2017, the new AAC for the non-GBR part of the Pacific TSA is 803 300 cubic metres. Within this AAC there is a partition of 730 100 cubic metres that is attributable to the areas outside supply blocks 28 and 29 and a partition of 615 100 cubic metres that is attributable to the area outside of supply blocks 28 and 29 and is within the area mapped as timber harvesting land base for base case in the 2016 Timber Supply Analysis Report– Pacific TSA.

This AAC will remain in effect until a new AAC is determined, which must take place within ten years of this determination.

The AAC for the GBR part of the Pacific TSA is as specified in the Great Bear Rainforest (Forest Management) Act Regulation.

Information sources used in the AAC determination

The information sources considered in determining this AAC for the Pacific TSA include but are not limited to, the following:

- Atmospheric Benefit Sharing Agreement, between British Columbia and the Nanwakolas First Nations, March 23, 2012;
- B.C. Timber Sales, Strait of Georgia, 2016. Pacific Timber Supply Area Socio-Economic Assessment;
- B.C. Timber Sales, Strait of Georgia, 2015. Pacific TSA Supply Block 7 Vegetation Resource inventory Statistical Adjustment. Prepared by: Forest Ecosystem Solutions Ltd.;
- B.C. Timber Sales, Strait of Georgia, 2016. Timber Supply Review Analysis Report Pacific TSA Prepared by: Forest Ecosystem Solutions Ltd.;
- B.C. Timber Sales, Strait of Georgia, 2016. Timber Supply Review Information Package Pacific TSA Prepared by: Forest Ecosystem Solutions Ltd.;
- B.C. Timber Sales, Strait of Georgia, 2015. Economic Operability Assessment Analysis Report Pacific TSA, Prepared by: Forest Ecosystem Solutions Ltd.;
- British Columbia Ministry Agriculture and Lands, 2005. Sustainable Resource Management Plan, Biodiversity Chapter for the Upper Nimpkish Landscape Unit;
- British Columbia Ministry of Agriculture and Lands 2010 Land Use Objectives for Old Growth Management Areas with the Tsitika, Naka, Adam-Eve, White, and Salmon Landscape Units situated on Northern Vancouver Island within the Campbell River Forest District;
- British Columbia Ministry of Agriculture and Lands 2010 Land Use Objectives for Old Growth Management Areas with the Nahwitti, Tsulquate, and Marble Landscape Units situated on Northern Vancouver Island within the North Island – Central Coast Forest District;
- British Columbia Ministry of Agriculture and Lands, Integrated Land Management Agency, Coast Region, 2005. Sustainable Resource Management Plan Biodiversity Chapter for Sproat Lake Landscape Unit;
- British Columbia Ministry of Agriculture and Lands, 2009, Land Use Objectives for the Renfrew Sustainable Resource Management Plan;
- British Columbia Ministry of Agriculture and Lands, 2006. Kalum Sustainable Resource Management Plan Integrated Land Management Bureau;
- British Columbia Ministry of Agriculture and Lands, 2006. Kowesas Sustainable Resource Management Plan Integrated Land Management Bureau;
- British Columbia Ministry of Forests, Lands and Natural Resource Operations, 2016. Current inventory information from Forest Analysis and Inventory Branch;
- British Columbia Ministry of Forests, Lands and Natural Resource Operations, 2013.
 Central North Coast Order;
- British Columbia Ministry of Forests, Lands and Natural Resource Operations, 2013. South-Central Coast Order;

- British Columbia Ministry of Forests, Lands and Natural Resource Operations, 2012, Brittain Landscape Unit Sustainable Resources Management Plan;
- British Columbia Ministry of Forests, Lands and Natural Resource Operations, 2016.
 Great Bear Rain Forest Order;
- British Columbia Ministry of Sustainable Resource Management, 2004. Biodiversity Chapter for the San Josef Landscape Unit;
- British Columbia Ministry of Sustainable Resource Management, 2003. Sayward Landscape Unit Plan;
- British Columbia Ministry of Sustainable Resource Management, 2002. Kalum Land and Resource Management Plan;
- Clayoquot Sound Technical Planning Committee, 2006, Watershed Planning in Clayoquot Sound, Vol 7: Upper Kennedy Watershed Plan;
- Coast Area Forest Health Aerial Overview Survey, 2016;
- Coast Forest Conservation Initiative, 2015. Joint Solutions Project, http://www.coastforestconservationinitiative.com/_About/joint_solutions.html;
- District and B.C. Timber Sales staff evaluations of forest practices relating to roads, riparian areas, unstable and potentially unstable terrain, forest regeneration, and silvicultural systems;
- First Nations Consultation Summary Pacific TSA, Ministry of Forests, Lands and Natural Resource Operations, Consultation Report and Tracking System – TFL 18 MP # 11 and TSR, July 2016;
- Forest Ecosystems Solutions Ltd., 2016. Memo on Outstanding Issues from the Nanwakolas Meeting;
- Forest Ecosystems Solutions Ltd., 2016. Memo on Alternate Harvest Flows;
- Forest Ecosystems Solutions Ltd., 2016. Memo on Additional Timber Supply Runs for the Pacific TSA;
- Forest Ecosystems Solutions Ltd., 2016. Memo on Additional Timber Supply Runs for the Pacific TSA;
- Forsite, 2009. Mid Coast Timber Supply Area Timber Supply Review #3, Draft Data Package, Version 1.0;
- Letter from the Minister of Forests and Range to the chief forester, October 27, 2010, regarding the Crown's economic and social objectives and mid-term timber supply in areas affected by the mountain pine beetle;
- Letter from the Minister of Forests and Range to the chief forester stating the economic and social objectives of the Crown. July 4, 2006;
- Letter from the Minister of Forests, Lands and Natural Resource Operations to the chief forester stating the economic and social objectives of the government for signatory First Nations of the Nanwakolas Reconciliation Protocol. April 12, 2013;
- Matt Kurowski, M.Sc., EIT, Researcher, FPInnovations and François Gougeon, Ph.D., Research Scientist, Canadian Forest Service, November 2016. Using LiDAR and

- orthophotos to quantify forest regeneration along active and non-active resource roads, unpublished draft;
- Nanwakolas First Nations Letter of Understanding, April 16, 2013;
- Nanwakolas Reconciliation Protocol Appendix 2 Schedule B (Forestry Schedule), Shared Decision Making Process, April 16, 2013;
- Nanwakolas/British Columbia, Amending Agreement of the Nanwakolas Reconciliation Protocol Spring 2015, May 14, 2015Nanwakolas Reconciliation Protocol, July 29, 2011;
- Nanwakolas/British Columbia Framework Agreement, December 16, 2009;
- Price Huber & Associates Inc., 2010.Licensee Benchmark Logging Cost Report;
- Price Huber & Associates Inc., 2015. Licensee Benchmark Logging Cost Update;
- Province of British Columbia, Wildlife Act, B.C. Government, current to June 16, 2017;
- Province of British Columbia. *Ministry of Forests and Range Act*, B.C. Government, current to June 16, 2017;
- Province of British Columbia, *Heritage Conservation Act*, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Parks and Protected Areas Statutes Amendment* Act, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Oil and Gas Activities Act* and regulations and amendments, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Forestry Revitalization Act*, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Great Bear Rainforest (Forest Management) Act* and Regulation, B.C. Government, current to January 1, 2017;
- Province of British Columbia, *Interpretation Act*, B.C. Government current to August 17, 2016;
- Province of British Columbia, *Land Act*, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Forest Practices Code of British Columbia Act*, B.C. Government, current to June 16, 2017, and regulations and amendments;
- Province of British Columbia, *Species at Risk Act*, Government of Canada (S.C. 2002, c29) current to August 15, 2016;
- Province of British Columbia, *Environment and Land Use Act*, B.C. Government current to June 16, 2017;
- Province of British Columbia, *Forest Act* and regulations, B.C. Government, current to June 16, 2017;
- Province of British Columbia, *Forest and Range Practices Act* (FRPA) and regulations and amendments, B.C. Government, current to June 16, 2017;
- Province of British Columbia, 2000. Vancouver Island Land Use Plan Higher Level Plan Order;
- Province of British Columbia, 1993. Clayoquot Sound Land Use Decision;

- Province of British Columbia, 2010. Updated Procedures for Meeting Legal Obligations when Consulting First Nations;
- Sunshine Coast Forest District Landscape Unit Planning, 2000, Bunster Landscape Unit Plan;
- Sunshine Coast Forest District Landscape Unit Planning, 2002, Lois Landscape Unit Plan:
- Consideration of Information Required by Section 8 of the Forest Act for the Pacific TSA presented to the Chief Forester by Ministry of Forests, Lands and Natural Resource Operations at a meeting held in Victoria, January 19 and 20, 2017;
- The Haisla Resource and Culturally Significant Sites within the NCLRMP, KLRMP and CCLRM, undated. unpublished manuscript provided by Haisla Nation, Lands and Resources.

Role and limitations of the technical information used

Section 8 of the *Forest Act* requires the chief forester, in determining AACs, to consider biophysical, social and economic information. Most of the technical information used in determinations is in the form of a timber supply analysis and its inputs of inventory and growth and yield data. These are concerned primarily with biophysical factors – such as the rate of timber growth and the definition of the land base considered available for timber harvesting – and with management practices.

The analytical techniques used to assess timber supply necessarily are simplifications of the real world. Many of the factors used as inputs to timber supply analysis have differing levels of uncertainty associated with them, due in part to variation in physical, biological and social conditions. Ongoing scientific studies of ecological dynamics will help reduce some of this uncertainty.

Furthermore, computer models cannot incorporate all of the social, cultural and economic factors that are relevant when making forest management decisions. Technical information and analysis; therefore, do not necessarily provide the complete answers or solutions to forest management decisions such as AAC determinations. Such information does provide valuable insight into potential impacts of different resource-use assumptions and actions, and thus forms an important component of the information I must consider in AAC determinations.

In determining this AAC for the Pacific TSA, I have considered known limitations of the technical information provided. I am satisfied that the information provides a suitable basis for my determination.

Guiding principles for AAC determinations

Section 8 of the *Forest Act* requires the chief forester to consider particular factors in determining the AACs for timber supply areas and tree farm licences.

Given the large number of periodic AAC determinations required for British Columbia's many forest management units, administrative fairness requires a reasonable degree of consistency of approach in addressing relevant factors associated with AAC determinations. In order to make my approach in these matters explicit, I have considered and adopted the following body of guiding principles, which have been developed over time by BC's chief foresters and deputy chief foresters. However, in any specific circumstance in a determination

where I consider it necessary to deviate from these principles, I will explain my reasoning in detail.

When considering the factors required under Section 8, I am also mindful of my obligation as a steward of the forests of British Columbia, of the mandate of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development as set out in Section 4 of the *Ministry of Forests and Range Act*, and of my responsibilities under the *Forest Act* and *Forest and Range Practices Act* (FRPA).

Integrated decision making

One of the key objectives of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development is to take an integrated approach to all resource management decisions that consider all resource values. In considering the factors outlined in Section 8 of the Forest Act, I will continue to consider all available information on timber and non-timber resources in the management unit, and all available information on the interactions of the management of those resources on timber supply.

Information uncertainty

Given the complex and dynamic nature of forest ecosystems coupled with changes in resource use patterns and social priorities there is always a degree of uncertainty in the information used in AAC determinations.

Two important ways of dealing with this uncertainty are:

- (i) managing risks by evaluating the significance of specific uncertainties associated with the current information and assessing the various potential current and future, social, economic and environmental risks associated with a range of possible AACs; and
- (ii) re-determining AACs frequently, in cases where projections of short-term timber supply are not stable, to ensure they incorporate current information and knowledge.

In considering the various factors that Section 8 of the Forest Act requires the chief forester to take into account in determining AACs, it is important to reflect those factors, as closely as possible, that are a reasonable extrapolation of current practices. It is not appropriate to base decisions on proposed or potential practices that could affect the timber supply but are not substantiated by demonstrated performance or are beyond current legal requirements.

In many areas, the timber supply implications of some legislative provisions remain uncertain, particularly when considered in combination with other factors. In each AAC determination, this uncertainty is taken into account to the extent possible in the context of the best available information.

It is not appropriate to speculate on timber supply impacts that may eventually result from land-use decisions not yet finalized by government, nor is it possible at this time to speculate about the possible effect on timber supply that could result from possible eventual legal proof of aboriginal title. However, where specific protected areas, conservancies, or similar areas have been designated by legislation or by order in council, these areas are deducted from the timber harvesting land base (THLB) and are not considered to contribute any harvestable volume to the timber supply in AAC determinations, although they may contribute indirectly by providing forest cover to help in meeting resource management objectives such as for biodiversity.

In some cases, even when government has made a formal land-use decision, it is not necessarily possible to fully analyse and account for the consequent timber supply impacts in a current AAC determination. Many government land-use decisions must be followed by detailed implementation decisions requiring, for instance, further detailed planning or legal designations such as those provided for under the *Land Act* and FRPA. In cases where there is a clear intent by government to implement these decisions that have not yet been finalized, I will consider information that is relevant to the decision in a manner that is appropriate to the circumstance. The requirement for regular AAC reviews will ensure that future determinations address ongoing plan implementation decisions.

Where appropriate, information will be considered regarding the types and extent of planned and implemented silviculture practices as well as relevant scientific, empirical and analytical evidence on the likely magnitude and timing of their timber supply effects.

I acknowledge the perspective that alternate strategies for dealing with information uncertainty are to delay AAC determinations or to generally reduce AACs in the interest of caution. However, given that there will always be uncertainty in information, and due to the significant impacts that AAC determinations can have on communities, I believe that no responsible AAC determination can be made solely on the basis of a response to uncertainty.

Nevertheless, in making a determination, allowances may need to be made to address risks that arise because of uncertainty by applying judgment to the available information. Where appropriate, the social and economic interests of the government, as articulated by the Minister of Forests, Lands and Natural Resource Operations, can assist in evaluating this uncertainty.

Climate change

One key area of uncertainty relates to climate change. While some controversy appears to remain on the causes of climate change, there is substantial scientific agreement that climate is changing, that the changes will affect forest ecosystems, and that forest management practices will need to be adapted. Nevertheless, the potential rate, amount, and specific characteristics of climate change in different parts of the province are uncertain. As research provides more definitive information on climate change, I will consider the findings in AAC determinations. Where forest practices are implemented to mitigate or adapt to the potential effects of climate change on forest resources, I will consider related information in my determinations.

In addition, vulnerability assessments can provide information on the potential risks associated with climate change, and could be useful in defining how to consider climate change in different AAC determinations. Such assessments could also highlight key topics in need of research that could improve climate change considerations for future determinations.

I note, however, that even with better information on climate change there will be a range of reasonable management responses. Considerations of how to respond in anticipation of uncertain, potential future impacts and risks differ from those related to responding to known or ongoing processes such as the recent MPB infestation. For example, it is not clear if either increases or decreases to current harvest levels would be appropriate in addressing potential future increases in natural disturbance due to climate change. Conversely, the present forest conditions resulting from the MPB infestation provide a clearer circumstance to which to respond.

To some extent, decisions on the preferred management responses to potential future risks, including potential changes to allowable timber harvests, are appropriately informed by broad discussion among interested parties. I will monitor such discussions and consider them insofar as they are relevant to AAC determinations. In general, the requirement for regular AAC reviews will allow for the incorporation of new information on climate change and its effects on forests and timber supply as it emerges.

First Nations

Established (declared) Aboriginal title lands and other areas, such as Treaty Settlement Lands or Indian Reserves, are not provincial Crown land. Consequently, the timber on these lands does not contribute to the AAC of the timber supply area or tree farm licence with which they overlap. For other areas, where Aboriginal title has not been legally proven, the Crown has a constitutional obligation to consult with First Nations regarding their asserted Aboriginal rights and/or title (Aboriginal interests) in a manner proportional to the strength of their Aboriginal interests and the degree to which the decision may impact these interests. In this regard, full consideration will be given to:

- (i) the information provided to First Nations to explain the timber supply review process;
- (ii) any information brought forward through engagement and consultation respecting First Nations' Treaty rights or Aboriginal interests, including how these rights or interests may be impacted; and
- (iii) any operational plans and/or other information that describe how First Nations' Treaty rights or Aboriginal interests are addressed through specific actions and forest practices.

Treaty rights or Aboriginal interests that may be impacted by AAC decisions will be addressed consistent with the scope of authority granted to the chief forester under Section 8 of the *Forest Act*. When information is brought forward that is outside of the chief forester's scope of statutory authority, this information will be forwarded to the appropriate decision makers for their consideration. Specific considerations identified by First Nations in relation to their Aboriginal interests and the AAC determination are addressed in the various sections of this rationale.

AAC determinations should not be construed as limiting the Crown's obligations under court decisions in any way, and in this respect it should be noted that AAC determinations do not prescribe a particular plan of harvesting activity within the management units. They are also independent of any decisions by the Minister of Forests, Lands and Natural Resource Operations with respect to subsequent allocation of wood supply.

The role of the base case

In considering the factors required under Section 8 of the *Forest Act* to be addressed in AAC determinations, I am assisted by timber supply forecasts provided to me through the work of the Timber Supply Review Program (TSR) for TSAs and TFLs.

For most AAC determinations, a timber supply analysis is carried out using an information package including data and information from three categories: land base inventory, timber growth and yield, and management practices. Using this set of data and a computer model, a series of timber supply forecasts can be produced to reflect different starting harvest levels,

rates of decline or increase, and potential trade-offs between short- and long-term harvest levels.

From a range of possible forecasts, one is chosen in which an attempt is made to avoid both excessive changes from decade to decade and significant timber shortages in the future, while ensuring the long-term productivity of forest lands. This is known as the "base case" forecast and forms the basis for comparison when assessing the effects of uncertainty on timber supply. The base case is designed to reflect current management practices.

Because it represents only one in a number of theoretical forecasts, and because it incorporates information about which there may be some uncertainty, the base case forecast is not an AAC recommendation. Rather, it is one possible forecast of timber supply, whose validity – as with all the other forecasts provided – depends on the validity of the data and assumptions incorporated into the computer model used to generate it.

Therefore, much of what follows in the considerations outlined below is an examination of the degree to which all the assumptions made in generating the base case forecast are realistic and current, and the degree to which resulting predictions of timber supply must be adjusted to more properly reflect the current and foreseeable situation.

These adjustments are made on the basis of informed judgment using currently available information about forest management, and that information may well have changed since the original information package was assembled. Forest management data are particularly subject to change during periods of legislative or regulatory change, or during the implementation of new policies, procedures, guidelines or plans.

Thus, in reviewing the considerations that lead to the AAC determination, it is important to remember that the AAC determination itself is not simply a calculation. Even though the timber supply analysis I am provided is integral to those considerations, the AAC determination is a synthesis of judgment and analysis in which numerous risks and uncertainties are weighed. Depending upon the outcome of these considerations, the AAC determined may or may not coincide with the base case forecast. Judgments that in part may be based on uncertain information are essentially qualitative in nature and, as such, are subject to an element of risk. Consequently, once an AAC has been determined, no additional precision or validation would be gained by attempting a computer analysis of the combined considerations.

Base case for the Pacific TSA

The timber supply analysis was completed by Forest Ecosystem Solutions Ltd. using their proprietary forest estate model, Forest Simulation and Optimization System.

The base case forecast projected an orderly transition from the highest possible short-term harvest level to the highest possible even flow long-term harvest level, while meeting all non-timber forest objectives. As well, periodic harvest level declines during the transition from the short-term to the long-term level were constrained to be no more than ten percent of the harvest level in any one decade.

As noted earlier, the contribution of the GBR portion of the Pacific TSA was excluded from the base case forecast.

In the base case, an initial harvest level of 688 245 cubic metres per year was maintained for ten years. The harvest level was then projected to decline by 8.5 percent to 630 080 cubic metres per year, where it was maintained for ten years before declining by 2.8 percent at year 21 to the long-term harvest level of 612 250 cubic metres per year. This final level was maintained for the rest of the forecast period.

A forecast which partitioned the harvest by BCTS business area was also generated in the analysis. This forecast showed that the first decade harvest level can be attributed to the BCTS business areas as follows: 615 045 cubic metres from the TST and TSG business areas and 73 200 cubic metres from the TSK Business Area.

In addition to the base case forecast, a number of alternative forecasts and sensitivity analyses were generated during the analyses. These forecasts have been helpful as I made specific considerations and reasoning in my determination as documented in the following sections.

I am satisfied that the base case, and the other analyses as noted and described, represent the best information currently available to me respecting various aspects of the projection of the timber supply in this TSA, and that as such they are suitable for reference in my considerations in this determination.

Consideration of Factors as Required by Section 8 of the Forest Act

I have reviewed the information for all of the factors required to be considered under Section 8 of the *Forest Act*. Where I have concluded that the modelling of a factor in the base case appropriately represents current management or the best available information, and uncertainties about the factor have little influence on the timber supply projected in the base case, no discussion is included in this rationale. These factors are listed in Table 1.

For other factors, where more uncertainty exists, or where public or First Nations' input indicates contention regarding the information used, modelling, or some other aspect under consideration, this rationale incorporates an explanation of how I considered the essential issues raised and the reasoning leading to my conclusions.

Table 1. List of factors accepted as modelled

Forest Act section and description	Factors accepted as modelled	
8(8)(a)(i) Composition of the forest and its	Total area within the Pacific TSA	
expected rate of growth	Non-forest, non-productive forest, non- commercial brush	
	Parks and protected areas	
	Ungulate winter ranges	
	Recreation reductions	
	Riparian reserve and management zones	
	Wildlife tree patches	
	Site productivity assignments	
	Aggregation procedures	
	Natural stand yields	
8(8)(a)(ii) Expected time that it will take the forest to become re-established following denudation	Backlog and current non-stocked areas	
8(8)(a)(iii) Silvicultural treatments to be applied	Silviculture systems	
8(8)(a)(iv) Standard of timber utilization and allowance for decay, waste, and breakage	Decay, waste and breakage for unmanaged stands Timber utilization	
8(8)(a)(v) Constraints on the amount of timber	Objectives for adjacent cutblock green-up	
produced by use of the area for purposes other	Objectives for watersheds	
than timber production	Objectives for stand level biodiversity	
8(8)(b) The short and long term implications to	Alternative rates of harvest	
British Columbia of alternative rates of timber harvesting from the area	Cumulative effects	

Section 8 (8) In determining an allowable annual cut under this section the chief forester, despite anything to the contrary in an agreement listed in section 12, must consider

- (a) the rate of timber production that may be sustained on the area, taking into account
 - (i) the composition of the forest and its expected rate of growth on the area:

Land base contributing to timber harvesting

- general comments

The timber harvesting land base (THLB) is an estimate of the land where timber harvesting is considered both available and economically feasible, given the objectives for all relevant forest values, existing timber quality, market values and applicable technology. It is a strategic-level estimate developed specifically for the timber supply analysis and, as such, could include some areas that may never be harvested or could exclude some areas that may be harvested.

The total area of the non-GBR part of the Pacific TSA is 641 436 hectares. Of this total area, 90 622 hectares are deemed to be available as THLB after deductions are applied for factors noted in Table 1 above and in factors discussed below

As part of the process used to define the THLB, a series of deductions was made from the Crown forest management land base. These deductions account for economic or ecological factors that reduce the forest area available for harvesting. In reviewing these deductions, I am aware that some areas may have more than one classification. To ensure accuracy in defining the THLB, care has been taken to avoid any potential double-counting associated with overlapping objectives. Hence, a specific deduction for a given factor in the analysis or in this document does not necessarily reflect the total area with that classification, as some portion of it may have been deducted earlier under another classification.

For this determination, I accept that the approach used to determine the THLB for the Pacific TSA base case was appropriate.

- existing and future roads, trails and landings

In the derivation of the THLB, areas are excluded to account for access structures (i.e., roads) that will never regenerate forest. Separate estimates are made to account for existing roads and for future roads.

The landbase of the Pacific TSA has a varied operational history, as the blocks that comprise the TSA originated from several TFLs that were held by several different licensees. While preparing the information for the analysis, roads were classified into several broad types (i.e., highway, mainline, branch and spur) and staff from each BCTS business area provided an average road width for each road type within their business area. The line work for these existing roads was mapped and buffered by these average widths to create a single road map layer, and the area occupied by roads was deducted from the forested area during the derivation of the THLB. The net area reduction for existing roads after accounting for overlaps with other exclusions was 3831 hectares.

To account for future roads, a network of the roads expected to be required to access the unroaded parts of the TSA was generated by BCTS operations staff. Any existing roads that had been semi-deactivated (and not accounted for as existing roads) were also included in this network. Permanently deactivated roads were included on a case-by-case basis following an evaluation of whether a deactivated road was on unstable or slide-prone terrain or in a location where upgrading would not be possible under current practice regulations. BCTS stated that a general assumption applied by their operations staff was that if an area was roaded once, it could be roaded again. No reduction was applied to account for future spur roads as it was assumed that the area of in-block roads will remain constant over time as existing spur roads are reforested, and new ones are built.

The same widths were applied to future road types as for existing roads. The total reduction applied to account for expected future roads was 863 hectares.

Western Forest Products (WFP) and International Forest Products (Interfor) commented on the data package that "there is significant evidence, including recent use of LiDAR datasets that support the premise that trees grow on roads such that at rotation age the road is indistinguishable from the rest of the land base." Both companies requested that the

assumptions for future road netdowns be revisited to re-determine what the perpetual amount for road netdown should be over time.

In September 2016, Interfor provided me with a draft report titled *Using LiDAR and orthophotos to quantify forest regeneration* prepared by FPInnovations (2016). This report provides estimates of the regeneration productivity surrounding older active and non-active roads in the Elk Bay area of the Strathcona TSA using information derived from LiDAR and orthophotos. The results indicate that when hardwood species are not considered merchantable—as they were in the Pacific TSA base case—the average road width loss is 5.6 metres for active roads and 6.3 metres for non-active roads. By comparison, the average road width loss for non-mainline roads assumed in the Pacific TSA base case was about 10 metres.

WFP and Interfor also commented that significant area in the TSA is assumed to be without roads, and that some existing older roads may have been omitted in the analysis. BCTS states they are confident that the roads have been thoroughly reviewed by operations staff and the estimates are based upon the best available and most current knowledge. In response to the input from the two companies, BCTS reviewed specific examples identified in the comments and in each case found that either the actual road networks used in the base case provided coverage over the area in question or that terrain issues presented significant obstacles to road construction.

In April 2017, I flew over portions of the TSA located on northern Vancouver Island and islands along the Johnstone Strait in order to further inform my assessment of the base case and base case assumptions. At that time, I noted a small number of areas where existing roads could be extended beyond what was assumed in the base case, potentially enabling conventional harvesting operations for stands in areas assumed to helicopter operable.

Having reviewed the information available regarding estimates for both existing and future roads, I have made the following conclusions. I am aware that the preliminary findings from the FPInnovations 2016 report support the premise that trees grow on roads, thus decreasing the lost productive forest area over time. However, I note that this growth is generally insignificant on maintained mainline roads and it is also uncertain to what degree trees growing on roads will meet requirements for merchantable timber when the roaded area is harvested in the future. Despite the uncertainty, I agree that there is evidence to support the premise that an amount of merchantable tree growth occurs on roadways, which suggests an unquantified underestimation of mid- to long-term timber supply in the base case projection, expected to be small as there is uncertainty as to what extent this growth will contribute to the future timber supply.

In addition, I believe that the future road network assumed in the base case has potentially been underestimated. Although the implications of this underestimation are significantly greater with respect to the economic operability (which I will discuss in the next section), I note it also has a small bearing on the THLB reduction applied for future roads.

Considering the net impact of the above two alterations from the base case assumptions with respect to roads, it is my assessment that timber supply has likely been underestimated by a small, unquantified amount in the mid term and potentially into the long term. I will discuss my consideration of this further in "**Reasons for Decision**".

I believe that further work using LiDAR or other methodologies would be beneficial to improve the estimates for road widths and longer term loss of growing space for merchantable trees along roads in the Pacific TSA, and I have included instructions on this under "Implementation".

- inaccessible areas

The ability of harvesting operations to access areas using the existing or future road network is a key consideration in the determining the amount of accessible-conventional, accessible-helicopter and inaccessible area in the TSA.

For the analysis, BCTS determined the area within the TSA that could be accessed from existing and future roads by extending a buffer area out from each existing and future road. The buffer distance was equal to the anticipated yarding distance which varied by supply block based on local terrain conditions and past practices. For supply blocks with more rugged terrain, the assumed yarding distance was 200 metres. In supply blocks with less mountainous terrain, the assumed yarding distance was 300 metres.

BCTS determined the area that could be accessed using helicopter harvesting systems (either land-based or water-based) by buffering all roads and coastlines by an assumed helicopter yarding distance of 2000 metres. Areas located within this buffer zone that were not already within the road-accessible buffer zone were classified as helicopter-accessible. In the base case, all area that is located more than 2000 metres from a road or the coastline was considered inaccessible.

The mapped road network was reviewed by BCTS operations staff and corrections were made to the classification of some areas based on knowledge of local conditions.

The total area assumed to be inaccessible in the TSA was 240 413 hectares. The majority of this inaccessible area is in blocks within the TSK Business Area.

The Coast Forest Products Association (CFPA) and Interfor commented that the BCTS road network used for the analysis lacked sufficient detail as to the location of secondary roads. As well, they noted that there is evidence where primary roads could be extended to access more conventional volume, and that permanently deactivated roads were not considered in the road plan. CFPA also suggested the assumed road yarding distance for conventional harvesting be revised to 400 metres—a value they suggested was a reasonable surrogate to adjusting the road plan in order to address the apparent lack of secondary roads.

In response to these comments, BCTS staff note that secondary and spur roads were included in the road network only where operations staff deemed them critical to the determination of the helicopter and conventional split in the land base.

Interfor also commented that a significant amount of land may have been unnecessarily excluded due to the yarding distance assumed for conventional harvest areas, stating that "areas of steep slope should not be a criterion for constraining yarding distance". BCTS staff noted that their initial assumption of using 300 metres for all supply blocks was revised to 200 metres in some areas to reflect past harvesting practices.

I have considered the information regarding the classification of inaccessible areas in the Pacific TSA presented by BCTS together with the comments received during the public review. As noted under "existing and future roads", permanently deactivated roads were

included on a case-by-case basis, in consideration of whether the road was on unstable or slide-prone terrain or in a location where upgrading was not possible. Overall, I find the methodology and assumptions applied by BCTS for classifying the inaccessible land base to be reasonable, and I am aware it included reviews by BCTS operations staff. However, I agree with comments suggesting that some uncertainty exists with respect to the projected future road coverage, particularly in areas of close proximity to deactivated roads or with potentially unstable terrain. As I noted previously, I observed some areas during my overflight of the TSA where it appeared future roads could be extended further than was assumed in the base case.

The extent of the future road network affects the distinction between the conventionally accessible and helicopter accessible land base, and thus contains implications for the economic operability assessment. Based on my review of the analysis methods, the comments received and observations made in the TSA, I conclude that the inaccessible land base may be overstated in the base case, although to an extent that is not certain. I will discuss my consideration of this in combination with other factors in my "Reasons for Decision".

- economic operability

In 2015, Forest Ecosystem Solutions Ltd., on behalf of BCTS, completed an Economic Operability Assessment (EOA) for the Pacific TSA. This was a strategic, landscape-level analysis that involved assessing the net financial value (defined as the value of the timber minus the delivered wood cost) for each available stand in the TSA.

The assessment was applied independently to the road-accessible and helicopter-accessible parts of the TSA. Areas that were unlogged and road-accessible were classified as suitable for conventional harvest. These areas were then further classified as either cable-based conventional harvest or ground-based conventional harvest, depending on slope condition and proximity to roads. Generally, if the slope was less than or equal to 40 percent and any part of the area was within 20 metres from the nearest road, the harvest method was classified as ground-based conventional. Otherwise the area was considered cable-based. All helicopter-accessible areas were classified as suitable for helicopter harvesting.

BCTS operations staff reviewed the harvest system classification and in some cases made adjustments to the classification, after considering local area size and terrain conditions.

The harvesting cost (per cubic metre) for each stand in conventional (subdivided as cable or ground) and helicopter harvestable areas were estimated based on information gathered for a report, *Licensee Benchmark Logging Cost Project* (2015), produced by Price Huber & Associates Inc. This report estimates logging costs, which included all costs from tree-falling to delivery, including silviculture, engineering costs and brokerage fees. Estimates were derived from a survey of timber sale licensees across the TSK Business area and in other parts of the TSA. Timber value was calculated for each stand based on its species distribution, estimated grade distribution and historical Vancouver Log Market (VLM) prices for the period from 2005 to 2014. The average log price in this period was assumed for stands in the conventional harvest area and the highest historic log prices were applied to stands in the helicopter accessible area. Log grade distributions for major tree species were derived from scale data collected in the Pacific TSA over the period from 2005 to 2014. The scale data only included old-growth timber as BCTS reported that information on second-growth timber was insufficient. The value for species—except for cedar and cypress—included an export

premium that was based on the proportion of exported volume from the Pacific TSA in the period 2008 to 2014 and an average export premium of \$30 per cubic metre.

Profit before road building costs was calculated for each stand by subtracting estimated harvest cost—before road building—from estimated timber value. Each proposed road was then assessed as to whether the total profit from the conventional harvestable stands that it was assumed to access would cover the road construction costs. Stands accessed from existing and deactivated roads (with some exceptions in the TSK Business Area) were considered economic. All profitable stands accessed by existing and deactivated roads and by profitable proposed roads were deemed to be economically operable. In the conventional harvest area, previously harvested stands less than 50 years old were considered economic regardless of net value, and in the helicopter accessible area, previously-harvested stands less than 50 years old and with at least 30 percent Douglas-fir, western redcedar or cypress (yellow cedar) were considered economic regardless of net value.

Once road costs were covered, the economic operable land base was expanded through a modelling exercise that sought to find the largest profitable land base that could be achieved by combining marginally-unprofitable stands with a profitable stand (known as "blending"). This blending of stands was done within supply block groups, called "woodsheds", to reflect harvest planning practices used in current operations. Blending was also done separately for helicopter and conventional stands, (i.e., there was no blending of cut blocks between conventional harvest areas and helicopter harvest areas). Results were reviewed by BCTS operations staff and changes were made to improve alignment with local knowledge and experience.

The result of this EOA was a spatial layer identifying areas of the accessible land base that were deemed economic for harvesting. The remaining uneconomic area, which covered 122 094 hectares, was excluded during the derivation of the THLB in the base case.

The result of the EOA has significant implications for the size of the THLB and therefore, the projected available timber supply for the Pacific TSA. For this reason, several sensitivity analyses were completed to assess the implications of altering various assumptions in the EOA.

The first sensitivity analysis was conducted to assess the effects of alternative VLM log price scenarios and alternative accessibility assumptions. Application of high historic prices, in place of average prices, increased the size of the THLB by 5 percent—with the increase occurring entirely within the conventional land base. A forecast showed that, with the above changes, harvest levels could be increased by 8 percent in the short term and 5 percent in the long term, relative to the base case forecast.

A second sensitivity analysis considered all conventional accessible areas to be economically operable. This change increased the THLB by 7.5 percent, with most of the increase occurring in the TSK Business Area. The larger THLB allowed harvest levels in the forecast to be increased by 11 percent in the short term and 7 percent in the long term, relative to the base case. All of the increase in the short term and approximately 80 percent of the increase over the long term occurred in the TSK Business Area.

A third sensitivity analysis assessed the impact if all physically accessible harvest areas across all business areas were economically operable. This change increased the THLB by 65

percent with most of the increase occurring in the helicopter land base, of which two-thirds was in the TSK Business Area. The larger THLB allowed harvest levels in the forecast to be increased by 70 percent in the short term and 65 percent in the long term, relative to the base case. In the short term, over 80 percent of the increased harvest was from the TSK business area and mostly in the helicopter accessible areas. In the long term, additional volume was also harvested from the TSG Business Area, though a lesser amount than from the TSK Business Area.

Finally, a fourth sensitivity analysis was generated which considered all physically accessible harvest areas across the TST and TSG business areas to be economically operable, while in the TSK business area only the base case THLB was considered operable. This configuration increased the size of the THLB by almost 19 percent. The short-term harvest forecast level increased by 115 000 cubic metres, or 16.7 percent, and the long-term harvest level increased by 103 000 cubic metres. All of the additional volume in the short term was from helicopter-operable areas, mostly in the TSG Business Area. In the long term, additional volume was also obtained from the TST Business Area.

Numerous comments about the EOA were received from Interfor, WFP and CFPA. In summary, these comments suggested that the projected road network, harvesting costs and timber value estimates applied in the EOA resulted in the excessive exclusion of land from the THLB. They suggested that the EOA results are contrary to experience, expectation and standards of operators in several other coastal management units.

With respect to the road network, Interfor, WFP and CFPA all expressed concern that the BCTS proposed road network, which they view as a primary driver in the EOA, omitted some existing roads, lacked sufficient secondary roads or did not project new roads in areas they believe were roadable, which resulted in a significant area of the TSA being left unroaded over the harvest forecast period. In their written responses, the companies pointed to three places in particular where this occurred—in supply blocks 11, 19 and 29.

As discussed earlier under "existing and future roads, trails and landings" and "inaccessible areas", BCTS responded to the concerns raised about projected roads stating that they are confident that the projected road network, which was thoroughly reviewed by BCTS operations staff, reflects the best available and most current knowledge.

BCTS also reviewed the examples identified in the industry response letters and in each case found that the actual road networks provided coverage over the area in question or that terrain issues presented significant obstacles to road construction. In the Block 11 example (Harbledown Island), BCTS noted that the excluded area was deemed to be roadable and assessed as conventional harvest area but was excluded based on the cost-value analysis. In the Block 19 example (Kaikash), BCTS indicated that area is challenging in terms of its capacity to be roaded and that the area described is very steep in the upper reaches and the roads that access the top bench of the block cannot be extended (due to steep terrain) down the sidehill, and further that access from the ocean was not viable due to terrain issues and visual objectives. In the Block 29 example, BCTS responded that the economic operability assessment included all previously logged blocks as economic except in the case that they are located in class V terrain. BCTS reported that the blocks identified in the industry letter are located in class V terrain.

With respect to harvesting costs, Interfor, WFP and the CFPA all expressed concern that cost estimates derived from timber sale licences as reported by Price Huber & Associates Inc., are not necessarily applicable for determining economic operability. They commented "While it may be useful to identify what areas may be deemed uneconomical due to current BCTS policy we would suggest excluding these areas from the timber supply is not an appropriate course of action as the ability to replace this lost timber will be extremely difficult." The industry commenters also considered the costs used in the EOA, particularly the helicopter phase cost, to be significantly higher than costs faced by licensees in other areas of the coast. They also suggested some costs applied such as log brokerage fees and remote operator additive fees should not have been applied.

BCTS replied that the cost survey was completed by the independent expert, who reviewed costs associated with average efficient BCTS licensee (ranging from small operators to major licensee bidders). Both log brokerage fees and the remote-location cost additive were included in the cost structure. Work was completed to ensure the costs reflect average BCTS timber sales with outputs verified by operations staff and cost/value changes tested through sensitivity analysis.

With respect to timber value, the industry letter suggested that, for the base case forecast, high market prices should have been applied to both conventional and helicopter harvest area (it was applied only to the helicopter area in the base case). They reasoned that since high prices are achieved during the market cycle, it does not make sense to exclude areas based on average pricing assumptions. They stated that "the variability in log values is too great to start excluding stands that fall within the variation of historic pricing". Industry also suggested that the export premium assumed in the EOA should have been higher.

BCTS replied that an assumed timber supply based on high market prices would only be achievable during the relatively brief period when markets were at the top of the multi-year price cycle. The EOA was intended to capture what is generally harvested in average market conditions. They replied that export values used were reviewed with the Ministry experts and the best available information was reviewed to determine export trends.

The CFPA suggested that an industry scenario be generated to examine the timber supply under the following modified assumptions: apply the THLB created before the *Forestry Revitalization Act* (Bill 28, 2003), apply a minimum harvest age criteria based on 95 percent of mean annual increment (MAI) for stands and remove minimum entry by block criteria and report on harvest by geographic area, making note of harvest patterns by ocular assessment—20-year plan approach.

In response, BCTS provided me with a memo dated February 1, 2017, which describes a timber supply scenario which closely matches the CFPA request. In the scenario, the economically operable land base was increased by considering all accessible areas to be economic, harvestable ages were restricted to greater than the age at which stands achieve 95 percent MAI and woodshed constraints were removed. The changed assumptions increased the THLB by nearly 70 percent, with most of the increase occurring in the TSK Business Area. The larger THLB allowed harvest levels in the forecast to increase by 70 percent in the short term and 65 percent in the long term, relative to the base case. I note that the projected supply under this scenario is very similar to the "all economically operable scenario"

presented in Section 5.5.3 of the September 2016 analysis report for the Pacific TSA, and described above.

The Truck Loggers Association, in a letter to me, requested that I consider that the market may find solutions to access parts of the THLB that are currently regarded by BCTS as uneconomic, should those areas be presented in a manner other than conventional timber sales through BCTS.

The Catalyst Paper Corporation, in a letter to the Deputy Minister, described how the company in the past has competed effectively due, in part, to affordable power and fibre supplies. However, the company now sees these historic advantages being eroded as the provincial timber supply declines. They believe the situation warrants a thorough analysis of the economic impacts of a significant reduction of THLB in the region.

I have considered the information presented regarding the EOA, and the resulting assumed economically operable land base in the Pacific TSA. My review of the methods and assumptions applied by BCTS in the EOA leads me to conclude that it provides a credible assessment of the economically viable timber supply available to BCTS within the Pacific TSA given current objectives and procedures of the timber sales programs carried out in the TSA. However, I acknowledge the concerns and comments provided in the extensive public input and discussed these concerns in detail with Ministry staff. During my April 2017 overflight of portions of the TSA, I noted the potential for a more extensive future road network than assumed in the base case, which has implications for the operable land base assumed to be economic in the TSA.

In consideration of other coastal industry input, I agree with the assessment of industry that the costs incurred by an average efficient timber sales operator in the TSA may be higher than those of some major coastal companies operating outside of the Pacific TSA. I also agree with comments that the exclusion of marginally-uneconomic stands in the EOA, which applied average market prices for conventional harvest areas, may underestimate the operable timber supply if log values exceed the average historic value over the last 10 years. I acknowledge the uncertainty with respect to the assumed grade distribution of second-growth stands, which was based on old-growth grades. However, I believe the effect of this is likely a modest overestimation of the value of existing second growth stands established before 1965.

In weighing the above points, I conclude that there is a low- to moderate-level of uncertainty with respect to the size of the operable land base determined in the EOA, within both the conventionally-harvestable and helicopter-harvestable areas. This uncertainty originates from multiple factors, though I believe the harvesting cost and log value assumptions to be the most significant. Given this uncertainty, my determination must, to the best degree possible, guard against making an unnecessary reduction at the current time to the AAC. Should improvements in operator efficiency or market conditions occur, or government policy change (that increases the likelihood of harvesting in stands assessed in the analysis as not economically operable), the timber supply would prove to be greater over time than assumed in the base case.

At the same time, my determination must also ensure that any adjustment made to the base case timber supply to account for future harvesting in stands that were excluded from the THLB as not-economic does not lead to an unsustainable concentration of harvesting in the more economic portions of the TSA. One means for achieving this is to allow for an AAC

above the base case harvest level, at a level that promotes activity in potentially-economic stands located outside the base case THLB, while also specifying an AAC partition that does not permit the portion of AAC attributed to potentially-economic stands located outside the THLB to be harvested from stands within the THLB. I discuss my considerations of this further under "Partitions" and in my "Reasons for Decision".

- deciduous-leading stands and non-merchantable timber

Deciduous-leading stands in most of the supply blocks of the Pacific TSA are considered non-merchantable in current practice. Deciduous-leading stands occupy approximately three percent of the land base of the TSA. All deciduous-leading stands were excluded during the delineation of the THLB, for a total of 2860 hectares after other reductions.

As well, coniferous-leading stands below a minimum volume threshold and below a minimum height are considered non-merchantable. In the base case, stands in the TSK business area that did not achieve a minimum volume of 300 cubic metres per hectare and a minimum height of 19.5 metres by 200 years of age were excluded in the derivation of the THLB. For the TSG and TST business areas, the requirement was 300 cubic metres per hectare by age 150 years. A total of 36 211 hectares of coniferous-leading stands that did not meet these minimum thresholds were excluded from the THLB after other reductions.

Input from the CFPA noted that the exclusion criteria for coniferous-leading stands seemed excessive and asked if any work was done to determine if the 300 cubic metres per hectare limit was appropriate, such as assessing if there is any harvest history in these stands that suggest issues with the accuracy of the inventory data. BCTS staff responded that the criteria were comparable to those for adjacent TSAs, and historically, there is very little harvest in older stands with volumes less than 300 cubic metres per hectare.

Having considered the information about deciduous stand exclusions, I note that alder can be included in timber sales in combination with other species and harvest of alder could represent an opportunity for BCTS. BCTS reported that approximately 700 hectares is occupied by alder-leading stands in the TSA. Should it be possible for these areas to contribute to timber supply, this represents an opportunity in the future for an increase to the size of the THLB. However, as current practice does not include significant harvest of alder, I make no adjustments on this account for this determination. I encourage BCTS to review the opportunities for this volume to be included in timber sales and monitor the harvest of alder over the term of this determination.

With respect to the minimum volume threshold applied to exclude low-volume coniferous-leading stands, I am aware that a threshold of 350 cubic metres per hectare has been applied in other coastal management units and harvesting has been observed at these levels; however, the harvest that has occurred close to this threshold has been seen primarily in spaced and managed Douglas-fir stands. Current practices in the Pacific TSA have tended to be harvested well above 300 cubic metres per hectare, with most harvest averaging reported scaled volumes of 500 cubic metres per hectare. Acknowledging that scaled volumes cannot be directly correlated to inventory volumes, the values nonetheless suggest that harvest in lower volume stands is not current practice. As a result, I accept that the minimum volume thresholds used by BCTS to exclude non-merchantable coniferous stands are reasonable and supported by current practice, and make no adjustments on this account.

- unstable terrain

Terrain stability mapping is available for the majority of the Pacific TSA and was used to identify areas of unstable or potentially unstable terrain. Where no terrain stability mapping was available, environmentally sensitive area (ESA) mapping was used.

Terrain stability class "V" (unstable terrain) and ESA class "ES1" areas were entirely removed in the derivation of the THLB. For terrain stability class "IV" (potentially unstable terrain) and ESA class "ES2" areas, a 50 percent reduction was applied in the TSG and TST business areas, and a 20 percent reduction in the TSK business area. BCTS staff indicated that these assumptions reflect current operational practices. A total of 58 083 hectares were excluded in the derivation of the THLB to account for unstable and potentially unstable terrain.

Interfor provided input expressing concern that the exclusions also included areas of class V terrain that had previously been harvested. The company suggested that if an area had been harvested in the past it would likely be operable again in the future.

I note that for other coastal management units, the land base exclusion applied to class V terrain typically allows between 5 percent and 15 percent of these areas to contribute to the THLB. This allowance for partial contribution of class V terrain is generally done to account for the proportion of class V terrain that is expected to support timber harvesting. During my overview flight of portions of the Pacific TSA in the TSG and TST business areas, I observed that there are also areas of future logging potential in the unharvested portion of class V terrain.

BCTS reported that there are approximately 950 hectares of previously-harvested class V terrain in the TSA, with almost all of this area occurring in the TSG and TST business areas. BCTS staff confirmed that very little class V terrain in the TSK business area has been harvested, despite this area having a relatively high proportion of class V terrain in comparison with the southern business areas.

FAIB staff advised me that if 10 percent of the unharvested class V terrain were to be considered operable in the TST and TSG business areas, the THLB in these business areas would be increased by about 0.8 percent.

Given the amount of harvesting that has occurred in class V terrain in the TST and TSG business areas and my observations during the TSA overflight, I consider that it is reasonable to assume that all of the previously harvested area of class V terrain as well as some proportion of unharvested class V terrain could contribute to the timber supply, in the TST and TSG business areas only. Given the experience in other coastal areas, it is reasonable to assume that 10 percent of unharvested class V areas would be suitable for harvesting.

As such, I consider that long-term timber supply in the TST and TSG business areas has been underestimated in the base case by one percent through the exclusion of previously harvested class V terrain. In addition, the base case assumption that all class V terrain areas in the TST and TSG business areas is non-harvestable, rather than 10 percent harvestable, has resulted in the short-term and long-term timber supply in the TST and TSG business areas being underestimated by 0.8 percent. I will discuss these two adjustments further in "**Reasons for Decision**".

- species at risk

In the Pacific TSA, wildlife habitat areas (WHAs) have been legally established for Northern Goshawk, Red-Legged Frog and Marbled Murrelet. There are some additional proposed WHAs for these species as well as other species such as grizzly bear.

All areas legally established as WHAs were excluded in the derivation of the THLB. As well, the area in proposed WHAs that met the requirements of the Forest Planning and Practices Regulation (FPPR) Section 7 Species at Risk Notice were excluded from the THLB.

The TSA also includes some reserve areas for Marbled Murrelet that have been designated in addition to the WHAs described above. A total of 5253 hectares have been set aside in the TSG business area to meet the intent of the FPPR Section 7 Species at Risk Notice. These areas were excluded in the derivation of the THLB.

The total area of WHAs excluded on these accounts was 30 676 hectares. These exclusions reflect current operational practice in the TSA.

Those areas currently in proposed WHAs but not listed in the FPPR Section 7 notice were not excluded in the derivation of the THLB. These areas total 222 hectares and are proposed for Northern Goshawk and Red-Legged Frog.

Additionally for species at risk, the Federal Draft Recovery Strategy for Northern Goshawk provides direction for managing the species. For the timber supply analysis, known nests located within the TSA were identified spatially. For the known nests that did not overlap an existing area already excluded as a WHA, the nest-site habitat were delimited by a 200-metre buffer, for a total of 80 hectares. As this additional habitat area is not legally established, it was not excluded from the THLB in the base case.

Additional guidance from the Coast Forest Conservation Initiative (CFCI) goshawk protocol recommends management practices for goshawk nest sites, including a range of management options for nest reserves which vary by the assessed risk of territory abandonment. Goshawk Management Area (GMA) sizes range from less than 25 hectares, associated with very high-risk of abandonment, to 200 hectares, considered very low risk. A GMA size associated with moderate risk is listed at between 40 and 70 hectares in size. Applying a level of habitat protection at the midpoint of this range to the known nest sites identified in the TSA would place approximately 400 hectares of THLB within GMAs.

BCTS staff are aware of one peregrine falcon nest within the TSA. Operationally, such nests are protected with a 200-metre reserve buffer, equating to a 12 hectare land base exclusion. This area was not excluded from the THLB.

I have considered the reductions applied in the base case to account for the management of wildlife, including species at risk, in the Pacific TSA. I am satisfied that the established WHAs as well as those proposed WHAs meeting the intent of the FPPR Section 7 Species at Risk Notice were appropriately excluded from the THLB in the base case. With respect to the proposed WHAs which are not included in the Section 7 order, I am satisfied that these areas remain in the THLB until such time as they are legally established, noting that their inclusion in the THLB for the purposes of timber supply analysis does not dictate the management of the areas on the land base.

In addition, I am satisfied that the reserves for Marbled Murrelet were appropriately accounted for in the base case. I am aware that there is potential for 400 hectares of THLB to be set aside for the management of goshawk nest sites and further 12 hectares of THLB to be set aside for management of peregrine falcon habitat, and these species are both species at risk and the direction provided regarding the management of the areas has received some level of approval by government or reflect current operational practice. As a result, I will take the timber supply implications of this additional reduction in the size of the THLB into account in my determination, as discussed under "Reasons for Decision".

- cultural heritage resource reductions

Archaeological values, which are managed under the *Heritage Conservation Act*, and archaeological sites are physical evidence of how and where people lived in the past.

There are 597 known archaeological sites within the Pacific TSA, covering a total of 748 hectares. These areas are located within, but not limited to, the vicinity of the Douglas Channel, Gardner Canal, Kowesas River, Chief Mathews Bay, Amos Passage, Kindala Arm, and Dala River. To reflect current operational practices of not harvesting in these areas, in the base case the known sites were excluded during the derivation of the THLB.

The *Forest Act* defines cultural heritage resources (CHR) as an object, site or location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an aboriginal people. CHRs are managed through FRPA. CHRs include traditional use features that are associated with past and current aboriginal use, and include hunting grounds, fishing areas, travel corridors and camp/seasonal village sites. These are predominately found along major water courses although they can be found inland. Other traditional use sites of importance to First Nations can include spiritual sites, battle sites, gathering sites for berries or medicinal plants, and burial sites.

The Vancouver Island Land Use Plan (VILUP) outlines objectives for Cultural Special Management Zones (SMZs) and states that consultation with First Nations is required prior to harvesting activity in Cultural SMZs. The Cultural SMZs overlap with 652 hectares of THLB in the Pacific TSA. In the base case, to reflect that harvesting activity may occur in these areas, Cultural SMZs were not excluded from the THLB, and no specific management regime was modelled.

District staff noted that BCTS manages for cultural heritage values by placing them in reserves that are co-located, where possible, with reserves for other values.

The Haisla Nation provided a copy of the report, *The Haisla Resource and Culturally Significant Sites within the NCLRMP, KLRMP and CCLRM* which identifies several culturally significant sites (archaeological, traditional, and ceremonial) within the Pacific TSA. BCTS operations staff for the TSK business area reported that they refer to this document when considering development in an area to inform on Haisla's interests in the area. Other sources of information when available are also used by BCTS to identify archaeological sites and interests. BCTS staff noted that many areas with culturally significant sites fall outside the THLB, and that often the interest can be managed through landscape-level or stand-level objectives. Ministry staff noted that many of the Haisla cultural areas are located near or overlapping with known archaeological areas already excluded from the THLB.

First Nations require access to large cultural cedar (LCC) on both the THLB and the non-harvestable land base on a continual basis, and a sustainable supply maintained into the future. The Nanwakolas First Nations requested information about how much western redcedar (cedar) and yellow cedar (cypress) were harvested over time in the base case forecast. BCTS provided a summary of the volume of cedar and cypress by age class harvested in the base case forecast and retained on the land base over time. At a meeting with FAIB staff, Nanwakolas First Nations voiced their expectation that BCTS will work with them in the development and implementation of a strategy to identify and manage the supply of LCC in the Pacific TSA. The Nanwakolas First Nations also referenced the Province's commitment made during government-to-government discussions on the Great Bear Rainforest, to providing an annual summary report of the Harvest Billing System (HBS) database regarding cedar harvest to Nanwakolas. Nanwakolas First Nations intend to use this information to monitor harvest rates of cedar within their territory.

Staff indicated that many of the redcedar and cypress stands on the THLB are projected to be harvested and regenerated to younger managed stands with components of redcedar and/or cypress by the fifth decade of the harvest forecast. Overall, across the TSA land base, a significantly larger proportion of old redcedar and cypress stands is projected to be maintained over time much of which falls outside the THLB.

I have reviewed the information regarding cultural heritage resources provided by BCTS and district staff. I note that government has a joint decision making protocol with the Nanwakolas First Nations for areas within their asserted traditional territory. I discuss my considerations of this further under "Nanwakolas First Nations Decision Making" later in this document.

In the case of known archaeological sites, I accept that amount of area reserved under current management practices for these sites was adequately accounted for in the base case. I am aware that no explicit reductions were applied to account for cultural resources outside of known archaeological sites. While I accept that the area that will be needed to protect sites identified in the future will largely overlap the non-THLB or overlap areas reserved for other resource values, I also expect that given the extensive First Nations history in the area of the TSA, additional THLB reductions will be required in order to effectively manage for these resource values. As a result, I will take into account a small unquantified overestimation of timber supply in the mid to long term on this account, and discuss this further under "Reasons for Decision".

I would like to acknowledge the work done by the Haisla to improve the available information about their interests in the TSA land base, and I encourage the sharing of information to continue as it supports the ability to look after these resource values during operational planning. I expect BCTS and district staff continue to work with all First Nations to better locate the resources on the land base so that they can be explicitly accounted for in future timber supply reviews.

With regard to the supply of LCC over time, it seems that most of the LCC requirements for First Nations into the future can be met outside of the THLB. However, I expect First Nations, BCTS and district staff to continue to monitor the available supply and the extent to which it is adequately met, such that any necessary adjustments to the assumptions can be factored into future timber supply analyses.

Existing forest inventory

- forest inventory

The current forest inventory in the Pacific TSA is a combination of data from a newer Vegetation Resource Inventory (VRI), a Forest Cover (FC1) inventory and several non-standard TFL inventories. Each of the data sources was converted into a VRI format and projected to 2014 by FAIB staff. For the analysis, the data were combined into one inventory file, corrected for known data issues, and then projected to 2016 for the start of the forecast period.

FAIB staff note that new VRI information is expected to be complete for many of the blocks of the TSA between 2018 and 2020. In the interim, they note the inventory information used in the analysis is considered to be the best available information for this determination.

I have reviewed the information about the forest cover inventory provided by BCTS and FAIB staff, and I accept that the inventory provides a reliable assessment of the current forest condition for the purpose of this determination. However, I expect FAIB staff to continue with the projected update schedule for the forest inventory information, as the renewal and update of this information is important for timber supply reviews.

- dead potential volume

Inventory information and yield tables do not include volume from dead trees that could potentially be used as sawlogs. To derive estimates of dead-potential volume for coastal TSAs and TFLs, a report *Summary of Dead Potential Volume Estimates for Management Units within the Coast Forest Region* (2006) was completed by FAIB using data obtained from VRI Phase II ground sampling. This report indicates that, for the study area, incremental dead-potential volume ranges from 2.7 percent to 14.3 percent of the green volume for existing stands over 60 years of age. An average calculated for all the coastal TFLs and TSAs for which data is available is 8.6 percent. FAIB staff indicated that these values represent the maximum amount of volume from dead timber that could be harvested.

Data specific to the stands in the Pacific TSA is not available and the possible utilization of dead-potential volume from the TSA has not been assessed. The base case harvest forecast did not include any assumed contribution from dead volume.

I have considered the available information about dead potential volume applicable to the Pacific TSA. I am aware that the potential volume available from dead yet merchantable stems in harvested stands is not accounted for in the timber supply projections. I believe that some portion of this volume in stands is likely economical to harvest, and therefore represents a level of available volume in addition to that projected in the base case. For this determination, I conclude that this potential volume contribution from dead stems represents a small, but unquantified underestimation of short-term timber supply projected in the base case, and I will discuss that further in "**Reasons for Decision**".

Expected rate of growth

- managed stand yields

Stands established after 1965 were considered managed stands in the base case. Stands were grouped together by site index and biogeoclimatic zones and then were further grouped into four different regeneration eras according to the year of establishment, which determined

assumptions applied about spacing, regeneration delay and genetic gain. Yield tables were developed for the stand groupings. Some ingress of natural seedlings was assumed in the yield modelling for all stands.

Stands established between 1966 and 1978 (Era 1) were modelled as naturally regenerated stands using Variable Density Yield Predictor (VDYP), to reflect that despite many of these stands being planted, the species composition resembles naturally regenerated stands.

Stands established between 1979 and 2003 (Era 2) were modelled using the Tree and Stand Simulator (TASS) as having been regenerated through planting, with no genetic gain applied and a regeneration delay of two years. For the TSK Business Area, this era of stand establishment was extended to 2009.

Stands established between 2004 and 2009 (Era 3) in the TST and TSG business areas were modelled using TASS as regenerated through planting, with seedlings of modest genetic worth and a regeneration delay of two years. Stands established after 2009 (Era 4) and those regenerated in the future were modelled as future managed stands, and assumed to be planted and with genetic gains applied to the stands in the TST and TSG business areas only.

BCTS reported that Class A seed (i.e., seed with genetic gain), is used where available in the Pacific TSA. Data from the RESULTS information system was used to determine the proportion of trees planted with genetic gain for stands established between 2004 and 2009, and then a weighted average genetic worth value was calculated for each species. For the stands established after 2009 and into the future, the RESULTS genetic gain and planting data available was assumed to also predict future gains.

Very little data on past incremental silviculture activities such as pruning and spacing in the stands prior to the establishment of the Pacific TSA was available, and thus the generation of the yield curves did not include implications of incremental activities.

FAIB and district staff reviewed the assumptions used to determine managed stand yields and believe they are reasonably reflective of current practice.

Among the assumptions applied in the analysis to reflect current practice was an assessment that retention levels for wildlife tree patches exceed the 7 percent minimum retention required under FPPR for approximately 43 percent of the THLB. Higher levels of stand retention post-harvest has an impact on the growth of regenerating stands due to the shading of regenerating trees from retained trees. As a result, the growth and yield of future stands are expected to be impacted in areas where significant in-block tree retention occurs. A sensitivity analysis conducted to assess potential timber supply implications of the higher than 7 percent retention indicated that long-term timber supply could be reduced by up to 10 percent in the affected portions of the THLB.

The CFPA, Interfor and WFP commented that the dates assumed for the different management eras should be reviewed, given that the Pacific TSA is comprised of stands previously from TFL lands and consequently it has a more advanced managed regeneration history than assumed in the base case. They note that the use of seedlings with genetic gain began before 2003, and a considerable amount of silvicultural activities was conducted during the 1990s. BCTS reported that available data for the TSA was limited on silviculture activities prior to 2003.

Having reviewed the information about the assumptions for managed stand yields, I agree that it is reasonable to assume that some enhanced silviculture activity, including an earlier use of genetically improved seed as it was available, likely occurred on portions of the Pacific TSA land base, given the history of the area in TFLs where such activities were more common. In the same vein, I expect incremental activities such as pruning and spacing also occurred on the land base, and I am aware that the base case forecast did not include assumptions about such activities. I therefore conclude that it is appropriate to take into account a small, unquantified underestimation in the mid-term timber supply presented in the base case, and I discuss this further in "Reasons for Decision".

In addition, I conclude that additional shading resulting from the increased levels of in-block retention on 43 percent of the THLB would be expected to have an impact on the growth of regenerating stands. As such, I accept that there is a small, unquantified overestimation of timber supply in the long term on this account. I will discuss my consideration of these factors in "**Reasons for Decision**".

- operational adjustment factors for managed stands

Operational adjustment factors (OAFs) are applied to managed stand yield curves to reflect average operational growing conditions. OAF 1 is applied to account for yield reductions associated with non-productive areas in stands, uneven spacing of trees, and endemic or random losses. OAF 2 is applied to account for increasing volume losses as stands mature that is attributable to decay, waste, breakage, disease and pest factors. Standard OAF values are 15 percent and 5 percent for OAF 1 and OAF 2, respectively.

Laminated and armillaria root diseases are common in the Pacific TSA and managed Douglasfir stands often exhibit volume losses from these diseases. To reflect these increased volume losses, recommendations to adjust values for OAF 2 for several biogeoclimatic subzones were made by the forest pathologist for the West Coast Region. The pathologist recommendations were to increase OAF 2 from 5 percent to 12.5 percent for all existing managed Douglas-fir stands and to 10 percent for future managed Douglas-fir stands in the biogeoclimatic (BEC) CWH xm1 and CWH xm2 subzones.

To reflect this in the base case, an area-weighted OAF 2 was calculated for the relevant BEC stand grouping, which was comprised of stands in the CWH dm, CWH mm1, CWH xm, CWH xm1 and CWH xm2 biogeoclimatic variants. The resultant OAF 2 values of 6.8 percent for existing managed stand yields and 6.2 percent for future managed stand yields in this BEC group were applied in the base case.

Input received from CFPA, Interfor and WFP commented that the application of the standard OAF 1 and OAF 2 values should be reviewed, suggesting that these values are too high given the fuller site utilization realized in current practice. In response, FAIB staff note that without local field data acquired through the Young Stand Monitoring (YSM) program or similar studies, the default values are considered the best available information, for areas not affected by root disease. FAIB staff state that the base case assumptions represent the best available information, in conjunction with the adjustments applied to the OAF 2 value for the root disease-impacted stands in the specific BEC variants identified.

I have considered the assumptions for OAF applied in the base case. I acknowledge the concerns expressed by forest industry regarding improved site utilization, in particular for

future managed stands, and the possibility that the OAF 1 values overestimate losses as a result. However, in the absence of data specific to the TSA, I accept that the values applied for OAF 1 and OAF 2, in combination with the adjustments to account for root diseases, adequately reflect current conditions in the TSA and represent the best available information.

I expect a YSM project to be conducted in the Pacific TSA in order to assess site occupancy and better quantify appropriate OAF percentages for use in timber supply review, as discussed under "Implementation".

- minimum harvestable age

Minimum harvestable criteria are used in the timber supply model to control when existing and future managed stands become merchantable for harvest. In the base case forecast, the minimum harvestable criteria for stands in all analysis units was set to the age at which each stand was predicted to reach a volume of 300 cubic metres per hectare.

BCTS staff indicate that in practice, most forest stands are harvested at ages older than the assumed minimum harvestable age, due to economic considerations and various constraints on harvest that arise from the management for other forest resource values.

Comments received from Interfor and WFP expressed the opinion that using the volume threshold as the only criteria for determining minimum harvestable ages likely results in a substantial portion of the volume in the base case forecast originating from stands that have not reached culmination age. They further note that setting minimum harvestable age using volume-based criteria alone does not factor in merchantability based on piece size and species. Interfor in its input also noted that the harvest age modelled in the base case was not consistent with current practice or the ages applied in other management units.

WFP also commented that the minimum harvest criteria may result in stands being harvested in the modelling before reaching merchantable size, and well before achieving their maximum mean annual increment (MAI).

Interfor stated that in other management units they noted a mid- to long-term increase in timber supply is possible when stands, managed for density, are harvested close to or after the age at which they reach their maximum mean annual increment. Interfor suggests the analysis should be corrected to ensure managed stand volumes reflect the productive capacity of the site and produce logs of sufficient volume to meet economic criteria.

FAIB staff note that managed stands are not harvested in the base case until the third decade of the forecast and do not contribute the majority of volume until the fourth decade. This is, in part, a result of the application of the relative oldest first harvest rule in the base case (as discussed under "harvest rules and priority"). The timber supply is sensitive to the availability of second growth timber at this critical point in the harvest forecast. In their review of the base case, staff found that some contribution to the mid-term harvest is from stands that have not yet reached MAI. Increasing the ages at which stands are assumed to be available for harvest in the base case to the age at which the stands reach 95 percent of their MAI (i.e., culmination MAI, or CMAI) had the effect of increasing the long-term growing stock and thus increased long-term timber supply. However, increasing the minimum harvestable age in this manner also resulted in a need to reduce the short-term harvest level in order to prevent a decline in the mid-term harvest level. To summarize, the analysis shows that increasing the minimum harvestable age such that stands must reach CMAI before they

are harvested results in a one percent increase in the long-term harvest level and about a 5.8 percent decline in the short-term harvest level.

In light of the information about the minimum harvestable criteria assumed in the base case, my considerations are as follows. I am aware that the 300 cubic metre threshold for stands applied in the base case is not reflective of current operational practice in the TSA. Operationally, as discussed under "harvest rules and priority", a level of harvest is occurring in managed stands but not in stands close to that minimum threshold.

I recognize that it is reasonable to assume that BCTS will continue its current practices, and some portion of the harvest will continue to come from young managed stands, which will result in some portion of older stands reserved to the mid term. Although the base case does not reflect current practices for this factor, I am satisfied from my review of the information that the short- to mid-term timber supply projected by the base case is achievable and I make no adjustments for this determination. However, I caution BCTS to ensure that their operations do not include the harvest of many stands below CMAI so as to not negatively impact long-term timber supply in this TSA. I expect BCTS to monitor harvested stand volumes over the term of this determination so that any adjustments to reflect operational practices can be applied at the next timber supply review.

Section 8 (8) (a) (ii) the expected time that it will take the forest to become re-established on the area following denudation:

No factors considered under this section require additional comment.

Section 8 (8) (a) (iii) silvicultural treatments to be applied to the area:

No factors considered under this section require additional comment.

Section 8 (8) (a) (iv) the standard of timber utilization and the allowance for decay, waste and breakage expected to be applied with respect to timber harvesting on the area:

No factors considered under this section require additional comment.

Section 8 (8) (a) (v) the constraints on the amount of timber produced from the area that reasonably can be expected by use of the area for purposes other than timber production:

Integrated resource management

The Ministry is required under the *Ministry of Forests Act* to manage, protect and conserve the forest and range resources of the Crown and to plan the use of these resources so that the production of timber and forage, the harvesting of timber, the grazing of livestock and the realization of fisheries, wildlife, water, outdoor recreation and other natural resource values are coordinated and integrated. Accordingly, the extent to which integrated resource management (IRM) objectives for various forest resources and values affect timber supply must be considered in AAC determinations.

- higher level plans

The area of the Pacific TSA falls within several higher level plans, including the Vancouver Island Land Use Plan (VILUP) Order, the Great Bear Rainforest (GBR) Land Use Order, the Clayoquot Sound Land Use Order and the Kalum Sustainable Resource Management Plan (SRMP). The base case analysis reflected requirements as stated in the higher level plans. As

noted earlier in this document, for the purposes of this AAC determination, areas of the TSA within the GBR were considered removed from the TSA, were not included in the base case forecast and did not contribute to the TSA timber supply projections.

Input received from the Clayoquot Sound Conservation Alliance commented on the pending inclusion of the Upper Kennedy in a forest stewardship plan (FSP). The input requested that the Upper Kennedy continue to be off limits in industrial activity from BCTS. District staff indicated that the majority of the area in the Upper Kennedy watershed was excluded in the derivation of the THLB for various reasons and the assumed contribution to timber supply from the area is small.

I have considered the input, and note that it is not appropriate for me to speculate on land use decisions that have not yet been undertaken by government, and therefore I cannot assume the Upper Kennedy Watershed does not contribute to the timber supply of the Pacific TSA. However, practices within this area are subject to the requirements of the Clayoquot Sound Land Use Order, which were reflected in the base case, and any FSP or other operational plan developed for the area is expected to reflect those requirements. Should a land use decision be made by government, the implications can be factored into the next timber supply review for the Pacific TSA.

For this determination, I am satisfied that the base case appropriately reflects the intent of the higher level plans that apply to the area, and no adjustments are required.

- scenic areas and visual quality objectives

A visual quality objective (VQO) is a resource management objective established for an area that reflects the desired level of visual quality based on the physical characteristics and social concern for the area. VQOs are managed for on 96 843 hectares of the CFLB in the Pacific TSA.

Guidelines to meet the VQOs include setting a maximum percentage of a specified area that is allowed to be denuded at any one time, and setting a visually effective green-up (VEG) height at which a regenerating stand is perceived by the public to be satisfactorily greened-up. In the timber supply analysis, forest cover objectives were applied that were consistent with the established VQOs. In the base case, the VEG height for each stand was calculated according to standard procedures and the area-weighted average slope class for each visual unit.

Areas designated with Preservation VQOs were excluded in the derivation of the THLB. Areas within Clayoquot Sound have unique objectives of Scenic Class Objectives (SCOs), and these were translated to VQO classifications for the purposes of the analysis.

District staff indicated that the accounting for the management for visual quality in the analysis represents the best available information for the area of the TSA. However, staff also noted that data were not consistently available for all areas of the TSA and some discrepancies were found between different datasets.

I have considered the information regarding the analysis assumptions for the management of visual quality in the TSA and I accept that the assumptions represent an acceptable estimation of operational requirements and practices. In acknowledgement of identified concerns regarding data quality and as described under "**Implementation**", I expect FAIB staff to work with other Ministry staff to determine how to better manage the data required for timber

supply reviews, and develop some recommendations for implementation that ensure all data layers are accurate, updated and maintained as needed.

- landscape level biodiversity

In most of the landscape units within the Pacific TSA, landscape level biodiversity is management through the establishment of Old Growth Management Areas (OGMAs). The legally-established OGMAs within the TSA have been spatially defined and the area reserved from harvest. Several other OGMA areas are considered "non-legal", and these have not yet been legally established but are included in a FPPR Notice stating that they meet the requirements of Section 9 of the Order Establishing Provincial Non-Spatial Old Growth Objectives. Draft OGMAS have been also set aside to meet some non-spatial old growth order requirements

The legal OGMAs within the TSA have been spatially defined and the area reserved from harvest. Several other OGMA areas are considered "non-legal", and these have not yet been legally established but are included in a FPPR Notice stating that they meet the requirements of Section 9 of the Order Establishing Provincial Non-Spatial Old Growth Objectives. Draft OGMAS have been also set aside to meet some non-spatial old growth order requirements.

Current operational practice in the TSA is to consider all of these areas regardless of status as non-harvest areas during operational planning. As a result, in the base case all of the OGMA areas, totalling 43 881 hectares, were excluded from the THLB.

A portion of the Pacific TSA, in the TSK Business Area, falls under the Kalum SRMP. Under this plan, there are five undeveloped watersheds with specific old seral stage targets based on PEM site series. The total of CFLB within the five watersheds (Brim, Hugh, Owyacumish, Wahoo and Wathlsto) is 16 819 hectares. In the base case, targets for old-seral retention were applied by site series for each watershed. Targets were not available under the Kalum SRMP for a few site series; in such cases, a target was applied from a similar site series in another watershed.

Another portion of the Pacific TSA falls within Clayoquot Sound. In this area, landscape level biodiversity was modelled through the application of a 40 percent old seral retention target at the watershed level.

Input received from Interfor questioned the exclusion of the proposed OGMAs from the THLB, as well as the exclusion of the draft OGMAs, noting that both could potentially be replaced with areas in non-economic portions of the land base. BCTS staff responded that the proposed OGMAs were excluded because the OGMAs were drafted to meet the requirements of the Non Spatial Old Growth Order, and the selection of these areas did include consideration of suitable non-contributing land base first to meet the requirements. In addition, BCTS notes that the exclusion of these areas is consistent with how the areas are being managed for in current practice.

Overall, district staff agreed that the assumptions applied in the base case are reflective of current practices in the TSA.

I have reviewed the information regarding the modelling assumptions for landscape level biodiversity in the base case. I am aware that some of the areas excluded from the THLB as OGMAs have not yet been legally established. However, I understand that the process to identify the draft OGMAs considered co-location principles and included an assessment of the

suitability of areas that do not contribute to the timber supply for other reasons. As a result, any potential movement of these currently draft OGMA areas is not expected to result in increased timber supply. I accept that the assumptions applied in the base case reflect the best available information and provide an accurate projection of current management for landscape level biodiversity and I make no adjustments on this account.

- block minimum volume constraints

Many of the supply blocks of the Pacific TSA are geographically isolated from one another, and a timber sale licence is typically issued to apply to volume in one block only. Each independent harvesting operation must be economically viable and meet mobilization and demobilization costs. As a result, any one harvesting operation requires a minimum harvest volume.

In order to reflect these constraints in the harvest forecast, a five-year harvest volume constraint was applied in the base case to select supply blocks or supply block groupings. The volume requirements were set based on historic timber supply licence size for each block, and primarily were applied to the smaller blocks of the TSA.

A sensitivity analysis in which the volume requirement was relaxed showed that this constraint did not impact timber supply.

Input was received from Interfor and the CFPA regarding the application of the minimum volume requirements by block groupings. They noted that the geographic connectivity and spatial adjacency within the TSA units do not support the need for minimum harvest volumes, in particular in areas where there are operations occurring in adjacent management units that could assist with ensuring minimum economic criteria could be met.

BCTS staff responded that the dispersed nature of the TSA blocks does have an effect on the economics of the volume available. Costs for mobilization and demobilization are less for blocks on Vancouver Island. As noted above, a sensitivity analysis in which the minimum block volume constraints were removed showed no impact to timber supply.

I have considered the information regarding the block minimum volume constraints presented to me by BCTS and district staff and received in public comments. I am aware that many of the blocks of the TSA are adjacent to other tenures, such as TFLs, held by major licensees, and that efficiencies might be possible through partnerships between major licensees and BCTS license holders. I encourage these opportunities to be explored where feasible. However, for this determination, I acknowledge that the minimum block volume constraint does reflect current operational considerations for those blocks to which it was applied. In any event, the base case timber supply is shown to not be affected by the application of the minimum block volume constraint, and therefore I make no adjustments on this account.

- harvest rules and priority

The analysis for the Pacific TSA was completed using a sequential harvest simulation model, which uses harvest scheduling rules to determine the order of stands to be harvested.

In the base case, a relative oldest first harvest rule was applied, which means that the stands given the highest priority for harvest were those that had passed their minimum harvestable age and had the greatest difference between their minimum harvestable age and their actual age.

The application of the relative oldest first harvest rule in the base case resulted in the harvest of primarily old stands in the first decade of the harvest forecast. This focus also resulted in the conversion of older stands fairly quickly in the forecast to managed stands and overall maximized the available growing stock into the long-term forecast period.

In addition to the harvest rule, as noted in "block minimum volume constraints", five-year harvest volume requirements were set in the base case for groups of supply blocks.

District staff noted that the base case harvest rule assumption does not reflect actual current practice in the TSA. Harvest profile information obtained from scale data indicates that approximately 30 percent of the volume harvested between 2011 and 2015 was from second-growth stands, all of which was harvested from blocks in the TST and TSG business areas. District staff also expressed concern that about the timber supply implications of the difference between this assumption and current practice. As a result of the use of this harvest rule, the base case initial harvest level assumes a greater initial contribution from higher volume old growth stands as well as a faster conversion of these stands to managed stands than is likely to be achieved in actual practice.

Two sensitivity analyses were completed to assess the timber supply implications of applying an alternative harvest rule from that used in the base case analysis. In the first sensitivity analysis, 41 to 60-year-old and 61 to 80-year-old stands that met minimum harvest criteria were prioritized for harvest. In this forecast, the conversion of the older stands (those more than 80 years of age) to managed stands over time was slower than in the base case, and this resulted in a one percent decline in the long-term harvest level. The short-term harvest level was unaffected.

In the second sensitivity analysis, priority was placed on all stands less than 81 years of age that met minimum harvest criteria. In the first decade of the forecast in this sensitivity analysis, 80 percent of harvest occurred in stands younger than 81 years of age. In this case, conversion of older stands was delayed to a greater extent than in the first sensitivity analysis, resulting in declines in the mid-term and long-term harvest levels by 11 and 9 percent, respectively.

I have considered the information regarding the harvest rule applied in the base case and the harvest priorities observed in current practice. I am aware the sensitivity analysis results indicated that the initial harvest level in the base case can still be met if operational practices include a mix of second-growth and old-growth stands. However, I am mindful that the sensitivity analysis results also indicate that the mid- to long-term timber supply would be impacted should operational harvest focus exclusively on stands less than 81 years of age. Further, I note that the slower conversion than assumed in the base case of older stands, with their correspondingly slower growth, to managed stands as a result of harvesting a greater proportion of managed stands in the short term, points to a one percent decrease in the long-term timber supply. In consideration of the above, I conclude it reasonable to take into account that long-term timber supply has been overestimated by a small, unquantified amount of less than one percent, and I discuss this further in "Reasons for Decision".

As mentioned in "**Implementation**", I expect BCTS to develop a strategy for the transition from old growth to second growth harvesting, including an evaluation of the longer-term timber supply implications, consideration of ideal piece sizes and species composition for the future, and implications for other forest management objectives.

Section 8 (8) (a) (vi) any other information that, in the chief forester's opinion, relates to the capability of the area to produce timber;

Other information

- Great Bear Rainforest (Forest Management) Act

A land use planning process was initiated by government in 1996 for the north and south Central Coast areas of British Columbia with the intent to provide an appropriate balancing of social, economic, and environmental benefits for the province. A multi-stakeholder process involving First Nations, provincial and local governments, environmental organizations (non-governmental organizations or NGOs), and representatives from various sectors including forestry, tourism, and mining, resulted in the development of an ecosystem-based management (EBM) framework for this area. The land use objectives for this area were established under the South Central Coast Order (SCCO) dated August 2007. The SCCO established objectives for important First Nations values, aquatic habitats, and biodiversity values. Parallel to the SCCO process, government also designated a number of conservancy areas as well as biodiversity, mining, and tourism areas in 2009.

In March 2009, all parties agreed to a five-year implementation plan for ecosystem-based management in the area which has become known as the Great Bear Rainforest (GBR). The commitment was for all parties to review the Land Use Objectives Orders by March 31, 2014, with the goal of "concurrently moving to high levels of ecological integrity and high levels of human wellbeing and if that is not possible, to make meaningful increments to both."

On January 1, 2017, under the *Great Bear Rainforest (Forest Management) Act*, the GBR Management Area was established. This area comprises a large region of land in the central and north coast which includes the Pacific TSA supply blocks 1, 2, 11-17, 25 and 26. Following the establishment of the GBR Management Area, the chief forester's authority to determine the AAC, and specify AAC partitions, applies only to the parts of the TSA that fall outside the GBR (the non-GBR part of the TSA). For this reason the GBR part of the Pacific TSA was excluded from the timber supply analysis and is not within the area covered by this AAC determination.

Having reviewed the base case assumptions and information presented to me by staff, I am satisfied that the analysis appropriately reflects recent legal land use decisions taken by government, and make no adjustments on this account.

-climate change

Climate change predictions suggest that forest ecosystems will be impacted in a number of different ways as a result of increased temperatures, altered precipitation patterns and increased frequency of as well as severity of disturbances. Although research is ongoing, it is difficult to determine the magnitude of the climate changes and the implications for forests, and a significant amount of uncertainty still exists.

A West Coast Natural Resource Region Extension Note, *Adapting natural resource* management to climate change in the West and South Coast Regions (2016), used current climate change research to summarize projected climate changes and impacts to ecosystems

for British Columbia. In this extension note, it is noted that "Averaged across the coast, over 1° C [Celsius] of warming has occurred during the 20th century. Projections suggest the West Coast may warm, on average, an additional 1.2 to 3.5° C by the end of this century and the South Coast an additional 1.9 to 5° C, similar to moving from Prince Rupert to Victoria (2.5° C warmer)."

The extension note additionally states "While it is normal for temperatures to vary considerably between seasons or from day to night, even a fraction of a degree rise in temperatures, when averaged over decades, is significant for ecosystems." And "Seemingly small increases in mean values of climate variables can substantially increase the probability of an extreme event. For example the 10 percent increase in precipitation predicted for the Georgia Basin in the 2080s would increase the frequency of slope instability by 165 percent."

It is believed that wildfires will become more frequent and the stand impacts of forest pests, such as Douglas-fir bark beetle, balsam bark beetle and the western spruce budworm will increase as altered precipitation levels stress and weaken stands established under previously existing climatic conditions. In very general terms, longer growing seasons may be a benefit for many tree species. However this will likely be offset where summer drought conditions increase, linked to generally lower summer precipitation and lower winter snowpack. It is projected that there will be a reduction in the amount of area considered as Alpine and Mountain Hemlock biogeoclimatic zones, and an increase in the amount of area considered as Coastal Western Hemlock biogeoclimatic zone.

Douglas fir is expected to continue growing well under warmer temperatures, even with increased summertime drought stress conditions. However, western hemlock, western redcedar, and grand fir are expected to show increasing levels of drought stress, particularly on drier sites, resulting in slower growth and possible mortality during series of hot, dry years. Overall, some tree species may become maladapted to the climate. Current data suggests that yellow cedar (cypress) along the coast are already observed to be experiencing mortality from reduced snowpack which exposes roots to frost damage.

There is ongoing consultation and collaboration in the region with federal and provincial government agencies, First Nations, universities and forest licensees to better understand climate adaptation and mitigation challenges and opportunities in relation to forest management. Findings from research initiatives can be incorporated into Coast Area climate actions. Climate change mitigation and adaptation strategies are discussed and developed through stakeholder engagement forums such as the Coast Operational Issues Forum and Forest Management Leadership Teams.

Having reviewed the information about climate change implications for the forests of the Pacific TSA, I acknowledge the work done to date to better understand the actions needed. Ongoing observations, data collection, analysis and discussions through various collaborative teams, include the Climate Change Forum, will play a critical role in ensuring we are able to respond to predicted implications for timber supply.

I am mindful that the extension note cited above highlights the potential implications to terrain stability from the increased precipitation levels anticipated to occur over time in this TSA, a consideration that has uncertain implications for future timber supply. I am concerned about the mortality trends seen in mature yellow cedar, as this species is important for First Nations cultural values. I note that this potential increased mortality trend places further importance

on ensuring reforestation activities include strategies for the continued occurrence of yellow cedar on the land base.

-harvest performance

The current AAC for the non-GBR part of the Pacific TSA is 1 279 700 cubic metres, which includes both BCTS and First Nations volume allocations.

Ministry staff compiled harvest performance data from the Harvest Billing System (HBS), including the proportion of scaled volume by tree species harvested in the TSA between 2010 and 2015. Harvest levels in the TSA have been below the AAC attributed to the TSA since the time of its establishment, particularly in the TSK Business Area. The results showed an actual average annual harvest level (for the non-GBR portion of the TSA) over the five-year period from 2010 to 2015 of about 598 000 cubic metres, or approximately 47 percent of the AAC. Harvest performance in the TSK business area has been particularly low; in the period between 2010 and 2015 only 12 percent of the AAC attributed to this area has been harvested.

I am aware that the actual annual harvest during recent years in the Pacific TSA has, on average, been below the AAC. BCTS report that, over the past seven years, an undercut volume of approximately 2.24 million cubic metres has accumulated in the Pacific TSA. Recently, Non Replaceable Forest Licences (NRFL) totaling 790 000 cubic metres, over five years, were awarded to the Nanwakolas First Nations in Block 18 from this undercut volume. I note that Block 18 is among the most heavily harvested supply blocks in the TSA, and that this additional commitment is incremental to the AAC and has the potential to affect the sustainable harvest level in this block.

BCTS examined the potential timber supply implications related to the allocation of undercut volume by conducting a sensitivity analysis which reduced the current TSA growing stock in blocks 18, 28 and 29 of the TSA by 1 million cubic metres—the unused volume committed to NRFLs in those blocks. This analysis showed that, although the growing stock reductions were compensated for in the first period by a shift in the harvest from other supply blocks, harvest reductions did occur in the second decade and continued over the long-term. Based on these results, BCTS staff expressed concern that the further issuance of undercut volume to licences, incremental to a fully apportioned AAC, would pose a risk to the sustainable timber supply in the Pacific TSA.

I have considered the information regarding harvest performance in the Pacific TSA presented to me by BCTS and FAIB staff. The sensitivity analysis results suggest that there is some flexibility to achieve the short-term harvest level even if an additional 1 million cubic metres of growing stock is harvested over the next five years. However, reducing the growing stock by the entire volume of the current undercut of 2.24 million cubic metres would not allow the harvest level in the base case to be achieved for several periods.

I note that any allocation and utilization of volume above what is presented in the base case, and above what is provided for within my AAC, puts the sustainable timber supply for the TSA at risk.

As well, the continuous under harvest in the TSK business area relative to AAC is cause for caution. I am concerned that the continuation of an AAC that is unlikely to be achieved in this area will lead to significant further accumulation of undercut volume. I am also compelled to guard against the risk to the sustainable harvest levels in other parts of the TSA if AAC

volume attributed to the TSK is harvested outside of this business area, and I will discuss this further under "Partitions".

Section 8 (8) (b) the short and long term implications to British Columbia of alternative rates of timber harvesting from the area:

-partitions

The AAC in effect prior to this determination did not contain a partitioned volume.

The base case harvest forecast included an assumed contribution from Blocks 28 and 29, the blocks in the TSK Business Area, of 73 200 cubic metres per year. The proportion of the THLB in these blocks is a small percentage of the overall block area. The amount of harvesting that has occurred in this area in recent years equates to only 12 percent of the AAC attributed to the area. BCTS notes that it is important for their management of the TSA timber supply that the volume attributed in the base case to stands in the TSK business area not be harvested from stands in other parts of the TSA. This concern is also expressed in the recommendations made through the Nanwakolas First Nations Joint Decision Making process.

As noted earlier in this document, I believe there is the potential for additional volume to contribute to the harvest from areas that were assessed in the EOA as uneconomic for harvesting and were excluded from the THLB. However, my determination must ensure that any AAC that I attribute to potentially-economic stands located outside the THLB used in the base case not be harvested from stands within the THLB.

In making my determination, I have considered the information regarding the TSK blocks and the potential to harvest stands assessed as uneconomic for timber harvesting located outside of the THLB. For the reasons indicated above, and discussed in other sections of this document, I have decided to specify two partitions in this AAC determination to ensure that any volume assumed to be available from stands in the TSK Business Area, as well as volume from stands in areas assessed as not economic is not harvested from stands elsewhere in the TSA, and I will discuss my considerations of this further under "**Reasons for Decision**".

Section 8 (8) (c) the nature, production capabilities and timber requirements of established and proposed timber processing facilities:

This section of the *Forest Act* has been repealed [2003-31-2 (B.C. Reg. 401/2003)]

Section 8 (8) (d) the economic and social objectives of the government, as expressed by the minister, for the area, for the general region and for British Columbia;

Economic and social objectives

-Minister's letters

The Minister of Forests and Range (now the Minister of Forests, Range, Natural Resource Operations and Rural Development) has expressed the economic and social objectives of the Crown in several letters to the chief forester.

The first letter is dated July 4, 2006 (attached as Appendix 3). In this letter, the minister asked for consideration, during AAC determinations, of the importance of a stable timber supply in maintaining a competitive and sustainable forest industry while being mindful of other forest values. As well, the minister suggested that the chief forester should consider the local social and economic objectives expressed by the public and relevant information received from First Nations.

With respect to the 2006 letter, I note that the base case harvest forecast, as well as the alternative harvest flow projections provided, provided a harvest schedule that projected an orderly transition to a stable, long-term harvest level where the growing stock is also stable.

The minister, in another letter dated October 27, 2010, provided the Crown's objectives with respect to mid-term timber supply in areas affected by the mountain pine beetle. I note that the Pacific TSA has not been affected by the mountain pine beetle.

In a third letter dated April 12, 2013 (attached as Appendix 4), the minister expressed the government's social and economic objectives for signatory First Nations of the Nanwakolas Reconciliation Protocol (NRP), and asked the chief forester to consider these objectives, in addition to others expressed in the earlier letters, when making determinations of allowable annual cut within the traditional territories of Nanwakolas First Nations. I am aware that the asserted traditional territories of the Nanwakolas First Nations overlap with the Pacific TSA. I discuss my consideration of the Nanwakolas under "Nanwakolas First Nations shared decision making".

During my consideration of the factors required under Section 8 of the *Forest Act*, I have been mindful of both the local objectives, as provided in the VILUP and associated plans and orders, as well as the objectives of First Nations including the Nanwakolas First Nations. I have considered the socio-economic objectives expressed in the 2013 letter in this determination for the Pacific TSA, and have as well reviewed the public consultation process undertaken by the district and considered the input received in making my determination. On this basis, I am satisfied that this determination accords with the objectives of Government as expressed by the minister.

-First Nations consultation

The Crown maintains a duty to consult with and accommodate, as necessary, those First Nations for whom it has knowledge of claimed Aboriginal rights and/or title (Aboriginal interests) that may be impacted by a proposed decision, including strategic level decisions such as AAC determinations. The AAC determination as a strategic decision sets the stage for other decisions such as AAC apportionment and disposition, leading to issuance of cutting authorities. AAC determinations do not determine particular harvesting areas or patterns, and as a result do not relate directly to the manner in which timber is utilized or managed on the ground. The relationship to claims of Aboriginal title is not a direct one. The AAC considers the sustainable harvest level from a particular geographic area which may include lands

claimed as Aboriginal title lands but not yet declared by a court to be such. While under claim, such lands remain Crown lands and are considered to be part of the harvestable land base. Whether timber is actually ultimately harvested from those lands is an issue that is subject to allocation decisions, and the AAC determination does not determine that matter.

In the case of Aboriginal rights claims, the overall AAC can affect various resource values on which First Nations may have or still do rely in the exercise of such rights. Information gained through consultation with potentially affected First Nations about Aboriginal rights claims has been taken into account in the development of this determination.

There are 30 First Nations that have traditional territory that overlaps at least one of the 30 blocks of the Pacific TSA. These First Nations are Chemainus First Nation/Stz'uminus First Nation, Cowichan Tribes, Ditidaht First Nation, Gitxaala Nation, Gwawaenuk Tribe, Haisla Nation, Halalt First Nation, Heiltsuk Nation, Hupacasath First Nation, Kitasoo/XaiXais Nation, Klahoose First Nation, Kwakiutl Indian Band, Kwikwasutinuxw Haxwamis First Nations, Lake Cowichan First Nation, Lyackson First Nation, Mowachaht/Muchalaht First Nation, 'Namgis First Nation, Nuxalk Nation, Pacheedaht First Nation, Penelakut Tribe, Quatsino First Nation, Shishalh (Sechelt) First Nation, Skin Tyee Nation, Tla'amin Nation, Tla-o-qui-aht First Nation, Tseshaht First Nation, Wuikinuxv Nation, Cheslatta Carrier, Nee-Tahi Buhn, Nanwakolas SEA First Nations (the Da'naxda'xw Awaetlatla First Nation, Tlowitsis Nation, K'omoks First Nation, Mamalilikulla Nation and Wei Wai Kum First Nation), Gitga'at First Nation, Maa-nulth First Nations, We Wai Kai Nation (Nanwakolas), Yuulu?il?ath Nation (Maa-nulth), and Hwlitsum.

At least one of the Pacific TSA blocks overlaps with the Maa-nulth Final Agreement Areas, which includes the Huu-ay-aht First Nations, Ka:'yu:'k't'h'/Che:k'tles7et'h' First Nations, Toquaht Nation, Uchucklesaht Tribe and Yuulu?il?atḥ Nation. The TSA also overlaps with the traditional territories of five of the six signatory Nanwakolas Strategic Engagement (SEA) First Nations (Mamalilkulla Nation, Tlowitsis Nation, We Wai Kai First Nation, Wei Wai Kum First Nation and K'omoks First Nation), and the Hwiltsum asserted traditional territories.

The primary purpose of the consultation was to seek from First Nations their concerns regarding the projected timber supply and AAC for the TSA and to learn what Aboriginal interests may be impacted by the AAC decision. Where the Province and First Nations have negotiated a treaty or have contractually agreed to a process for consultation, that process was followed. Consultation with the signatory members of the Nanwakolas Reconciliation Protocol (the Da'naxda'xw Awaetlatla First Nation, Tlowitsis Nation, K'omoks First Nation, Mamalilikulla Nation and Wei Wai Kum First Nation) was conducted consistent with that protocol, and is discussed in the next section of this document "Nanawakolas First Nations decision making".

For those First Nations who do not have a specific consultation/engagement process agreement in place, Ministry staff considered the potential for the proposed decision(s) to impact upon Aboriginal interests in order to inform the suggested consultation level.

Consultation with First Nations began in September 2014 and was coordinated by the West Coast Natural Resource Region. Information sharing was led by BCTS staff and district staff provided assistance to the consultation and to BCTS during the process. A notification letter was sent on September 9, 2014, to all applicable First Nations indicating that the timber

supply review process had begun. This letter defined the process, included basic information on the three stages of the process, and provided additional information on the AAC determination. It also provided some history of the creation of the Pacific TSA and some timelines, and enclosed a one pager providing a summary on how Aboriginal Interest can be brought into the timber supply review process, a link providing further information on the Pacific TSA timber supply review and an overview map of the Pacific TSA.

First Nations engagement and consultation on the draft information package began on January 29, 2016. Each applicable First Nation was sent a letter providing a brief review of the timber supply review process, and also provided some information on the draft information package. A link regarding the Pacific TSA timber supply review was included as well as a Pacific TSA overview map and draft information package. The First Nation was invited to comment on the document and to suggest additional information on Aboriginal interests that could be used in the timber supply analysis. The letter also indicated that additional consultation/engagement would occur for the timber supply analysis report. Comments were requested within a 60-day period which ended March 31, 2016. The consultation period was extended twice for the 'Namgis to discuss the information package via conference call, which occurred on April 20, 2016.

On September 15, 2016, each applicable First Nation was sent a consultation/engagement letter regarding the 2016 Timber Supply Review Analysis Report – Pacific TSA (the analysis report). The letter commenced a 60-day consultation process ending November 15, 2016. This letter mentioned and briefly described the topic of the past correspondence sent by the Ministry, gave a brief description of the analysis report, provided a link to the report, provided information on the AAC determination and rationale, and attached an overview map of the Pacific TSA. Each First Nation was asked to review the analysis report and provide comments or concerns regarding the information it contained. Each First Nations was also asked to inform the ministry of how their Aboriginal interests in the area may be impacted by an AAC decision. This letter extended an offer for Ministry staff to meet with the First Nation to discuss the information provided, and also indicated once the AAC determination was made the rationale would be sent to each of the applicable First Nations.

Where applicable, the letters to First Nations included a level of consultation as outlined in applicable First Nations agreements, including a Strategic Engagement Agreement (SEA), Forest Consultation and Revenue Sharing Agreement (FCRSA), or Reconciliation Protocol (RP), as applicable. Ministry did not receive any correspondence from applicable First Nations disagreeing with the Ministry's suggested level of consultation and/or engagement.

The letters indicated that all information received would be summarized and provided to the chief forester to be considered in the AAC determination for the Pacific TSA. Consistent with this commitment, staff have provided the information to me and I have reviewed and considered it for the purposes of this determination.

Those comments that were received from First Nations whose asserted traditional territories overlap the portion of the Pacific TSA that falls within the Great Bear Rainforest have not been included in this document, as this AAC determination is not applicable to those areas. In general, the comments and concerns from First Nations included but were not limited to the following points.

The Gwawaenuk Tribe provided comments to the timber supply review asserting Aboriginal rights to their traditional territory in the Pacific TSA all of which is within the GBR-part of the TSA. The Gwawaenuk Tribe stated that the AAC determination will seriously impact their Aboriginal Interests as it determines how much volume will be harvested from their territory. They also want old-growth forests within their territory protected from harvesting. I acknowledge the comments of Gwawaenuk Tribe. However, as noted previously, under the *Great Bear Rainforest (Forest Management) Act*, my authority to make an AAC determination for the Pacific TSA extends only to the non-GBR part of the Pacific TSA which is outside the traditional territory of the Gwawaenuk Tribe.

The Haisla Nation provided a copy of the report "The Haisla Resource and Culturally Significant Sites within the NCLRMP, KLRMP and CCLRM", which identifies several culturally significant sites within the Pacific TSA that exist in addition to registered archaeological sites. My consideration of this information is discussed earlier in this document under "cultural heritage resource reductions".

The 'Namgis First Nation has a Forest Strategic Agreement with BCTS, which includes ongoing collaboration related to high-level forest management and planning activities. The 'Namgis concerns relate to Blocks 8 and 10, as these blocks overlap with their asserted traditional territories. The 'Namgis First Nation comments included: the current AAC for block 8 is too high; would like to see a consent based approach to all natural resource development, and the introduction of an EBM on Vancouver Island included in modelling assumptions; concerns regarding fish habitat, health of the Nimpkish River ecosystem, wildlife and biodiversity, Goshawk Wildlife Habitat Area, management of old growth, wildlife tree retention, and cultural heritage; and that the timber supply review may not fully consider the impact to CMTs, monumental cedar and other non-timber forest resources with cultural values for the non-EBM portion of the TSA.

The shíshálh First Nation provided comments prior to the signing of their Interim Forestry Agreement with the Province that the Pacific TSA overlaps with their asserted traditional territory and that in their opinion, there was not adequate consultation in a previous timber supply review process. Since the signing of their agreement, the shíshálh First Nation has provided no further comment on the timber supply review for the Pacific TSA.

I have reviewed the consultation process conducted by Ministry staff and the input received from the First Nations whose asserted traditional territories overlap with portions of the Pacific TSA. With respect to the Namgis concerns, I am aware that BCTS staff reviewed the periodic harvest contribution from Block 8 and the projected forest composition for Block 8 and 10 resulting from the base case assumptions, or other aspects of the analysis, such as assumptions regarding wildlife, biodiversity and cultural heritage values in 'Namgis First Nation's traditional territory. I am satisfied, as discussed under factors in this document, that the base case assumptions have appropriately reflected the management necessary for the values present in the Pacific TSA, or as noted, I am making adjustments in my determination as required to ensure all values are appropriately accounted for in the assessment of the TSA's timber supply. I am also aware that the base case forecast assumes a level of harvest reduced from the current AAC for the TSA, including reduced levels of harvest in Blocks 8 and 10.

I acknowledge the 'Namgis First Nation's desire for the introduction of EBM on Vancouver Island; however, this involves a land use decision not currently contemplated by government.

The timber supply review focussed on the assessment of a sustainable timber supply for the TSA under the current management and legislative framework and was guided by the chief forester's principles for determining AAC, and as noted elsewhere, I am satisfied the analysis provided the appropriate basis for my determination.

Based on my review of the information sharing and consultation process followed, the Aboriginal interest information available to Ministry staff, and the potential impact my decision may have on these interests, I believe that the Ministry has engaged in consultation in accordance with current Provincial guidance and applicable case law. I conclude that no additional accommodation beyond that which I have described in this rationale document is required as part of this decision. I believe that any adverse impacts upon asserted rights within the area of Pacific TSA stemming from forest development activities that occur subsequent to the AAC determination, can be appropriately mitigated or minimized through existing legislation and regulation, planning documents and meaningful engagement at the operational level.

-Nanwakolas Firsts Nation shared decision making

In the Pacific TSA, the Da'naxda'xw Awaetlatla First Nation, Tlowitsis Nation, K'omoks First Nation, Mamalilikulla Nation and Wei Wai Kum First Nation are signatory members of the Nanwakolas Reconciliation Protocol (NRP) with the Province. This protocol outlines a shared decision making process for allowable annual cut and land use objective decisions, and provides for the opportunity to make recommendations regarding allowable annual cut decisions and conditions that may apply to allowable annual cut decisions related to their asserted traditional territories.

Territories of these First Nations overlap blocks 10, 18, 19 and 20 of the Pacific TSA. As part of the normal First Nations consultation process, BCTS met with Nanwakolas First Nations several times during the timber supply review process to share information.

In June 2013, representatives of the Nanwakolas First Nations and the Province met to discuss how the shared decision making process would affect the timber supply review processes that were already underway.

In a letter dated March 31, 2014, Nanwakolas First Nations senior representatives provided the Provincial decision-maker with initial issues they wish to be considered in the upcoming TSR projects, including the Pacific TSA. These included a request for provision of an explicit sustainable supply of large cultural cedar, minimizing impact on the Nanwakolas Carbon Project and fulfilling the socio-economic objectives outlined in the Minister's April 12, 2013 letter to the chief forester. On January 29, 2016, the manager of the Forest Analysis and Data Management section, FAIB, wrote to the Nanwakolas to address the requirements of the shared decision making process. The letter provided the information package for the Pacific TSA and commented on where the other relevant and available documents could be found. The FAIB manager also provided a summary of how the Nanwakolas initial issues had been or were to be addressed.

Further discussions between the parties regarding the shared decision recommendations for the Pacific TSA occurred on September 9, 2016, following the releases of the analysis report. In January 2017, the parties met to discuss the formulation of common recommendations

regarding the AAC determination for the Pacific TSA. The final recommendations were forwarded to the chief forester in February 2017.

The joint recommendations for the determination of an AAC for the Pacific TSA specify eight recommendations for the chief forester. In summary, they are as follows:

- 1. Volume outside the THLB: If the chief forester chooses to include volume attributed to areas outside of the timber harvesting land base (THLB), such as stands considered uneconomic in the base case forecast presented by BC Timber Sales, the chief forester should specify AAC partitions, based on the spatial TSR resultant, in a manner that does not permit volume attributed to areas outside of the THLB to be harvested within the THLB.
- 2. *Partitions*: The chief forester should specify AAC partitions in a manner that does not permit AAC attributed to the portion of the Pacific TSA within the Skeena business area to be harvested outside of the Skeena Business Area.
- 3. *BCTS harvest activity*: The chief forester should instruct BC Timber Sales to manage their future harvest activity within Nanwakolas Council member First Nations territories in a manner that avoids large inter-decadal fluctuations in harvest activity.
- 4. *Cedar strategy*: The chief forester should request BCTS and district staff to continue working with Nanwakolas Council member First Nations in the development and implementation of a strategy to identify and manage, at both operational and strategic scales, the supply of large cultural cedar in the Pacific TSA
- 5. *Growth and yield*: The chief forester should instruct BC Timber Sales to stay abreast of new developments in growth and yield regarding the effects of shading from stand-level retention, and to use the best available information in future timber supply review analyses.
- 6. *Harvest performance*: The chief forester should instruct BC Timber Sales to monitor and assess harvest performance across the forest profile, and if redcedar and yellow-cedar are being disproportionately harvested relative to their modelled contribution in the base case, then a cedar partition should be specified.
- 7. *First Nations collaboration*: The chief forester should instruct BC Timber Sales and district staff to continue improving the processes for information sharing with First Nations, and to monitor the actual outcomes and impacts of forest practices on culturally heritage features and resources and on the associated assumptions used in timber supply modelling.
- 8. Short-term AAC considerations: When aligning modeling assumptions with BC Timber Sales current and planned forestry practices, the chief forester should consider the effect on the short term AAC of combined scenarios (e.g. interactions between an older minimum harvestable age and a harvest scheduling rule that includes some short term contribution from second growth forests) instead of assessing the effect of changing these assumptions individually.

Having considered the information presented, I am satisfied that the province and Nanwakolas First Nations have successfully implemented a protocol for shared decision making process pursuant to the Nanwakolas Reconciliation Protocol (RP). I have reviewed the

recommendations provided and have considered them in my determination for the Pacific TSA. I discuss my considerations of all the information provided to me, including these recommendations and other First Nations input, further in my "**Reasons for Decision**".

Section 8 (8) (e) abnormal infestations in and devastations of, and major salvage programs planned for, timber on the area:

Abnormal infestations, devastations and salvage programs

-non-recoverable losses

Unsalvaged or non-recoverable losses provide an estimate of the average annual volume of timber damaged or killed on the THLB and not salvaged or otherwise accounted for in timber supply projections. The losses result from natural events, including insects, disease, wind and wildfire.

No data specific to the Pacific TSA was available from which to estimate unsalvaged losses. As a result, data from a 2016 Coast Area Forest Health Aerial Overview Survey was used to develop annual non-recoverable loss estimates. The data was from six TSAs adjacent to blocks of the Pacific TSA. A value for non-recoverable losses from each TSA was used to develop a pro-rated estimate for the similar adjacent blocks. The total non-recoverable losses for each block were then summed, and the value (in cubic metres per year) was excluded from the base case harvest forecast. A total of 18 057 cubic metres per year were assumed to be lost across the entire TSA and this volume was excluded from harvest forecasts.

District staff have reviewed the estimates applied in the base case and indicated to me that they seem reasonable.

I have considered the information regarding the accounting in the base case for unsalvaged losses. In the absence of data explicitly collected from stands on the Pacific TSA landbase, I accept that the approach taken in the analysis to account for unsalvaged losses was reasonable and I make no adjustments in this determination. However, as mentioned in "Implementation", I expect BCTS staff to collect information on appropriate loss factors from the TSA to enable more site-specific information to be available for the next timber supply review. Ensuring accurate estimates for future losses expected from various forest health factors is increasingly important, in particular given the concerns noted earlier in this document under "climate change".

Reasons for Decision

In reaching my AAC determination for the Pacific TSA, I have made the considerations documented above, all of which are integral to my reasons for my decision, and from which I have also reasoned further as follows.

I note that the base case showed that an initial harvest level of 688 245 cubic metres per year could be maintained for ten years before declining in two steps, of 8.5 percent to 630 080 cubic metres per year and then 2.8 percent at year 21, to the long-term harvest level of 612 250 cubic metres per year. The long-term harvest level was maintained for the remainder of the forecast.

I am aware of one factor that indicates an overestimation in the base case timber supply to a degree that can be quantified, as follows:

• Wildlife habitat areas – the exclusion of an additional 400 hectares from the THLB for the management of known goshawk nest sites and 12 hectares for the management of a peregrine falcon nest site results in an overestimation of timber supply of slightly less than 0.5 percent across all time horizons.

I am also aware of the following factors that indicate an overestimation in the base case timber supply, but to degrees that cannot be quantified, as follows:

- Cultural heritage resource reductions accounting for the implications of managing for cultural heritage resources outside of known archaeological sites leads to a small, unquantified overestimation of timber supply in the mid to long term;
- *Managed stand yields* the additional shading of regenerating trees resulting from the increased levels of in-block retention on 43 percent of the THLB results in a small, unquantified overestimation of timber supply in the long-term; and
- *Harvest rules* accounting for the implications of a sequence of harvest not reflected by current practice results in an overestimation of long-term timber supply by a small, unquantified amount of less than one percent.

As well, I am aware of the following factors that indicate a potential underestimation in the base case timber supply to a degree that can be quantified, as follows:

• Unstable terrain – accounting for previously harvested areas in class V terrain in the TST and TSG business areas results in an underestimation of up to one percent of the long-term timber supply in the TST and TSG business areas; and, as well, the accounting for the potential to harvest up to 10 percent of the remaining unharvested class V terrain in the TST and TSG business areas results in an underestimation of the timber supply in the TST and TSG business areas by 0.8 percent across all time horizons.

I am also aware of the following factors that indicate a potential underestimation in the base case timber supply, but to a degree that cannot be quantified, as follows:

- Existing and future roads, trails and landings the growth of merchantable timber on roadway area excluded from the THLB represents an underestimation of mid-term and long-term timber supply by an unquantified amount;
- *Inaccessible areas* to the extent that the future road network has been underestimated in the base case, the accessible land base and forecasted timber supply has been underestimated to an unquantified amount;
- *Dead potential* the volume contribution from dead stems not accounted for in the base case harvest forecast represents a small, but unquantified underestimation of short-term timber supply; and
- *Managed stand yields* accounting for enhanced silviculture activity, including the earlier use of genetically improved seed as it was available and incremental activities such as pruning and spacing results in a small, unquantified underestimation in mid- to long-term timber supply.

In considering the factors that suggest the base case timber supply has been overestimated, I am aware that taking into account additional land base exclusions for wildlife habitat areas results in a short-term reduction in timber supply of 0.5 percent. In addition, accounting for areas set aside to protect cultural heritage resources, the shading of stems as a result of inblock retention, and the difference in stand prioritization between operations and the base case harvest rule suggests that the mid- and longer-term timber supply has been overestimated by a small amount, likely in the range of one percent. In summation, the above factors suggest an overestimation of the short-term timber supply projected in the base case of 0.5 percent and an overestimation of the long-term timber supply projected in the base case of 1.5 percent, with the majority of the underestimation attributed to the assumed timber supply in the TST and TSG business areas.

In considering the factors that suggest the base case timber supply has been underestimated, I am aware that the potential volume contribution from dead stems and an allowance of harvesting in class V terrain suggests the short-term timber supply is greater than projected by the base case by 0.8 percent. In addition, accounting for timber supply contribution from merchantable stems growing on roadways, increased level of enhanced silviculture and previously harvested areas excluded as class V terrain suggests the long-term timber supply is underestimated by 1.8 percent, with the majority of the underestimation attributed to the assumed timber supply in the TST and TSG business areas.

I must now consider the assessment of several factors that relate to the size of the land base expected to be accessed for timber harvesting, including the size of the road-accessible land base and the economically operable land base. Based on the information presented to me by BCTS and forest industry representatives as well as my observations during an overflight of parts of the TSA, I accept that there is potential for a more extensive future road network and higher-than-assumed economics for stands in the TSG and TST business areas. I do not accept that the same potential exists within the TSK Business Area.

In my determination, I will account for a potential contribution from those physically accessible stands located outside the THLB in the TSG and TST business areas that were not considered within the economically-operable land base in the base case. The basis of my adjustment is the results of a sensitivity analysis, which I described under "economic operability," that projects the timber supply under the assumption that all physically accessible areas within the TST and TSG business areas will be harvestable. This sensitivity analysis suggested a potential for a short-term harvest level that was 115 015 cubic metres per year higher than base case, which I consider to represent the maximum additional volume that is potentially available from stands outside the THLB, and I consider the adjustments indicated by all other factors to be included within this amount (i.e., it is not additive to the other adjustments).

In consideration of the above, I believe it appropriate to establish an AAC for the Pacific TSA of 803 300 cubic metres, an amount equal to the initial harvest level of the base case plus 115 000 cubic metres contribution from potentially-economic stands in the TST and TSG business areas that are located outside the area mapped as THLB for the base case in the 2016 *Timber Supply Review Analysis Report – Pacific TSA*.

I am mindful that the AAC I have determined is based on a significant volume contribution from stands located outside the area mapped as THLB in the timber supply analysis. I note

that if the volume I attribute to these stands is instead harvested from stands inside the THLB, the sustainable timber supply for the TSA as a whole may be compromised. I am also mindful that historic harvest levels in TSK part of the TSA (supply blocks 28 and 29) have been well below the AAC attributed to this business area and that it is not desirable for volume attributed to the TSK to be harvested in other business areas. Therefore, to promote harvest activity in these potentially-economic areas and to ensure that volume attributed to these areas is not harvested elsewhere in the TSA, I will specify two AAC partitions which set the maximum AAC that can be taken from the more economic areas. One partition will set the maximum AAC harvestable from supply blocks within the combined TST and TSG business areas (defined as the area outside of supply blocks 28 and 29). This amount is 730 100 cubic metres, which equals the total AAC of 803 300 cubic metres minus the timber supply projected for the TSK business area of 73 200 cubic metres. Within the area of this first partition, I will specify a second partition that sets the maximum AAC harvestable from those stands mapped as THLB in the 2016 timber supply analysis. This amount equals the timber supply projected to be available from the TST and TSG business areas in the base case forecast, 615 100 cubic metres.

In making this AAC determination I have considered the joint recommendations provided to me in February 2017 by representatives from the Nanwakolas First Nations and the Province under the Nanwakolas Reconciliation Protocol, as presented under "Nanwakolas First Nation shared decision making'. Specifically, I note that the AAC determination and AAC partitions outlined in my reasons are consistent with recommendations #1 and #2. With respect to recommendation #8, I note that my considerations include the combined effect of the factors influencing the timber supply projected in the base case and that I am taking into account in this determination. I have addressed the remaining recommendations in "Implementation".

Determination

I have considered and reviewed all the factors as documented above, including the risks and uncertainties of the information provided.

It is my determination that a timber harvest level that accommodates objectives for all forest resources during the next 10 years and that reflects current management practices as well as the socio economic objectives of government can be best achieved by setting the AAC for the non-GBR portion of the Pacific TSA at 803 300 cubic metres.

I specify, under Section 8(5)(a) of the *Forest Act*, a partition of 730 100 cubic metres of the total AAC is attributable to the non-GBR portion of the TSA that is outside of supply blocks 28 and 29.

I further specify under Section 8(5)(a) of the *Forest Act*, a partition of 615 100 cubic metres of the AAC is attributable to the non-GBR portion of the TSA outside of supply blocks 28 and 29 and is within the area mapped as timber harvesting land base for the base case in the 2016 Timber Supply Review Analysis Report – Pacific TSA.

This determination is effective August 10, 2017, and will remain in effect until a new AAC is determined, which must take place within ten years of the effective date of this determination.

If additional significant new information is made available to me, or major changes occur in the management assumptions upon which I have predicated this decision, then I am prepared to revisit this determination sooner than the 10 years required by legislation.

The AAC for the GBR part of the Pacific TSA is as specified in the Great Bear Rainforest (Forest Management) Act Regulation.

Implementation

In the period following this decision and leading to the subsequent determination, I expect BCTS, FAIB, district staff and, where appropriate, other licensees to undertake or support the tasks and studies noted below, the particular benefits of which are described in appropriate sections of this rationale document. I recognize that the ability of all parties to undertake or support these projects is dependent on provincial priorities and available resources, including funding. However, these projects are important to help reduce the risk and uncertainty associated with key factors that affect the timber supply in the Pacific TSA.

- 1. *Roads*, *Trails and Landings* I expect BCTS to acquire LiDAR when the opportunity arises to assist with engineering layout as well as provide information for the next timber supply analysis.
- 2. Cultural Heritage Resources I expect BCTS to continue to work with First Nations to obtain clear quantifiable information on cultural heritage resources that can be brought into the timber supply review process.
- 3. Cultural Heritage Resources I expect BCTS and district staff to continue working with Nanwakolas Council member First Nations in the development and implementation of a strategy to identify and manage, at both operational and strategic scales, the supply of large cultural cedar in the Pacific TSA.
- 4. *Information sharing with First Nations*—I expect BCTS and district staff to continue improving the processes for information sharing with First Nations, and to monitor the actual outcomes and impacts of forest practices on culturally heritage features and resources and on the associated assumptions used in timber supply modelling.
- 5. Operational Adjustment Factors I expect FAIB staff to conduct Young Stand Monitoring in the Pacific TSA in order to assess site occupancy and better quantify appropriate OAF percentages for use in timber supply review.
- 6. Objectives for Visual Resources I expect FAIB staff to work with other Ministry staff to determine how to better manage the data required for timber supply reviews, and develop some recommendations for implementation that ensure all data layers are accurate, updated and maintained as needed.
- 7. Harvest priority and harvest rules I expect BCTS to develop a strategy for the transition from old growth to second growth harvesting, including an evaluation of the longer-term timber supply implications, consideration of ideal piece sizes and species composition for the future, and implications for other forest management objectives.
- 8. Future harvest activity I expect BCTS to manage its future harvest activity within Nanwakolas Council member First Nations territories in a manner that avoids large interdecadal fluctuations in harvest activity.
- 9. Future harvest profile I expect BCTS to monitor and assess harvest performance across the forest profile relative to the modelled contribution in the base case forecast.

10. *Unsalvaged losses* – I expect that BCTS staff to collect information on appropriate loss factors from the TSA to enable more site-specific information to be available for the next timber supply review.





Diane Nicholls, RPF Chief Forester August 10, 2017

Appendix 1: Section 8 of the *Forest Act*

Section 8 of the *Forest Act*, Revised Statutes of British Columbia 1996, c. 157, (current to February 18, 2015), reads as follows:

Allowable annual cut

- 8 (1) The chief forester must determine an allowable annual cut at least once every 10 years after the date of the last determination, for
 - (a) the Crown land in each timber supply area, excluding tree farm licence areas, community forest agreement areas and woodlot licence areas, and
 - (b) each tree farm licence area.
 - (2) If the minister
 - (a) makes an order under section 7 (b) respecting a timber supply area, or
 - (b) amends or enters into a tree farm licence to accomplish a result set out under section 39 (2) or (3),

the chief forester must make an allowable annual cut determination under subsection (1) for the timber supply area or tree farm licence area

- (c) within 10 years after the order under paragraph (a) or the amendment or entering into under paragraph (b), and
- (d) after the determination under paragraph (c), at least once every 10 years after the date of the last determination.
- (3) If
- (a) the allowable annual cut for the tree farm licence area is reduced under section 9 (3), and
- (b) the chief forester subsequently determines, under subsection (1) of this section, the allowable annual cut for the tree farm licence area,

the chief forester must determine an allowable annual cut at least once every 10 years from the date the allowable annual cut under subsection (1) of this section is effective under section 9 (6).

- (3.1) If, in respect of the allowable annual cut for a timber supply area or tree farm licence area, the chief forester considers that the allowable annual cut that was determined under subsection (1) is not likely to be changed significantly with a new determination, then, despite subsections (1) to (3), the chief forester
 - (a) by written order may postpone the next determination under subsection (1) to a date that is up to 15 years after the date of the relevant last determination, and
 - (b) must give written reasons for the postponement.
- (3.2) If the chief forester, having made an order under subsection (3.1), considers that because of changed circumstances the allowable annual cut that was determined under subsection (1) for a timber supply area or tree farm licence area is likely to be changed significantly with a new determination, he or she
 - (a) by written order may rescind the order made under subsection (3.1) and set an earlier date for the next determination under subsection (1), and
 - (b) must give written reasons for setting the earlier date.
- (4) If the allowable annual cut for the tree farm licence area is reduced under section 9 (3), the chief forester is not required to make the determination under subsection (1) of this section at

- the times set out in subsection (1) or (2) (c) or (d), but must make that determination within one year after the chief forester determines that the holder is in compliance with section 9 (2).
- (5) In determining an allowable annual cut under subsection (1) the chief forester may specify that portions of the allowable annual cut are attributable to one or more of the following:
 - (a) different types of timber or terrain in different parts of Crown land within a timber supply area or tree farm licence area;
 - (a.1) different areas of Crown land within a timber supply area or tree farm licence area;
 - (b) different types of timber or terrain in different parts of private land within a tree farm licence area.
 - (c) [Repealed 1999-10-1.]
- (6) The regional manager or district manager must determine an allowable annual cut for each woodlot licence area, according to the licence.
- (7) The regional manager or the regional manager's designate must determine an allowable annual cut for each community forest agreement area, in accordance with
 - (a) the community forest agreement, and
 - (b) any directions of the chief forester.
- (8) In determining an allowable annual cut under subsection (1) the chief forester, despite anything to the contrary in an agreement listed in section 12, must consider
 - (a) the rate of timber production that may be sustained on the area, taking into account
 - (i) the composition of the forest and its expected rate of growth on the area,
 - (ii) the expected time that it will take the forest to become reestablished on the area following denudation,
 - (iii) silviculture treatments to be applied to the area,
 - (iv) the standard of timber utilization and the allowance for decay, waste and breakage expected to be applied with respect to timber harvesting on the area,
 - (v) the constraints on the amount of timber produced from the area that reasonably can be expected by use of the area for purposes other than timber production, and
 - (vi) any other information that, in the chief forester's opinion, relates to the capability of the area to produce timber,
 - (b) the short and long term implications to British Columbia of alternative rates of timber harvesting from the area,
 - (c) [Repealed 2003-31-2.]
 - (d) the economic and social objectives of the government, as expressed by the minister, for the area, for the general region and for British Columbia, and
 - (e) abnormal infestations in and devastations of, and major salvage programs planned for, timber on the area.
- (9) Subsections (1) to (4) of this section do not apply in respect of the management area, as defined in section 1 (1) of the Haida Gwaii Reconciliation Act.

- (10) Within one year after the chief forester receives notice under section 5 (4) (a) of the Haida Gwaii Reconciliation Act, the chief forester must determine, in accordance with this section, the allowable annual cut for
 - (a) the Crown land in each timber supply area, except the areas excluded under subsection (1) (a) of this section, and
 - (b) each tree farm licence area

in the management area, as defined in section 1 (1) of the Haida Gwaii Reconciliation Act.

(11) The aggregate of the allowable annual cuts determined under subsections (6), (7) and (10) that apply in the management area, as defined in section 1 (1) of the Haida Gwaii Reconciliation Act, must not exceed the amount set out in a notice to the chief forester under section 5 (4) (a) of that Act.

Appendix 2: Section 4 of the Ministry of Forests and Range Act

Section 4 of the Ministry of Forests and Range Act (current to March 1, 2017) reads as follows:

Purposes and functions of ministry

- 4 The purposes and functions of the ministry are, under the direction of the minister, to do the following:
 - (a) encourage maximum productivity of the forest and range resources in British Columbia;
 - (b) manage, protect and conserve the forest and range resources of the government, having regard to the immediate and long term economic and social benefits they may confer on British Columbia;
 - (c) plan the use of the forest and range resources of the government, so that the production of timber and forage, the harvesting of timber, the grazing of livestock and the realization of fisheries, wildlife, water, outdoor recreation and other natural resource values are coordinated and integrated, in consultation and cooperation with other ministries and agencies of the government and with the private sector;
 - (d) encourage a vigorous, efficient and world competitive
 - (i) timber processing industry, and
 - (ii) ranching sector

in British Columbia;

(e) assert the financial interest of the government in its forest and range resources in a systematic and equitable manner.

Appendix 3: Minister's letter of July 4, 2006



JUL 0 4 2006

Jim Snetsinger
Chief Forester
Ministry of Forests and Range
3rd Floor, 1520 Blanshard Street
Victoria, British Columbia
V8W 3C8

Dear Jim:

Re: Economic and Social Objectives of the Crown

The Forest Act gives you the responsibility for determining Allowable Annual Cuts-decisions with significant implications for the province's economy, communities and environment. This letter outlines the economic and social objectives of the Crown you should consider in determining Allowable Annual Cuts, as required by Section 8 of the Forest Act. This letter replaces the July 28, 1994 letter expressing the economic and social objectives of the Crown, and the February 26, 1996 letter expressing the Crown's economic and social objectives for visual resources. The government's objective for visual quality is now stated in the Forest Practices and Planning Regulation of the Forest and Range Practices Act.

Two of this government's goals are to create more jobs per capita than anywhere in Canada and to lead the world in sustainable environmental management. The Ministry of Forests and Range supports these objectives through its own goals of sustainable forest and range resources and benefits. In making Allowable Annual Cut determinations, I ask that you consider the importance of a stable timber supply in maintaining a competitive and sustainable forest industry, while being mindful of other forest values.

The interior of British Columbia is in the midst of an unprecedented mountain pine beetle outbreak. Government's objectives for management of the infestation are contained in British Columbia's Mountain Pine Beetle Action Plan. Of particular relevance to Allowable Annual Cut determinations are the objectives of encouraging long-term economic sustainability for communities affected by the epidemic; recovering the greatest value from dead timber before it burns or decays, while respecting other forest values; and conserving the long-term forest values identified in land use plans.

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Minister of Forests and Range and Minister Responsible for Housing

Office of the Minister Mailing Address: PO Box 9049 Stn Prov Govt Victoria BC V8W 9E2 Telephone: 250 387-6240 Facsimile: 250 387-1040 Location:
Parliament Buildings
Victoria BC V8V 1X4
e-mail: FOR,Minister@gov.bc.ca

Jim Snetsinger

To assist the province and affected communities in planning their responses to the beetle infestation, it would be best to have realistic assessments of timber volumes that can be utilized economically. Therefore, in determining the best rate of harvest to capture the economic value from beetle-killed timber, I ask that you examine factors that affect the demand for such timber and products manufactured from it, the time period over which it can be utilized, and consider ways to maintain or enhance the mid-term timber supply.

The coast of British Columbia is experiencing a period of significant change and transition. In making Allowable Annual Cut determinations I urge you to consider the nature of timber supply that can contribute to a sustainable coast forest industry, while reflecting decisions made in land and resource management plans.

You should also consider important local social and economic objectives expressed by the public during the Timber Supply Review process, where these are consistent with the government's broader objectives as well as any relevant information received from First Nations.

Sincerely yours,

Rich Coleman Minister

Appendix 4: Minister's letter of April 12, 2013



Ref: 196701

April 12, 2013

Dave Peterson
Chief Forester and Assistant Deputy Minister
Ministry of Forests, Lands & Natural Resource Operations
Temures, Competitiveness and Innovation Division
PO Box 9352 Stn Prov Govt
Victoria, British Columbia
V8W 9M1

Dear Dave Peterson:

The Forest Act gives you the responsibility and authority to make allowable annual cut determinations

Section 8 of the Forest Act requires you to consider the government's social and economic objectives, as expressed by the Minister, as well as the other items listed in section 8.

As provided for in Section 1.1 of the Shared Decision Making Process agreed to as part of Schedule B, Appendix 2 (the Forestry Schedule) of the Nanwakolas Reconciliation Protocol, this letter provides government's social and economic objectives for signatory First Nations. In addition to government's social and economic objectives provided in other letters, please consider these objectives when making determinations of Allowable Annual Cut within the traditional territories of Nanwakolas First Nations:

- To share in economic development initiatives within the Traditional Territories of the Nanwakolas First Nations that facilitate, over time, the individual members of the Nanwakolas First Nations obtaining a quality of life that is equal to or better than the national Canadian average;
- To become full partners with the Province (i.e. to the fullest or maximum extent
 possible) in the forest sector within the Nanwakolas Traditional Territories including,
 but not limited to, opportunities for shared decision-making, forest tenures and
 revenue sharing;
- To develop significant involvement with the forest industry operating within their Traditional Territories, through the development of measures that will facilitate new relationships with industry;

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Ministry of Forests, Lands and	Office of the Minister	Mailing Address.	Tel	250-387-6240
Natural Resource Operations		PO BOX 9049 Shi Prov Gore Victoria, BC VSW 9E2	Fan	250-387-1040
			Websac	www.govbcka/for

- To significantly increase employment opportunities in the forest industry, over time, for Nanwakolas First Nations members, within their Traditional Territories; and
- To consider the value of forest resource development in the Traditional Territories of Nanwakolas First Nations when developing appropriate strategies for full Nanwakolas First Nations participation in the management and operation of the forest resource sector in the Traditional Territories.

Sincerely,

Steve Thomson Minister