

FRASER VALLEY REGIONAL DISTRICT

REGIONAL AND CORPORATE SERVICES COMMITTEE

OPEN MEETING AGENDA

Thursday, May 9, 2024

10:00 am

In person at FVRD Boardroom & by Zoom Conference Call

Pages

1. LAND ACKNOWLEDGEMENT
2. CALL TO ORDER
3. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

MOTION FOR CONSIDERATION

THAT the Agenda, Addenda and Late Items for the Regional and Corporate Services Committee Open Meeting of May 9, 2024 be approved;

AND THAT all delegations, reports, correspondence and other information set to the Agenda be received for information.

4. MINUTES/MATTERS ARISING

4.1 Draft Regional and Corporate Services Committee Meeting Minutes - April 11, 2024

5 - 12

MOTION FOR CONSIDERATION

THAT the Minutes of the Regional and Corporate Services Committee Open Meeting of April 11, 2024 be adopted.

5. RESOLUTION TO CLOSE MEETING

MOTION FOR CONSIDERATION

THAT the meeting be closed to the public, except for Senior Staff and the Executive Assistant, for the purpose of receiving and adopting Closed Meeting Minutes convened in accordance with Section 90 of the *Community Charter* and to consider matters pursuant to:

- Section 90(1)(i) of the *Community Charter* - the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;
- Section 90(1)(k) of the *Community Charter* - negotiations and related discussions respecting the proposed provision of a regional service that are at their preliminary

stages and that, in the view of the board, could reasonably be expected to harm the interests of the regional district if they were held in public;

RECESS

6. RECONVENE OPEN MEETING

7. RISE AND REPORT OUT OF CLOSED MEETING

8. FINANCE

8.1 Forced Labour Report 13 - 17

- Corporate report dated May 9, 2024 by Kelly Lownsbrough, Director of Corporate Services & CFO
- Draft Forced Labour Report

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board approve and attest to the Forced Labour Report and submit to the Federal Government by May 31, 2024.

8.2 Financial Plan 2024-2028 Amendment: May 18 - 20

- Corporate report dated May 9, 2024 by Kinga Williams, Accountant
- Regional Service Amendments

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board direct Staff to prepare for the Board's consideration an amendment to the Fraser Valley Regional District 2024-2028 Financial Plan Bylaw No. 1726, 2024 to include two amendments for Regional and Corporate Services.

8.3 2024 Tax Requisition Results 21 - 23

FOR INFORMATION ONLY

- Corporate report dated May 9, 2024 by Kinga Williams, Accountant

8.4 Call Answer Levy Update 24 - 117

FOR INFORMATION ONLY

- Corporate report dated May 9, 2024 by Kelly Lownsbrough, Director of Corporate Services & CFO
- 9-1-1 Services in BC
- Provincial response to UBCM Resolutions

9. REGIONAL SERVICES

9.1 REGIONAL PARKS

9.1.1 BC Wildfire Service Rental Agreement

118 - 119

- Corporate report dated May 9, 2024 by Christina Vugteveen, Manager of Parks

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board authorize its signatories to enter into a five-year agreement with the British Columbia Wildfire Service for use of the Fraser Valley Regional Airpark and the Boston Bar Airstrip for their wildfire management program as required.

9.2 STRATEGIC PLANNING AND INITIATIVES

9.2.1 Endorsement of Chilliwack and FVRD Transit Future Action Plan and FVX Service Update

120 - 216

- Corporate report dated May 9, 2024 by Alison Stewart, Manager of Strategic Planning
- Transit Future Action Plan
- FVRD Transit Future Action Plan – Chapter 6: Fraser Valley Express (November 12, 2021)

MOTION FOR CONSIDERATION

THAT the Fraser Valley Regional District Board approve the draft “Chilliwack and FVRD Transit Future Action Plan” as it pertains to the Fraser Valley Regional District managed services.

9.3 OUTDOOR RECREATION AND PLANNING

9.3.1 FVRD Active Transportation Network Plan Phase 3 – Round Two Engagement Summary

217 - 301

FOR INFORMATION ONLY

- Corporate report dated May 9, 2024 by Melissa Geddert, Planner 1 and Andrea Antifaeff, Planner 1
- Open House Boards and Network Maps
- Community Meetings Presentations (February and March 2024)
- Round 2 Online Engagement Summary

10. ADDENDA ITEMS/LATE ITEMS

11. REPORTS BY STAFF

12. REPORTS BY DIRECTORS

13. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

IN PERSON PARTICIPATION

FVRD Board Room

ONLINE PARTICIPATION

Questions can be emailed to info@fvrd.ca before 1 pm, May 8, 2024. Alternatively, you may participate in public question period live on Zoom, by phone or computer using the Zoom information provided on the FVRD website.

14. ADJOURNMENT

MOTION FOR CONSIDERATION

THAT the Regional and Corporate Services Committee Open Meeting of May 9, 2024 be adjourned.

FRASER VALLEY REGIONAL DISTRICT

REGIONAL AND CORPORATE SERVICES COMMITTEE

OPEN MEETING MINUTES

Thursday, April 11, 2024
10:00 am
In person at FVRD Boardroom & by Zoom Conference Call

Members Present: Director Jason Lum, City of Chilliwack, Chair
Director Patricia Ross, City of Abbotsford, Vice Chair
Director Diane Johnson, Electoral Area A
Director Peter Adamo, Electoral Area B
Director Bill Dickey, Electoral Area D
Director Taryn Dixon, Electoral Area H
Director Leo Facio, Village of Harrison Hot Springs
Director Paul Horn, City of Mission
Director Ken Popove, City of Chilliwack
Director Ross Siemens, City of Abbotsford *(Zoom) (arrived at 10:03am)*
Director Victor Smith, District of Hope
Alt. Director Susan Spaeti, District of Kent

Regrets: Director Sylvia Pranger, District of Kent

Others Present: Director Patti MacAhonic, Electoral Area E
Director Cory Cassel, Electoral Area G

Staff Present: Jennifer Kinneman, Chief Administrative Officer
Kelly Lownsborough, Director of Corporate Services/CFO
Jaime Van Nes, Director of Legislative Services/Corporate Officer
Stacey Barker, Deputy CAO/Director of Regional Services
Lauren Olynick, Deputy Corporate Officer
Sam Piper, Manager of Communications
Lance Lilley, Manager of Environmental Services
Adam Swartz, Manager of Information Technology, GIS & FDM
Beth Klein, Controller/Deputy CFO
David Urban, Deputy Director of Regional Services
Alison Stewart, Manager of Strategic Planning
Eli Ross, Environmental Services Coordinator
Melissa Geddert, Planner I *(Zoom)*
Theresa Alexander, Planner I *(Zoom)*
Kate Fenton, Planner I (Indigenous Relations) *(Zoom)*
Melanie Jones, Accountant *(Zoom)*
Kinga Williams, Accountant *(Zoom)*

Riley Smith, Planning Technician (*Zoom*)
Matthew Fang, Network Analyst II
Amanda Molloy, Administrative Manager (*recording secretary*)

No members of the public were present in person or online.

1. LAND ACKNOWLEDGEMENT

Chair Lum provided introductory remarks recognizing the homeland of the 30 First Nations located within the Fraser Valley Regional District.

2. CALL TO ORDER

The Chair called the open meeting to order at 10:00am.

3. APPROVAL OF AGENDA, ADDENDA AND LATE ITEMS

Moved By FACIO
Seconded By HORN

THAT the Agenda, Addenda and Late Items for the Regional and Corporate Services Committee Open Meeting of April 11, 2024 be approved;

AND THAT all delegations, reports, correspondence and other information set to the Agenda be received for information.

CARRIED

4. MINUTES/MATTERS ARISING

4.1 Draft Regional and Corporate Services Committee Meeting Minutes - March 14, 2024

Moved By POPOVE
Seconded By ADAMO

THAT the Minutes of the Regional and Corporate Services Committee Open Meeting of March 14, 2024 be adopted.

CARRIED

5. LEGISLATIVE SERVICES

5.1 **Automatic Vehicle Location Technology Policy**

Moved By ROSS

Seconded By DIXON

THAT the Fraser Valley Regional District Board abolish the Automatic Vehicle Location Technology Policy.

CARRIED

6. FINANCE

6.1 **Canada's New Forced Labour Act & Reporting Requirements**

The corporate report dated April 11, 2024 by Kelly Lownsbrough, Director of Corporate Services & CFO, was provided for information.

6.2 **2023 Grant Financial Accountability Reporting**

The corporate report dated April 11, 2024 by Kinga Williams and Melanie Jones, Accountants, was provided for information.

6.3 **Financial Plan 2024-2028 Amendment: April**

Moved By HORN

Seconded By POPOVE

THAT the Fraser Valley Regional District Board direct Staff to prepare for the Board's consideration an amendment to the Fraser Valley Regional District 2024-2028 Financial Plan Bylaw No. 1726, 2024 to include five Electoral Area Service Amendments and thirteen Regional Services amendments.

CARRIED

6.4 **UBCM - Excellence in Governance Award Application**

Moved By FACIO

Seconded By SPAETI

THAT the Fraser Valley Regional District Board support the application to UBCM's Excellence in Governance Award for the FVRD Financial Plan's public engagement and transparency.

CARRIED

7. REGIONAL SERVICES

7.1 ENVIRONMENTAL SERVICES

7.1.1 Do-It-Yourself Indoor Air Cleaner Workshops

The corporate report dated April 11, 2024 by Elias Ross, Environmental Services Coordinator was provided for information. The Committee requested staff provide an example of the air cleaner at the April Board meeting.

7.2 INDIGENOUS RELATIONS

7.2.1 Provincial Land Management Legislative Updates related to the Declaration on the Rights of Indigenous Peoples Act

The corporate report dated April 11, 2024 by Kate Fenton, Planner I, Indigenous Relations, was provided for information.

7.3 REGIONAL PARKS

7.3.1 Vancouver Soaring Association Seasonal Lease

Moved By ADAMO
Seconded By SMITH

THAT the Fraser Valley Regional District Board authorize its signatories to enter into a five year agreement with the Vancouver Soaring Association for the purpose of a seasonal lease located at the Fraser Valley Regional Airpark in Hope.

CARRIED

7.4 STRATEGIC PLANNING AND INITIATIVES

7.4.1 Rural Transit Needs Assessment and Action Plan Update

The corporate report dated April 11, 2024 by Theresa Alexander, Planner I was provided for information.

7.4.2 Fraser Valley Regional District Regional Growth Strategy Bylaw No. 1706, 2023 (Fraser Valley Future 2050)

Moved By ROSS
Seconded By DIXON

THAT the Fraser Valley Regional District Board receives the City of Abbotsford, City of Chilliwack, City of Mission, District of Hope, District of Kent, Village of Harrison Hot Springs, Metro Vancouver Regional District, Squamish-Lillooet Regional District, Thompson Nicola Regional District and Regional District of Okanagan Similkameen resolutions to accept *Fraser Valley Regional District Regional Growth Strategy Bylaw No. 1706, 2023* in accordance with Section 436 of the Local Government Act;

AND THAT the Fraser Valley Regional District Board deem the *Fraser Valley Regional District Regional Growth Strategy Bylaw No. 1706, 2023* accepted in accordance with Section 436 of the Local Government Act;

AND THAT the Fraser Valley Regional District Board give third reading to the bylaw cited as *Fraser Valley Regional District Regional Growth Strategy Bylaw No. 1706, 2023*;

AND FINALLY THAT the Fraser Valley Regional District Board adopt the bylaw cited as *Fraser Valley Regional District Regional Growth Strategy Bylaw No. 1706, 2023*.

CARRIED

8. ADDENDA ITEMS/LATE ITEMS

No items.

9. ITEMS FOR INFORMATION AND CORRESPONDENCE

9.1 Letter from Jeff Weightman, BC Ministry of Agriculture and Food RE: A Presentation on Land Use Planning for Agriculture - Invitation (March 22, 2024)

Discussion ensued and the following motion was brought forward:

Moved By HORN
Seconded By ROSS

THAT the Fraser Valley Regional District Board send an invitation to the Ministry of Agriculture and Food to provide a presentation on land use planning for agriculture to a future meeting of the FVRD Board.

CARRIED

10. REPORTS BY STAFF

No items.

11. REPORTS BY DIRECTORS

Director Adamo: Clean up at Skagit River happened over the weekend that was started by a group of individuals in the Hope area. Thank you to those who came together and to Director Smith for participating.

Director Horn: City of Mission has been concerned about 92 unit affordable housing building that was not funded in the most recent community housing fund trench through BC housing. Request for support from Directors to help get building funded.

Director Smith: Thank you to Director Adamo for work at Skagit River clean up. Earth Day event taking place in Hope with Areas A and B.

Director Facio: Health and Wellness Fair taking place this Saturday from 10-2 at Memorial Hall in Harrison.

Director Dixon: Rotary Climate Fair taking place this weekend at the Chilliwack Landing Leisure Centre.

Director MacAhonic: Vedder River Clean up event is taking place at Thompson Regional Park on April 20.

Director Lum: Met with **Sts'ailes** to talk about furthering their relationship. Visited Director Smith to see exciting things happening in Hope.

12. PUBLIC QUESTION PERIOD FOR ITEMS RELEVANT TO AGENDA

No questions were asked online or in person and no written correspondence was received.

13. RESOLUTION TO CLOSE MEETING

Moved By FACIO
Seconded By ROSS

THAT the meeting be closed to the public, except for Senior Staff and the Executive Assistant, for the purpose of receiving and adopting Closed Meeting Minutes convened in accordance with Section 90 of the *Community Charter* and to consider matters pursuant to:

- Section 90(1)(c) of the *Community Charter* - labour relations or other employee relations;
- Section 90(1)(i) of the *Community Charter* - the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

CARRIED

The open meeting recessed at 10:24am.

14. RECONVENE OPEN MEETING

The open meeting reconvened at 10:38am.

Discussion ensued regarding writing a letter to the Ministry of Housing and the following motion was brought forward:

Moved By HORN
Seconded By SIEMENS

THAT the Fraser Valley Regional District Board Chair write a letter to the Ministry of Housing asking for quicker resolution on housing matters, including issues of inter-Ministry planning, existing buildings used for affordable housing units, and encampments on crown land.

CARRIED

15. RISE AND REPORT OUT OF CLOSED MEETING

No items.

16. ADJOURNMENT

Moved By FACIO
Seconded By ROSS

THAT the Regional and Corporate Services Committee Open Meeting of April 11, 2024 be adjourned.

CARRIED

The Fraser Valley Regional District Regional and Corporate Services Committee meeting of April 11, 2024 adjourned at 10:49am.

MINUTES CERTIFIED CORRECT:

.....
Director Bill Dickey, Chair

.....
Corporate Officer/Deputy

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Kelly Lownsborough, Director of Corporate Services & CFO

File No:

Subject: Forced Labour Report

RECOMMENDATION

THAT the Fraser Valley Regional District Board approve and attest to the Forced Labour Report and submit to the Federal Government by May 31, 2024.

BACKGROUND

Canada passed new legislation, *Fighting Against Forced Labour and Child Labour in Supply Chains Act* (the “Act”) in May 2023, which came into effect on January 1, 2024. The purpose of the Act is to **increase transparency in Canada’s supply chain**, and gives the Canada Border Services Agency the right to seize goods if they reasonably believe the goods have been produced using forced and/or child labour. The Act applies to local governments if they are selling, distributing, producing or importing goods. This could include imports such as parts for machinery, materials used for public works or products that are sold to customers.

The Act requires annual reporting in relation to **workers in the local government’s extended supply chain**. It needs to describe the full (direct and indirect) supply chain and any any measures to identify and manage risks of forced and / or child labour within the supply chain. The report must be publicly posted on a government registry and website.

The Board will be required to attest to the report. Both the government, its senior management and Board could face criminal penalties of up to \$250,000 if the report is not filed or if its contents are inaccurate.

DISCUSSION

The legislation applies broadly including to local governments that meet the requirements and thresholds identified below:

1. Their activities include producing, selling, or distributing goods in Canada or elsewhere; importing goods into Canada; or controlling an entity engaged in producing, selling, distributing or importing goods;

2. They have a place of business in Canada, do business in Canada or have assets in Canada; and
3. Based on consolidated financial statements, they meet at least 2 of the following conditions for at least 2 of its most recent financial years: (a) at least \$20 million in assets, (b) at least \$40 million in revenue, and/or (c) an average of at least 250 employees.

The Act's definition of government institution does not capture provincial and municipal governmental institutions; though requires all organizations to refer to the definition of entity to assess whether the Act applies to them. KPMG has advised that the Act applies to the FVRD, based on the above criteria, despite the fact that the importation of goods is not material to or the primary activity of the organization.

Local governments are required to file a report by May 31, 2024 if they meet the above criteria. Staff have worked with KPMG on the preparation of the report which is attached for review and approval.

COST

Staff have worked with KPMG on the report and expect the cost to be under \$10K and will be funded from existing budgets.

CONCLUSION

Canada passed new legislation, *Fighting Against Forced Labour and Child Labour in Supply Chains Act* in May 2023, which came into effect on January 1, 2024. The purpose of the Act is to increase **transparency in Canada's supply chain**, and gives the Canada Border Services Agency the right to seize goods if they reasonably believe the goods have been produced using forced and/or child labour. While the Federal Government clarified that local governments are not required to report, KPMG has advised that the Act applies based on the definition of entity and the fact that the FVRD imports goods from time to time. The FVRD has worked with KPMG to prepare the attached report for review and approval.

COMMENTS BY:

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

2024 Report under the *Fighting Against Forced Labour and Child Labour in Supply Chains Act*

Introduction

This report has been prepared by the Fraser Valley Regional District (“FVRD”) and Fraser Valley Regional Hospital District (“FVRHD”) in response to Canada’s *Fighting Against Forced Labour and Child Labour in Supply Chains Act* for our financial year ending December 31, 2023.

The Act encourages transparency of actions taken by Canadian organizations to prevent and reduce the risks of forced labour and child labour in the sale, production, distribution and importation of goods. Although only a very small part of our activities involves selling or importing goods, the Act applies even if the import or sale of goods is not the primary activity of a reporting entity. The Act only excludes very minor dealings.

Also, we recognize the importance of identifying and preventing risk of forced labour and child labour in Canada’s supply chains. We are committed to promoting labour practices that protect the safety and human rights of workers, including preventing and mitigating the risks of forced labour and child labour in our operations and supply chains.

Organizational structure, activities, and supply chain

The FVRD is a local government consisting of six municipalities (Abbotsford, Chilliwack, Harrison Hot Springs, Hope, Kent, and Mission) and eight unincorporated electoral areas. Our local government offices are located in Chilliwack, British Columbia. We are governed by a 24-member Board, consisting of 8 directors elected by the electoral areas, and 16 directors appointed from our municipal councils.

The FVRD is responsible for governance, administration and services within the district. We deliver over 100 different services to the approximately 325,000 residents in our district, which include animal control, emergency management, bylaw enforcement, recycling, composting, garbage, sewer and septic, and street lighting.

The FVRHD was established by the provincial government to provide the local share of capital funding for health care infrastructure in the Fraser Valley. Working with the Fraser Health Authority, the FVRHD supports healthy communities by investing in health care equipment and capital priorities. Each member of the FVRD Board also serves on the FVRHD Board.

Our operational activities occasionally include the sale and import of goods. The FVRD sells sporting accessories and vending machine beverages at our recreational facilities, branded clothing to our employees, and aviation fuel at a regional airport in Hope.

Our supply chain is closely aligned with the location of our operations in British Columbia, as we are committed to supporting local vendors in our community wherever possible. However, we occasionally import software, technology, equipment, office supplies and parts into Canada. The majority of our international suppliers are located in the United States.

The FVRD is a member of Canoe Procurement (“Canoe”), which is Canada’s largest municipally-focused cooperative purchasing group. Canoe enables its members to access trusted brands and products across a number of industries from reputable national and local vendors and supports members in meeting applicable legislative and trade agreement requirements.

The FVRD is also a member of the British Columbia Social Procurement Initiative (“BCSPI”). BCSPI supports local governments and other large purchasers to follow best practices for social procurement, including ethical purchasing, to create positive social impact in our local communities.

Steps to prevent and reduce the risks of forced labour and child labour

In this reporting year, our approach to preventing and reducing the risks of forced labour or child labour in supply chain has been to focus on our continued work with Canoe and BCSPI to adopt ethical purchasing practices. By working with these organizations, we have a stronger voice in improving transparency over the risks of forced labour and child labour in Canada’s supply chain. In addition, we have continued to apply our existing *Code of Conduct* and Procurement Policy to set standards of ethical practice, fairness and transparency in our procurement decisions.

Policies and due diligence processes

We have adopted policies that establish our commitment to ethical conduct, human rights and respect for dignity.

Our *Code of Conduct* communicates our expectation that our employees and volunteers will respect human rights and prohibits unethical or illegal acts. The *Code of Conduct* provides that all employees have the right to expect, as well as the responsibility to create, a safe workplace where everyone’s dignity is respected. Compliance with the *Code of Conduct* is a condition of employment. Any employee who fails to comply with our standards may be subject to disciplinary action, including termination.

Our *Discrimination, Bullying and Harassment Policy* prohibits behavior which violates the fundamental rights, dignity and integrity of workers and members of our communities. This policy applies to all employees, as well as our Board Members, contractors, students and volunteers.

Our *Procurement Policy* applies to the procurement of all goods and services, construction and consulting or professional services made by or on behalf of the FVRD. This policy sets standards to require that our procurement decisions are made in a fair, transparent and consistent manner. Employees who procure goods or services on our behalf must act responsibly and professionally with a high degree of integrity in compliance with our policies as well as all applicable laws.

Forced labour and child labour risk

To date, we have not identified risks of forced labour or child labour in our supply chain. The goods we sell are primarily sourced from Canada, and the goods we import are sourced primarily from the United States. Both countries have legal protections for workers safety, wages, age verification and human rights. We will continue to work with our suppliers, Canoe and BCSPI to identify any potential risks, and to adopt ethical purchasing practices.

Remediation measures and remediation of loss of income

To date, we have not identified any risks of forced labour or child labour in our operations or supply chain, and as such has not taken any remediation measures or remediation of loss of income to families as a result of forced labour or child labour.

Employee training

Our employees receive training with respect to our Code of Conduct and workplace policies relating to the human rights of workers. Our employees also have access to training related to ethical sourcing provided through the BC SPI. We have not developed training for our employees specifically on the risks and indicators of forced labour and child labour in the supply chain.

Assessing effectiveness

We have not yet developed formal measures to assess the effectiveness of our approach to preventing and mitigating the risks of forced labour and child labour in our supply chains.

Approval and attestation

In accordance with the requirements of the Act, and in particular section 11 thereof, we attest that we have reviewed the information contained in the report for the entity or entities listed above. Based on my knowledge, and having exercised reasonable diligence, we attest that the information in the report is true, accurate and complete in all material respects for the purposes of the Act, for the reporting year listed above.

Dated in the City of Chilliwack, British Columbia, this ____ day of _____, 2024.

FRASER VALLEY REGIONAL DISTRICT

JASON LUM, CHAIR

I have the authority to bind the Fraser Valley Regional District

FRASER VALLEY REGIONAL HOSPITAL DISTRICT

SYLVIA PRANGER, CHAIR

I have the authority to bind the Fraser Valley Regional Hospital District

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Kinga Williams, Accountant

File No:

Subject: Financial Plan 2024-2028 Amendment: May

RECOMMENDATION

THAT the Fraser Valley Regional District Board **direct Staff to prepare for the Board's consideration an** amendment to the Fraser Valley Regional District 2024–2028 Financial Plan Bylaw No. 1726, 2024 to include two amendments for Regional and Corporate Services.

BACKGROUND

Fraser Valley Regional District's 2024-2028 Financial Plan Bylaw No. 1726, 2024 ("the Plan") was adopted by the Board on March 21, 2024. Section 374 (2) of the Local Government Act, states that the Financial Plan may be amended by bylaw at any time. Staff use a threshold of \$10,000 to guide materiality levels of items that would prompt an amendment.

Within this report, the term "carry forward" refers to the shift of a project from one year to the next.

As a result of circumstances arising during 2024, there were three amendments previously approved. In addition, there were sixteen amendments approved relating to projects being carried forward that were budgeted in the prior years and not yet complete at 2023 year-end.

DISCUSSION

Following the adoption of the 2024-2028 Five-Year Financial Plan in March, circumstances have arisen which require updates to the Plan.

Refer to Appendix A for the two amendments related to Corporate and Recreation Services.

COST

If directed, the amendments proposed in this report will be incorporated into the Five-Year Financial Plan. The revised Financial Plan bylaw will be brought forward for adoption in early 2025.

CONCLUSION

As a result of circumstances arising, there are two amendments to the Five-Year Financial Plan that are recommended to ensure staff have the appropriate authority to incur expenditures required to effectively manage FVRD services.

COMMENTS BY:

Beth Klein, Controller/Deputy CFO: Reviewed and Supported.

Kelly Lownsborough, Director of Corporate Services/CFO: Reviewed and Supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

Appendix A: Regional Service Amendments

1. Hope & Area Recreation Centre (Service Area 709) – Main Pool Heater Replacement

The Hope & Area Recreation Centre's main pool heater requires replacement earlier than originally planned. The heater is important for pool temperature regulation and its replacement is imperative to maintaining optimal swimming conditions and upholding service standards.

This report seeks to amend the 2024-2028 Financial Plan to include a replacement of the main pool heater, which will be funded through surplus savings and will increase Capital (Equipment) expense by \$25,000.

2. Information Technology (Service Area 111) – Ministry of Agriculture Orthophoto Grant

The previous plan included \$78,700 in grant funding for collecting new orthophotos for select areas of the region. Work began on the project in 2023, but was delayed due to scheduling issues between both parties and Staff have confirmed with the issuer that this delay will not impact grant funding.

This report seeks to amend the 2024-2028 Financial Plan to carry forward the project costs from the 2023 year to the 2024 year. The project will be funded fully through Provincial Government Conditional Grants and will increase Support Fees expense by \$78,700.

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Kinga Williams, Accountant

File No:

Subject: 2024 Tax Requisition Results

INTENT

This report is intended to advise the Fraser Valley Regional District Board of information pertaining to 2024 estimated average residential taxes following the **Fraser Valley Regional District's 2024-2028 Financial Plan** Bylaw No. 1726, 2024 adoption on March 21, 2024. Staff is not looking for a recommendation and has forwarded this information should members want more clarification to discuss the item further.

BACKGROUND

The FVRD Financial Planning process involves 114 budgets and the levels of approval are staggered to ensure the utmost transparency to **the FVRD's** unique tax bases. Financial planning is an iterative process and preparations begin in the summer months for final Bylaw adoption before March 31st of the following year. The FVRD Board approves the budgeted dollars and not tax rates; tax rates are simply the final step in the process to ensure that the FVRD collects what it set out to achieve in the Financial Plan. Financial Plan presentations include estimated taxation impacts to residential property owners to provide context to decision makers.

Concurrent to FVRD's Financial Planning process, BC Assessment releases and refines assessment data for the next tax year through their own iterative process. While their process does not align with Regional District budgeting, it does provide high-level insight into changes that are expected for the next year. Because of these concurrent processes, Staff took a deliberate approach to present 2024 tax estimates based on the 2023 assessment values. This decision focused presentations on budget changes and proposed initiatives while demonstrating an **"apples to apples"** comparison to the previous **year's** taxation impacts.

In the Committee of the Whole presentation in January, Staff conveyed that preliminary 2024 property assessment data would result in residential taxes being lower than presented in Financial Plan materials. The impacts related to expected trends and shifts in property classes. The updated assessment data showed that 2024 average residential taxes would ultimately be less than the tax impacts presented (using 2023 assessment data).

DISCUSSION

The FVRD Board adopted the 2024-2028 Financial Plan Bylaw No. 1726, 2024 on March 21 and BC Assessment released the 2024 tax roll (Revised Roll) information at the end of March as per their schedule. It is at this juncture that Staff begin the administrative processes to work with the Province to ensure the FVRD taxation is fulfilled. Additionally, with this refined information Staff can now report the 2024 average residential tax impact using current BC Assessment information (which is the basis for 2024 Property Taxation).

Staff update tax requisition calculations using the 2024 Revised Roll information before advising municipalities and the Province of final requisition dollars. The final results are presented in the following tables for information and reference during any discussions with taxpayers.

Municipal Average Residential Property Values & Taxes

	2023 Avg. Property Value	2024 Avg. Property value	Change in Avg Property Value	2024 Avg. Residential Tax as Presented	2024 Avg. Residential Tax	Avg. Residential Tax Decrease
City of Abbotsford	\$ 956,000	\$ 940,000	\$(16,000)	\$ 74.15	\$ 70.67	\$ (3.48)
City of Chilliwack	\$ 840,000	\$ 806,000	\$(34,000)	\$ 67.17	\$ 62.89	\$ (4.28)
Village of Harrison Hot Springs	\$ 781,000	\$ 733,000	\$(48,000)	\$135.36	\$123.45	\$(11.91)
District of Hope	\$ 688,000	\$ 619,000	\$(69,000)	\$532.40	\$451.80	\$(80.60)
District of Kent	\$ 771,000	\$ 743,000	\$(28,000)	\$ 87.34	\$ 81.85	\$ (5.49)
City of Mission	\$1,105,000	\$1,096,000	\$ (9,000)	\$ 84.93	\$ 81.91	\$ (3.02)

Electoral Area Average Residential Property Values & Taxes

	2023 Avg. Property Value	2024 Avg. Property value	Change in Avg Property Value	2024 Avg. Residential Tax as Presented	2024 Avg. Residential Tax	Avg. Residential Tax Decrease
Area A	\$197,000	\$198,000	\$ 1,000	\$753.22	\$717.50	\$(35.72)
Area B	\$380,000	\$387,000	\$ 7,000	\$637.87	\$603.95	\$(33.92)
Area C	\$606,000	\$595,000	\$(11,000)	\$544.45	\$521.36	\$(23.09)
Area D	\$992,000	\$972,000	\$(20,000)	\$686.57	\$653.10	\$(33.47)
Area E	\$699,000	\$695,000	\$ (4,000)	\$496.16	\$474.58	\$(21.58)
Area F	\$702,000	\$640,000	\$(62,000)	\$464.68	\$412.70	\$(51.98)
Area G	\$716,000	\$705,000	\$(11,000)	\$502.11	\$481.76	\$(20.35)
Area H	\$978,000	\$982,000	\$ 4,000	\$703.67	\$665.26	\$(38.41)

In a regional district there are no two taxpayers that are alike; therefore, the Electoral Area averages presented in the table include only Regional, Sub-Regional, and Electoral Area Wide Services. These figures do not include individual local services or parcel taxes as these are not uniformly applied to all residents within an Electoral Area.

Overall, the decrease in average residential taxes was due to property class shifts: the 2024 tax base showed a shift from residential classes to utility classes or business/industry classes in both Municipal and Electoral areas. Furthermore, many areas showed clear decreases in average residential property values in 2024 compared to 2023.

COST

There are no costs directly associated with the writing of this report. The average residential tax **amounts presented within this report are based on approved dollar values as per the FVRD's 2024-2028 Financial Plan Bylaw No. 1726, 2024** adopted on March 21, 2024. Figures are based on 2024 Revised BC Assessment data.

CONCLUSION

BC Assessment released the 2024 Revised Roll information after the **Board's adoption of 2024-2028 Financial Plan Bylaw** and Staff have updated estimated tax requisition calculations using the new information. Estimates are based on total approved dollar values as per the Financial Plan Bylaw.

This Report is intended as an information piece to the Board as part of the focus on continuous improvement and transparency of the Financial Planning process.

COMMENTS BY:

Beth Klein, Controller: Reviewed and Supported.

Kelly Lownsbrough, Director of Corporate Services/CFO: Reviewed and Supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Kelly Lownsborough, Director of Corporate Services & CFO

File No:

Subject: Call Answer Levy Update

INTENT

This report is intended to advise the Fraser Valley Regional District Board of information pertaining to the Call Answer Levy. Staff is not looking for a recommendation and has forwarded this information should members want more clarification to discuss the item further.

BACKGROUND

E-Comm 911 serves as the Fraser Valley Regional District's (FVRD) primary and secondary Public Safety Answer Point (PSAP) for 911 calls. As emergency calls are taken, they are dispatched to either Police, Fire or Ambulance Services (primary PSAP). Emergency calls related to Fire Services are dispatched (secondary PSAP) to fire departments by transmission through FVRD and E-Comm 911 maintained infrastructure.

The FVRD manages the primary and secondary public safety answer points through two service area budgets; the Combined E911 for the primary PSAP via service area budget 246 and Regional Fire Dispatch for secondary PSAP via service area budget 247.

Within the approved 2024-2028 Financial Plan, the FVRD has had to enact property taxation (beginning in 2024) to supplement the Call Answer Levy that has historically funded the Combined E911 budget. The Board requested an update on the status of discussions to expand the Call Answer Levy from landlines to cell phones. The Union of British Columbia Municipalities (UBCM) has led advocacy on this topic on behalf of local governments.

DISCUSSION

During the 2024 – 2028 Financial Plan Committee of the Whole meeting in January 2024, the Board requested an update on the status of the expansion of the Call Answer Levy to cell phones. UBCM has historically led advocacy on this topic and in April 2024 has provided an update to local governments, summarized below.

- UBCM has been advocating for a 911 call answer levy (CAL) on cellular devices going back over a decade, to when a discussion paper was released and a working group was formed to examine the issue.
- In addition to the resolutions process, UBCM has continued to advocate for these changes in meetings with provincial staff and elected officials. Last year, UBCM met with Minister Mike Farnworth to raise the issues that were eventually included in the attached resolution.
- **The Province's response, to this point, is that it is reviewing UBCM's recommendations.**

Staff will continue to monitor the topic of Call Answer Levy expansion and will report any updates to the Board.

COST

There are no costs associated with this report, though a lack of ability to apply the Call Answer Levy to cell phones means a continued reliance on property taxation to fund the Combined E911 service for the FVRD.

CONCLUSION

Within the 2024-2028 Financial Plan, the FVRD has had to enact property taxation to supplement the Call Answer Levy funding for the Combined E911 service. The expansion of the Call Answer Levy to cell phones has been a long-standing issue with UBCM leading advocacy with the Provincial Government on behalf of local governments. Last year UBCM met with Minister Mike Farnworth and discussed a resolution to which the Province has advised it is reviewing.

COMMENTS BY:

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.



**9-1-1 Services in British Columbia:
Background Review in Relation to a
Province-Wide Call Answer Levy**

Dave Mitchell & Associates Ltd.

12 July 2013

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Executive Summary

In January 2013, a Steering Committee was formed comprising representatives of local government, the Union of British Columbia Municipalities and the Province, to examine the issues surrounding the introduction of a uniform, province-wide Call Answer Levy to support and improve 9-1-1 services in British Columbia. This background paper was commissioned by the UBCM in support of the Steering Committee's work. The paper examines how 9-1-1 services currently are delivered in the province, reviews call answer levy legislation and the operation of 9-1-1 services in other jurisdictions, and sets out a framework of the options and issues facing the introduction of a call answer levy in British Columbia.

9-1-1 services are an integral part of the province's emergency communications system. They are a front-end gating mechanism which connects the public to the correct emergency service dispatch agency. There are 12 Public Safety Answering Points which operate under local government authority and provide 9-1-1 services to most of the province.

The operation of 9-1-1 services, indeed, of all aspects of the emergency dispatch and communications system, is time-impacted and often life-critical. The system itself is inter-dependent and may be viewed as a continuum commencing from when a member of the public places a call to 9-1-1, where the call is assessed by the 9-1-1 operator and transferred to the relevant emergency dispatch agency, to the dispatch of emergency services and the operation of those services at the incident itself. A failure or delay at any point in this continuum will potentially affect how the entire system operates. Such failures or delays may increase the risk to life of both the public and emergency responders, or result in increased damage to property. Consequently, the entire system, from 9-1-1 services through to dispatch and the emergency radio system, needs to be resilient. It must operate to recognized standards, be adequately housed and staffed with properly trained personnel, and supported by carefully considered programs and processes for quality assurance/quality improvement, centre back-up and business continuity.

Research was conducted on the operation of the existing 9-1-1 system in British Columbia, and on the operation of similar systems in other jurisdictions, with a focus on Canadian provinces where provincial Call Answer Levies have been introduced. The B.C. research included two surveys: one for local governments which were responsible for providing 9-1-1 services; and the other to the 12 Public Safety Answering Points which actually operate the service. In addition, follow up telephone interviews and email exchanges were conducted with local government, RCMP and PSAP¹ personnel, all of whom willingly and generously assisted in providing data, information and insight.

9-1-1 Services in British Columbia

The existing 9-1-1 system has developed organically since its inception in the 1980s. Responsibility for the service lies with local government. Typically, this responsibility is met at

¹ A list of acronyms used is set out in Appendix A. Capitalized terms and acronyms used in the Executive Summary are defined in the body of the paper when they are first used.

the regional district level, though a number of municipalities either contract for, or directly provide the service as well. As technology has developed and improved, a number of local governments have banded together to coordinate the delivery of the service through a single centre. With current technologies, 9-1-1 services can be provided safely and effectively from distant locations.

9-1-1 services are available in most areas of the province, but there are still some unserved areas and some coverage gaps. Two regional districts – the Northern Rockies Regional Municipality and Central Coast Regional District – and one provincially governed region (the Stikine Region), lack any 9-1-1 service. Additionally, there is no 9-1-1 service in Skeena-Queen Charlotte Regional District outside of the City of Prince Rupert and District of Port Edward. Seven other regional districts reported coverage gaps, either in some electoral areas or on some First Nations reserves. As part of the move to a uniform, province-wide Call Answer Levy, it will be necessary to address the 9-1-1 service coverage gaps, which may involve some financial assistance for the unserved areas. More detailed investigation of coverage gaps also will be required, to assess the cost of service expansion and confirm the areas which still lack service.

The existing 9-1-1 system manages between 1.5 and 1.6 million calls annually. The cost of operating the existing system is in the range of \$12-13 million per year. All of the PSAPs have sought to address business continuity issues: every PSAP has back up and alternate power supplies for critical systems; 11 of 12 have designated fail-over centres and most of the PSAPs have back-up sites for their operations. Only half of the PSAPs, however, were able to confirm that their infrastructure was built to current post-disaster standards.

The 9-1-1 system faces various challenges. In addition to the coverage gaps noted above, the system is also struggling to deal with “Abandoned Calls”. These calls, which almost exclusively come from mobile phones, place significant strain on PSAP, dispatcher and police resources. In some jurisdictions, nearly a quarter of the calls for service for police involve follow-up on abandoned 9-1-1 calls. A formal study of the issue needs to be undertaken and a province-wide policy adopted on how such calls are treated, from PSAP through to police response. The issue also highlights the need for an effective, province-wide educational program aimed at the public, to reduce the number of “pocket dials” received by PSAPs.

The most significant development for 9-1-1 and dispatch services is the imminent advent of Next Generation 9-1-1. NG911 will involve moving PSAPs and Secondary Safety Answering Points to internet-protocol based systems. It will allow emergency communication centres to accept a broader range of connections and data sources – including text, video and pictures. Moving to NG911 will involve a substantive transformation of the existing systems used by emergency communication centres in the province, and will entail technological, operational, economic and institutional change. The system and equipment architecture for NG911 are still being developed, debated and reviewed. However, transitioning to the new systems will be a costly undertaking, in terms of capital investment as well as staffing and training issues. A “precursor” to NG911 is already on the horizon as the CRTC has mandated that carriers must

enable text connections to 9-1-1 services for the deaf, hard of hearing and speech impaired, by 2014.

The review showed that larger PSAPs tended to be more cost-efficient when measured on a “per-call” or per capita basis. Larger centres enjoy economies of scale which are significant. Cost efficient operation of the emergency communications system is important, to ensure that limited budgets are well invested. This reality, however, should not be viewed as a criticism of the existing system, given that it developed organically over the past 30 or so years. Indeed, local governments have worked hard to combine the delivery of the services in most areas of the province, as the technology enabling them to do so has become available. British Columbia compares well to most Canadian jurisdictions: given its geographic size and population, it already has a reasonably efficient PSAP footprint. On a *per capita* basis, Québec has nearly 60% more PSAPs, while Alberta has more than twice the number of that in British Columbia. The numbers are even more significant when compared to the Maritime Provinces and Ontario.² Improved efficiencies should still be encouraged, however, as it ensures that monies can be invested in improving the operation and resilience of the system, and enhancing service to the public.

9-1-1 Services and Call Answer Levies in Other Jurisdictions

A significant part of this review involved research into the operation of 9-1-1 systems and Call Answer Levy regimes in other Canadian provinces. Six other Canadian provinces have established, or are introducing, a province-wide CAL: Alberta, Saskatchewan, Québec, New Brunswick, Prince Edward Island and Nova Scotia. In five of those provinces, the CAL applies to all devices which can connect to 9-1-1 services; only Alberta has introduced a CAL which is limited to wireless devices. Each Canadian jurisdiction which has introduced a CAL has also either established procedures, guidelines and operational requirements for PSAPs, or has created a process for establishing them. Four of the six provinces also have introduced liability exemptions covering the operation of PSAPs.

The Maritime Provinces and Saskatchewan fundamentally approach 9-1-1 services as a provincial responsibility (even though service delivery everywhere but Prince Edward Island generally remains with local governments). In Québec and Alberta, 9-1-1 service delivery remains the responsibility of local governments – though Québec has taken the step of requiring that local governments make the service available (either directly or by contract) in most areas of the province.

In the Québec system, the provincial government set detailed requirements for PSAPs, ranging from location and infrastructure, to operational requirements, procedures and quality assurance processes. The allocation of funding from the CAL, however, rests with an agency which is operated by local government. That same agency is responsible for reviewing PSAP operations. In essence, though the province established the requirements, it gave control and

² The number of PSAPs in Ontario is not reported. An email from Inspector Paulo DaSilva of the York Regional Police, who responded to an information request placed to the Ontario 9-1-1 Advisory Board, indicated that there are “over 100” PSAPs in Ontario. Email from Insp. P. DaSilva, 8 July 2013.

oversight of the system to local government, which remains responsible for actual service delivery. An interesting feature of the Québec system, moreover, is that it strictly limits the amount of the funding available for “administration”: a maximum of 3% of the CAL funds can be spent by the responsible agency for its administrative overheads.

Other provinces (notably Saskatchewan, New Brunswick and Nova Scotia) have established committees comprising various stakeholders, including representatives of local government and PSAPs, and emergency services personnel, to develop and implement consistent policies, procedures and standards for their 9-1-1 services. In Alberta, which is in the process of introducing a new CAL and attendant standardized requirements for PSAPs, the principal responsibility lies with the Alberta Emergency Management Agency. The AEMA is seeking to coordinate policy development with local governments and PSAPs.

In four of the six Canadian jurisdictions, the permitted use of CAL funds is broader than a narrowly conceived view of 9-1-1 services. Nova Scotia, among other things, funds its poison control centre using CAL monies. New Brunswick recently broadened its definition of allowable expenditures to include the “coordination of emergency services” in the province, while Saskatchewan uses about half of the CAL funding to subsidize the connection of local government and provincial agencies (including fire departments and municipal workers) to the province’s emergency radio network. Québec utilizes a set allocation formula for distributing CAL funds to (or at the direction of) local governments. It does not actually limit or prescribe how those funds must be spent, though in practice, 96% of the funds are distributed directly to PSAPs.

Two other jurisdictions also were examined: Manitoba and the State of Kentucky. Manitoba has not introduced a provincial CAL. However, it has adopted a centralized approach to the establishment of standards governing PSAP operations and established a wide-ranging liability exemption for PSAP operations. The State of Kentucky, conversely, epitomizes the decentralized approach. With an area only one-third that of British Columbia and a smaller population, Kentucky supports 109 certified PSAPs, and more than 80 uncertified PSAPs, which are not tracked by any state agency. PSAP operation is a local government responsibility and is principally funded through a combination of landline CALs and property taxes. The state also has established a wireless CAL, which it uses to subsidize certified PSAPs and to regulate how those PSAPs manage wireless 9-1-1 calls. It is probably not surprising that the system suffers from significant efficiency issues and many local governments are struggling with funding problems.

Issues and Options for a Province-wide CAL in British Columbia

As a starting point it should be noted that this background paper assumes that a CAL will be imposed on all devices which connect to 9-1-1 services (including landline, wireless and Voice over IP). The CAL will be set at a uniform level and will be province-wide. The principal function of the CAL will be to fund 9-1-1 services, though the introduction of the new system should not result in any local government losing any amount of existing revenue which it currently raises from a landline (or, in the case of Prince Rupert, landline and wireless) CAL. In

other words, the CAL should provide at least the same existing level of funding to such jurisdictions.

Establishment of a CAL and related structures and processes, will involve senior legislation and related regulations. The legislation and regulations will need to address a range of issues, which are set out in greater detail in the body of the paper (including the scope of the CAL, liability issues, collection issues, processes etc.). In general, however, the three principal, interrelated issues which need to be addressed are: the allowable scope of expenditure of funds raised from the CAL; the method or process by which those funds will be managed and allocated; and the extent to which (and process by which) common standards and requirements for PSAP operations will be developed and implemented.

The paper does not seek to prejudge the appropriate scope for the application of CAL funds. That is a policy issue for local governments and the province, though a range of matters are identified which could be included as “in scope”, on both a narrow conception of 9-1-1 services and a broader approach to the use of the funds. Simply put, however, the broader the scope of the CAL – the more elements of the emergency communications system that will be funded, in whole or in part, by this levy – the more complex the allocation process and the more complex the oversight and management of the system will become.

Certain issues or principles did emerge from discussion both with stakeholders during the research process, and through the review of an initial draft of the paper with the Steering Committee:

1. The CAL funding should only be applied to specific, agreed purposes, which should be clearly defined in the senior legislation;
2. The principle use of the funding will be “9-1-1 services”;
3. Control over the allocation of CAL funding should remain with local governments;
4. The allocation process will likely involve both a metrics-driven formula and some form of grants process;
5. The allocation process will need to take into account existing funding and cost structures of local governments;
6. Any administration costs related to the oversight of the system (i.e., to manage the allocation process and any similar functions) should be strictly limited; and
7. Any standards or procedures which are established should be created through a consensus process involving relevant stakeholders – the costs of developing, implementing and meeting those standards must be factored into the CAL funding formula.

Finally, the legislation will also need to address the quantum of the administration fee which telecommunication companies will be permitted to charge for collecting and remitting the CAL. As a matter of principle, this fee should be set at a rate that is no more than the actual cost of collection. With a uniform levy across all devices, and a single point of remittance for CAL funds, the administration fee should be nominal, and certainly far less than the \$0.07 currently charged for the collection of landline CALs.

1. Introduction and Background

In January 2013, a steering committee (the “Steering Committee”) was established comprising representatives of local government, the Union of British Columbia Municipalities (“UBCM”) and the province. The goal of the steering committee was to examine issues related to the introduction of a uniform call answer levy to support and improve the operation of 9-1-1 services in British Columbia. In early May 2013, Dave Mitchell & Associates Ltd. commenced work to develop a background paper to help inform the review process being undertaken by the Steering Committee.

The work to be undertaken included a review of the existing 9-1-1 services in the province, a consideration of how such services are delivered in other jurisdictions, a review of how other Canadian jurisdictions with provincial call answer levies have implemented and manage those levies, and a review of the issues, challenges and options in relation to the introduction of a call answer levy (“CAL”) in British Columbia.

The Steering Committee established a series of strategic objectives and principles in relation to the establishment of a practical and sustainable CAL model.³ From the province’s perspective, three criteria need to be met:

- the CAL needs to be province-wide and harmonized with other jurisdictions (if possible);
- the establishment of a CAL must offer improvements to public safety (e.g. enhanced capabilities, additional training, enhanced capacity to meet future demands, etc.); and,
- the CAL needs to feature a consensus funding formula based on industry and local government leadership.

From the local government perspective, a province-wide CAL must:

- provide new revenue to assist in the development of local 911 services;⁴
- ensure that all users of the local 9-1-1 service help pay for the service, both wireless and landlines; and
- respect the delivery of 9-1-1 services by local government.

To gather the necessary background information, two separate surveys were created. One survey was for the 12 Public Safety Answering Points (“PSAPs”) which operate under local government authority and are responsible for handling the vast majority of 9-1-1 services in the province. This survey focused on issues ranging from the number of calls handled, the number of agencies to which calls were downstreamed and staffing, to infrastructure, training and standards. The second survey was designed for those local governments which were

³ UBCM/Provincial Government Committee on Provincial 911 Call Answer Levy: Terms of Reference (undated - 2013).

⁴ Various comments from local government representatives have emphasized that this criterion refers to net new revenue, after taking into account existing local governments costs and revenue sources. Comment from T. Whiting, Senior Manager, Protective Services, CRD, 8 July 2013.

responsible for delivering 9-1-1 services in their jurisdictions. These surveys therefore went principally to regional district governments, which typically have responsibility for this service. Where municipal governments were known to be directly involved in providing the service, the questionnaire was also provided to those governments.

In addition, extensive research was conducted on how 9-1-1 services are delivered in other Canadian provinces, with a particular emphasis on those jurisdictions which have established a CAL. The manner in which other provinces are operating their 9-1-1 systems, and managing the corresponding CAL funds, provides a guide as to the issues that need consideration in British Columbia and some conceptual approaches that may be applicable here.

Assistance was also obtained from various individuals in local government and the PSAPs, who willingly shared information and their expertise. Particular thanks are owing to Inspector Rick Greenwood (RCMP E-Division Operational Communication Centres), Bill Figgitt (RCMP – SE District Deputy Leader), Mike Webb and Doug Watson (E-Comm), Cary Berger (Central Okanagan Regional District), Donna Munt (Regional District of Fraser-Fort George), Deb Middleton (Bulkley-Nechako Regional District), Per Kristensen (City of Nanaimo), Travis Whiting (Capital Regional District), Debra Oakman and Marie Lapp (Comox Valley Regional District) and Mike Gilbert (Northern Rockies Regional Municipality).

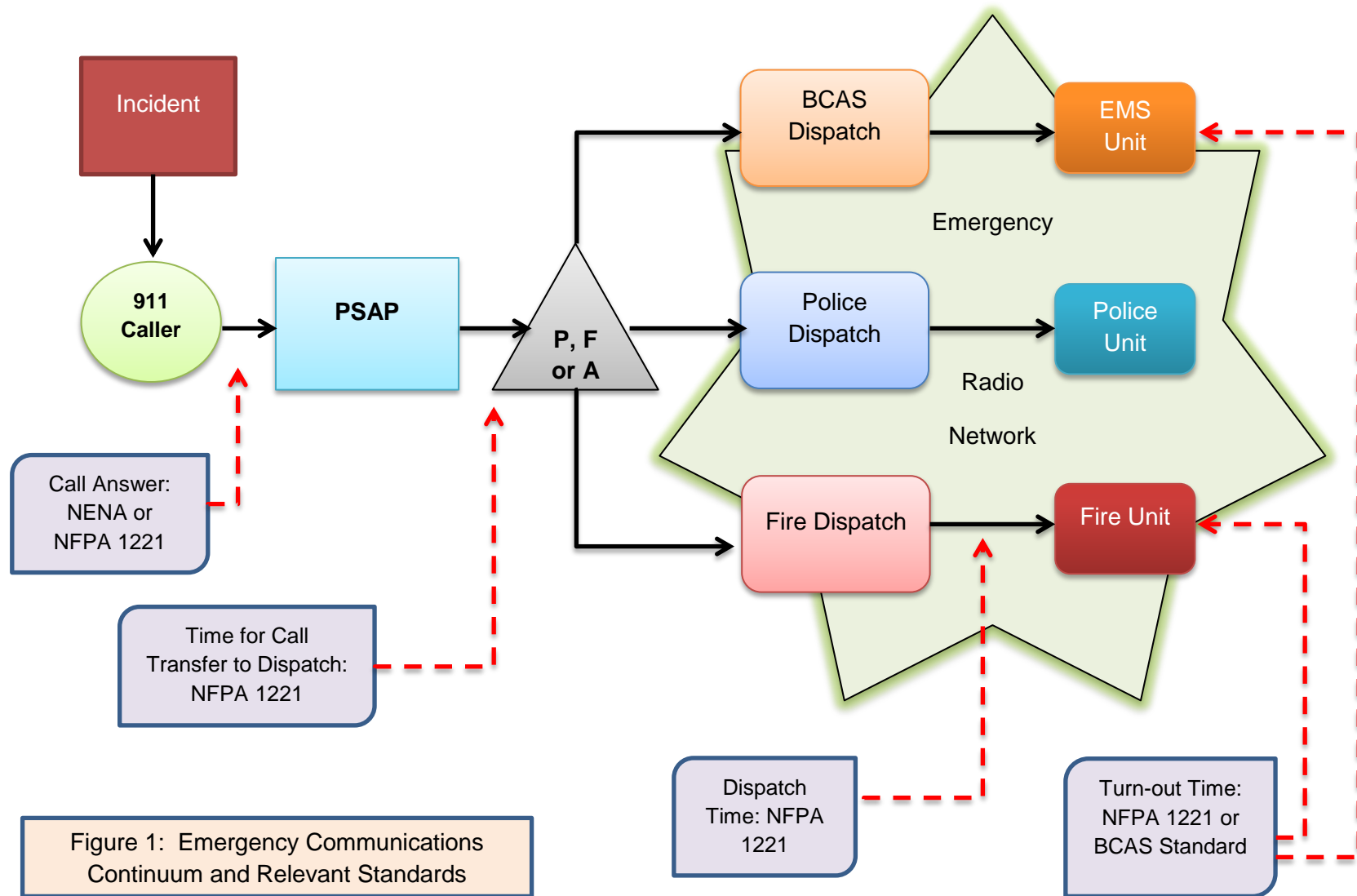
2. Definition of 9-1-1 Services, Public Safety Context and Standards

The potential introduction of a province-wide CAL to support and improve 9-1-1 services will necessarily involve a consideration of the funding, operation, applicable standards, oversight and control of those services. As such, it is critical to bear in mind the public safety context applicable to 9-1-1 services as those decisions are made. This section seeks first to define what constitutes “9-1-1 services,” then to place those services in the public safety context and to develop some principles which should inform the decision making process.

a. Definition of 9-1-1 Services

9-1-1 services are part of the continuum of emergency communications which start with a member of the public seeking assistance, and ends when that event has been responded to and dealt with by the relevant emergency service. While each element may be distinctly identified and its processes defined, it needs to be understood that they are fully interconnected and interdependent. The failure of the system at any one point will negatively impact the operation of the system as a whole. The general structure of the system is shown in Figure 1, below, along with the potentially applicable standards for each element of 9-1-1 call handling and emergency service dispatch process:⁵

⁵ Note that BC Ambulance Service Dispatch also applies standards to call answer and dispatch. The former is essentially the NENA standard of answering 90% of the calls within 10 seconds or less. The dispatch standard is essentially the same as NFPA 1221 (2010), though BCAS breaks its measurement into two separate components. Fundamentally, however, an EMS unit must be dispatched within 60 seconds, 90% of the time. Email from G. Kirk, Director, Dispatch Operations, BCAS, 10 July 2013.



On this continuum, the 9-1-1 service is actually a relatively limited piece – it is the initial interface or gating mechanism through which a member of the public is directed to the correct dispatch agency for the relevant emergency responders.

In practice, the call flow from a PSAP to the relevant emergency dispatch agency, and from that agency to the relevant emergency service personnel, can be complex. For example, a 9-1-1 call placed from the Shuswap Lake area in the Columbia Shuswap Regional District (“CSRD”), will be routed to the Kelowna RCMP PSAP. If the call is for a fire department, the Kelowna RCMP PSAP will downstream the call to Surrey Fire Dispatch, which is contracted to provide fire dispatch services for the CSRD’s regional fire departments. Surrey Fire Dispatch, in turn, will then assess the call and page out the appropriate CSRD regional fire department.

A diagrammatic representation of how emergency calls get routed from 9-1-1 to emergency service agencies is shown in Figure 2 below, which sets out how the current system operates in the Capital Regional District (the “CRD”).⁶ The CRD is served by three PSAPs.⁷ Each of the PSAPs also dispatches police services (two for multiple jurisdictions). 9-1-1 calls can also be downstreamed to one of three fire dispatch centres or to the BCAS dispatch centre. Two of the fire dispatch centres, in turn, dispatch multiple agencies.

⁶ Diagram provided courtesy of the CRD, by Travis Whiting, Senior Manager, Protective Services, CRD.

⁷ There is a fourth PSAP which serves only the DND regions of the CRD, as noted at the top of the diagram.

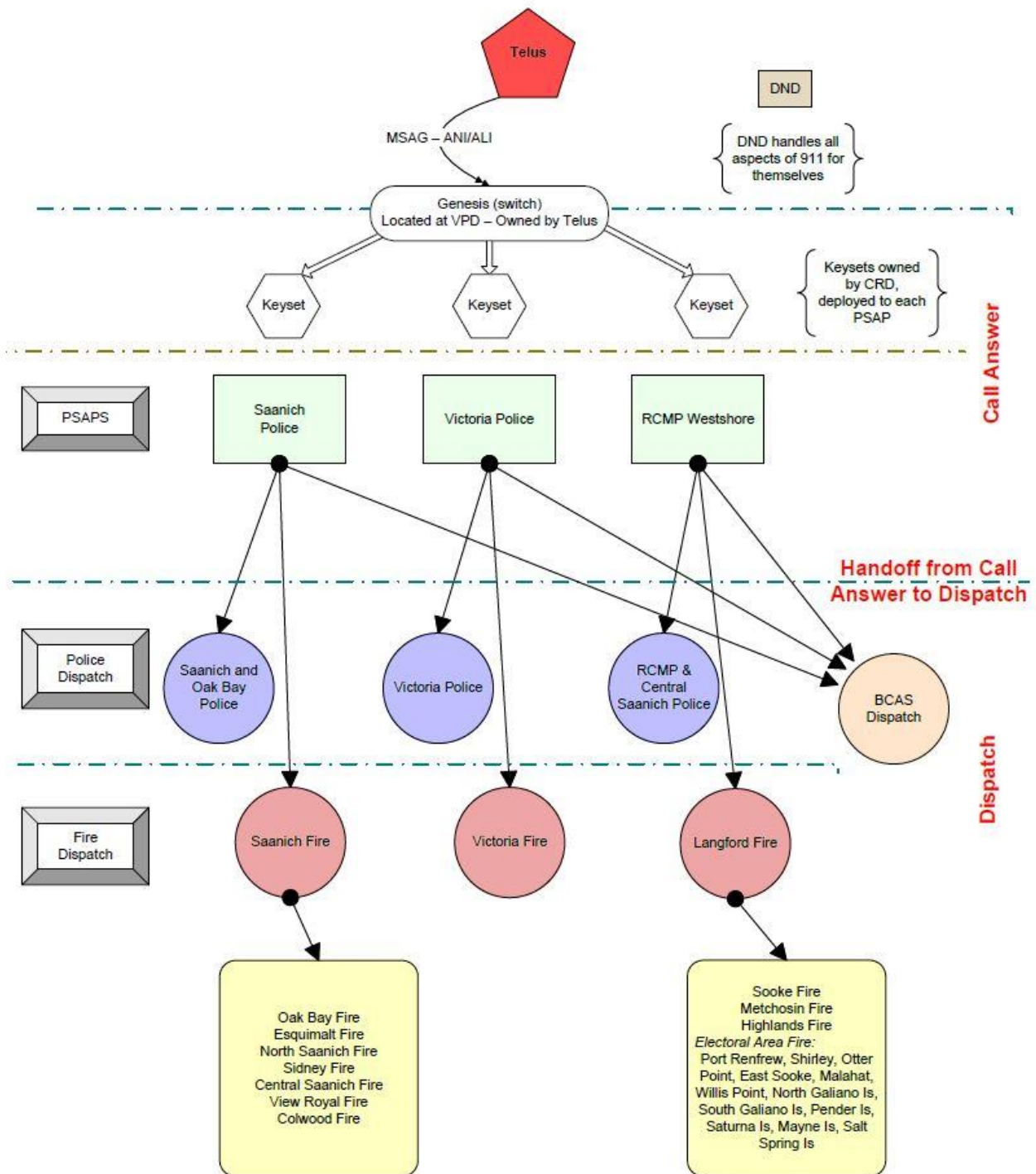


Figure 3: CRD PSAP Operation

For the purposes of this background paper, 9-1-1 services are understood to comprise the following:

- (a) Call answer on the incoming 9-1-1 line.
- (b) Caller interrogation/call evaluation to determine:
 - to which emergency agency or Secondary Safety Answering Point the call should be directed; and
 - the jurisdiction and location to which it relates.⁸
- (c) “Transfer” of the call to the appropriate dispatch centre for the appropriate jurisdiction.

The “Transfer” step may involve any one of the following:

- the call taker notionally switching roles, and undertaking a caller interrogation/dispatch function for either fire or police;
- the call being transferred across the room to a police or fire dispatcher position; or
- the call being transferred to an external agency – such as to BC Ambulance, or to a police or fire dispatch agency such as Surrey Police Dispatch or Kamloops Fire Dispatch.⁹

The 9-1-1 function ends when the “transfer” is complete, either through a call hand-off to another agency or when the notional transfer occurs and the call taker commences agency-specific call evaluation and/or dispatch functions.

On this basis, when viewed as part of the continuum of the emergency communications system, 9-1-1 services are a very limited piece, at the front end of the process. Subsequent references in this background paper to “9-1-1 services” will be predicated on this definition. A provider of 9-1-1 services is properly referred to as a “public safety answering point” or “PSAP”.¹⁰ Communication centres which provide only dispatch services are referred to as “Secondary Service Answering Points” or “SSAPs”.

An issue to be considered by stakeholders, including local governments, the province, emergency communication centres and emergency agencies, is the role to be played by PSAPs in relation to abandoned or short duration 9-1-1 calls. This issue, which can consume

⁸ In many cases, as the system is currently structured, the “jurisdiction” question may not need to be answered, as there may be only one relevant dispatch agency to which the PSAP downstreams the call. However, as noted in the Kelowna OCC’s operational manual: “The primary source of information, including location and type of emergency is the caller. ANI/ALI information is used as a *secondary* or *confirmation* source only, unless the caller is unable to provide the information.”

⁹ There are approximately 50 – 60 external dispatch agencies in the province to which PSAPs may downstream 9-1-1 calls, in addition to the in-house dispatching that they also perform.

¹⁰ The use of the term “PSAP” in some sources is used to refer to any emergency communication centre, including those which only provide dispatch services. In this background paper, the term “PSAP” will only refer to an emergency communication centre which provides 9-1-1 services. In B.C., every PSAP in the province also provides police, fire, or police and fire, dispatch services, in addition to 9-1-1 services.

significant amounts time for both SSAPs and for police resources, will be examined elsewhere in this paper (see section 6(b), below).

The use of this definition is not intended to prejudge how funds from a CAL should be used. As will be seen, other Canadian jurisdictions use the funds raised for purposes broader than what may be considered “9-1-1 services” as narrowly defined and some also have 9-1-1 operators play a much more expansive role in the emergency communications system.

Principled arguments can be made for using this funding source to enhance emergency communications as more broadly conceived (including dispatch and emergency radio systems). Ultimately, that decision rests with the local governments and the province. It needs to be appreciated, however, that the further along the emergency communications continuum one goes, the more complicated the issues related to funding allocation methodologies, standards, operational requirements, oversight and similar issues become.

b. Public Safety Context

9-1-1 services are, first and foremost, a question of public safety. It is critical to ensure that the public safety context of these services remains the driving factor in any decision being made regarding the introduction of a CAL and any related consideration of funding allocation, operations, standards, oversight and control.

Emergency communications systems, of which 9-1-1 services are an integral part, require speed, accuracy, thoroughness and resilience. Emergency call handling is time-impacted and often life-critical. An emergency call taker must handle calls quickly, gathering the required information accurately and then fulfilling his or her function in the emergency communications continuum. These four criteria apply along the entire continuum, from 9-1-1 through to dispatch and the role played by dispatchers in emergency incident management.

Speed. If call handling is slow at any point in the system, it will delay the arrival of an appropriate emergency response, which can result in greater risk to life for both the public and the emergency responders, and potentially greater damage to property. Slow call handling can also impact other segments of the emergency communication process – if a dispatch centre cannot quickly effect the dispatch of units for which it is responsible, 9-1-1 call takers may not be able to pass on further calls to that centre. In turn, the queue for 9-1-1 calls may back up, since a 9-1-1 call taker cannot take a new call until an existing call has been transferred.

Slow call handling can result from a variety of issues, including insufficient staffing, insufficient training, a lack of quality assurance/quality improvement processes and problems with technology, equipment or software.

Accuracy. As with speed, if call handling is inaccurate at any point in the system, it may delay the arrival of an appropriate emergency response, which can result in greater risk to life for both the public and the emergency responders, and potentially greater damage to property. If call takers are not accurate, the wrong service may be dispatched, the wrong types of units may be sent or the units may be delayed in reaching the correct

destination. In the 9-1-1 context, an error in the appropriate jurisdiction, or selection of the wrong type of service, or technological issues stemming from insufficiently current master street address guides, GIS mapping problems, or similar issues, may significantly delay an emergency response.

Thoroughness. Given the limited mandate of 9-1-1 services, thoroughness is less of an issue for 9-1-1 call takers than it is for dispatch functions. That being said, at each gating point of the emergency communication process, call takers must ensure that they obtain all of the relevant information necessary to carry out their role in order to activate and direct the appropriate emergency response.

Resilience. The emergency communications system, from the 9-1-1 call taker position through to on-scene radio communications between emergency responders, must be resilient and robust. The system must be able to function effectively regardless of adverse circumstances. In the context of 9-1-1 services, resilience relates to the following issues:

- Infrastructure – the building housing the communications centre, including all essential telephone, power and other service connections and related back-up systems;
- Technology and IT systems;
- Staff training and recognized service standards;
- Staffing levels;
- Proper organizational processes and management (including quality assurance and quality improvement); and
- Effective overflow, back-up and business continuity plans.

A PSAP needs to be able to continue functioning (or the service needs to be appropriately backed up by another centre) so that regardless of call volume or an incident affecting a particular 9-1-1 service provider, this critical connection service between the public and emergency responders is not lost or unduly delayed.

The final issue that needs to be borne in mind is that the delivery of the service has to be efficient. If the service does not operate efficiently, monies will be wasted which could have been invested in improving the standards or quality of service delivery to the public and to emergency responders.

An emergency communication centre, whether a PSAP or an SSAP, which meets the four criteria listed above, is an expensive undertaking. Given the capital costs of constructing and maintaining a resilient operation, one which is properly staffed and which utilizes current technology and software, there has been a move towards coordinating the delivery of emergency communication services. In delivering 9-1-1 services, various regional districts and

municipal governments have already banded together to share services through single points of coordination. Example of these shared or combined 9-1-1 services include:¹¹

- the arrangements made through the Central Okanagan Regional District, which coordinates and manages provision of 9-1-1 services to itself and eight other regional districts;
- the arrangements made through the Regional District of Fraser-Fort George, which coordinates and manages provision of 9-1-1 and fire dispatch services to itself and three other regional districts;
- E-Comm, which is owned by local governments and provides 9-1-1 services to three regional districts, in addition to fire and police dispatch services;
- Central Island 911, which is an arrangement between two regional districts and a municipality to manage the provision of 9-1-1 services; and
- North Island 911, through which six regional districts arrange for 9-1-1 and fire dispatch services.

These trends towards centralization of service delivery reflect both the benefits that can be obtained through economies of scale and the capabilities of current technologies. They enable investments in infrastructure, technology and staff which enhance service delivery to the public and to emergency responders and should be encouraged as part of this process.

c. Standards

The adherence to standards is one of the hallmarks of modern emergency services. The adoption of standards is critical to the efficient, safe and effective delivery of life-critical, time-impacted services. They also ensure that such services are delivered in a uniform and well understood fashion, thereby improving oversight and mitigating operational risk. In the context of emergency communication centres, established standards also enable such centres to undertake appropriate quality assurance and quality improvement reviews, with established and relevant benchmarks against which to measure performance.

In relation to 9-1-1 services, two recognized sets of standards are potentially applicable: those established by the National Emergency Number Association (“NENA”) and those established by the National Fire Protection Association (“NFPA”). Both are already used to varying degrees by different PSAPs in the province.

NENA is a professional organization focused on 9-1-1 policy, technology, operations and education issues.¹² NENA has established a call answering standard and model for 9-1-1 services which covers five areas:¹³

¹¹ In some cases, one regional district may participate in two separate services. Thus, the Squamish-Lillooet Regional District (“SLRD”) arranges for 9-1-1 services through both the Central Okanagan Regional District, for its northern portion, and with E-Comm for the southern portion. Two municipal governments within the SLRD – Squamish and Whistler – separately contract with E-Comm for 9-1-1 and dispatch services.

¹² See the NENA website, at: <http://www.nena.org/>

- Operational level of service;
- Order of answering priority;
- Answering Protocol;
- Information gathering; and
- Call Transfer.

The NENA standard provides that 9-1-1 calls should be answered within 10 seconds, 90% of the time. It also prescribes that a 9-1-1 operator should always answer by saying “9-1-1”. The priority for handling calls are the 9-1-1 and 7 or 10 digit emergency lines, followed by non-emergency lines and finally by administrative or internal phone lines.¹⁴

The NENA standard offers certain recommendations as to what information should be obtained from callers, as well as processes to be followed by operators to verify address.¹⁵ While the standard specifically identifies call transfers to dispatch agencies as an issue, and provides that “the telecommunicator will transfer the call without delay”, it does not actually establish a measurable standard for such transfers.¹⁶

NENA also has established specific standards for responses to wireless 9-1-1 calls, TTY/TDD¹⁷ operating procedures, the use of call processing protocols and an operational study of “silent or hang-up” 9-1-1 calls.¹⁸

The NFPA has established comprehensive standards for 9-1-1 call taking and dispatch by emergency services. The NFPA is a professional organization which develops consensus standards for use by fire and other emergency services.¹⁹ Various NFPA standards already have been mandated by the province and by WorkSafe BC for use by the fire service.²⁰

¹³ NENA, *NENA Call Answering Standard/Model Recommendation* (2006), at p. 5/12.

¹⁴ *Ibid.*, at p. 8/12, sections 3.1, 3.2 and 3.3.

¹⁵ *Ibid.*, at pp. 8-9/12, section 3.6 and 3.6.1.

¹⁶ *Ibid.*, at p. 9/12, sections 3.7.

¹⁷ TTY/TDD refers to “Telecommunications Device for the Deaf”. The device is essentially a typewriter that allows the deaf, hard of hearing or speech impaired to communicate with the emergency communications services through text. Not all PSAPs in the province currently have TTY/TDD capabilities.

¹⁸ See, for example: NENA, *NENA Guidelines For Minimum Response To Wireless 9-1-1 Calls* (2004); *NENA TTY/TDD Communications Standard Operating Procedure Model Recommendation* (2005); *NENA Emergency Call Processing Protocol* (2008); and *NENA Silent or Hang-Up 9-1-1 Calls for Service: An Operations Focused Study* (2002). NENA also has standards on civic addressing.

¹⁹ See the NFPA website at: www.nfpa.org.

²⁰ The province, pursuant to section 3(3)(b) of the *Fire Services Act* (B.C.), has mandated that the training standards to be used by the fire services in the province are those set by the NFPA. See: Minister's Order (OIC M368), 18 December 2002. Various NFPA requirements have also been adopted by WorkSafe BC in Part 31 of the *Occupational Health and Safety Regulation* made under the *Workers Compensation Act* (B.C.).

The relevant standard for emergency communications is NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems* (2013 Edition) (“NFPA 1221”). The NFPA has prescribed a full range of call answer and handling standards, from 9-1-1 call answer and transfer to the ultimate dispatch of emergency services. Under the NFPA system, 9-1-1 calls should be answered within 15 seconds, 95% of the time, with 99% of all calls answered within 40 seconds. Call transfer by the 9-1-1 operator should be effected within 30 seconds, 95% of the time.²¹

The NFPA standard, however, also covers most aspects of an emergency centre’s operations, including detailed requirements for infrastructure, equipment, back-up power supplies, continuity planning and similar issues. Centres which meet NFPA 1221 standards are designed to be resilient and secure.

All of the PSAPs which responded to the survey utilize either NENA or NFPA call answer standards, with the exception of E-Comm. E-Comm has a more stringent call answer standard – call answer within 5 seconds, 95% of the time – established under contract with its local government clients, and uses NFPA standards for call transfers. Only two centres reported that they have adopted the NFPA call transfer standard.

A corollary to establishing standards is the need to report on a communication centre’s performance against those standards and to utilize appropriate quality assurance/quality improvement processes to ensure that the standards are being met. Regular reporting requirements are an essential discipline. They ensure that a PSAP is regularly reviewing its performance against applicable standards,²² and assessing the quality of the service it delivers in a measurable fashion. The quality assurance and quality improvement processes then assist in identifying any issues with existing services and developing improvements to the system. Regular reporting on performance metrics and formal quality assurance/quality improvement programs, however, are far from universal in the province.

3. Legislative Responsibility

In British Columbia, delivery of 9-1-1 services is a local government responsibility. The provision of 9-1-1 services, like the provision of fire services, is an optional power. A local government is not obligated to provide such service and the province has not regulated any standards or requirements in relation to such 9-1-1 services if they are provided.

In general, this responsibility has been met by regional district governments, which have established and/or contracted for the provision of service across most of the province. Typically, amendments to the relevant Letters Patent for each regional district conferred the

²¹ See: NFPA 1221, s. 7.4.1.

²² Every PSAP and SSAP collects large volumes of data. It is surprising, however, that many do not then analyze and report on such data.

necessary powers to undertake the provision of 9-1-1 services, which are then implemented by bylaw as a regional service in accordance with the *Local Government Act* (B.C.).²³

There are a few notable exceptions: in both Prince Rupert and Nelson, 9-1-1 services are municipally provided. The Prince Rupert PSAP is a combined 9-1-1, fire dispatch and communication centre, which is operated by the Prince Rupert Fire Rescue Department. The service was established under a city bylaw, “9-1-1 Dispatch Service Establishment Bylaw No. 3183, 2004.” The bylaw establishes 9-1-1 services within the municipal boundaries and permits the city to enter into agreements to provide those services to “any other area outside the City that has given consent and entered into an agreement” with the city.²⁴ Prince Rupert also provides 9-1-1 services to the District of Port Edward under contract. The Regional District of Skeena-Queen Charlotte itself, however, does not provide any 9-1-1 services, and there are a number of settled areas within that regional district without 9-1-1 services.

The City of Nelson, in the Regional District of Central Kootenay (“RDCK”), also provides 9-1-1 services within its municipal boundaries. In this case, the services are incorporated as part of the operation of the Nelson Police Department emergency communications centre. Unlike the Prince Rupert example, however, the RDCK does provide 9-1-1 services to the rest of the regional district. The RDCK is one of eight regional districts which have contracted with the RDCO, to obtain 9-1-1 services through the Kelowna RCMP Operational Communications Centre.

In some cases, individual municipalities also have arranged for 9-1-1 services directly with a PSAP. Thus, in the Squamish-Lillooet Regional District (the “SLRD”), both Squamish and Whistler have separately contracted with E-Comm to obtain both 9-1-1 and dispatch services. Similarly, Central Island 911 is an arrangement between the City of Nanaimo, the Cowichan Valley Regional District and the Regional District of Nanaimo (acting on behalf of the area covered by the boundaries of School District 68) for the provision of 9-1-1 services to each of those parties.

As a local service, funding of 9-1-1 operations is the responsibility of local government. Two primary funding mechanisms are used: property taxes and a CAL on landlines. Most jurisdictions appear to rely on property taxes to fund 9-1-1 services; typically the same tax is used to pay for other portions of the emergency communications system, including dispatch services and the radio network.

A number of jurisdictions use both property taxes and a landline CAL. Landline CALs are implemented through agreements between local governments and the relevant Incumbent Local Exchange Carrier (“ILEC”) (in British Columbia, Telus is the ILEC) and Competitive Local

²³ See, for example, Capital Regional District, *Supplementary Letters Patent*, Division XXXVI (OIC 1906, 15 October 1988), which conferred the power on the Capital Regional District to establish, operate and fund an “Emergency Response Telephone Service”; see also Regional District of Central Okanagan (“RDCO”), *Supplementary Letters Patent*, Division XXV (20 February 1985), which established comparable powers in the RDCO.

²⁴ Prince Rupert, Bylaw No. 3183 (2004) s. 2(b).

Exchange Carriers (“CLECs”). Although the amount of the CAL varies from jurisdiction to jurisdiction, the terms of such agreements are standardized, including a set fee of \$0.07/line/month charged by Telus and the CLECs to collect the local levy.²⁵

Finally, one jurisdiction in the province has managed to implement a wireless CAL. The Prince Rupert bylaw establishing the service in 2004 also established a CAL on wireless devices. Some funds are actually being collected through the mechanism, but it appears to be limited to wireless devices activated through Citytel, the telecommunications company owned by the city itself. As is well known, the attempt by Nanaimo to impose a CAL on wireless service providers was struck down by courts as a tax that was *ultra vires* the city.²⁶

An issue that arises when assessing the costs associated with the provision of 9-1-1 services is that, in every case, these services are provided out of a facility which also offers dispatch services. Given that local governments usually treat 9-1-1 services as a related component of their emergency communication systems (in the broadest sense), it is therefore challenging to determine the precise costs of 9-1-1 service delivery for certain jurisdictions.

As will be seen, not all PSAPs in the province are required to report regularly on their performance metrics. Some Canadian jurisdictions prescribe both the standards applicable to call handling, as well as reporting requirements and quality assurance processes. In connection with the development of a CAL model, consideration of an appropriate approach to establishing consensus performance standards, reporting requirements and quality assurance processes for PSAPs should be included as an aspect of improving the delivery of 9-1-1 services in the province.

4. Existing 9-1-1 Services in British Columbia

a. Overview

9-1-1 services are available throughout most of the province,²⁷ provided through either regional district or municipal governments. 9-1-1 services are provided by 12 PSAPs, plus a PSAP operated by DND Esquimalt (the operation of which is outside the scope of this review). Of the 12 PSAPs, six are located in RCMP Operational Communication Centres (“OCCs”).²⁸ In some cases, 9-1-1 staffing of the OCCs is provided, in whole or in part, by local governments, a

²⁵ The administration fee is expressly provided for as part of the general tariff. See, for example, Telus, *General Tariff: Local Switched Access Service* (CRTC 21461), Item 203.2D, “Local Government Authority Call Answer Levy”, paragraph 2. There also are CRTC-approved standard form agreements for “local governments” wishing to establish landline call answer levies with ILECs and CLECs.

²⁶ *Canadian Wireless Telecommunications Association v. Nanaimo (City)* 2012 BCSC 1017, at para. 95

²⁷ This is true, whether it is considered in a geographic sense (i.e., wherever there is a landline or reliable cell phone coverage) or in terms of coverage for resident populations. It is not meant to suggest, however, that coverage is complete.

²⁸ In relation to the OCCs, this paper uses the location to name the OCC, rather than using the standard RCMP naming convention. For example, the “Southeast District OCC” is called the “Kelowna OCC”. In this way, it will be immediately understandable for the average reader where the particular OCC is located.

situation that figures most prominently in the Nanaimo and Kelowna OCCs. The following table shows each PSAP and its approximate or usual coverage zone:

PSAP	Regions/Areas Served
Saanich Police Department	Capital Regional District (Saanich and Oak Bay only)
Victoria Police Department	Capital Regional District (Victoria and Esquimalt only)
Westshore RCMP OCC	Capital Regional District (remainder of CRD except DND Esquimalt)
[DND Esquimalt PSAP]	[Capital Regional District (DND area only)]
Nanaimo RCMP OCC	City of Nanaimo, Nanaimo Regional District (south portion – School District 68 only), and Cowichan Valley Regional District
Courtenay RCMP OCC	North Island 911. North Island 911 is owned by and arranges for 9-1-1 services to six participating regional districts: Alberni-Clayoquot Regional District, Comox Valley Regional District, Mount Waddington Regional District, Powell River Regional District and the Regional District of Nanaimo (north portion – School District 69).
E-Comm (Emergency Communications for Southwest British Columbia)	Metro Vancouver (Greater Vancouver Regional District), Sunshine Coast Regional District, District of Squamish, Resort Municipality of Whistler, Squamish-Lillooet Regional District (southern portion).
Chilliwack RCMP OCC	Fraser Valley Regional District (part)
Abbotsford Police Department Communications Centre	Fraser Valley Regional District (part)
Kelowna RCMP OCC	Regional District of Central Okanagan, which coordinates provision of services for eight other regional districts as well: Columbia Shuswap Regional District, Kootenay-Boundary Regional District, Regional District of Central Kootenay, Regional District of East Kootenay, Regional District of North Okanagan, Regional District of Okanagan-Similkameen, Squamish-Lillooet Regional District (north), and Thompson-Nicola Regional District).
Nelson Police Department Communications Centre	City of Nelson

PSAP	Regions/Areas Served
Prince Rupert Fire Rescue Services Communications Centre	City of Prince Rupert, District of Port Edward (both in Skeena-Queen Charlotte Regional District)
Prince George RCMP OCC	Peace River Regional District; and Regional District of Fraser-Fort George, which coordinates the provision of 9-1-1 services to: Cariboo Regional District, the Regional District of Bulkley-Nechako and the Regional District of Kitimat-Stikine.

b. Summary of Survey Results

In connection with the review of the operation of the 9-1-1 system in British Columbia, two surveys were developed: one was designed for and provided to each PSAP; the second was designed for local governments which had responsibility for providing, or arranging the provision of, 9-1-1 services for their jurisdictions. In addition, a PSAP survey was provided to BC Ambulance Service (“BCAS”), which provides back-up 9-1-1 service support for E-Comm. The forms of the survey used are attached as Appendix B.

Response rates from the surveys was high: all of the PSAPs responded and 21 out of 28 local government surveys were returned. The willingness of both emergency communications personnel and local governments to participate and to offer views and suggestions throughout the research process was greatly appreciated.

Certain of the data received needs to be treated with some caution. Time constraints affecting this project limited our ability fully to confirm or investigate all anomalies. For example, as noted above, a number of jurisdictions were unable to isolate and identify separately the cost of 9-1-1 services, since such services were fully integrated with their dispatch functions. The cost estimates presented later in this paper will need further investigation before a CAL is introduced.

Similarly, the reporting of call volumes by certain PSAPs does not actually reflect the full volume of calls received, and there were discrepancies between the total number of calls received by some centres and the detailed call breakdown that also was provided. In other instances, it was reported that where a particular event may generate a large number of repetitive calls, the PSAP call taker will initiate “call-screening”.²⁹ If the PSAP call taker determines that the caller is repeating information about an existing incident, the call may be terminated without connecting the caller to the SSAP or dispatcher (leading, again, to significant discrepancies in call volume reporting and itemized breakdown).

In large measure, the call-screening approach (which is not ideal) is driven by capacity constraints at the SSAP, not the PSAP, level. A small dispatch centre which is attempting to

²⁹ This term is extracted from the operations manual of one of the PSAPs where such a practice exists.

manage a major incident may not be able to handle the volume of calls presented while still dispatching and monitoring units active at the event. If the PSAP holds the calls until the SSAP is available, there is the risk that 9-1-1 lines would then become congested. Such congestion could result in a different emergency, at another location, not receiving timely assistance. This issue dramatically illustrates the inter-connected nature of each element in the emergency communications chain.

c. PSAP Surveys

The aim of the PSAP surveys was to get an overview of the actual operation of PSAPs in the province, including call volumes, call handling standards, infrastructure, staffing levels, training programs, reporting requirements and continuity planning. It is clear from the responses and the opportunity we had to exchange views with these centres, that their members are dedicated professionals seeking to ensure and enhance public safety. They welcomed the effort to review how services were delivered and were forthcoming with suggestions for improvements. All 12 PSAPs operating under provincial jurisdiction responded to the survey request.

The questions were grouped into several categories, not all of which will be summarized or repeated here. In aggregate, the following statistics provides a snapshot of how the PSAPs are currently operating:

Question or Issue	Responses
Total 9-1-1 Call Volume (2012)	~1,583,000
Highest	911,571
Lowest	2,839
Median	48,379
Number of abandoned or "short duration" calls	~260,000 (approximately 16.4%)
PSAPs without TTY/TDD	5 of 12
PSAPs without access to translation services	2 of 12
Number of external SSAPs to which calls are sent	~50 – 60
Number of agencies and police detachments dispatched by primary PSAPs	~167
PSAPs with back-up centres	9 of 12
PSAPs with a fail-over centre	11 of 12
PSAPs with call volume overflow centre	5 of 12
PSAPs with prescribed call answer standards	All
PSAPs with prescribed call transfer standards (time to assess the call and connect to the SSAP)	2 of 12
PSAPs with established protocols for call answer	All
PSAPs requiring the 9-1-1 call taker to stay on the line until SSAP accepts call	All
PSAPs in purpose-built communications facility	2
PSAPs co-located in police buildings	9
PSAPs co-located in fire halls	1
PSAPs in buildings built to current post-disaster standards	6 of 12 (three surveys marked as "unsure" & one left blank are treated as "noes")
PSAPs with generator power back-up	All

Question or Issue	Responses
PSAPs with UPS for IT systems	All
PSAPs with formal, documented training processes	All
PSAPs with formal quality assurance programs	8/12

A number of these results are considered in further detail in section 4(e) “Technology and Infrastructure,” below.

d. Local Government Surveys

The local government surveys were intended to determine how the delivery of 9-1-1 services is organized and governed across the province, and the approximate cost of delivering such services. The surveys were primarily sent to those local governments which had direct responsibility for the service. Thus, if the service was delivered by a regional district government, the municipal governments which comprise that regional district were not separately surveyed. The primary results from the local government surveys are summarized below:

Question or Issue	Responses
Population represented by returned surveys	~4,250,000
Estimated cost of existing 9-1-1 services	~\$12,000,000 - \$13,000,000 ³⁰
Number of regional districts without any 9-1-1 service	2 ³¹
Number of regions with known coverage gaps (including First Nations areas)	7 ³²
Number of responding jurisdictions with landline CALs	12
Range of landline CALs	\$0.47/line/month - \$2.72/line/month

e. Existing Technology and Infrastructure

Appropriate technology and infrastructure are essential to ensuring that 9-1-1 service providers can meet the four criteria identified in the discussion of the public safety context of the service. Given the range of technologies being used and relatively short time lines for conducting the background review, no effort was made to ascertain the various systems in use at each PSAP. Rather, the focus was on major infrastructure and the back-up systems.

The review showed that all centres have available, on either a dedicated or shared basis, back-up power from one or more generators, as well as UPS systems for critical IT systems. Loss of

³⁰ These estimates are analyzed in greater detail in section 4(f) below

³¹ To this number needs to be added the Stikine Region, which lacks any form of statutory local government and is managed directly by the province. Stikine Region has a total population of around 1,000, with significant areas of settlement at Atlin and at Dease Lake, as well as some First Nations reserves. Additionally, in Skeena-Queen Charlotte the only 9-1-1 services are those provided by the City of Prince Rupert to itself and the District of Port Edward.

³² A number of the regions reporting coverage gaps have multiple electoral areas or First Nations reserves without coverage.

power arising from a natural or human induced event, therefore, will not have an immediate impact on the operation of any of the PSAPs.

Most of the centres are co-located in police facilities, which should ensure a reasonable level of physical protection from outside intrusion. E-Comm and Saanich, as standalone communications centres, have been specifically designed to resist such intrusion, both in terms of construction and controlled access.

Of the PSAPs in the province, only six confirmed that the buildings in which they were located were known to be built to current post-disaster standards.³³ While the degree of seismic risk varies throughout the province, post-disaster construction is important for public safety infrastructure. In areas such as coastal British Columbia, including Vancouver Island, the lower mainland region and Prince Rupert, meeting such standards is critical.

Most of the PSAPs (9 of 12) had back-up centres to which they could move in the event that their main facility became inoperable. Even more PSAPs (11 of 12) had a “fail-over” centre, which could be activated in the event that their facility suffered a temporary failure. Few centres, however, reported that they had arrangements in place to cover a surge in call volumes (though many had additional capacity within their organizations to manage such surges, by distributing 9-1-1 call handling work to dispatchers).

Business continuity is critical to both PSAP and SSAP functions. A model to be considered, one which would improve emergency communications resilience within the province, is the creation of a virtual PSAP, through well-defined interconnections between each of the centres. This model operates currently in Nova Scotia (see discussion in section 7(b)(ii), below). The Nova Scotia system permits both fail-over and volume surge protection – if calls are not being picked up by the regular PSAP for the particular region, they are diverted to one of the three other PSAPs in the province. This is also the model used by the four BCAS dispatch centres, which provide both fail-over and call surge coverage for each other.

In British Columbia, moreover, there also is a good argument that “fail-over” centres should be geographically distinct from one another. If two PSAPs provide back-up to one another, but both would be affected by a regional emergency, such as a seismic event, then the protection offered by the fail-over centre may prove illusory.

The challenges of developing a resilient emergency communications system are significant. There are material issues that would need to be addressed, ranging from appropriate technology interfaces and compatible systems to standardized procedures and training. These efforts would also have to include planning for back-up of the dispatching done by the PSAPs in question.

If the challenge is viewed holistically, moreover, it is apparent that similar back-up systems will be needed for all SSAPs as well. The issue is easily illustrated. If a regional emergency (for example, a seismic event) were to impact the operation of E-Comm, such an event will also

³³ Of the other six, three were confirmed “noes”; two were “unsure” and one questionnaire was left blank.

potentially impact the 14 SSAPs to which E-Comm downstreams 9-1-1 calls. Even if E-Comm's 9-1-1 and dispatching functions are backed up in a fail-over centre which is located in an unaffected region of the province, that fail-over centre potentially will not be able to connect 9-1-1 callers to other lower mainland SSAPs, if they also were affected by the particular emergency.

While the example postulated is extreme, it is intended to reinforce the reality that, although there are distinct functions identifiable within the emergency communications system, the system as a whole is interconnected and interdependent. It is not sufficient to provide a back-up or fail-over solution for 9-1-1, if the SSAPs to which those 9-1-1 calls should be directed are not similarly resilient.

The need to provide coordination and to develop solutions to these issues should be considered intrinsic to improving the 9-1-1 system. As noted in relation to extending the system to unserved areas, a formal process for obtaining and managing input from affected stakeholders – including local governments, the province, PSAPs, SSAPs and emergency service agencies – should be considered as the processes around implementing a CAL are developed.

f. Costs and Funding Issues

Part of the goal of the local government survey process was to determine the approximate cost of operating the 9-1-1 system, to assist in assessing an appropriate rate for a CAL. Data was received from all but one local government responsible for directly funding a PSAP.³⁴ As noted above, the data must still be treated with some caution for several reasons:

1. 9-1-1 services are typically fully integrated into and form part of a larger dispatch centre. Proper cost allocations between dispatch functions and the narrower conception of the 9-1-1 call answer and handling role often has not been conducted.³⁵ In some cases, the charge for emergency dispatch services includes the charge for 9-1-1 services, which has not been separately broken out or invoiced. In a number of instances, therefore, the cost attributed to 9-1-1 services represents an estimate.
2. Local governments which are receiving services through one of the six RCMP OCCs will be experiencing material cost increases over the next one to three years. In some cases, the increase could be as much as 30% or more. Those numbers had not been finalized at the time of writing. One region has produced a firm 2013 budget which includes an estimated 24% increase in PSAP costs from the RCMP (that data was included in the estimate below). The other RCMP price increases will impact budgets valued at approximately \$5,000,000 in the aggregate.

³⁴ Some responses were not received from local governments which arrange for their service through another regional district. Aggregate amounts and cost allocations, however, were received from each regional district government or entity which is primarily responsible for acquiring such services on behalf of those non-responding local governments.

³⁵ For example, the Capital Regional District is conducting such a review in consultation with the three PSAPs with which it has contracts or arrangements. This process is time consuming and complex.

3. In many cases, for a local government (here, called the “Purchaser”) which contracts for its service through another regional district government or other entity, the amount included in the estimate below reflects only the direct cost of that service. It does not reflect any administrative or other overhead of the Purchaser for participating in or managing the service locally, including managing any educational efforts or dealing with contract and service management issues. No attempt has been made in this paper formally to assess such additional administrative or overhead costs.
4. Certain other costs which impact the operation of 9-1-1 services – including civic addressing and maintenance of appropriate digital mapping – often are covered through a CAL in other Canadian jurisdictions.³⁶ No attempt to assess these costs has been included in this paper, and these amounts have not been included in the estimate given below.
5. The transition to NG911 (discussed in section 6(a), below) will involve significant capital, training and, potentially, staffing costs for PSAPs. These amounts are not currently calculable.

Subject to the foregoing caveats, the estimated current cost of delivering 9-1-1 services in B.C. is approximately \$11,000,000. Assuming a 20% average increase in price for those centres receiving services from the RCMP, this amount increases to approximately \$12,000,000 for 2013 and adding in a margin for overhead costs which were not reported would mean that the total cost is likely in the range of \$12,000,000 – \$13,000,000 (not including civic addressing costs). To put this in context of a CAL on all devices, raising between \$12 -13 million to cover the cost of the system as currently operated would require that the CAL (net of any collection or administration costs) be about \$0.21 – 0.23 per device or connection per month (or about \$2.52 - \$2.76 per year).³⁷

There is some level of cross-subsidization that occurs in both directions between 9-1-1 call taking and same-centre dispatch functions. In some cases, it is clear that existing local landline CALs are being used, in effect, to subsidize dispatch functions.³⁸ In other areas, the situation is far more complex. For example, E-Comm operates a dynamic call answering model. In general, for security and training reasons, most 9-1-1 call taking positions are fully dedicated to that function (and perform no dispatch role). However, E-Comm also provides dispatch services for 13 police and 19 fire agencies (in addition to downstreaming 9-1-1 calls to 14 external dispatch centres). If there is a surge in 9-1-1 calls, dispatchers not otherwise engaged can be assigned to handle 9-1-1 call taking duties. In those instances, the dispatch function is essentially subsidizing the 9-1-1 call taking process.

In the Kelowna OCC, the nine regional districts which obtain PSAP services through this centre fund three PSAP call taking positions. The PSAP call takers are local government employees

³⁶ As is the case in Nova Scotia, New Brunswick, PEI and Saskatchewan.

³⁷ This assumes around 5 million devices or connections. The assumptions on which this calculation is based are considered in greater detail in section 8(e) below.

³⁸ This issue is more acute in one or more of the smaller centres and will add a layer of complexity to managing any CAL allocation process, as will be discussed further below.

who are fully trained as police dispatchers, and can (and do) handle some of the dispatching function. The RCMP dispatchers, however, are also trained to manage 9-1-1 call taking. During a surge in volume, these dispatchers are able to assist with 9-1-1 call taking.

No attempt has been made to estimate the level of cross-subsidization that exists. It should be noted that the dynamic staffing models described above are efficient approaches to managing unpredictable call volumes, and should not be inadvertently discouraged through an overly narrow interpretation of “9-1-1 services”.

Local governments used a combination of property taxes and landline CALs to fund PSAP (and related dispatch) functions. Only twelve jurisdictions reported having landline CALs:³⁹

Jurisdiction	Amount of CAL⁴⁰	Amount Raised
Central Kootenay Regional District	\$0.75	\$201,400
City of Nanaimo	\$0.47	~\$475,000 in aggregate
Cowichan Valley Regional District	\$0.47	<i>See City of Nanaimo</i>
Capital Regional District	\$0.66	~\$1,542,000
Fraser Valley Regional District	\$0.72	\$939,835
Powell River Regional District		
City of Prince Rupert	\$2.72	\$162,032
Regional District of Bulkley-Nechako	\$0.68	\$160,200
Regional District of Kitimat-Stikine	\$0.75	\$121,045
Regional District of Nanaimo (SD 68 region)	\$0.47	<i>See City of Nanaimo</i>
Squamish-Lillooet Regional District (excluding Squamish & Whistler)	\$0.75	\$32,000
Kamloops (to pay its contribution to the service arranged by the Thompson-Nicola Regional District)	\$0.75	\$212,000
Total amount raised from Landline CALs		~\$3,845,000

The amount raised from landline CALs has been falling each year, as individuals move from traditional network access lines to wireless devices. Telus reported that, for 2011, the number of residential landlines it provided fell by some 6.4% from the previous year.⁴¹ Each jurisdiction which uses a landline CAL also imposes a property tax as well to cover the full cost of its emergency communications requirements.

The remaining jurisdictions use only property taxes to fund their 9-1-1 services (and related dispatch/emergency communication functions). In some cases, most notably Metro Vancouver, the possibility of using a landline CAL to fund 9-1-1 services was considered and expressly rejected. The primary basis for the rejection was that the tariffed administration fee of \$0.07/month/line sought by Telus was considered excessive, as it did not reflect the actual

³⁹ There may be other municipalities with landline CALs, which were not covered by the survey process.

⁴⁰ This is the gross amount of the landline CAL, before the subtraction of the telecommunications carrier's fee for administration.

⁴¹ Telus, *Annual Report 2011*, at p. 65.

collection and administration costs of the company and unduly increased the amount of the CAL.

Prince Rupert is a unique case, in that the city owns the local telephone company (which appears to be the basis on which a wireless levy has been imposed). It currently raises about half of its funding for 9-1-1 and fire dispatch/emergency communication services from a combination of a landline and wireless CAL. The wireless CAL raises approximately \$29,800 per year. Given the size and nature of the Prince Rupert Fire Rescue Department Communications Centre, costs attributable to “9-1-1 services” alone are difficult to estimate, but probably are in the range of \$50,000 - \$75,000.⁴²

5. Coverage Gaps

In examining coverage gaps, two issues should be noted. First, the paper is discussing coverage gaps in the provision of 9-1-1 service, not coverage gaps in terms of availability of landline or wireless telephony. The latter is a wholly separate consideration: the focus here is on areas where there already is either landline or wireless coverage, but no access to 9-1-1 services.

Second, one of the aims of a CAL is to ensure that the costs of the system are fairly borne by the users based on modality of contact rather than simply being another service which is funded through property taxes or an impost on a limited selection of connection services. If there are areas of the province where resident users are paying the fee, but not able to access the service, the fairness of the structure rightly can be questioned (and the excerpting of “unserved” areas from the CAL would make the system more cumbersome and inefficient).

a. Regional Districts

As noted earlier in the report, three areas in the province lack any 9-1-1 service: Central Coast Regional District (“Central Coast”), Northern Rockies Regional Municipality (“NRRM”) and the Stikine Region. The permanent population across the three regions is about 11,000 people. However, both the Central Coast and the NRRM have active tourism industries. The Central Coast actively promotes the “eco-tourist” trade and its major settlements – Bella Coola, Bella Bella, Ocean Falls, Denny Island and Klemtu – are regular stops on the BC Ferries’ “Discovery Coast Passage” tour.

The Alaska Highway passes through the NRRM, and local estimates are that as many as 200,000 (or more) visitors per year travel through Fort Nelson.⁴³ NRRM is also host to large resource development works, including mining and the oil and gas sector. The number of

⁴² Based on email correspondence with the Chief of Prince Rupert Fire Rescue Service, the costs attributable to 9-1-1 services were estimated at between 10 – 20% of the total cost of operating the dispatch centre.

⁴³ Email correspondence with Mike Gilbert, NRRM Community Development Officer, 7 June 2013.

workers at such sites in the NRRM is difficult to estimate with certainty, but is thought to be around the same number as the permanent population.⁴⁴

Another major gap in 9-1-1 coverage is found in Skeena-Queen Charlotte Regional District. The regional district itself does not provide 9-1-1 services, and there is no coverage outside of the City of Prince Rupert and the District of Port Edward. As with the Central Coast and NRRM, Skeena-Queen Charlotte actively promotes its tourist trade, which in part is driven by the BC Ferries “Inside Passage” tours.⁴⁵

The availability of 9-1-1 services is a public safety issue. The provision of emergency services to local residents will be enhanced by the availability of 9-1-1. The situation is even more compelling when considering the impact on visitors. Local residents are aware of the existing limitations of their system (and the need to dial a 10-digit number for emergency services). Visitors, however, may not realize that 9-1-1 services are not available and may encounter significant delays in obtaining access to the appropriate emergency service as a result.

The cost of establishing and connecting remote communities to 9-1-1 services is substantial relative to the limited tax bases of these areas. It is, nevertheless, important to extend existing 9-1-1 services to each area of the province where there are landline connections or reliable cell phone coverage.

In terms of equity, moreover, if a province-wide CAL is to be imposed, it would be inappropriate to require residents to pay the levy if the service is not available to them (or not being introduced as part of the process that created the levy).⁴⁶ Some subsidization may be necessary to ensure that these improvements are effected and should be factored into any CAL which is established. In the context of operating and improving the system, the amount of that assistance is likely to be relatively small in percentage terms.

b. First Nations

A number of jurisdictions reported that, although 9-1-1 services were being provided, those services did not extend to all of the First Nations territories within their boundaries. Six regional districts which returned surveys reported that one or more First Nations areas within their jurisdictions did not have 9-1-1 coverage. These results almost certainly underestimate the

⁴⁴ *Ibid.* The permanent population in the NRRM is about 4,000.

⁴⁵ Prince Rupert itself (which has 9-1-1 services) reports in the order of 190,000 visits annually. A portion of those tourists will also visit other areas within the regional district which lack 9-1-1 services. Tourism figures are from 2007: Prince Rupert and Port Edward Economic Development Corporation, *Tourism Industry: Sector Profile* [undated – 2011?], at p. 3. Available from: www.predc.com/images/editor/File/Tourism%20Sector%20Profile.pdf .

⁴⁶ Bell Canada recently lost (at first instance) a class action lawsuit for imposing a “9-1-1 fee” on residents in the north, when no service was available to them. See: Jeff Gray, “Bell loses class-action case over 911 fees in North” *Globe and Mail*, 17 May 2013, at: www.theglobeandmail.com/report-on-business/industry-news/the-law-page/bell-loses-class-action-case-over-911-fees-in-north/article12003832/#dashboard/follows/ .

problem, though it should be noted that, in many areas of the province, arrangements have successfully been concluded to provide such services.

A number of issues exist with connecting all First Nations lands to the 9-1-1 system, ranging from cost to the lack of municipal addressing. The latter greatly complicates managing emergency communications and, ultimately, dispatching and response by emergency services. Managing these coverage gaps will require a coordinated approach with the affected First Nations bands and with Indian and Northern Affairs Canada. As with the issue of extending 9-1-1 services to remote areas of the province, some subsidization of the costs of establishing services on First Nations lands may be necessary.

It should be noted that this is an area which was identified as a potential concern by some local governments, but time constraints prevented any in-depth consideration. Further follow-up is required to ascertain the size and extent of this coverage issue, and to enable some reasonable estimate of cost to be developed.

6. 9-1-1 System Developments and Issues

a. Next Generation 9-1-1

The looming advent of NG911 will have a significant impact on PSAP (and SSAP) operations. NENA defines NG911 as follows:⁴⁷

NG9-1-1 is an Internet Protocol (IP)-based system comprised of managed Emergency Services IP networks (ESInets), functional elements (applications), and databases that replicate traditional E9-1-1 features and functions and provides additional capabilities. NG9-1-1 is designed to provide access to emergency services from all connected communications sources, and provide multimedia data capabilities for Public Safety Answering Points (PSAPs) and other emergency service organizations.

In the simplest terms, NG911 involves moving emergency communication centres to wireless and IP-based systems. By so doing, both PSAPs and SSAPs will be able to accept a broader, more comprehensive range of connections – including text messages – as well as new data sources, such as pictures and video. Moving to NG911 will involve a substantive transformation of the existing systems used by emergency communication centres in the province. As noted by NENA, which is heavily involved in developing standards for NG911 in the United States, transition to the new system will involve “technological, operational, economic and institutional change.”⁴⁸

⁴⁷ NENA, *NENA Master Glossary of 9-1-1 Terminology* (2012) at p. 82. For a more detailed definition and description, see: NENA, *What is NG9-1-1?* (2008).

⁴⁸ NENA, *NENA NG9-1-1 Transition Plan Considerations* (2011), at p. 10 (hereafter, “NENA Transition Plan”).

The system and equipment architecture for NG911 are still being developed, debated and reviewed.⁴⁹ In Canada, the CRTC has assigned a subgroup of the Emergency Services Working Group (“ESWG”) responsibility for managing the processes around the implementation of NG911.⁵⁰ This working group is responsible for reviewing developments internationally (particularly in the United States), identifying technical and policy issues relating to the transition to NG911 in Canada, and helping to develop solutions to challenges as they arise.⁵¹

There will be significant capital and operational costs involved in the transition of PSAPs to NG911 infrastructure and systems. These capital and operational costs will also have to be incurred by SSAPs and emergency response agencies, if the new data sources received by PSAPs are to be of any operational use in the field. New systems and new data sources will require significant extra training of PSAP and SSAP staff, as well as emergency services personnel.

A precursor of NG911 is already being readied for implementation. Under CRTC Decision 2013-22,⁵² wireless service providers are required “*to make the changes in their networks, systems, and processes required to support the provision of Text Messaging with 9-1-1 service for hearing- or speech-impaired persons...*”. The changes are required to be made by service providers within 12 months of the decision which means the service is to be available as of January 2014.⁵³

The effect of this decision is actually quite limited. Only users who are hearing or speech impaired will be entitled to register to use this system. The ability of PSAPs (and SSAPs) to process this new data source, however, will likely take longer than 12 months to implement, and service availability will vary with location. Nevertheless, it is an indication of the types of changes to come. Indeed, there already is a reported communication issue with youth, who mistakenly assume that 9-1-1 services already can be contacted through text messaging services.⁵⁴

The move to NG911 will require careful and detailed planning. There will need to be close coordination between PSAPs, SSAPs and emergency services. Existing mechanisms for managing these processes will need to be reviewed. Part of the outcome of introducing CAL

⁴⁹ See: NENA, *Understanding NENA’s i3 Architectural Standard for NG9-1-1* (2011); and NENA Transition Plan.

⁵⁰ Emergency Services (E9-1-1) Working Group.

⁵¹ See Emergency Services (E9-1-1) Working Group, *Status Update for Next Generation (NG) 9-1-1 in Canada: Consensus Report* (31 January 2013) at <http://www.crtc.gc.ca/public/cisc/es/ESRE0058.pdf>. On some of the issues which are emerging in relation to NG911 see: Ken Sluman, “Preliminary Overview – Suggested Work Plan Items,” ESCO0423 (14 December 2012), prepared for the ESWG at: <http://www.crtc.gc.ca/public/cisc/es/ESCO0423.pdf>.

⁵² CISC Emergency Services Working Group – Consensus report regarding Text Messaging with 9-1-1 trial and service implementation, CRTC 2013 – 22 (24 January 2013).

⁵³ The ESWG is reportedly looking at trying to delay this implementation to Q1, 2015: comment from T. Whiting, Senior Manager, Protective Services, Capital Regional District, 8 July 2013.

⁵⁴ Presentation by Jasmine Bradley, Corporate Communications, E-Comm, on 17 May 2013.

legislation could and should be the establishment of a recognized stakeholder group comprising the province, local government, emergency communication centres, emergency services and telecommunication providers, to manage the significant structural and operational challenges that a transition to NG911 will pose.

b. Abandoned, Misdialed and Short Duration Calls

While the issue of abandoned, misdialed and short duration calls (here, referred to as “Abandoned Calls”) may appear tangential, the scope of the problem significantly impacts PSAPs, SSAPs and police services. The problem raises questions about the appropriate role of the 9-1-1 operator (and potentially the cost of operating the PSAP portion of the service), as well as significant issues of public safety, risk management and liability. Abandoned Calls are a growing burden on both emergency services and the emergency communications system.

It should be noted that the number of these calls which get presented to 9-1-1 operators may vary depending on the equipment and set-up of the particular PSAP. In simplest terms, in some PSAPs, certain very short duration calls may not actually get presented, while in other PSAPs, such calls do go to a call taker.

Each of the PSAPs in the province has a protocol for managing these types of calls, though the role played by the 9-1-1 call taker may vary. In some cases, the 9-1-1 operator will attempt to reconnect with the caller (based on the protocols that were described, they typically make three attempts to reconnect with an abandoned call, though that process may vary with different PSAPs).⁵⁵ Where no reconnection is possible, the call is then either downstreamed to a police agency, or, if the 9-1-1 operator also does police dispatching, then a police call is created. In other PSAPs, details regarding the call are immediately downstreamed to the relevant police dispatcher or police dispatch agency, which then attempts the reconnection before creating a police call. This approach has the effect of increasing the work for police dispatch agencies.

The response by police to an abandoned 9-1-1 call will vary, depending on the level of detail and information received. In each case, however, unless a reconnection attempt is successful, a police incident is created and, if sufficient information is available, a unit dispatched.⁵⁶

The volume of these calls is significant and creates enormous pressure on the system. The PSAP survey results indicated that Abandoned Calls represent between 10 – 20% of all 9-1-1 calls received. The impact on the police service is even more significant. Statistics provided by the RCMP show that dealing with Abandoned Calls is an enormous and expensive drain on police resources. In many cases, the single largest number of dispatched events in a

⁵⁵ This is the role prescribed for 9-1-1 operators in Saskatchewan, who also have responsibility for contacting service providers to confirm subscriber details, if required. Sask911, *Standard Operating Guidelines v. 1.5* (June 2012), sections 4.12. For wireless call backs, however, only one attempt is made and if the call back goes to voice mail, no message is left. See section 6.2.

⁵⁶ The level of priority will vary: based on data provided by the RCMP, most such incidents are rated “P2” or lower in priority. This also assumes there is sufficient information from the terminated connection to enable follow-up, which may range from actual dispatch of a unit to follow up with the service provider for the particular number, subscriber details, etc.

jurisdiction involves follow-up on Abandoned Calls. For the City of Surrey alone, more than 36,000 police dispatch events, representing 24% of all calls for service in the city, were for Abandoned Calls.⁵⁷

This problem may be exacerbated with the eventual roll-out of NG911. As noted in an assessment provided to the ESWG committee responsible for NG911:⁵⁸

“1. **Primary PSAP’s will be notified of many more calls to 9-1-1.** These additional calls will have been of very short duration. The calls will have been disconnected or terminated before they could have been answered at the PSAP. **[emphasis added]**

2. The notification of the additional calls will be provided in the form of ALI data packets only. There will not be a telephone call presented to a 9-1-1 call taker.”

While the quoted comments relate to issues identified in connection with the proposals from Bell for IP-based systems in Ontario and Québec, the problem of increased call volume may also affect any system established in British Columbia as well.

The growth in the number of Abandoned Calls is directly related to the growth in the number of mobile phones in use. It is likely that most such calls are inadvertent “pocket dials” (or similar misdialing) by cell phone users. Nova Scotia reported that 99% of its Abandoned Calls were from mobile devices.⁵⁹ In the context of developing policy, however, the challenge is that the issue has not been systematically studied. While anecdotal statistics exist, it is currently not possible to quantify with any certainty how many Abandoned Calls reflect genuine attempts to reach aid, which were prematurely terminated because of circumstances. This creates an enormous risk management issue and potential source of liability.

There is clearly a need for a uniform and consistent provincial policy to be developed addressing the issue of Abandoned Calls. This policy should:

- be based on a substantive and formal review of the issues involved;
- address the public safety risks, and other risk management and liability concerns arising from these call types;
- define appropriate roles for the 9-1-1 operators, police dispatchers and the police services in managing such calls and assess the costs of any recommended approaches; and

⁵⁷ Data provided by Inspector R. Greenwood, RCMP E-Division - Operational Communications Centres, in a presentation entitled: “General Duty Officer (GDO) Staffing Assessment” (undated: 2013), at p.12.

⁵⁸ Ken Sluman, “Preliminary Overview – Suggested Work Plan Items,” ESCO0423 (14 December 2012), at p. 2.

⁵⁹ See: EMO, 911 Performance Report, 2009-2010 (2010), at p. 2/4, under “Service Summary”. Prince Edward Island is reportedly considering amendments to its 9-1-1 legislation to make it illegal to sell a mobile phone which has “9-1-1” preprogrammed into the device. Comment from T. Whiting, Senior Manager, Protective Services, Capital Regional District, 8 July 2013, based on email from Pat J. Kelly, Provincial Coordinator of 9-1-1 Services, Prince Edward Island.

- include an educational component which is directed at mobile phone users about the problem and appropriate responses to it (including not hanging up if a misdial has occurred).

It should not be assumed that Abandoned Calls are the only operational issue that may need consideration as legislation for a CAL is contemplated. Other issues – such as the fact that wireless devices which are no longer connected to any network can still connect to 9-1-1, but are difficult for operators to locate if the call is terminated prematurely – also impact the operation of the system and should be formally studied. Indeed, improving the ability of PSAPs and SSAPs to pinpoint the location of wireless users is a major on-going concern. One benefit that could arise through the creation of an official users' group as a related aspect of any CAL legislation, would be that such operational challenges and risks could be considered and addressed consistently across the province.

There also is a role for legislation. A number of Canadian jurisdictions make it illegal to pre-program a phone to dial 9-1-1, with the goal of reducing the number of “pocket-dials” received by mobile devices. A secondary function should be to clarify that PSAP and SSAP operators are entitled to require provision of subscriber information from telecommunication carriers, where needed to support emergency communication operations.

c. Service Delivery and Efficiency Issues

The emergence of centralized 9-1-1 call handling and emergency dispatch centres was largely an organic process. Originally, separate dispatch operations developed within each emergency service in every community, reached directly by the public of that community. The advent of the 9-1-1 system beginning in the mid-1980s led to the establishment of a front-end gating mechanism which directed the caller to the right dispatch agency – which initially meant multiple separate dispatch agencies in each separate community.

With improvements in dispatching technologies and communication systems over the past 20 years, it has become possible safely and effectively to dispatch multiple agencies in widely disparate geographic locations from a single centre. Indeed, if one were to design from scratch a 9-1-1 call taking and related emergency dispatch system for the province using current technologies, it is a certainty that there would be far fewer separate operations than currently exist. Rather, there would be an integrated system that comprises a number of larger, better connected and fully interoperable emergency communication centres, with appropriate local back-up facilities and geographically distinct fail-over sites.

This observation should not be taken as a criticism of the existing system. Indeed, the move to develop collaborative approaches to 9-1-1 and dispatch services has been evident as technologies and systems have developed. It does mean, however, that there is a wide variation in the relative economic efficiency and costs to operate the different PSAPs in the province. Local governments should be commended for both developing and implementing an effective 9-1-1 system initially, and having taken steps to make that system more efficient as technological developments emerged. British Columbia compares well to most Canadian jurisdictions: given its geographic size and population, it already has a reasonably efficient

PSAP footprint. On a per capita basis, Québec has better than 50% more PSAPs, while Alberta has more than twice the number of that in British Columbia. The numbers are even more significant when compared to the Maritime Provinces and Ontario.

In general, properly managed larger PSAPs will operate more cost efficiently when measured on a *per capita* or per call basis, without any loss of effectiveness or compromise of public safety. The economies of scale offer a number of advantages, including the ability to staff with greater depth in the event of a major event, and ability to afford investment in more resilient and robust equipment, systems and infrastructure.

The costing data collected through the survey process can only be treated as indicative. Nevertheless, it was clear that the larger PSAPs were more cost efficient – the two PSAPs which serve the largest respective population bases, were the two most cost efficient operations based on the metrics noted above (an issue that is looked at in greater detail in section 8(c) below).

The challenge when introducing a province-wide CAL will be to ensure that, notwithstanding the introduction of a new funding source, the impetus that currently exists to improve economic efficiencies will continue. The initiatives taken by local governments to combine and create single points of service delivery should be actively encouraged. This approach will better enable the development and improvement of both the quality of service and overall resilience of the infrastructure and systems. It will also make it easier to oversee PSAP operations, and ensure that services are being provided in a fashion that meets modern standards and the public's expectations.

7. Canadian and Other Jurisdictions' 9-1-1 Service and CAL Models

a. Introduction

This section of the report considers how 9-1-1 services and CALs operate in other jurisdictions, with a particular focus on Canadian provinces where provincial CALs have been introduced. It also places that analysis in the context of how those provinces manage their 9-1-1 systems with a particular focus on whether the system is centralized or decentralized and the level of centralized direction and control that is exerted.

b. Review of Canadian Jurisdictions

At present, five Canadian provinces have introduced and are operating provincially mandated CALs. In addition, in May 2013, the province of Alberta passed the *Emergency 911 Act* (AB) which will impose a CAL on wireless devices in that province, and give the province the ability to prescribe standards for delivery of 9-1-1 services by PSAPs. Figure 3 summarizes the status and some of the principal components of 9-1-1 and related CAL legislation across Canada:

Province	Statute/Regulation	CAL Fee	Telecom Admin Charge
Alberta	Bill 15, <i>Emergency 911 Act</i>	0.44 ⁶⁰	?
New Brunswick	<i>Emergency 911 Act</i> (N.B.) Regulation 2008-23 under the <i>Emergency 911 Act</i> (O.C. 2008-77)	\$0.53	\$0.07
Nova Scotia	<i>Emergency 911 Cost Recovery Fee Regulations</i> made under Section 14 of the <i>Emergency "911" Act</i> S.N.S. 1992, c. 4 O.I.C. 2001-44 (February 2, 2001), N.S. Reg. 8/2001	\$0.43	\$0.07
Prince Edward Island	<i>Emergency 911 Act</i> , RSPEI 1988, ch. E-5 – Fee is found in the Schedule. <i>911 Cost Recovery Fees Regulations</i> , PEI Reg EC342/06	\$0.70	\$0.07
Quebec	Statutes <i>An Act respecting municipal taxation</i> (R.S.Q., chapter F-2.1). See Sections 244.68 to 244.74, subsections 13, 14 and 15 of first paragraph, Section 262, and second and third paragraph of section 262. <i>Civil Protection Act</i> (R.S.Q., chapter S-2.3). See Sections 52.1 to 52.20, in force since December 30, 2010. <i>An Act to amend various legislative provisions respecting municipal affairs</i> (2008, chapter 18, as modified by 2012, chapter 30, section 34). See section 135 which provides that 9-1-1 emergency centres in operation on the date of coming into force of the first regulation made under section 52.4 of the <i>Civil Protection Act</i> (i.e. December 30, 2010) have three years from that date to obtain a certificate of compliance (until December 30, 2013). <i>An Act respecting pre-hospital emergency services</i> (R.S.Q., chapter S-6.2). See sections 7, 22, 24 and 86. <i>An Act respecting the Québec sales tax</i> (R.S.Q., chapter T-0.1). Section 162.1 provides that a supply made to a municipality of a service of receiving and processing telephone calls through a 9-1-1 emergency centre is exempt. <i>An Act respecting the exercise of certain municipal powers in certain urban</i>	\$.40	0.04

⁶⁰ The Alberta government has indicated that the cell charge will be the same as for a land line.

	<p><i>agglomerations</i> (R.S.Q., chapter E-20.001). See paragraph b) of subsection 8° of section 19, which provide that 9-1-1 emergency center is a matter that concerned related municipalities as a whole. See also sections 118.2, 118.27 and 118.79 about financing such an expenditure in certain urban agglomerations.</p> <p>Regulations <i>Regulation governing the municipal tax for 9-1-1</i> (R.R.Q., c. F-2.1, r. 14.2) <i>Regulation respecting standards, specifications and quality criteria applicable to 9-1-1 emergency centres and to certain secondary emergency call centres</i> (R.R.Q., c. S-2.3, r. 2). In force since December 30, 2010. <i>Regulation respecting the police services that municipal police forces and the Sûreté du Québec must provide according to their level of jurisdiction</i> (R.R.Q., c. P-13.1, r. 6). See section 2, subsection 1 b)</p>		
Saskatchewan	<p><i>The Emergency 911 System Act</i>, SS 1996 ch. E-7.3</p> <p><i>The Sask911 Fees Amendment Regulations, 2010</i> (OC 196/2010), amending <i>The Sask911 Fees Regulations, 2003</i> (chapter S-35 Reg 5), under s. 46 of <i>The Saskatchewan Telecommunications Act</i> (C. S-34) as amended.</p>	\$0.62	\$0.07

Figure 3 – Chart of Other Provincial Legislation/Regulation and CAL Fees

i. Canadian Overview

Six Canadian provinces have, or are in the process of introducing, provincially-mandated call answer levies. Five of those provinces – Nova Scotia, New Brunswick, Prince Edward Island, Québec and Saskatchewan – have implemented CALs which attach essentially to any device which connects with the 9-1-1 system. Thus, the governing statutes cover traditional landline connections, wireless, and voice over internet protocol (“VoIP”), typically with the power for the relevant minister to designate any other device or connection as being covered as well. Alberta, which has not yet proclaimed its legislation, has limited its legislation to wireless devices. This approach means that not all landlines in the province are covered by a CAL, because not all municipalities have entered in agreements with the ILEC or the CLECs.

All six provinces which have introduced CALs also have used the legislation to establish or enhance provincial authority to set standards of service, policies, procedures and guidelines for the operation of PSAPs. The range of explicit centralized control varies from province to province. Nova Scotia, which contracts with three municipal providers and one private provider, sets performance standards and operating procedures by regulation and contract. It also takes responsibility for training of 9-1-1 call operators. New Brunswick and Prince Edward Island also have the powers to set such standards, though they do not provide direct training for 9-1-1 operators. New Brunswick has issued standard operating procedures governing PSAPs and some aspects of SSAP operations. Prince Edward Island has only one PSAP, which is governed by the terms of a contract with the province.

Saskatchewan also has the power to regulate PSAP operations, which it has exercised through a committee established by Sask911.⁶¹ This committee, which includes membership from each of the province’s four PSAPs as well as representatives of Sask911, has developed comprehensive and detailed standard operating procedures. These guidelines are limited to the operation of the 9-1-1 system (as narrowly defined) and do not directly regulate SSAP operations (though, by defining the role of the PSAP operator, the procedures also define certain aspects of the role played by a dispatcher, particularly with regards to issues such as abandoned 9-1-1 calls).

Québec has a well-developed regulatory structure, which specifies requirements for a broad range of PSAP activities, from call answer standards and training requirements, to equipment and infrastructure for its 34 municipally-operated PSAPs. Québec PSAPs are required to be provincially certified to operate.

Under its new legislation, the Alberta government will have the power to regulate PSAP operations. Responsibility for this role will fall to the Alberta Emergency Management Agency, which has indicated that it intends to develop consistent standards for 9-1-1 services, in consultation with local PSAPs.

⁶¹ The Sask911 Standard Operating Procedures Committee – Call-taking Working Group. The committee also included participation by a representative of SaskTel.

Four of the six provinces (Alberta, New Brunswick, Nova Scotia and Prince Edward Island) have included exemptions of liability for PSAP operators and other stakeholders (e.g., telecommunication providers, emergency service providers and the provincial and local governments). Saskatchewan has a liability exemption, but it applies to volunteer emergency services, not to the PSAPs themselves. Québec has not exempted PSAP operations from liability.

In terms of the scope of the CALs, Nova Scotia, New Brunswick and Saskatchewan have permitted or directed that the levy be used for other purposes, in addition to funding 9-1-1 services. Saskatchewan uses some of its CAL funds to cover a portion of the costs of the provincial emergency radio network. Nova Scotia uses a portion of the amounts raised to fund the provincial poison control centre. New Brunswick has recently revised its senior legislation to broaden the potential scope of expenditures to include coordinating emergency communications across the province.

The Québec situation is somewhat different – once funds are paid to the municipalities, in theory there is no further direction from the province on how the monies are used. In practice, however, it appears that the amounts paid are very closely tied to the actual cost of operating, maintaining and upgrading 9-1-1 services. As a result, it is clear that the funds are being expended on 9-1-1 services, though some portion of those monies may also, in effect, be used to subsidize other aspects of the emergency communication centres' operations.

Both Saskatchewan and Nova Scotia have established committees to oversee and provide input as to the how the 9-1-1 system operates. Québec established a separate agency for this purpose, which is headed by representatives of local government (with a provincial government observer). That agency is also responsible for setting standards, allocating the CAL funds and certifying PSAP operations. Alberta has indicated that it will coordinate oversight of PSAP operations through the Alberta Emergency Management Agency, in consultation with PSAP operators and other stakeholders.

ii. Nova Scotia

Nova Scotia has established a centralized, provincially administered system for delivering 9-1-1 services. The Emergency Management Office ("EMO"), a division of the Nova Scotia Department of Justice, has authority over the operation of the 9-1-1 system in the province. The EMO was established under and derives its authority from the *Emergency Management Act*.⁶²

The Nova Scotia 9-1-1 service itself is governed by the *Emergency "911" Act*⁶³ and the regulations made thereunder. The principal regulation is the *Emergency 911 Cost Recovery Fee Regulations*,⁶⁴ which establishes the amount of the provincial CAL and the processes for managing the funds raised. The statutory structure centralizes the administration of 9-1-1 services in the province and permits the Minister to prescribe standards and recover the costs of

⁶² *Emergency Management Act*, SNS 1990, c.8 (as amended).

⁶³ *Emergency "911" Act*, SNS 1992, c.4.

⁶⁴ *Emergency 911 Cost Recovery Fee Regulations*, N.S. Reg. 8/2001.

operating the system. Section 9 of the *Emergency “911” Act* also exempts from liability the entities (including local government and emergency service agencies) which are responsible for operating the 9-1-1 system.

The Nova Scotia 9-1-1 system comprises four interconnected PSAPs. Although the service is centrally administered, each PSAP is owned and operated by a different entity:

- Halifax Regional Municipality in Dartmouth;
- the RCMP OCC in Truro;
- Cape Breton Regional Municipality in Sydney; and
- Valley Communications Inc., a privately owned communication centre located in Kentville.

The integration of the PSAPs means that overflow calls are automatically routed to another of the four centres. As of 2010, the EMO reported that they had never had a recorded instance where a caller received a “busy” signal or voice recording when attempting to call 9-1-1.⁶⁵

The relationship between the province and each PSAP is governed by a standard agreement. This agreement:⁶⁶

- (a) makes the province responsible for providing and maintaining the necessary telecommunication equipment (ss. 4(5) and 7(1));
- (b) makes the province responsible for establishing the training program for emergency call takers (s. 8(1)). The training curricula, however, is subject to input from the PSAPs (s. 8(9));
- (c) makes the PSAP responsible for supplying the necessary facilities infrastructure for housing the call takers and telecommunications equipment (s. 4(1)). The agreement does not, however, expressly specify any standards applicable to those buildings (e.g., post-disaster construction, NFPA 1221, etc.);
- (d) requires the PSAP to conform to standardized operating procedures (“SOPs”) developed by the EMO (ss. 4(4) and 6(1)). Changes to the SOPs, however, require the consent of the PSAPs (s. 6(2)(c));
- (e) establishes a standard for call answering (90% of calls answered within 10 seconds) (s. 6(2)(a)). The agreement, however, does not establish a standard for call transfers to downstream PSAPs;⁶⁷
- (f) requires the PSAP to hire sufficient trained staff as required to meet the standards and other SOPs (s. 6(2)(c));
- (g) establishes the fee for service (s. 11(2));

⁶⁵ EMO, “911 Fact Sheet,” (Nova Scotia, 2010), at p. 2.

⁶⁶ The information in this section is based on the agreement approved as to form by the Halifax Regional Municipality on 29 May 2007.

⁶⁷ NFPA 1221 includes a reporting metric for call transfers (within 30 seconds, 90% of the time). It is also interesting to note that the Nova Scotia EMO reports on a different call answer metric in its public communications – it reports against a 20 second, not 10 second, call answer time. See: EMO, *911 Performance Report, 2009-2010* (2010), at p. 2/4, under “Service Summary”.

- (h) establishes a process for reimbursement of “extraordinary or unforeseen expenses” incurred by a PSAP in relation to the operation of the 9-1-1 service;
- (i) includes an indemnity from the province in favour of the PSAP for any liability arising out of the operation of the 9-1-1 system (s. 12(1)), which indemnity is backed by the exemption from liability for PSAPs under section 9 of the *Emergency “911” Act*; and
- (j) includes a somewhat narrower indemnity from the PSAP to the province in relation to breaches of the agreement itself (for example, if the PSAP breached the agreement by permitting the untrained personnel to act as 9-1-1 call takers, this indemnity could be invoked by the province).

The fee for service established under section 11(2) of the agreement is driven solely by the number of “qualified” 9-1-1 calls handled by the PSAP. For each qualifying 9-1-1 call, the PSAP is paid \$9.21 (adjusted annually in accordance with the Canadian CPI). There are significant limitations, however, on reimbursable 9-1-1 calls. Where the PSAP is also a dispatch agency, a 9-1-1 call which is converted to a dispatchable event at that same PSAP will not be compensated.⁶⁸

The agreement also includes, as Appendix A, an annex dated “February 2007” which further specifies the roles and responsibilities of each party. This annex provides that travel and backfill costs related to the training of 9-1-1 call takers will be reimbursed by the province.

From an infrastructure perspective, there are two 9-1-1 switches in the province – one primary and one back-up – which are operated by Bell Aliant (a subsidiary of BCE, the owner of Bell). The province has a master service agreement with Bell Aliant governing the provision and maintenance of the 9-1-1 infrastructure.

Nova Scotia Call Answer Levy. The funding of EMO’s obligations in relation to the 9-1-1 service is obtained primarily through a province-wide call answer levy. The levy is established under the *Emergency “911” Act* and the regulations thereunder.

Paragraph 14(1)(ea) of the *Emergency “911” Act* permits the Governor in Council to make regulations “respecting any matter necessary or advisable for the establishment of fees to recover costs for any services or materials provided in the course of the administration of this Act or the regulations.”⁶⁹

In 2001, the Nova Scotia government introduced the *Emergency 911 Cost Recovery Fee Regulations*, which creates a comprehensive structure for establishing and managing the CAL in the province. Under this regulation:

- (a) a CAL of \$0.43 per month was established for landlines and wireless devices (VoIP connections are not expressly mentioned);

⁶⁸ See section 1 of Appendix B, “Call Counting Methodology” to the master agreement between the province and Halifax Regional Municipality.

⁶⁹ The *Emergency “911” Act* was amended in 2000 to add this power (see: *Financial Measures (2000) Act*, SNS 2000, c.4, section 7).

- (b) the “E911 Cost Recovery Fund” (the “Fund”) was established as a separate, special fund,⁷⁰ to hold and disburse the amounts received;
- (c) the objects of the Fund were specified; and
- (d) the “E911 Cost Recovery Committee” was established to advise the Minister on the administration of the Fund (including collection and disbursement of monies).

Appointments to the E911 Cost Recovery Committee are made by Minister of Justice from among “individuals who have suitable qualifications and experience and have demonstrated suitable interest.”⁷¹ One member must be a representative from the Union of Nova Scotia Municipalities.

The objects of the Fund are broader than just the 9-1-1 service. Subsection 5(3) of the *Emergency 911 Cost Recovery Fee Regulations* permits the Fund to be used for the following purposes:

- the management, administration and operation of the E911 program including civic addressing, public education and training components of the E911 program;
- the acquisition, installation, maintenance and operation of PSAP equipment;
- the maintenance, support and upgrading of databases owned and managed by the Province and related to the administration of the E911 System;
- the maintenance, support and upgrading of digitized civic address mapping;
- the development, installation and maintenance of signage to assist in the reporting of, and response to, emergencies;
- support to the facilities responsible for the receipt and triage of calls reporting poison-related emergencies to the E911 System;
- support to municipalities in the administration of civic addressing programs;
- the payment of any costs, charges, audits, taxes, fees or other expenses incurred in the administration and management of the Fund; and
- the payment of such other things as the Minister may direct, in respect of the provision of E911 Services.

One issue of particular note is that the province’s poison control centre is funded through the CAL, in addition to the provision of 9-1-1 services.

The audited statements for the Fund show that, since 2008/09, it has received between \$4.5 – \$4.7 million annually, net of collection costs and bad debt costs (which together amount to

⁷⁰ The E911 Cost Recovery Fund is a separate fund originally created under clause 2(1)(n) of the *Provincial Finance Act* (Nova Scotia); when the latter was repealed in 2010, the fund was continued under s. 83 of the *Finance Act*, SNS 2010, c.2.

⁷¹ See *Emergency 911 Cost Recovery Fee Regulations*, ss. 6(6) and 6(8).

approximately \$950,000 annually). Overall, collection costs and bad debt represent approximately 17% of the gross fees collected.⁷²

iii. New Brunswick

The New Brunswick approach to its CAL and the operation of its 9-1-1 service appears similar to that of Nova Scotia's. The six regional PSAPs in the province operate under the authority of the *Emergency 911 Act*⁷³ and regulations made thereunder.⁷⁴

There is less public detail about the operation of the New Brunswick system than that in Nova Scotia. Overall authority for the operation of the New Brunswick 9-1-1 system rests with the Minister of Public Safety, which operates the system through its 911 Bureau. The PSAPs themselves, however, are independently operated under contract with the province. The PSAPs are owned either by municipalities or the RCMP. The 911 Bureau oversees service provision, helps coordinate and implement technological upgrades, and develops operating standards and requirements. The 911 Bureau is also responsible for civic addressing in unincorporated areas of the province.

Like its Nova Scotia counterpart, the *Emergency 911 Act* (NB) contains a liability exemption for participants in the 9-1-1 service. Section 8 of that act exempts the province, the Minister, "a telecommunications service provider," a municipality, an "emergency service provider" and employees or volunteers of any of them, from any liability:

"for any loss or damage suffered by any person by reason of anything in good faith done or omitted to be done...under the authority of this Act or the regulations."

Under the New Brunswick legislation, the province has the right to oversee and control 9-1-1 service delivery and related PSAP operations. Under section 11 of the *Emergency 911 Act* (NB), the Minister may make regulations regarding, among other things,

- the performance and operation of PSAPs;
- the training and certification of PSAP employees;
- the services and functions to be performed by PSAPs;
- how PSAP operations are to be monitored and evaluated;
- the amount of any CAL; and
- how the CAL is to be billed, collected and remitted by telecommunication service providers.

⁷² See: Grant Thornton, *Financial Statements: Nova Scotia E911 Cost Recovery Fund* (31 March 2012); and Grant Thornton, *Financial Statements: Nova Scotia E911 Cost Recovery Fund* (31 March 2010), which together provides aggregated information for the period from 2008/09 – 2011/12.

⁷³ RSNB 2011, c.146 (as amended through to June 2012).

⁷⁴ The two principal regulations are New Brunswick Regulation 96-104, which designates the six PSAPs and deals with civic addressing, and New Brunswick Regulation 2008-23, which establishes the New Brunswick CAL.

Notwithstanding these powers, however, New Brunswick is not as active as Nova Scotia in the training and certification of 9-1-1 call takers. Training is left to the individual PSAP, though the province mandates that each operator “shall be trained on all necessary equipment to process 9-1-1 calls as per the NB 9-1-1 Operating Procedures Directive.”⁷⁵

The province, through its New Brunswick 9-1-1 Bureau, has issued an “Operating Procedures Directive” (the “NB-OPD”). The NB-OPD sets out call handling procedures, PSAP responsibilities, the responsibilities of emergency service dispatch agencies and certain requirements relating to the operation of the PSAPs (e.g., records keeping, incident reporting, etc.). The NB-OPD is binding on both PSAPs and SSAPs in the province.

One difference worth noting regarding the operation of the New Brunswick 9-1-1 system is that the role of the 9-1-1 call taker is far broader than that in most other provinces. In New Brunswick, the 9-1-1 call taker is required to obtain basic information about the nature of the emergency (not just the emergency agency that is sought by the caller). This information is then relayed by the 9-1-1 operator to the SSAP operator, before the caller is handed over to the SSAP. In addition, if additional emergency service agencies are to be notified, responsibility for such notification falls to the PSAP operator.⁷⁶

The New Brunswick approach contrasts sharply with the situation in British Columbia, where substantive caller interrogation is conducted by the SSAP, which then will notify additional emergency response agencies if required. The New Brunswick approach would add considerable time to the 9-1-1 call handling process (and likely require additional 9-1-1 operators). Also, the 9-1-1 operator is expected to transmit information to other emergency service providers (or to screen additional callers on the same incident), without necessarily having received the full or complete details of the incident from the caller.

New Brunswick Call Answer Levy. Under section 7 of the *Emergency 911 Act* (NB), a separate fund was established to hold the monies collected through the CAL. The funds may be used for:

- developing, establishing, operating and improving the “NB 911 service”; and
- paying for costs associated with administering the Fund.

The term “NB 911 service” was redefined in 2012 as:⁷⁷

“a province-wide system for the coordination of emergency services and for the reporting of emergencies to emergency service providers through a public safety answering point.”

⁷⁵ New Brunswick 9-1-1 Bureau, *Operating Procedures Directive*, Policy D-2 (2010).

⁷⁶ NB-OPD, Policies C-1, C-2 and C-4.

⁷⁷ The revision was made in *An Act to Amend the Emergency 911 Act*, SNB c. 25 (2012).

The original definition read:⁷⁸

“a province-wide 911 emergency telephone service for the reporting of emergencies to emergency service providers through a public safety answering point.”

The new definition has the effect of expanding the range of allowable expenditures by the CAL fund, to include expenditures on efforts to develop a “system” for coordinating emergency services, in addition to 9-1-1 call answering services.

Under the *Emergency 911 Act* (NB), a telecommunications company either can enter into an agreement with the Minister to collect the prescribed CAL fee, or it must collect the fee in accordance with the terms of the regulations.⁷⁹

The level of the CAL is prescribed by New Brunswick Regulation 2008-23; this regulation also contains rules which govern how those fees are to be collected and remitted to the province. We have not seen copies of any separate agreements between the carriers and the province; it is not clear, therefore, whether the terms of those agreements differ from the rules prescribed in the regulations.

The New Brunswick CAL covers landline, wireless and VoIP connections.⁸⁰ It prescribes a fee of \$0.53 per “exchange service” connection, and permits the telecommunication carriers to retain \$0.07 per connection as a billing and collection fee.⁸¹ Each carrier is required to set out the fee in its billing to its subscribers, and must make all commercially reasonable efforts to collect the fee.

The New Brunswick system requires that the CAL be deducted from the accounts of prepaid phone subscribers, but if insufficient funds are available, “the subscriber shall not be deemed to have refused to pay the fee” and the carrier does not have to make any further efforts to collect it.⁸² The logic behind this section is unclear. Even where a prepaid phone no longer has any time available, it can still be used to connect to 9-1-1. In principle, there is no reason why the fee should not be accrued from month to month, until the amount available in the phone’s account is replenished (or some reasonable sunset provision is reached).

The CAL fees are payable 45 days after the end of the relevant month. Each payment has to be accompanied by a statement which includes:⁸³

- the amount of the CAL fees billed;
- the amount of the CAL fees collected;

⁷⁸ See the earlier form of the act at <http://www.canlii.org/en/nb/laws/stat/rsnb-2011-c-146/96293/rsnb-2011-c-146.html#history> (accessed 20 May 2013), at section 1.

⁷⁹ *Emergency 911 Act* (NB), ss. 5 and 6.

⁸⁰ New Brunswick Regulation 2008-23, s. 2, definition of “exchange service”.

⁸¹ *Ibid.*, ss. 3 and 5(1).

⁸² *Ibid.*, ss. 10(1) and 10(2).

⁸³ *Ibid.*, s. 11

- the amount of the CAL fees remitted;
- the amount of the retained billing and collection fee; and
- the number of “exchange services” (connected lines and devices) provided by the carrier in the province during the relevant period.

The monthly statements are required to be certified annually by an accountant.⁸⁴

Unlike the Nova Scotia legislation, no express allowance appears to have been made in New Brunswick for bad debt, which presumably is borne by the carriers.

iv. Prince Edward Island

On Prince Edward Island (“PEI”), responsibility for 9-1-1 services falls to the Minister of Environment, Labour and Justice, who oversees the 911 Administration Office which operates under the umbrella of the Office of Public Safety. Operation of the 9-1-1 system is governed by the *Emergency 911 Act*, RSPEI 1988, ch. E-5.1 (as amended through 2012), and regulations made thereunder. The operation of the CAL in PEI is specifically governed by the *911 Cost Recovery Fees Regulations*, PEI Reg EC342/06. A 2012 estimate provided to the UBCM indicates that New Brunswick’s CAL raises approximately \$3.3 million per year.⁸⁵

In 2011, PEI consolidated its three 9-1-1 PSAPs into a single centre located in Charlottetown. This PSAP is a privately operated communication centre owned by Medacom Atlantic Inc.⁸⁶ Medacom also provides dispatching services for a number of rural PEI fire departments, two police services and the province’s EMS. There is no publicly available documentation that describes the respective responsibilities between the province and Medacom in connection with delivering 9-1-1 services. Nevertheless, under the *Emergency 911 Act* (PEI), the Minister has authority to establish and operate the 9-1-1 service, in “cooperation with” other identified stakeholders. The Minister has the power to determine how those services are operated including codes of practice, policies, standards and similar matters.⁸⁷

Like its Nova Scotia and New Brunswick counterparts, the *Emergency 911 Act* (PEI) contains a liability exemption for certain participants in the 9-1-1 service. Section 4 of that act exempts the province, the Minister, “telecommunications carriers,” a municipality, an “emergency service provider” and employees or volunteers of any of them, from any liability “for any loss or damage suffered by any person by reason of anything in good faith done or omitted to be done” in connection with the 9-1-1 service.

This language is substantially identical to that of the New Brunswick statute. With the recent consolidation of 9-1-1 services into a single, privately owned PSAP, however, it is not clear that

⁸⁴ *Ibid.*, s. 19.

⁸⁵ Document provided by K. Vance, Senior Policy Advisor, UBCM.

⁸⁶ See: “Centralized PSAP will be provided by Medacom Atlantic Inc.” on <http://www.gov.pe.ca/newsroom/index.php?number=news&dept=&newsnumber=7551>, accessed on 24 May 2013.

⁸⁷ *Emergency 911 Act* (PEI), ss. 2(1) and 2(5).

the liability exemption in the *Emergency 911 Act* (PEI) extends to Medacom Atlantic's communication centre. Although the Minister may, by order, designate a person or a service to be considered an "emergency service provider", there is no evidence that such an order has been made.

PEI Call Answer Levy. The PEI CAL itself is set in the act and its Schedule, although how the levy is administered is determined by the regulations. The fee is currently set at \$0.70 for each "telephone service that is subscribed to by a local subscriber."⁸⁸ The fee applies to landlines, wireless and VoIP connections, as well as to "any other telecommunications service that is of a type or class prescribed by the regulations."⁸⁹ This additional language gives PEI the flexibility to easily adapt the CAL to new types of telecommunication services as they develop.

Under the PEI legislation, the CAL may be used "for the purpose of recovering the costs of the Government in connection with the provision of the PEI 911 service".⁹⁰ The PEI 911 service is narrowly defined as being "a province-wide 911 emergency telephone service for the reporting of emergencies to emergency service providers through a public safety answering point" (which is essentially the same definition as that used by New Brunswick, before its 2012 revision).⁹¹

The PEI legislation does not establish a separate fund for holding the amounts raised from the CAL, and the PEI government does not appear to account for its CAL receipts and expenditures as a separate item (unlike, for example, Nova Scotia).

Under the regulations, a telecommunication carrier is permitted to deduct a "collection" allowance of \$0.07 for each CAL it bills.⁹² The regulations also contain provisions requiring carriers to provide documentation supporting the billings and remittances (standardized forms are available for this) and permitting the Minister to reassess returns from carriers and to audit the carriers' books and records.⁹³ Any records submitted by carriers which reveal how many subscribers they have in the province are protected as confidential information under the main statute.⁹⁴ Depending on how a carrier elects to account for the CAL (it can be done on either a billed or collected basis), it may be permitted to deduct an amount representing bad debt.⁹⁵ The regulations also contain extensive provisions dealing with payment defaults by carriers as well

⁸⁸ *Ibid.*, s. 2.1 and "Schedule: Cost Recovery Fee". The fee originally was \$0.50 per month per connection, but was adjusted upwards in 2012 to \$0.70.

⁸⁹ *Ibid.*, s. 1(i1)(vii).

⁹⁰ *Ibid.*, s. 2.1(1)

⁹¹ *Ibid.*, s. 1(f).

⁹² *911 Cost Recovery Fees Regulations*, PEI Reg. EC342/06, s. 5

⁹³ *Ibid.*, ss. 6,7(1), 17

⁹⁴ *Emergency 911 Act* (PEI), s. 4.1.

⁹⁵ *911 Cost Recovery Fees Regulations*, PEI Reg. EC342/06, s. 2(2). The service allowance is reduced in these circumstances.

as processes for managing any reassessment of the CAL by the Minister. PEI collects an estimated \$850,000 annually through its CAL.⁹⁶

v. Saskatchewan

The E911 system in Saskatchewan was established in 1996 under the *The Emergency 911 System Act*, SS 1996 ch. E-7.3. Saskatchewan still has a provincial telecommunications company, SaskTel, and the E911 service utilizes SaskTel's CRTC regulated infrastructure for 9-1-1 call routing. SaskTel, CLECs and wireless service providers are made responsible for billing the CAL to their customers. Under the Saskatchewan model, the CAL funds are remitted to and held by SaskTel. Phase 2 wireless E9-1-1 has been implemented throughout the province.⁹⁷

Under *The Emergency 911 System Act* (Sask.), the Sask911 system is defined as “a province-wide emergency telephone service that connects a person dialling the telephone digits 911 to emergency service providers through a public safety answering point, and includes the province-wide radio communication network to be used by emergency service providers.”⁹⁸

Responsibility for managing the Sask911 system falls to the Saskatchewan Office of the Fire Commissioner, which operates under the jurisdiction of the Ministry of Corrections, Public Safety and Policing. There are four PSAPs in Saskatchewan, located in Prince Albert, Saskatoon, Lloydminster and Regina, each with defined coverage areas. Each PSAP is operated independently⁹⁹ under contract with the provincial government.

Under section 45.1 of *The Saskatchewan Telecommunications Act*, RSS 1978, c. S-34, SaskTel is required to establish a fund, and to collect, hold, invest and, at the direction of the Minister, disburse the CAL funds. The funds are required to be accounted for annually, and SaskTel is required to prepare a corresponding report and financial statement for the minister.

A distinctive feature of the Saskatchewan system is that a portion of the province's financial obligations for the Provincial Public Safety Telecommunications Network (the “PPSTN”) is also funded through the CAL.¹⁰⁰ The PPSTN is partnership between the province, SaskPower and the RCMP, and provides radio coverage for the partner agencies throughout most of the province. It has an annual budget of slightly under \$15 million, and each of the partners contributes capital in alignment with its responsibilities for maintaining the system. Each partner is also responsible for funding its own users of the system (e.g., in terms of providing equipment, training and meeting any interconnection requirements). The province's direct financial contribution to the PPSTN (excluding user-specific costs), amounted to some \$5.5

⁹⁶ Document summarizing Canadian CALs provided by K. Vance, Senior Policy Advisor, UBCM.

⁹⁷ Description is based on SaskTel, *Sask911 Annual Report (April 1, 2010 – March 31, 2011)*, p. 1

⁹⁸ *The Emergency 911 System Act* (Sask.), s. 1. This definition reflects amendments made in 2009.

⁹⁹ Two PSAPs are municipally operated (City of Prince Albert and Lloydminster) and two PSAPs are operated by municipal police agencies (Regina Police Service and Saskatoon Police Service).

¹⁰⁰ The *Emergency 9-1-1 System Act* (Sask.) was amended in 2009 to broaden the scope of the CAL to include the PPSTN. See: Office of the Fire Commissioner, *Annual Report 2009-10* (2010) at p 13/24.

million in 2011-12.¹⁰¹ The province increased the CAL specifically to cover a portion of the PPSTN costs, including subsidizing connection costs of various provincial users.¹⁰²

Under *The Emergency 911 System Act* (Sask.), the minister has the power, among other things, to set the location, number and areas of coverage for PSAPs and prescribe standards, protocols, systems and procedures for communicating, equipping, mapping and addressing, as well as standards for call taking and dispatching. The province may also set requirements for training and education and set standards for civic addressing.¹⁰³ The legislation also requires the minister to establish an advisory committee to advise on the development, implementation and operation of the Sask911 system.¹⁰⁴ The Sask911 Advisory Committee fulfils this role in the province.

In Saskatchewan, call answer and call handling times are provided for in the standard operating guidelines developed by a working group of the Sask911 Advisory Committee. Interestingly, Saskatchewan does not expressly provide a standard for call answer (though it extensively references the NENA standard for other purposes), but does prescribe a standard for call transfers, using the NFPA 1221 standard of 95% of calls transferred to the appropriate dispatch agency within 30 seconds or less.¹⁰⁵ The Saskatchewan guidelines also establish training and proficiency requirements for staff, procedures for managing public complaints, confidentiality obligations, certain equipment requirements, staffing obligations, security requirements and the requirement for auditing compliance with guidelines and standards.¹⁰⁶

The Sask911 Advisory Committee, in addition to developing comprehensive standard operating guidelines, also has developed contingency planning requirements for PSAPs, including business continuity and infection control/pandemic response plans.¹⁰⁷ The establishment of standards and PSAP procedures in Saskatchewan reflected input from the PSAPs, the province and SaskTel.

¹⁰¹ This description of the PPSTN is drawn from: Provincial Public Safety Telecommunications Network, *Operating Report, 2011-12* (Saskatchewan: 2012).

¹⁰² Ministry of Corrections, Public Safety and Policing, [Untitled memorandum to users], undated [November 2009]. In the memo, which was distributed to groups such as the Saskatchewan Volunteer Firefighters Association, the ministry noted that: "The operating fee for users of the PPSTN will be \$40 per month per radio. The actual cost is \$90 per month with the difference being funded by a 24-cent increase in the Sask911 charge on consumer phone bills." See: www.svffa.ca/news_events_pdfs/PPSTN_announcement_2009_Nov.pdf, accessed on 28 May 2013.

¹⁰³ See: *The Emergency 911 System Act* (Sask.), ss. 5 – 8.

¹⁰⁴ *Ibid.*, s. 8(5).

¹⁰⁵ Sask911, *Standard Operating Guidelines v. 1.5* (June 2012). The NFPA standard is used, but not expressly identified as NFPA 1221. See section 4.8, final bulleted point.

¹⁰⁶ *Ibid.*, sections 3 (training), 7 (public complaints), 12 (confidentiality), and 13 (PSAP standards).

¹⁰⁷ Sask911, *Business Continuity Planning* (April 2012); and Sask911, *Sask911 Infection Control Policy* (April 2012).

Although there is an exemption of liability provision in *The Emergency 911 System Act* (Sask.),¹⁰⁸ unlike comparable provisions in the Maritime Provinces, it does not actually exempt the PSAPs from liability. Rather, the provision applies to “a volunteer or a volunteer organization” and exempts liability on the following basis:

“by reason of anything in good faith done, caused, permitted or authorized to be done, attempted to be done or omitted to be done by any of them in carrying out or in the supposed carrying out of any responsibility, duty or power while:

(a) responding to an emergency 911 telephone call; or

(b) acting at the request of an emergency service provider who is responding to an emergency 911 telephone call.”

While an interesting exemption, and undoubtedly of significance to organizations such as volunteer fire departments and volunteer search and rescue organizations, it seems odd to include it in legislation dealing with 9-1-1. The exemption fails to define what constitutes a “volunteer” (which could be problematic in situations where responding emergency workers are receiving a small stipend to cover gas or similar costs, or are paid “per call”), and does not address situations where a volunteer agency responds *without* a 9-1-1 call having been received.

PSAPs, however, are not expressly exempt from liability in Saskatchewan.

Saskatchewan Call Answer Levy. The Saskatchewan CAL has been set at \$0.62; an administration fee of \$0.07 is charged by SaskTel and other carriers for collecting the CAL. In 2012, more than \$8.9 million was collected through the CAL. Of this amount, \$4.6 million was directly spent on “Public safety answering points”, while \$4.43 million was expended on “Central co-ordination”.¹⁰⁹ The latter line item clearly includes amounts spent on both provincial administration and related costs for managing the Sask911 system, as well as amounts expended on the PPSTN.¹¹⁰

vi. Québec

Québec centrally administers and oversees the operation of its 9-1-1 PSAPs, imposing a range of provincially-established standards and requirements. It also operates a certification process which involves a provincial review of any centre operating as a PSAP. The certification process was introduced in legislative amendments in 2010, with existing facilities granted until December 2013 to qualify. Actual responsibility for the funding, staffing and operation of

¹⁰⁸ *The Emergency 911 System Act* (Sask.), s. 9.

¹⁰⁹ SaskTel, *Sask911 Annual Report (Fiscal Year April 1, 2011 – March 31, 2012)* (2012), at p. 5/8.

¹¹⁰ The charge for “central co-ordination” has jumped from approximately \$669,000 in 2007 to the current \$4.43 million. The increase is directly related to the change in legislation in 2009 which added the PPSTN funding to the CAL. See: SaskTel, *Financial Statements of Sask911 Account for the year ended March 31, 2007* (2007), at p. 3/8 for comparison. The central coordination fee increased as the PPSTN system came online in 2010-11.

PSAPs, however, falls to municipal governments. There are some 34 PSAPs operating in Québec. Most are operated by municipal police agencies; some, however, are separate legal entities (like E-Comm in B.C. or Medacom Atlantic in Prince Edward Island). There is a wide range of size, with the largest PSAP handling 9-1-1 services for more than 530 municipalities.¹¹¹

Québec's legislative structure is more complex than that of the other provinces reviewed. Conceptually, it provides an interesting model, since although there is central regulation of the system, much of the enforcement (including allocation of the funds from the CAL) is actually devolved to an agency which is primarily controlled and operated by local governments.

The following statutes and regulations are applicable to the operation of the PSAPs and implementation of the CAL:

Statutes

- 1) *An Act respecting municipal taxation* (R.S.Q., chapter F-2.1). See sections 244.68 to 244.74, subsections 13, 14 and 15 of first paragraph, section 262, and second and third paragraphs of section 262.
- 2) *Civil Protection Act* (R.S.Q., chapter S-2.3). See Sections 52.1 to 52.20, in force since December 30, 2010.
- 3) *An Act to amend various legislative provisions respecting municipal affairs* (2008, chapter 18, as modified by 2012, chapter 30, section 34). See section 135 which provides that 9-1-1 emergency centres in operation on the date of coming into force of the first regulation made under section 52.4 of the *Civil Protection Act* (i.e. December 30, 2010) have three years from that date to obtain a certificate of compliance (until December 30, 2013).
- 4) *An Act respecting pre-hospital emergency services* (R.S.Q., chapter S-6.2). See sections 7, 22, 24 and 86.
- 5) *An Act respecting the Québec sales tax* (R.S.Q., chapter T-0.1). Section 162.1 provides that a supply made to a municipality of a service of receiving and processing telephone calls through a 9-1-1 emergency centre is exempt.
- 6) *An Act respecting the exercise of certain municipal powers in certain urban agglomerations* (R.S.Q., chapter E-20.001). See paragraph b) of subsection 8 of section 19, which provide that a 9-1-1 emergency center is a matter that concerned related municipalities as a whole. See also sections 118.2., 118.27 and 118.79 which cover financing such expenditures in certain urban agglomerations.

Regulations

- 7) *Regulation governing the municipal tax for 9-1-1* (R.R.Q., c. F-2.1, r. 14.2)
- 8) *Regulation respecting standards, specifications and quality criteria applicable to 9-1-1 emergency centres and to certain secondary emergency call centres* (R.R.Q., c. S-2.3, r. 2). In force since December 30, 2010.

¹¹¹ Email correspondence with Serge Allen, General Manager Municipal Finance and Development Agency for Emergency 9-1-1 Call Centers in Québec, dated 5 June 2013.

- 9) *Regulation respecting the police services that municipal police forces and the Sûreté du Québec must provide according to their level of jurisdiction* (R.R.Q., c. P-13.1, r. 6). See section 2, subsection 1 b).

Under the *Civil Protection Act* (Que.), each municipality or regional municipality,¹¹² other than certain northern villages, must ensure the provision of 9-1-1 services through a certified PSAP. A municipality may meet this requirement by establishing its own PSAP, contracting for the service from another municipality or contracting with a private or non-profit enterprise.¹¹³

The minister is required to establish the criteria which must be met by PSAPs to obtain certification; he or she may also set the criteria applicable to any other dispatch agencies, other than “health communication centres.”¹¹⁴ The minister may also set binding guidelines governing PSAPs and secondary dispatch agencies (other than health communication centres).¹¹⁵ The legislation also permits the minister to appoint inspectors to ensure that PSAPs (and other dispatch agencies, if relevant) are meeting the prescribed standards and guidelines. Certification may be revoked if agencies do not meet the specified requirements.¹¹⁶

The regulations governing the establishment and operation of PSAPs and emergency dispatch centres cover a wide range of issues, from location and infrastructure to equipment, call handling and training. Some of the regulatory provisions apply only to PSAPs, while others apply to both PSAPs and emergency dispatch centres.¹¹⁷ The Québec Dispatch Centre Regulations prescribe that PSAPs:¹¹⁸

- (a) must not be located in an “industrial zone” or in an area with known “disaster risks”; (s. 2)
- (b) must provide physical security to prevent intrusions by unauthorized personnel; (s. 4)
- (c) must be located in a building which complies with standards applicable to post-disaster buildings, as at the time the PSAP was installed (and, if being materially renovated, upgraded to current standards); (ss. 5 (1) and (2))

¹¹² In Québec, it appears that “regional municipalities” provide services to unincorporated areas of the province, and in that regard are similar to B.C.’s regional districts. (Email correspondence with Serge Allen, General Manager Municipal Finance and Development Agency for Emergency 9-1-1 Call Centers in Québec, dated 5 June 2013).

¹¹³ *Civil Protection Act* (Que.), ss. 52.1 and 52.2.

¹¹⁴ *Ibid.*, s. 52.3. In Québec, the relevant emergency dispatch centres are referred to as “secondary emergency call centres”.

¹¹⁵ *Ibid.*, ss. 52.3 and 52.4.

¹¹⁶ *Ibid.*, see sections 52.12, 52.15, 52.16.

¹¹⁷ Regulation respecting standards, specifications and quality criteria applicable to 9-1-1 emergency centres and to certain secondary emergency call centres, (R.R.Q., c. S-2.3, r. 2), s. 1 (hereafter, the “Quebec Dispatch Centre Regulations”).

¹¹⁸ Certain of these standards are also applicable to emergency dispatch centres, particularly those relating to quality of service. In many respects, the requirements in these regulations are similar to (though less detailed or comprehensive than) those set out in NFPA 1221.

- (d) must have appropriate fire alarm and detection systems, as well as fire extinguishing equipment;(s. 5(3))
- (e) must have a means for shutting off external air intakes from the heating, ventilation and air conditioning systems; (s. 5(4))
- (f) must have the dispatching equipment and call takers located above the first (ground) floor of the building; (s. 6)
- (g) must have appropriate back up and uninterruptible power supplies, which systems are tested every three months; (s. 6(1))
- (h) meet certain requirements with respect to telephone infrastructure, including the ability to process E911 calls and at least two work stations capable of handling TTY/TDD calls; (ss. 7 – 8)
- (i) meet certain specified staffing requirements and call handling / quality of service obligations (ss 9 – 11). Calls must be answered within 10 seconds, 90% of the time and landline calls must be transferred to the relevant emergency dispatch centre within 60 seconds or less;
- (j) must create and maintain certain records about each call, and keep information relating to their records confidential (ss. 12 -14, 16);
- (k) must develop, maintain and exercise business continuity and backup plans (ss. 17 – 20). The backup plans have to include the identification of a functional backup centre and procedures for dealing with call overflows; and
- (l) must ensure that their staff meet certain requirements when hired, and certain minimum initial and on-going training standards. (ss. 21-22).

These detailed regulatory provisions regarding PSAP facilities, equipment and operations set Québec apart from other Canadian jurisdictions which have implemented a province-wide CAL. Oversight of the system is provided by the Agence municipale de financement et de développement des centres d'urgence 9-1-1 du Québec (the “Agency”),¹¹⁹ which is responsible for managing the certification processes, as well as distributing the CAL funds.

Notwithstanding the over-arching nature of the provincial regulatory structure, responsibility for 9-1-1 services (including funding and operations) remains with municipal governments. Accordingly, the Agency is governed by a board of directors comprising representatives of the Union of Municipalities of the Province of Québec, the Fédération québécoise des municipalités and the Ville de Montréal, in equal numbers. The province is entitled to appoint an observer to the Agency, and one has been designated by the Minister of Municipal Affairs, Regions and Land Occupancy.¹²⁰

In accordance with its mandate, the Agency also operates a Technological and Regulatory Monitoring Committee, which stays abreast of issues impacting 9-1-1 services, and develops

¹¹⁹ The Agency was established by the Minister pursuant to section 244.73 of *An Act Respecting Municipal Taxation*, RSQ, c. F-2.1.

¹²⁰ This description was extracted from the Agency’s website, <http://www.agence911.org/en/theagency> , accessed on 2 June 2013.

forward planning to address those issues. It also has a responsibility for public education regarding 9-1-1 services.¹²¹

The operation of the Agency is funded through the CAL. The Agency may retain a maximum of 3% of the CAL funds remitted to it by Revenu Québec for its administrative costs.

Québec Call Answer Levy. The Québec CAL is implemented as a municipal tax, albeit one required by provincial legislation. Under the senior legislation, each municipal government was required to pass a bylaw implementing the CAL. The CAL is set at \$0.40 per connection per month;¹²² telecoms companies are permitted to retain \$0.04 of that amount as an administration fee. The Québec government established the fee after reviewing the operational costs of the 9-1-1 services before the legislation was implemented.

Carriers are required to remit the amounts raised to Revenu Québec, which in turn remits the CAL to the Agency for distribution amongst its municipal members. In 2012, the CAL raised gross revenue of \$42.5 million. From that amount, some \$4.25 million was paid to telecoms carriers for administration fees, and a further \$400,000 was retained by Revenu Québec for its own administration costs. Of the remaining approximately \$37.85 million, some \$37.1 million was distributed to municipal members to cover 9-1-1 costs, while approximately \$750,000 was retained by the Agency for its overhead and the cost of fulfilling its mandate, including certifying PSAPs.¹²³

As noted above, the Agency comprises solely municipal representatives, with a provincial representative acting as an observer. Its members have developed a formula for distributing the funds available based on two principal metrics:¹²⁴

1. An amount calculated based on historic revenues received from previous landline CALs (and where no such revenues existed, on the basis of an estimated amount for same);¹²⁵ plus
2. The remainder distributed *pro rata* based on population.

An arbitrary amount was also established for certain unorganized areas within the province which are not within municipal or regional municipal boundaries.¹²⁶

¹²¹ Agence municipale de financement et de développement des centres d'urgence 9-1-1 du Québec, *Rapport d'activité*, at p.4/41 (hereafter: "Agency 2012 Annual Report").

¹²² The tax applies to any device or connection which permits connection to 9-1-1 services. See: Agency 2012 Annual Report, at p. 10/41.

¹²³ Agency 2012 Annual Report, at pp. 8-9/41. Decisions by the Agency about how to distribute CAL funds must be unanimous; see: *An Act Respecting Municipal Taxation*, RSQ, c. F-2.1, s. 244.73(2).

¹²⁴ Agency 2012 Annual Report, at p. 40/41

¹²⁵ The amount for each municipality is 1/12 of the amount raised in either 2007 or 2008 (whichever year had the most revenue).

¹²⁶ Email correspondence with Serge Allen, General Manager Municipal Finance and Development Agency for Emergency 9-1-1 Call Centers in Québec, dated 5 June 2013.

With the Québec approach, the funds are distributed without regard to actual cost of operation of the underlying PSAPs and delivery of 9-1-1 services. If the revenue is insufficient, municipalities would be required to cover the deficit through normal funding channels. If there is a surplus, there is no technical limitation on how such surplus is spent. In general, there was an recognized funding shortfall before the introduction of the uniform CAL. With the new certification requirements, moreover, PSAPs had to invest in upgraded equipment, training and, potentially, staffing. As such, it was felt that there were unlikely to be any significant surpluses available. Indeed, the vast majority of municipalities (96%) reportedly direct the Agency to make the payments to the relevant PSAP, rather than to the municipality itself.¹²⁷ The amount of the CAL is expected to be revisited in 2014.¹²⁸

The Agency itself does not retain any significant funds for special projects, system expansion or upgrades, or similar matters.

It should be noted that the CAL appears to have been set at a level that would result in significantly more funds being available than had been the case with the comparable landline levy. On its website, the Agency estimated that the new CAL would raise approximately \$13.5 million more than the previous landline CAL. The 2012 figures are actually \$16.5 million higher.¹²⁹ These additional funds were expected to be used to enhance the provision of 9-1-1 services, although as noted, there is nothing in the Québec statutory or regulatory structure that would require that excess funds be invested in enhancing PSAP operations.

vii. Alberta

In Alberta, PSAP operation is a municipal responsibility. Until recently, there has been little provincial oversight or involvement in the establishment or operation of PSAPs. There currently are some 25 PSAPs managing 9-1-1 services in the province. While the number of PSAPs has declined somewhat over the past decade as a result of consolidations, there are still more of them than is typical based on the experience in comparable Canadian jurisdictions.

At the time of writing, Alberta is in the process of introducing a province-wide CAL. Bill 15, *Emergency 911 Act* passed third reading on 6 May 2013 and received Royal Assent on 27 May 2013. It is expected to be proclaimed in force later this year. Unlike the CAL legislation in other jurisdictions, the Alberta statute is narrowly focused on wireless devices. The 9-1-1 levy is established under section 4. The amount is to be set by regulation (not yet promulgated), but applies only to a “wireless subscriber”.¹³⁰ It is currently anticipated that the CAL will be set at

¹²⁷ There is, however, the possibility that the CAL is subsidizing the cost of dispatch services provided by the centres which offer PSAP services.

¹²⁸ Based on information provided in email correspondence with Serge Allen, General Manager Municipal Finance and Development Agency for Emergency 9-1-1 Call Centers in Québec, dated 5 June 2013.

¹²⁹ See the FAQ section on the Agency’s website, at <http://www.agence911.org/en/faq#68>, where it notes: that, after costs are deducted, it was expected that the municipalities would receive \$34.5 million, which was \$13.5 million more than under the old landline CAL. By 2012, the amount available for distribution had grown to \$37.5 million.

¹³⁰ Bill 15, *Emergency 911 Act* (Alta.), s. 4(2).

\$0.44 per device per month.¹³¹ The Alberta government has not yet made public how much of an administration fee will be retained by telecom companies for collecting the CAL.

The focus on solely wireless devices means that the patchwork of local government landline agreements will also remain in place, which is neither particularly efficient nor does it ensure a fair sharing of the burden amongst users (as in some regions, landline users may not have to pay a fee for the ability to connect to 9-1-1 services and the amount paid may vary from jurisdiction to jurisdiction). The narrow focus also excludes static VoIP connections. In theory, the Minister may, by regulation, define “other purposes” for the Act, and “prescribe other devices as wireless devices”.¹³² However, this seems an awkward approach and it is likely preferable to ensure that all existing forms of connection to 9-1-1 services are captured by statute.¹³³

Under the Alberta structure, the Minister is responsible for establishing how CAL funds are to be distributed to PSAPs. Section 6 of Bill 15 provides:

“The Minister may, in accordance with the regulations, make payments or grants from the 911 levy ... for carrying out the purposes of this Act.”

Regulations regarding the distribution of CAL funds are still being drafted. The Alberta Emergency Management Agency (the “AEMA”) is leading the effort to consult with PSAPs and other stakeholders on how the funds are to be distributed, including the metrics which are to be used. Our understanding is that the proposed process will involve a grant system. Each PSAP will receive a basic grant, plus an amount based on population served. The suggested approach seem quite complex – separate grant applications from each PSAP are required every quarter in order to qualify for continued funding. This proposal, which may well change in the final form, seems overly bureaucratic and time consuming, both for the PSAPs involved and for the administration of the system. Initial estimates are that the administration costs (including amounts paid to the telecom companies for collecting the CAL) will amount to about 20% of the sums collected.¹³⁴ This contrasts unfavourably with, for example, Québec, where the total administration costs, including amounts expended on PSAP certification and standards setting, is only 12.7%.

The new legislation also permits the Minister to establish province-wide standards, guidelines and policies respecting 9-1-1 call taking processes and procedures. The AEMA has indicated that this new provision means that the province intends to “work with stakeholders to create

¹³¹ Alberta Emergency Management Agency, <http://www.aema.alberta.ca/911.cfm> accessed on 3 June 2013.

¹³² Bill 15, *Emergency 911 Act* (Alta.), ss. 12(b) and 12(c).

¹³³ Even with the broad powers to add to the statute through regulation, it is unlikely the Minister would be able to extend the scope of the statute to include landline connections (which may also limit his ability to extend it to include static VoIP).

¹³⁴ Alberta Emergency Management Agency, “Emergency 911 Regulation and Program Guidelines: Public Safety Answering Point Meetings – Discussion Questions,” Undated [June 2013]. This document sets out the framework for discussion of issues relating to, among other things, how the CAL funds will be distributed and what constitutes eligible expenses. As at the date of writing, no definitive decisions had been made by the AEMA on how to manage the distribution of funds.

province-wide standards processes and procedures for 911 call taking. This will ensure consistent service delivery across the province.”¹³⁵

Like the legislation in the Maritime Provinces, Bill 15 includes a provision which exempts liability for certain groups involved with 9-1-1 services. Section 11 of Bill 15 exempts the Government, the Minister, a “wireless telecommunications provider”, a PSAP operator and any of their respective employees or volunteers from liability in relation to providing 9-1-1 services or acting under the authority of the new Act or regulations. The caveat to this exemption is that the party in question must have been acting in good faith.

Interestingly, this section does not specifically exempt wireline carriers from liability. Telus provides wireless services through a subsidiary (Tele-Mobile Company), which is a separate legal entity from the one that provides the wireline backbone infrastructure for PSAPs in Alberta. As such, it is not entirely clear that the exemption from liability would apply to Telus’s provision of wireline services or the backbone infrastructure used to support the 9-1-1 system (though its liability in respect of such services may be limited in other ways, including through the terms of the tariffs issues by the CRTC).

c. Approaches in Other Jurisdictions

The approaches of two other jurisdictions also were reviewed as part of the gathering of background information on 9-1-1 systems.

i. Manitoba

Manitoba does not currently have a province-wide call answer levy. Nevertheless, it does have legislation which governs and regulates the operation and functioning of PSAPs. Manitoba’s regulation of its PSAPs is provided for under *The Emergency 911 Public Safety Answering Point Act*, C.C.S.M. c. E85 (the “Manitoba PSAP Legislation”) and the corresponding regulations, *Emergency 9-1-1 Public Safety Answering Point Regulation*, Manitoba Regulation 60/2005 (the “Manitoba PSAP Regulation”).

Under the Manitoba system, although PSAP services are delivered by local government, they are subject to provincial regulation and oversight. The Manitoba PSAP Legislation requires that PSAPs be provincially licensed, and makes them subject to provincial inspection. The minister is given the power to control the operation of PSAPs, including functions performed, operational standards, training standards, procedures and equipment.¹³⁶ The Manitoba PSAP Legislation also:

- makes it an offence to connect automatic dialing devices to 9-1-1 services;
- makes it an offence to make a false, frivolous or vexatious call to 9-1-1 services; and

¹³⁵ Alberta Emergency Management Agency, <http://www.aema.alberta.ca/911.cfm> accessed on 3 June 2013.

¹³⁶ *The Emergency 911 Public Safety Answering Point Act*, C.C.S.M. c. E85, s. 12.

- establishes the confidentiality standard applicable to 9-1-1 calls made “in good faith”.¹³⁷

The Manitoba PSAP Legislation also includes a wide-ranging liability exemption for the provincial and local governments, an emergency service provider (police, fire, EMS and others prescribed by regulation), a licensed, not-for-profit PSAP, and their respective employees or volunteers, for:¹³⁸

- responding to an emergency 911 telephone call;
- acting at the request of an emergency service provider who is responding to an emergency 9-1-1 telephone call;
- operating a public safety answering point; or
- carrying out any responsibility or duty or exercising any power under the legislation.

Employees and volunteers of “for-profit” PSAPs are granted comparable exemptions, but for-profit PSAPS, and their officers, directors and principals, are not.¹³⁹

Under the Manitoba PSAP Regulation, a comprehensive regime covering matters ranging from facilities, infrastructure and equipment, to staffing, training and records keeping, is established for PSAPs in the province. PSAPs are mandated to have back-up locations and fail-over procedures. They also are required to have quality assurance processes and performance reviews and are subject to inspection by the province.¹⁴⁰

Actual operating procedures appear to be established at the PSAP level, rather than New Brunswick model, where they are prescribed by the province. One approach taken by the Winnipeg Police Service in relation to 9-1-1 call handling, is that 9-1-1 operators are expected to “confirm that an emergency exists” as part of the caller interrogation.¹⁴¹ In general, the policy in British Columbia is to pass the caller to the requested emergency service agency, without further interrogation. Interrogation as to the nature of the emergency would only occur where the caller is uncertain as to which agency he or she requires.

ii. State of Kentucky

The manner in which PSAPs are operated and CALs managed in Kentucky stand in contrast to the more centralized approaches found in Canadian jurisdictions. It is useful to consider, if only to understand how decentralized some systems are and the problems that such decentralization can pose. It should be noted, however, that all 50 American states and the District of Columbia,

¹³⁷ *Ibid.*, ss. 8(1), 8(2) and 10.

¹³⁸ *Ibid.*, s. 7(1).

¹³⁹ *Ibid.*, ss. 7(2), 7(3).

¹⁴⁰ *Emergency 9-1-1 Public Safety Answering Point Regulation*, Manitoba Regulation 60/2005, *passim*. On alternate locations, see: s. 14; quality assurance and performance reviews, see s. 20; provincial inspections are covered in s. 22.

¹⁴¹ Information provided by Inspector Rick Greenwood, RCMP, based on the Winnipeg Police Service, *Communications Manual: 911 Policies and Procedures* (2011).

impose 9-1-1 CALs on wireless devices and all permit the imposition of CALs on landlines. The CAL fees for wireless range as high as \$3.00 per month.¹⁴²

Kentucky is approximately one-third the area of British Columbia, with a smaller population.¹⁴³ PSAP operation is primarily a local city and county matter, and has seen very little in the way of consolidation. In 2011, it was reported that Kentucky had 109 certified PSAPs, with an unknown number of additional, unregistered PSAPs located at universities, airports and army bases.¹⁴⁴ These noncertified PSAPs are not tracked in any way by the state. 9-1-1 services are a local government responsibility, but the service is optional, as there is no federal or state law which requires it be provided.¹⁴⁵

Local governments are authorized to impose landline call answer levies, while the state imposes a levy on wireless service providers. The landline CALs in Kentucky range from no fee to \$4.25 per month. While the legislation permitting the imposition of a landline CAL restricts the use of the funds to expenditures on the “911 emergency communications system”, it does not define what is meant by that phrase or prevent local governments from accumulating surpluses.¹⁴⁶ In general, revenues from the landline CALs have declined over recent years.¹⁴⁷

The State plays a role in collecting and distributing the wireless CAL, which is set at \$0.70/month. The revenue from this source appeared to have plateaued. The only right that the State has to regulate PSAP operations relates to establishing standards for handling of 9-1-1 calls from wireless devices, and distributing the funds from the wireless CAL. The State use the funds to help local governments and wireless providers defray some of the costs of providing 9-1-1 services to wireless customers. It also provides funding to local governments on a grant-basis, to help upgrade PSAP equipment and encourage PSAP consolidation.

The fragmented nature of PSAP operation, and separation of local government – which is responsible for the service – from the most readily available source of funding for that service

¹⁴² Information from the NENA website: <http://www.nena.org/?page=911RateByState>, accessed on 6 July 2013. Alaska permits local counties to determine whether to charge a fee on wireless connections. Some states (e.g., California), have established a tax rate based on phone usage. Wisconsin does not have a wireless charge for 9-1-1 services *per se*, but they do charge \$0.75/month per connection as a “police and fire protection fee”, which is used to fund state aid to municipalities and counties for emergency services. See: Wisconsin Legislative Council, *Staff Brief: 911 Communications*, SB-2012-04 (12 July 2012), at p. 10; http://legis.wisconsin.gov/lc/publications/sb/sb_2012_04.pdf.

¹⁴³ The population of Kentucky is approximately 4.0 million, while B.C.’s population is approximately 4.4 million.

¹⁴⁴ Legislative Research Commission, *9-1-1 Services and Funding: Accountability and Financial Information Should be Improved* (2011) at pp. 5, 9. There are also some unregistered PSAPs operated by local governments. The Federal Communications Commission lists more than 190 PSAPs for the State of Kentucky, which is almost as many as exist in all of Canada. See: FCC Master PSAP Registry, downloadable at: <http://transition.fcc.gov/pshs/services/911-services/enhanced911/psapregistry.html> accessed on 6 July 2013.

¹⁴⁵ Legislative Research Commission, *9-1-1 Services*, at p. 13.

¹⁴⁶ *Ibid.*, at p. 10 and 61.

¹⁴⁷ *Ibid.*, at p. 10.

(wireless CALs), has led to significant financial challenges. These problems also have been exacerbated by the failure at the local level to manage PSAP and related dispatch functions efficiently. The number of PSAPs and dispatch centres greatly exceed the number required to provide efficient and effective services to the public, and necessarily increases the overall cost of the operation of the system. As noted in a 2013 report by Kenton County, Kentucky, examining the financial problems facing its 9-1-1 system:¹⁴⁸

“...the Committee unanimously supports the further consolidation of the ... dispatch systems. Lives would be saved through improved response times while creating efficiencies that would save tax dollars. *It was surprising to many on the Committee to see the amount of time and energy that has been invested in this process over the past 15 years with the taxpayers still not able to enjoy the benefits of county-wide dispatch.*” **[emphasis added]**

The Kenton County report noted that traditional landline levies were declining significantly. To keep pace, local municipal governments had increased the amount of the levy, in some cases to as much as \$4.25 per line, per month. Funding from wireless levy raised by the State was limited, and the county was facing a deficit of more than \$2 million per year for its 9-1-1 operations.¹⁴⁹ The solution proposed by the report was to add an additional levy to electricity meters, to once again broaden the tax base.¹⁵⁰

The issues in Kentucky highlight several matters. First, the failure of local governments to manage the delivery of 9-1-1 services efficiently greatly impacts the cost of delivering such services and, ultimately, negatively impacts public safety.

Second, separating the government with responsibility for the service from the most relevant source of funding is problematic. By creating a wireless levy at the state level, but not providing a mechanism either for local government to ensure that the funds were distributed as required or (alternatively) giving the State authority to drive greater efficiency in the system, means that the levy does not necessarily translate into better service to the public. The State itself noted the problem: while jurisdictions like Kenton County struggle financially, other counties (which are acquiring PSAP services in a more efficient fashion, by contracting for them through the State police), were able to claim wireless funding and were accumulating large surpluses.¹⁵¹

¹⁴⁸ Funding Review Panel, *Funding 911 Services: A Report and Recommendation by the Kenton County 911 Funding Review Panel* (May 2013), at p. 6. The report noted that even greater benefits could be enjoyed if they moved to a three-county 9-1-1 service and dispatch function.

¹⁴⁹ The report somewhat blurred the distinction between 9-1-1 services narrowly defined and the broader issue of emergency dispatch and emergency communications, and the committee reported problems separating out how much was spent on 911. Nevertheless, it had three dispatch centres serving approximately 160,000 people and they estimated that the service was costing some \$5 million annually to deliver. *Ibid.*, at p. 7; on the “breadth” of the services covered, see p. 8. Notwithstanding the committee’s “surprise” at what was funded, only one item noted seemed broader than usual: the provision of mobile display terminals in police vehicles.

¹⁵⁰ *Ibid.*, at p. 12

¹⁵¹ Legislative Research Commission, *9-1-1 Services*, at pp. ix, 27, 42-43.

8. Issues, Challenges and Options for Introduction of a Provincial CAL Legislative Responsibility

a. Legislative Approach and Issues

i. Legislation/Regulation

The introduction of a CAL, along with any corresponding system for managing and allocating funds and regulating the operation of PSAPs (and possibly other elements of the emergency communication system) will require senior legislation and regulations. There are no obvious statutory structures into which these types of provisions easily could be inserted, and the legislation is sufficiently particular and potentially complex, that it will be better to have a standalone statute. That is the approach taken in each of the other Canadian jurisdictions examined (with the possible exception of Québec, which has a very different legislative structure to that of the common law provinces).

The legislation and related regulations will need to deal with a range of issues. Based on the legislation implemented in other Canadian jurisdictions, the following non-exhaustive list of matters will need to be considered as part of the legislative drafting process:¹⁵²

- The scope of the CAL, including:
 - Defining what the CAL covers (i.e., the devices/connections against which the CAL is charged) and providing a process for updating the list of covered devices and connections. In general, it is recommended that all services (and attendant devices) which connect to 9-1-1 services should be subject to a CAL, including landlines, wireless devices and VoIP connections; and
 - Defining the scope of permissible services and costs which may be funded by the CAL.
- The amount of the CAL (which should be set in the regulations) and the process for amending or reviewing same.
- The process for collecting and remitting the CAL, including:
 - Frequency of remittance;
 - Issue of bad debt (note that not all Canadian jurisdictions permit telecommunication companies to make allowances for bad debt);
 - Amount of the administration fee to be permitted;
 - Telecommunication companies' reporting requirements; and
 - Confidentiality of sensitive economic information.
- Level and extent of regulation of the system (and definition of what can be regulated) in terms of PSAP operations (including standards, training, equipment, infrastructure, etc.). This will also require a specified process for developing, overseeing and implementing such regulation.
- The system/process for holding, managing and allocating the CAL funds, and managing any regulation of the system, including:

¹⁵² Other issues include penalties for misusing the 9-1-1 system, requirements for civic addressing,

- Appropriate metrics / formula for allocation and a process for revising same;
 - Note that the complexity of the allocation will vary materially depending on the scope of the CAL (in general, the broader the CAL scope, the more complex the allocation system);
- A process for allocating funds not covered by any set formula (i.e., if the distribution process includes a granting component);
- The system for managing this allocation should be intrinsically connected to any regulation of the operation / function of PSAPs;
- A clear definition of the roles and responsibilities of the various stakeholders, including a well-defined process for obtaining technical and operational guidance to inform decision-making; and
- Responsibility for undertaking educational initiatives in relation to 9-1-1 services.

The principal issues which need to be addressed are closely interconnected. The scope of the CAL (what devices are covered, and what the funds may be used for) impacts the amount of the CAL. The scope also impacts the complexity of the allocation process and system needed to manage and distribute the funds: the broader the range of activities which are permissibly financed or subsidized through the levy, the more complex the approach required for allocating the funds.

Similarly, the broader the scope of the CAL (in term of what can permissibly be funded), the more important it will be to ensure that there is centralized oversight and control of the operation of the relevant aspects of the emergency communication system, to ensure that its public safety objectives are being met in a manner which is both effective and efficient. These interconnected issues are considered in greater detail in sections 8(b), (c) and (d) below.

For the purposes of this paper, based on discussions with the project sponsors it is assumed that the legislation would seek to impose a CAL on all devices which can connect to 9-1-1 services.

ii. Managing Liability

Five of the seven Canadian jurisdictions surveyed established some form of statutory liability protection for the operation of the 9-1-1 system in their jurisdictions. No such general protection exists in British Columbia, with the exception that E-Comm, as an “emergency communications corporation,” enjoys a broad immunity from liability under section 10 of the *Emergency Communications Corporation Act* (B.C). The exemption enjoyed by E-Comm provides as follows:

- 10 (1) In this section, "protected person" means the following:
- (a) an emergency communications corporation;
 - (b) a current or former member of an emergency communications corporation;

(c) a current or former director, employee or agent of an emergency communications corporation.

(2) No action lies and no proceedings may be brought against a protected person, and a protected person is not liable for any loss or damages suffered by any person, in relation to anything done or omitted to be done by the protected person in relation to the provision of or failure to provide emergency communications services by an emergency communications corporation.

(3) As an exception, the immunity from legal action otherwise provided to a person by subsection (2) does not apply if the person has been guilty of malice or wilful misconduct in relation to the subject matter of the action.

If liability protection is to be extended to PSAP operations, a decision will need to be made if that protection should be more broadly cast (akin to that provided to E-Comm), or limited to the 9-1-1 call answer / transfer function. If the narrow approach is taken, then a very clear definition of the 9-1-1 function will need to be included.

If a broader approach is taken (and each PSAP's related dispatch function is also protected), then the further issue of whether such protection would also be extended to other SSAPs in the province would need to be considered.

Regardless of whether a narrow or expansive approach is taken, granting such protection raises the issue of establishing and enforcing consistent standards and procedures. In each case where other jurisdictions have granted such protection from liability, they have established a corresponding set of standards and requirements for PSAP operations. In some respects, it may almost be seen as being a trade-off: in exchange for receiving liability protection, there is a need to accept centralized standards and oversight.

This question raises a number of broad policy issues and potential concerns (not all of which are addressed here) which would require more detailed analysis than is possible in this paper. It is an issue of concern, however, both to PSAPs and local governments, and one which should be examined closely as part of this process.

b. Scope of Services to be Funded by a CAL

The scope of the services to be funded by a province-wide CAL is a policy decision to be made by local governments and the province.¹⁵³ Determining the scope will impact a series of other decisions, including the quantum of the CAL, the allocation methodologies required, the governance and oversight systems needed to manage the process, and the issue of establishing recognized standards of service and operational requirements for recipients of CAL funding.

¹⁵³ For the purposes of this section, references to the "scope" of the CAL refers exclusively to the services which permissibly may be funded under such levy, and not to the types of devices or connections against which such a CAL would be charged.

As noted in the discussion of comparable Canadian jurisdictions, there is a range of approaches to the question of the appropriate scope for a CAL. Saskatchewan, Nova Scotia and New Brunswick permit the funding to be used for a broader range of services than what may narrowly be considered “9-1-1 services”. Conversely, Prince Edward Island and Alberta are more restrictive in how CAL funds are utilized, and define the scope using a narrow definition of 9-1-1 services. Québec utilizes an agreed formula for allocating CAL funds, but does not statutorily prescribe how those funds are to be spent.¹⁵⁴

The options to be considered for the scope of a CAL include:

- Funding only a narrowly defined concept of 9-1-1 services; and
- Funding 9-1-1 services and funding some portions of the other components of the emergency communications continuum, such as:
 - Emergency service dispatch functions;
 - Wide-area emergency radio networks; and/or
 - Emergency service agencies’ radio connections.

In each case, the relevant capital, administrative and operational costs are assumed to be included in what potentially is being funded, though obviously distinctions could be made depending on the defined scope and related allocation model.

A caveat should be noted here. No attempt has been made to assess the aggregate cost of dispatch and radio network services in the province. The amounts, however, are substantial and, in the unlikely event that the CAL was to provide full funding for all aspects of the emergency communications continuum, the impact on the required quantum of the CAL would be significant. To put this in perspective, the cost of just E-Comm’s operation (which includes 9-1-1 services, fire and police dispatch services and a wide-area emergency radio network) is in the range of \$43.7 million per year.¹⁵⁵ The aggregate cost of operating all 9-1-1 services, dispatch and emergency radio systems in the province would likely be at least several times that figure. It is assumed, therefore, that if a decision is made to provide any funding to other aspects of the emergency communications system, that funding would only be partial.

Within the context of what would need to be funded to provide 9-1-1 services (narrowly conceived), based on other Canadian jurisdictions’ legislation, the following matters are generally considered directly “in scope”.¹⁵⁶

¹⁵⁴ Though, as noted in section 7(b)(vi) above, in practice the money is directed to the PSAPs. What is not clear is whether the CAL monies are also being used to fund or subsidize dispatch operations by those centres.

¹⁵⁵ E-Comm, *2011 Annual Report to the Community* (2012), at p.12. The cost of the BCAS dispatch system, with its four inter-connected SSAPs, is a further approximately \$23 million per year. There are more than 70 dispatch centres in the province.

¹⁵⁶ This is based on a review of the Nova Scotia, New Brunswick and Saskatchewan legislation and regulations. It omits reference to services – such as poison control in Nova Scotia and the wide-area radio network in Saskatchewan – that falls outside of the narrow conception of 9-1-1 services. PEI does

- the capital and operating costs directly attributable to providing 9-1-1 services, including, staffing, training, equipment, IT systems and related software, and allocations for infrastructure;
- the costs of establishing and operating any committees formed to advise on the operation of the 9-1-1 system or any aspect of it (including participation as required at the federal level, with the relevant CRTC committees);
- the costs related to the development of any standards, guidelines or operational procedures related to 9-1-1 services, and of providing oversight of the operation of the system;
- the costs of public education initiatives in relation to the 9-1-1 system (e.g., to address the problem of Abandoned Calls, etc.);
- some or all of the costs related to civic addressing; and
- some or all of the costs related to developing and maintaining accurate digital maps.

It is worth observing that the Province has looked at the issue around developing a resilient, interoperable provincial emergency radio network, to replace the patchwork of provincial, federal and local government networks currently in place. Similar radio systems have been established in both Saskatchewan and Alberta. When this issue was considered within Emergency Management British Columbia, the possibility of funding some or all of this undertaking through a CAL was raised at that time.¹⁵⁷

If a decision is made to broaden the scope of the CAL, the range of permissible undertakings will need to be carefully considered and properly identified. Care also should be taken to ensure that, when such new source of funding is made available, any new expenditures represent efficient use of the funds.

c. Allocation and Management of CAL funding

The process for allocating and managing the funds raised from a province-wide CAL will require careful consideration. Clearly, the broader the scope of the CAL, the more complex the allocation process will become as there will be more considerations in determining an appropriate allocation.

As a precursor to this discussion, however, it should be noted that some concerns were expressed during the information gathering process that the CAL funding should not become an undirected source of revenue for any level of government. In other words, that it should remain focused on its defined intent. Concerns were also expressed that primary control of the funds should remain with local government, which is principally responsible for the provision of the service.

There are a number of different approaches that can be taken to distributing CAL funds, including:

not provide a detailed description of what can permissibly be funded from its CAL, outside of saying that it relates to “E911 services” for which the province is responsible.

¹⁵⁷ Based on discussions with Mike Webb, Vice-President Technology Services, E-Comm.

1. A metric-driven formula, where relevant cost drivers and other factors are used to divide the available funding amongst either the various PSAPs or the local governments (e.g., as in Québec);
2. A grant-based system (e.g., as in Alberta);
3. A negotiated amount, based on either arm's length negotiation with private parties (PEI), or negotiations between government entities (e.g., as in New Brunswick, Nova Scotia¹⁵⁸ and Saskatchewan).
4. A hybrid model that blends two or more of the above approaches.

Given the situation in British Columbia, a hybrid model, combining a metric-driven formula and grant based system, is probably most appropriate for distributing the CAL. There will still be negotiated arrangements between local governments and PSAP service providers (e.g. with the RCMP OCCs, or with E-Comm), but the numbers generated through those negotiations could become one of the metrics in the allocation formula.

Use of a Fixed, Metric-driven Formula. The PSAPs in British Columbia vary in size and relative cost efficiency. On a per call or *per capita* basis, larger centres generally tend to be financially more efficient. The largest PSAP in the province provides service to nearly 2.4 million people, handling between 900,000 – 1,000,000 9-1-1 calls per year. It costs approximately \$1.55 *per capita* or a little over \$4.00 per 9-1-1 call, to operate E-Comm's PSAP function. Operations in smaller centres do not match this cost profile. Costs for other centres varied widely (and the numbers which were generated need to be treated with caution, given the uncertainty about how some centres reported the total number of calls, and the difficulty in separating out the cost of 9-1-1 services from dispatch). Still, E-Comm's 9-1-1 services cost approximately 1/3 less on a *per capita* or per call basis, than the operation of the second least costly PSAP. The unweighted average "cost per call" across all 12 PSAPs was approximately \$10; the unweighted average cost *per capita* for delivering 9-1-1 services was approximately \$3.50.¹⁵⁹ The median cost for 9-1-1 services was \$9.08 per call and about \$3.55 *per capita*.

The difference in cost structures makes it challenging to develop a fixed, metric-driven formula that covers each PSAP's current cost of operations, without creating a significant surplus in some centres. At the same time, a fair argument can be made that cost efficiencies should be sought, which will reduce the relative cost gap. It needs to be recognized, however, that this gap will never entirely be eliminated. As noted above, regional district governments have already worked to aggregate service delivery to increase efficiency. This process should be further encouraged and supported through any system that emerges from this process.

¹⁵⁸ Nova Scotia actually operates a hybrid system, since they have an allocation process for covering or subsidizing certain local government costs related to municipal addressing, and for funding poison control services. The primary PSAP funding, however, is based on a contract with the province, which establishes a "cost per qualified 9-1-1 call" and makes the province responsible for training PSAP operators.

¹⁵⁹ The "unweighted average" here means the sum of the average cost *per capita*, or average cost per call, for each centre, divided by the number of centres. Where more than one PSAP served the same regional district (i.e., in the Capital Regional District and the Fraser Valley Regional District), the results for the PSAPs were aggregated before the calculation was made. This calculation does not include any figures for the City of Nelson.

While a system based solely on a metrics-driven formula may not be the entire answer, it could provide the cornerstone for the bulk of the funding of the 9-1-1 service itself. The metrics that should be considered include:

1. Call volumes. Call volumes are one of the principal drivers of staffing requirements and therefore the cost of operating a PSAP. Call volumes are largely a function of population, though it is probably a better measure than permanent population, as a number of regional districts have sizeable summer and holiday population booms that impact service delivery requirements. Even use of this metric, however, needs to be carefully considered. The Kelowna OCC, which handles calls for nine regional districts in the province's central interior, sees 60% more calls during August (its peak month) than it does in February.¹⁶⁰ The realities of PSAP operation make it challenging to staff up only for one or two months, which means that the overall costs for the Kelowna OCC are impacted by having to maintain somewhat higher staffing levels year round.
2. Historical Amounts Raised from Landline CALs.¹⁶¹ One criterion established by local governments when undertaking this process was that a province-wide CAL should provide net "new" revenues. Given the disparity in populations, call volumes and resulting cost structures, some allowance will therefore need to be made to ensure that, at a minimum, the funding received is not less than currently is obtained by those jurisdictions which use a landline CAL. A similar approach was used in Québec when its allocation model was established – historical amounts raised through each municipality's landline CAL forms part of the formula used to distribute funds from Québec's province-wide CAL.
3. Actual Cost of Operation. If there is a disparity between the actual cost of operating the PSAP function, and the amount raised from a metric such as call volume (or population, or the number of devices in a region) or historical CALs, there may need to be method of adjusting for such additional costs. This does flag the cost efficiency issue noted earlier and it may be advisable to put upper limits on this type of adjustment.
4. Cost of Improvements. The cost of improvements to the PSAP system, particularly if these are mandated through any process established by the CAL legislation, might be treated as a separate item.

Grant-based System. The model used by Alberta for its grants-based system appears overly complex. Nevertheless, blending an appropriately designed granting system with a metric-driven formula would offer great flexibility. It would allow adjustments to be made on an individual case basis in relation to 9-1-1 services. It also would provide an appropriate methodology for using some of the CAL funding for broader support of the emergency communications system, if it is decided that such an extended scope is appropriate for the CAL.

A grant system will require that appropriate parameters be developed regarding the basis on which grants will be made. For matters which fall outside of the narrow conception of "9-1-1

¹⁶⁰ Based on call answer statistics supplied by the Kelowna RCMP OCC: Email from B. Figgitt, SE District Deputy Leader, 13 June 2013.

¹⁶¹ In the case of Prince Rupert, this would also have to take into account that city's wireless CAL.

services”, for most undertakings it should probably be approached on a “cost-sharing” basis with the relevant local jurisdiction(s).

Some of the undertakings that could be considered for funding assistance through a grants process would include:

- upgrading of dispatch centres to manage NG911;
- upgrading the emergency radio communication system in the province;
- improving interoperability between different PSAPs and SSAPs and emergency response agencies;
- developing appropriate connections between the Provincial Regional Emergency Operations Centres and local government Emergency Operations Centres to the 9-1-1 system;
- assisting with the cost of consolidating PSAP or SSAP operations to improve overall system efficiencies; and
- assisting with the costs associated with improving the overall resilience and robustness of emergency communications centres and related systems in the province.

Managing CAL Funds.

The management and allocation of CAL funds will require some form of regular and consistent oversight. If a grants-based allocation system is included as part of the structure, a process for reviewing and approving grants will also be required.

As noted in the introduction to this section, the composition of this entity should reflect the predominant responsibility that local governments have in delivering the services. Care also should be taken to ensure that the monies raised through the CAL can only be used to fund the objects defined by the legislation.

Conceptually, the approach taken by Québec is worth consideration. In that province, a separate agency, the board of which comprises local government representatives and a non-voting provincial appointee, is responsible for overseeing allocation of the CAL funds and certifying the operation of PSAPs. The province acts as agent for this organization when collecting the CAL funds (so, such funds do not form a part of the provincial revenues).

A comparable structure could be considered for British Columbia. It may be that a new organization should be created; alternatively, some success in the past has been enjoyed using the UBCM as a mechanism through which such structures have been created in the past (e.g., as in the original creation of the Municipal Insurance Association). One important limitation imposed on the Québec agency, is that its administration costs are limited to 3% of the net funds collected. Again, this is a good concept, which will inhibit the creation of a large bureaucracy which can so often attract negative attention.

To ensure that overall administration costs remain low, a single point of remittance should be created for the CAL. To the extent that this can be done inexpensively through an existing function of the provincial government, as is done in Québec, that approach would likely be the

most straightforward. In this case, the Province would collect the funds as agent on behalf of the entity established to, or charged with, managing the allocation of the CAL and overseeing the operation of the PSAPs.

d. Governance and Oversight Issues

This section examines the need for appropriate governance and oversight of the emergency communications system in the province, and roles that should be considered for each of the principal stakeholders, including the province, local government, the PSAPs, SSAPs and the emergency services.

i. National Participation Issues

The introduction of NG911 will substantially affect how the emergency communications system operates. It will significantly impact capital and operating costs for PSAPs, SSAPs and front line emergency services. There is still great uncertainty surrounding the specification of NG911 and how it will be rolled out. At a recent CITIG conference in Ottawa,¹⁶² the issue of governance in relation to the development and introduction of NG911 was discussed extensively, though no ready solution or approach appears to have been adopted.¹⁶³ It was suggested at the conference that governance issues relating to NG911 might best be managed at the SOREM¹⁶⁴ level.

There is a need for the provincial government to take an active and leading role at the SOREM level, to ensure that the province's interests are properly represented and protected in relation to the introduction of NG911.

ii. PSAP Regulation, Standards and PSAP Operational Role

Every Canadian jurisdiction that has introduced a province-wide CAL has also introduced (or established a process for creating) standards applicable to PSAP and related SSAP operations. While the extent of regulation varies, in some cases it extends to detailed requirements relating to infrastructure, equipment, staffing levels and operational procedures. Standards and procedures are enforced principally through regulation and the development of binding standard operating guidelines and procedures.

As noted at the outset of this paper, appropriate standards are essential to the safe, effective and efficient operation of emergency services. The introduction of a province-wide CAL offers the opportunity to establish a process for setting standards for PSAP operation in the province. Ideally, that process would be consensual, based on input from affected stakeholders, including the province, local government, PSAP and SSAP personnel and the telecommunications

¹⁶² CITIG is the Canadian Interoperability Technology Interest Group. The conference was entitled, "NG9-1-1 National Governance and Coordination Workshop", held on 10-11 June 2013.

¹⁶³ Based on discussions with Mike Webb of E-Comm, who attended the conference, and highlighted the need for there to be active provincial involvement at a senior level.

¹⁶⁴ SOREM means "Senior Officers Responsible for Emergency Management" and is a cooperative federal-provincial body that considers emergency management issues.

industry. Such standards should be based on those developed by organizations such as NENA and NFPA, and which are widely used throughout North America. Any standards established should reflect minimum requirements.

Operational issues – such as the challenge of dealing with Abandoned Calls, appropriate quality assurance and quality improvement processes, the definition of the role of 9-1-1 call takers, and addressing problems arising from unregistered cell phones – also would be within the purview of this committee's consideration. As new developments emerge which impact PSAP operations specifically or the operation of the emergency communication system generally, this group also could advise on appropriate policies for dealing with such issues (including whether any required changes should be funded, in whole or in part, from the CAL).

At present, the Association of 911 Providers of British Columbia offers the principal forum through which issues affecting British Columbia PSAPs and SSAPs are considered.¹⁶⁵ Any user/stakeholder committee established under or through the CAL legislation would have a similar role, but also would be responsible for developing recommendations that potentially would be translated into binding requirements. This user committee should report to and advise the entity established to manage and allocate CAL funds. The operation of this user committee should be supported by funding from the CAL.

Where the implementation of consensus standards impacts the cost of providing PSAP services, such additional costs would need to be factored into CAL funding arrangements. In some cases, the costs may be transitional in nature and would best be handled through a grants-based process. In other cases, if the requirements changed the cost of on-going PSAPs operations, those additional costs would need to be covered through operational funding increases.

e. Amount of the CAL and Administration Fee for CAL Collection

The amount of the CAL will depend on the scope of services to be funded by it. Estimating the amount that can be raised requires knowing how many landline, wireless and other connections exist in the province. While we do not have definitive numbers for either wireless or landline connections, we can make a reasonable estimate. The UBCM was advised that there is an estimated 3.4 – 3.5 million wireless devices in the province.¹⁶⁶ The 2012 Telus annual report indicates that it has a total of 3.4 million network access lines,¹⁶⁷ the vast majority of which will be in British Columbia and Alberta (though they do provide some residential voice service in eastern Québec and business network access services nationally¹⁶⁸). With the bulk of Telus's

¹⁶⁵ The Association is principally focused on bringing education and knowledge of issues to its members. It does not act as an advocacy group for its membership.

¹⁶⁶ Email from Ken Vance, UBCM Senior Policy Advisor, 14 May 2013, relaying information from the [Canadian Wireless Telecommunications Association](#).

¹⁶⁷ Telus, *2012 Annual Report*, at p. 3.

¹⁶⁸ *Ibid.*, at p. 67

landline business being in the west, it is reasonable to estimate that there are probably about 1.6 – 1.7 million landline connections in British Columbia.¹⁶⁹

These two categories will represent the vast bulk of connections. Assuming, therefore, that there are approximately 5.1 – 5.2 million devices which would be paying a CAL, the following revenue would be generated:

Net CAL charge/month ¹⁷⁰	Net CAL charge/year	Approximate number of connections	Approximate Revenue
\$0.21	\$2.52	5.1 – 5.2 million	\$12,852,000 – \$13,104,000
\$0.25	\$3.00	5.1 – 5.2 million	\$15,300,000 – \$15,600,000
\$0.30	\$3.60	5.1 – 5.2 million	\$18,360,000 – \$18,720,000
\$0.40	\$4.80	5.1 – 5.2 million	\$24,480,000 – \$24,960,000
\$0.50	\$6.00	5.1 – 5.2 million	\$30,600,000 – \$31,200,000

These estimates should be treated as indicative. It will be necessary to determine from discussions with the telecommunication providers the number devices in the province that would be covered by the CAL.

As a reminder, the monthly CALs in other provinces, before deduction of the collection fee permitted to be charged by the carriers, range from a low of \$0.40 in Québec (less a \$0.04 collection fee) to a high of \$0.70 in PEI (less a \$0.07 collection fee). Alberta is proposing to charge a fee of \$0.44 / month per wireless device – the permitted collection fee has not yet been publicly released. Existing landline CALs in British Columbia range from \$0.47 per line per month to \$2.72 per line per month.

It should be noted that the number of landline connections can be expected to decrease over coming years. British Columbia also already has a relatively high penetration of the wireless market (approximately 82%, according to the [Canadian Wireless Telecommunications Association](#)). Individuals who currently have both types of connections may increasingly drop their landline connections, which could result in the total revenue dropping over time if landlines are dropped faster than new wireless connections are added. That may require that the CAL be adjusted in subsequent years.

The final issue that will need to be considered is the administration or collection fee that telecommunication companies will be permitted to charge for collecting and remitting the CAL. As noted earlier in this report, landline CALs were rejected by some jurisdictions – most notably

¹⁶⁹ British Columbia's population is 55% of the aggregate population of BC and Alberta (~4.4 million of ~8.0 million in total). Alberta also has a higher penetration of wireless (approximately 87% in 2010), which suggests it may have a lower overall number of landlines *per capita* than British Columbia. On the penetration of wireless in Alberta, see: <http://www.statcan.gc.ca/daily-quotidien/110405/dq110405a-eng.htm> .

¹⁷⁰ References to “net” CAL means the amount received after deduction of any administration fee by the telecommunication companies.

Metro Vancouver – on the grounds that the tariffed administration fee of \$0.07/month/landline was excessive.

As a general principle, any administration fee that is permitted to be charged should be limited to the actual cost of collecting and remitting the CAL. Under the existing system, arrangements for a landline CAL are made on a jurisdiction-by-jurisdiction basis. The amount of the CAL varies from area to area in the province, and remittance is to each relevant jurisdiction. This particularization undoubtedly increased the related administration costs of the telecommunication companies.

With a province-wide, uniform CAL, and a central point for remittance of the funds, the administration costs for telecommunication companies will be minimal. While discussion with the industry on this question should be undertaken, a significantly lower administration fee seems warranted.

Appendix A: Glossary

The following are the principal abbreviations or acronyms used in the paper:

Abandoned Calls means calls received by a PSAP which have been prematurely terminated before the call can be assessed and transferred to a dispatcher or to an SSAP.

BCAS means the British Columbia Ambulance Service.

CAL means call answer levy, being a levy on devices or connections which enable a person to contact 9-1-1 services.

Central Coast means the Central Coast Regional District.

CLEC means a competitive local exchange carrier, being a Canadian carrier providing local exchange services and who fulfills all the local competition entry obligations and requirements as defined in CRTC Decision 97-8 and subsequent decisions that have modified the requirements set out in CRTC Decision 97-8.

CRTC means the Canadian Radio-television Telecommunications Commission.

DND means Department of National Defence.

E-Comm means Emergency Communications for Southwest British Columbia Incorporated, a corporation which manages a combined 9-1-1, dispatch and emergency radio network located in Vancouver, B.C.

EMO means the Nova Scotia Emergency Management Office.

ESWG means the Emergency Services Working Group, a committee which was formed by and reports to the CRTC.

ILEC means “Incumbent Local Exchange Carrier” which, in British Columbia, is Telus.

NB-OPD means the New Brunswick Operating Procedures Directive, which are the mandatory operational procedures established by the Province of New Brunswick in relation to the operation of that province’s PSAPs.

NENA means the National Emergency Number Association, an organization which examines operational, technological and procedural issues affecting emergency communications centres and which has established certain consensus standards applicable to PSAP operations.

NFPA means the National Fire Protection Association, a consensus-based standards-setting organization which has established standards for various aspects of the operation of fire and other emergency services.

NFPA 1221 means *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems* (2013 Edition), issued by the NFPA, which is a standard for the operation of emergency communication centres, including 9-1-1 services.

NG911 means Next Generation 9-1-1 services, which will be an IP-based system that will permit a greater range of connections to emergency communication centres by the public, and enable the uploading of additional data types, such as text, pictures and video.

NRRM means the Northern Rockies Regional Municipality.

OCCs means the operational communication centres operated by the RCMP. There are six OCCs in British Columbia, each of which operates as a PSAP.

PEI means the Province of Prince Edward Island.

PPSTN means the Provincial Public Safety Telecommunications Network, a province-wide emergency radio system operated by a partnership comprising the Province of Saskatchewan, SaskPower and the RCMP.

PSAP means Public Safety Answering Point, which is the entity responsible for receiving 9-1-1 calls from the public.

RDCK means the Regional District of Central Kootenay.

RDCO means the Regional District of Central Okanagan.

SLRD means the Squamish-Lillooet Regional District.

SSAP means a Secondary Safety Answering Point, which is responsible for police, fire, ambulance or other emergency service dispatch, to which 9-1-1 calls are transferred from a PSAP.

Steering Committee means the steering committee comprising representatives from the province and local government formed to consider the issues regarding the implementation of a province-wide CAL.

UBCM means the Union of British Columbia Municipalities.

VoIP means Voice over Internet Protocol which is a communications protocol that allows for telephonic communication via the Internet.

Appendix B: Forms of Survey



Union of BC Municipalities
Suite 60 10551 Shellbridge Way
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Phone: 604.270.8226
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Local Government Survey

15 May 2013

Local Government 9-1-1 Services Questionnaire

Introduction & Background

UBCM in cooperation with the Province has established a Steering Committee to examine the delivery of 9-1-1 emergency call handling services and develop a plan for implementing a call answer levy to support and improve 9-1-1 services in British Columbia.

The purpose of this survey is to collect information on where 9-1-1 services currently are being delivered and the cost of providing such services through Public Safety Answering Points ("PSAPs") from the perspective of local government. The goal is to assess how these services are being delivered throughout the province and to understand the costs and issues associated with them.

We would ask for your cooperation and assistance in providing this information. UBCM has retained Ian MacDonald, of Dave Mitchell & Associates Ltd., to collate and assess the responses.

The goal is to include the data from this survey in a background paper for the Steering Committee. To ensure that your responses can be included, please reply by 28 May 2013.

Directions and Contact Information

This form uses Microsoft Word. For text, simply click where the words "**Click here to enter text**" appears, and begin typing. Where a "yes" or "no" option is given, clicking in the appropriate box will insert an "X".

Please return all forms to Ian MacDonald at the email address below. If you have any trouble with this form or any questions about the survey, please contact:

Ian MacDonald

Email: ian_macdonald@telus.net

Phone: 604 885 9588

Questionnaire

Note: For the purposes of this questionnaire “9-1-1 call handling services” are defined as follows:

9-1-1 call handling services involve a central answer point – the PSAP – which handles emergency calls and, in simplest terms, determines:

- (1) The (approximate) location of the caller;
- (2) The nature of the emergency; and
- (3) The appropriate emergency service (police, fire or ambulance) required.

The PSAP then connects the caller to the relevant local emergency service or its dispatch agency for assistance.

1. Person completing this questionnaire
 - a. Name: [Click here to enter text.](#)
 - b. Position: [Click here to enter text.](#)
 - c. Contact telephone number: [Click here to enter text.](#)
 - d. Contact e-mail: [Click here to enter text.](#)
2. Name of the Local Government: [Click here to enter text.](#)
3. Type of Local Government
 - a. Regional District ☐
 - b. Municipal Government ☐
 - c. Other – specify [Click here to enter text.](#)
4. Does your Local Government provide or contract for 9-1-1 services in its area of jurisdiction?
 - a. Yes ☐
 - b. No ☐

If you answered “NO”, you do not need to complete the rest of this questionnaire. You may add any additional comments you have in question 16.

5. Approximate population under the direct jurisdiction of your local government served by 9-1-1 services, and date of population estimate
 - a. Population served: [Click here to enter text.](#)
 - b. Date of estimate: [Click here to enter text.](#)
6. Under what bylaws and/or supplementary Letters Patent are you authorized to provide and fund 9-1-1 services. Please list: [Click here to enter text.](#)

7. What is the approximate geographic area covered by the 9-1-1 service (in square kilometres)? [Click here to enter text.](#)
8. Does your entire jurisdiction have access to 9-1-1 services, where there is either landline or wireless coverage?
- a. Yes ☐
 - b. No ☐
 - i. If no, have the areas without coverage been mapped or otherwise identified? [Click here to enter text.](#)
9. Are there any First Nations lands within your jurisdiction that do not have access to 9-1-1 services?
- a. No ☐
 - b. Unsure ☐
 - c. Yes ☐
 - i. If yes, please list the First Nations lands which are not covered (to the extent known) [Click here to enter text.](#)
10. How does your government provide the service (select from the following choices, as appropriate):
- a. Directly (i.e., through staff and equipment owned and operated by you) ☐
 - b. Under contract to a PSAP (e.g., with the RCMP and/or E-Comm) ☐
 - i. If so, specify the PSAP(s) [Click here to enter text.](#)
 - ii. Does the contract include any specifications as to the standard of service to be provided (e.g., call answer by 9-1-1 staff within 15 seconds, 95% of the time, etc.)
 - 1. No ☐
 - 2. Yes ☐
 - a. If yes, what are the standards? [Click here to enter text.](#)
 - c. Under contract to or through another local government (e.g., another regional district). ☐
 - i. If so, specify the other local government. [Click here to enter text.](#)
 - ii. Does the contract include any specifications as to the standard of service to be provided (e.g., call answer by 9-1-1 staff within 15 seconds, 95% of the time, etc.)
 - 1. No ☐
 - 2. Yes ☐
 - a. If yes, what are the standards? [Click here to enter text.](#)

- d. Other arrangement (e.g., with local government staff at a facility operated by another entity) ☐
 - i. If so, specify the other arrangement. [Click here to enter text.](#)
 - ii. Does the arrangement include any specifications as to the standard of service to be provided (e.g., call answer by 9-1-1 staff within 15 seconds, 95% of the time, etc.)
 - 1. No ☐
 - 2. Yes ☐
 - a. If yes, what are the standards? [Click here to enter text.](#)
11. What was your total cost of providing 9-1-1 services **for your local jurisdiction** in 2012? [Click here to enter text.](#)
12. If you are receiving 9-1-1 services from the RCMP, what is the estimated approximate price increase for coming years (as a percentage of 2012 costs)? [Click here to enter text.](#)
13. What funding sources are used to pay for 9-1-1 services?
- a. Property taxes ☐
 - i. if yes, at what rate [Click here to enter text.](#)
 - b. Landline phone call answer levy ☐
 - i. if yes, at what rate [Click here to enter text.](#)
 - c. Wireless call answer levy ☐
 - i. if yes, at what rate [Click here to enter text.](#)
 - d. Other sources – specify (including rate) [Click here to enter text.](#)
14. How much money was raised from each funding source for 2012, to pay for 9-1-1 services?
- a. Property taxes – [Click here to enter text.](#)
 - b. Landline call answer levy – [Click here to enter text.](#)
 - c. Wireless device call answer levy – [Click here to enter text.](#)
 - d. Other sources (specify source and amount) – [Click here to enter text.](#)
15. Do you provide, or coordinate the provision of, 9-1-1 services for other local governments which are not within the ordinary jurisdiction of your local government?
- a. No ☐
 - b. Yes ☐
 - i. If yes, specify the jurisdictions involved [Click here to enter text.](#)
 - ii. Is the service provided under an agreement or an extra-territorial bylaw?
 - 1. Agreement ☐
 - 2. Bylaw ☐
 - iii. List any relevant authorizing bylaws and agreements by which you provide services: [Click here to enter text.](#)

16. We recognize that local governments have a variety of methods for delivering 9-1-1 services. If you wish to add any details regarding how your local government manages this service, or refine any answer given above, or comment about any issue regarding the establishment of a 9-1-1 call answer levy, please do so here. If you are refining an answer to any of the questions from above, please clearly indicate which question you are referring to. [Click here to enter text.](#)

.....

Form of PSAP Survey



Union of BC Municipalities
Suite 60 10551 Shellbridge Way
Richmond, BC, Canada V6X 2W9

Phone: 604.270.8226
Email: ubcm@ubcm.ca

22 May 2013

9-1-1 Services Questionnaire

Introduction & Background

UBCM in cooperation with the Province has established a Steering Committee to examine the delivery of 9-1-1 emergency call handling services and develop a plan for implementing a call answer levy to support and improve 9-1-1 services in British Columbia.

The purpose of this survey is to collect information from Public Safety Answering Points on how 9-1-1 services are operated, managed and delivered, including applicable standards, call handling processes, infrastructure, staffing, training and similar operational issues. A separate questionnaire is being sent to the local governments which have responsibility for the service to their residents. The overall goal of the two surveys is to assess how these services are being delivered throughout the province and to understand the costs and issues associated with them.

We would ask for your cooperation and assistance in providing this information. UBCM has retained Ian MacDonald, of Dave Mitchell & Associates Ltd., to collate and assess the responses.

The aim is to include the data from this survey in a background paper for the Steering Committee. To ensure that your responses can be included, please reply by 3 June 2013.

Directions and Contact Information

This form uses Microsoft Word. For text, simply click where the words "**Click here to enter text**" appears, and begin typing. Where a "yes" or "no" option is given, clicking in the appropriate box will insert an "X".

Please return all surveys to Ian MacDonald at the email address below. If you have any trouble with this form or any questions about the survey, please contact:

Ian MacDonald

Email: ian_macdonald@telus.net

Phone: 604 885 9588

Questionnaire

Note: for the purposes of this questionnaire, the 9-1-1 call taking function (and 9-1-1 call-taker role) is defined as follows:

- (d) Call answer on the incoming 9-1-1 line.
- (e) Caller interrogation to determine: that it is an emergency; what jurisdiction it relates to; and to which emergency agency or Secondary Safety Answer Point the call should be directed.
- (f) "Transfer" of the call to the appropriate agency/dispatch centre in the indicated jurisdiction. This third step may involve any one of the following: the call taker notionally switching roles, and undertaking a caller interrogation/dispatch function for either fire or police; the call being transferred across the room to a police or fire dispatcher position; or the call being transferred to an external agency – such as to BC Ambulance, or to a fire or police dispatch agency such as Surrey Fire Dispatch or North Island 911, or to an RCMP Operational Communications Centre.

The 9-1-1 function ends when the "transfer" is complete, either through a call hand-off to another agency or the notional transfer occurs and the call taker commence agency-specific call evaluation and/or dispatch functions.

17. Person completing this questionnaire

- a. Name: [Click here to enter text.](#)
- b. Position: [Click here to enter text.](#)
- c. Contact telephone number: [Click here to enter text.](#)
- d. Contact e-mail: [Click here to enter text.](#)

18. Name and location of the Public Safety Answering Point: [Click here to enter text.](#)

19. Nature of relationship with local governments

- a. Owned and directly operated by local government ☐
- b. Separate legal entity providing service under contract to local government ☐
- c. Other – describe [Click here to enter text.](#)

20. Approximate population served by the PSAP:

- a. Population served: [Click here to enter text.](#)
- b. Date of estimate: [Click here to enter text.](#)

21. What is the approximate geographic area covered by the PSAP's 9-1-1 service (in square kilometres)? [Click here to enter text.](#)

22. The number of external Secondary Safety Answer Points or agencies to which you "transfer" or "downstream" calls (not including internal transfers):

- a. Fire [Click here to enter text.](#)
- b. Police [Click here to enter text.](#)
- c. BC Ambulance [Click here to enter text.](#)

- d. Other (specify) [Click here to enter text.](#)

Nature and Operation of the PSAP

23. Number of 9-1-1 calls handled by the PSAP in 2012:

- a. Total of all 9-1-1 calls [Click here to enter text.](#)
 - i. Landline Calls [Click here to enter text.](#)
 - ii. Wireless or other devices [Click here to enter text.](#)
- b. Breakdown of 9-1-1 call types:
 - i. Police [Click here to enter text.](#)
 - ii. Fire [Click here to enter text.](#)
 - iii. Ambulance [Click here to enter text.](#)
 - iv. Other emergency (e.g., Coast Guard, Wildfire Management Branch, etc.)
[Click here to enter text.](#)
 - v. Abandoned calls:
 - 1. Abandoned "in queue" [Click here to enter text.](#)
 - 2. Abandoned "pre-switch" (very short duration calls which are not presented to an operator) [Click here to enter text.](#)

24. Does your communication centre track the number of misdialled and prank/malicious calls?

- a. No ☐
- b. Yes ☐
 - i. Number of calls categorized as misdials [Click here to enter text.](#)
 - ii. Number of calls categorized pranks/malicious [Click here to enter text.](#)

25. Does your call centre have TTY/TDD capabilities:

- a. No ☐
- b. Yes ☐
 - i. If Yes, how many calls were received using a TTY and/or TDD system in over the past 3 years:
 - 1. 2010 [Click here to enter text.](#)
 - 2. 2011 [Click here to enter text.](#)
 - 3. 2012 [Click here to enter text.](#)

26. Does your communication centre have access to translation services?

- a. No ☐
- b. Yes ☐
 - i. What service is used? [Click here to enter text.](#)
 - ii. Approximately how many calls annually do you direct to this service?
[Click here to enter text.](#)

27. In addition to the 9-1-1 call handling function, what other services does your communications centre provide (check all that apply)
- a. Police Dispatching ☐
 - i. For how many jurisdictions? [Click here to enter text.](#)
 - b. Fire Dispatching ☐
 - i. For how many jurisdictions? [Click here to enter text.](#)
 - c. Alarm Response Monitoring ☐
 - i. For how many customers? [Click here to enter text.](#)
 - d. Operation of emergency services radio network ☐
 - e. Monitoring services for “work alone” local government employees ☐
 - f. Monitoring or other services for commercial customers ☐
 - i. For how many customers? [Click here to enter text.](#)
 - g. Other services (e.g., distributed records management services, etc.) (specify)
[Click here to enter text.](#)
28. How many call taker positions are there for 9-1-1 call handling (please specify/describe).
[Click here to enter text.](#)
29. Are the 9-1-1 call takers:
- a. Employed directly by local government ☐
 - b. Employed by another agency (e.g., RCMP, E-Comm) ☐
 - c. Other (specify) [Click here to enter text.](#)
30. What best describes the role of your 9-1-1 call takers:
- a. 9-1-1 call answer positions are fully dedicated to that function and do not perform agency-specific call evaluation or dispatching duties ☐
 - b. 9-1-1 call answer positions may also handle some agency-specific call evaluation or dispatching functions, depending on workloads ☐
 - c. Individuals in the 9-1-1 call answer position are also the regular call evaluators/dispatchers for either police or fire ☐
 - d. Other (please specify) [Click here to enter text.](#)
 - e. If desired, please add any further explanation of the model you use. [Click here to enter text.](#)
31. Do you have a back-up centre – that is, a second communications centre to which your staff would move to continue operations – in the event that your communications centre becomes non-functional for any reason?
- a. No ☐
 - b. Yes ☐

32. If you have a back-up centre, how often do you test or practice its use?
- a. Not applicable (no back-up centre) ☐
 - b. Monthly ☐
 - c. Quarterly ☐
 - d. Semi-annually ☐
 - e. Annually ☐
 - f. Less frequently than annually ☐
33. Do you have arrangements with another communications centre to manage your 9-1-1 call handling function in the event there is a temporary loss of operations at your centre?
- a. No ☐
 - b. Yes ☐
 - i. If yes, please identify the communication centre(s) you have these arrangements with. [Click here to enter text.](#)
 - ii. Are these arrangements set out in a written agreement and/or written protocols:
 - 1. No ☐
 - 2. Yes ☐
 - iii. How often do you test or practice its use?
 - 1. Monthly ☐
 - 2. Quarterly ☐
 - 3. Semi-annually ☐
 - 4. Annually ☐
 - 5. Less frequently than annually ☐
 - c. If desired, please add any further description of the arrangements you have in place [Click here to enter text.](#)
34. Do you have arrangements with another communications centre to handle overflow work, in the event that your 9-1-1 call handling function is impacted by a sudden surge in call volumes?
- a. No ☐
 - b. Yes ☐
 - i. If yes, please identify the communication centre(s) you have these arrangements with. [Click here to enter text.](#)
 - ii. What events will trigger the overflow (please specify). [Click here to enter text.](#)
 - iii. How often has this arrangement been activated in the period 2010 – 2012? [Click here to enter text.](#)
 - c. If desired, please add any further description of the arrangements you have in place [Click here to enter text.](#)

Call Handling Standards

35. Does your centre have established standards for:
- a. Call answer times for 9-1-1 calls (e.g., answer 90% of calls within 10 seconds or less):
 - i. No ☐
 - ii. Yes ☐
 - 1. If yes, what is your standard (specify – e.g., NENA, NFPA 1221 or the specific metric used) [Click here to enter text.](#)
 - b. Call handling times – being the time taken to interrogate the caller and initiate the transfer to a dispatch agency):
 - i. No ☐
 - ii. Yes ☐
 - 1. If yes, what is your standard (specify – e.g., NFPA 1221 or the specific metric used)? [Click here to enter text.](#)
 - c. Any other call answer/handling metrics (e.g., average total length of 9-1-1 calls):
 - i. No ☐
 - ii. Yes ☐
 - 1. If yes, please specify what is measured and what standard is applied. [Click here to enter text.](#)
36. Do you regularly report call handling metrics to local governments which use your service?
- a. No ☐
 - b. Yes ☐
37. Does your communication centre have express protocols addressing:
- a. How the 9-1-1 operator answers the call?
 - i. No ☐
 - ii. Yes ☐
 - 1. If yes, please describe/specify. [Click here to enter text.](#)
 - b. How the 9-1-1 operator interrogates the caller?
 - i. No ☐
 - ii. Yes ☐
 - 1. If yes, please describe/specify (or attach description when returning the survey). [Click here to enter text.](#)
 - c. Requiring the 9-1-1 operator to stay connected to the call until the downstream agency answers and accepts the call?
 - i. No ☐
 - ii. Yes ☐

38. Does your communication centre have express protocols addressing how 9-1-1 operators handle:

a. Abandoned calls?

i. No ☐

ii. Yes ☐

1. If yes, briefly describe the protocols, distinguishing if relevant between Abandoned “in queue”/“incomplete” calls and those abandoned “pre-switch”/“very short duration” calls. [Click here to enter text.](#)

b. Silent calls (no voice communication on interrogation)?

i. No ☐

ii. Yes ☐

1. If yes, briefly describe the protocol. [Click here to enter text.](#)

c. Malicious or Prank calls?

i. No ☐

ii. Yes ☐

1. If yes, briefly describe the protocol. [Click here to enter text.](#)

Infrastructure and Equipment

39. Is your communication centre in a stand-alone, purpose built communication facility (as opposed to being integrated as part of an emergency service or other building):

a. No ☐

b. Yes ☐

i. If yes, does this facility meet current provincial standards for post-disaster construction?

a. No ☐

b. Yes ☐

40. Is your communication centre integrated in a larger building, which serves other purposes:

a. No ☐

b. Yes ☐

i. If yes, what other services are provided out of this building (check all that apply)

a. Police ☐

b. Fire ☐

c. Other Government services ☐

d. Other (please specify) [Click here to enter text.](#)

- ii. Does this facility meet current provincial standards for post-disaster construction?
 - a. No ☐
 - b. Yes ☐
 - c. Unsure ☐

41. Does your communication centre have a back-up power supply?

- a. No ☐
- b. Yes ☐
 - i. If yes, please provide a general description of the back-up power supply.
[Click here to enter text.](#)
 - ii. Is the switchover to the back-up power supply automatic or does it have to be initiated manually?
 - 1. Automatic ☐
 - 2. Manual ☐
 - iii. How often do you test the power supply unit (specify)? [Click here to enter text.](#)
 - iv. How often do you test switching over from the regular power supply to the back-up power supply (specify)? [Click here to enter text.](#)
- c. If desired, please add any further description of the back-up power supply arrangements you have in place [Click here to enter text.](#)

42. Are your critical call-handling and related IT systems equipped with uninterruptible power supply back-ups?

- a. No ☐
- b. Yes ☐
- c. If desired, please add any further description of the UPS arrangements you have in place [Click here to enter text.](#)

Training, Supervision and Quality Assurance

43. Does your communication centre have a formal, documented training process for new 9-1-1 call takers?

- a. No ☐
- b. Yes ☐

44. Does your communication centre have a formal, documented program to provide 9-1-1 call takers with on-going skills training and education?

- a. No ☐
- b. Yes ☐

45. Does your communication centre have a minimum number of annual hours of skills training and/or education for existing 9-1-1 call takers?

a. No ☐

b. Yes ☐

i. If yes, how many hours per year (specify). [Click here to enter text.](#)

46. Does your communication centre have a formal, documented quality assurance program which regularly reviews the overall performance of 9-1-1 call handling (whether alone, or in combination with other call-handling functions performed by the centre)?

a. No ☐

b. Yes ☐

i. If yes, how frequently are these reviews conducted (specify)? [Click here to enter text.](#)

Other

47. We recognize that there are a range of possibilities for how different centres operate and/or are equipped. If you wish to clarify or refine any of the answers given above, please do so below (or on a separate sheet). Identify clearly which question you wish to refine/clarify, and the additional detail that you believe is necessary or relevant. [Click here to enter text.](#)

LR1 CALL ANSWER LEVY FOR WIRELESS SERVICE PROVIDERS

WHEREAS almost one half of all emergency calls to 9-1-1 are now made from cellular telephones;

AND WHEREAS wireless service providers are not required to collect a call answer levy that would contribute to the cost of providing the 9-1-1 service:

THEREFORE BE IT RESOLVED that UBCM urge the provincial government to enact legislation similar to that enacted in Nova Scotia and Saskatchewan that would require all telephone service providers, including wireless service providers, to collect a call answer levy as a means to contribute to the costs associated with the delivery of 9-1-1 emergency service.

RESPONSE: Ministry of Justice

The Ministry of Justice will follow-up with municipalities and corporations, such as TELUS and Bell, to establish a UBCM working group to consider issues related to emergency services and wireless phones.

Considerations of the working group will include:

- Improvements to public safety, such as enhanced capabilities, additional training and meet future public demands.
- Province-wide options and, if possible, harmonize with other jurisdictions.
- Consensus by industry and municipal leadership.

Whereas there is a growing need for a more resilient and reliable emergency communications system, especially in light of the increasing severity and frequency of disasters and emergencies, 911 service disruptions and a growing annual emergency call volume;

And whereas 911 is a universally recognized number for British Columbians to call when there is an emergency (e.g., medical issue), but 911 calls related to mental health are oftentimes directed to police agencies as the first point of contact;

And whereas the improvement of the 911 emergency communications system has been a long-standing priority for local governments, as well as the UBCM Executive, which has made calls for improvements related to funding, governance and standards:

Therefore be it resolved that the Province of BC work with local governments to modernize the 911 emergency communications system in a manner that is consistent with recent UBCM advocacy, and which includes the following:

- Implementation of a 911 levy on cellular devices, to address current and future financial challenges associated with the delivery of 911 services;
- Development of consistent 911 service standards, without increasing service costs for local governments;
- Creation of a provincial 911 governance model, with local government representation, to address policy and service standard issues, and manage revenue; and
- Integration of mental health call options within the 911 framework including culturally safe options for Indigenous and other racialized peoples.

Convention Decision: **Endorsed as Amended**

Provincial Response

Ministry of Public Safety and Solicitor General

Government is working to protect BC communities and make them stronger.

The Ministry is reviewing this recommendation including the need for a provincial framework for BC's public safety and emergency communications systems, including oversight, and response standards, how to better support communities from a long-term financial perspective for a modernized 911 system and better integrating mental health supports.

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Christina Vugteveen, Manager of Parks

File No: 0870-20

Subject: BC Wildfire Service Rental Agreement

RECOMMENDATION

THAT the Fraser Valley Regional District Board authorize its signatories to enter into a five-year agreement with the British Columbia Wildfire Service for use of the Fraser Valley Regional Airpark and the Boston Bar Airstrip for their wildfire management program as required.

BACKGROUND

The Fraser Valley Regional Airpark is located in the District of Hope, approximately 4.8 km west of the main town site. The entire grass turf airpark is approximately 106 acres in size and is a short distance from local mountains as well as the Fraser River. Flights landing at the Airpark are typically for recreation and industry purposes, and for emergencies such as ambulance and fire-fighting purposes. Fraser Valley Regional District (FVRD) also manages a basic grass airstrip in Boston Bar which is primarily used for emergency response staging and emergency landings.

Through a rental contract with FVRD, the British Columbia Wildfire Service (BCWS) has been utilizing both the Fraser Valley Regional Airpark and the Boston Bar Airstrip as an integral part of its wildfire management program and auxiliary training activities for many years. Helicopters and airtankers are a vital part of **wildfire response and the BCWS's** aircraft are deployed based on needs of crews in the field and they perform a variety of functions.

DISCUSSION

FVRD's most recent agreement with BCWS for use of these facilities expired in 2023, and the BCWS has expressed an interest in continuing with a new 5-year agreement.

With the impacts of climate change and significant wildfire events over the past few years, the need for these facilities has been increasing. Since 2021, the Boston Bar Airstrip has seen BCWS utilize this facility for 4 different emergency events totalling 125 days. During this time, BCWS also utilized the Fraser Valley Regional Airpark in Hope for 3 separate events for a total of 64 days. It is important to note that the Fraser Valley Regional Airpark is also used for other emergency response activities such as regular BC Ambulance use and other emergency use such as the Atmospheric River event of 2021.

Having BCWS utilize the facilities to stage for emergency purposes is beneficial for firefighting response in the area and is a good use of the facilities. Having an agreement in place assists with quick response and activation and also provides the facilities with some funding which supports asset management.

Staff are continuing to pursue additional land leases and agreements for aviation and emergency use purposes and will report back to the Board as those opportunities arise.

COST

Should the agreement be continued, the FVRD will receive the following revenues:

Fraser Valley Regional Airpark

- Office Space - \$150/day + GST
- Apron/Runway - \$300/day + GST
- Placement of a Storage Container – \$100/day + GST
- Airpark Operator Support beyond existing contract - \$50/day + GST
- Practice/Training - \$150/day

Boston Bar Airstrip

- Runway - \$125/day + GST

In the event that there is need for ground rehabilitation of the properties as a result of rental activities, the costs will be covered by BCWS through this agreement.

CONCLUSION

Staff recommend approval of a 5-year rental agreement with BCWS for their use of the Boston Bar Airstrip and Fraser Valley Regional Airpark in support their wildfire management program.

COMMENTS BY:

Stacey Barker, Director of Regional Services/Deputy CAO: Reviewed and supported.

Kelly Lownsbrough, Director of Corporate Services/CFO: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

To: Regional and Corporate Services Committee
From: Alison Stewart, Manager of Strategic Planning

Date: 2024-05-09
File No: 8330-02-19744

Subject: Endorsement of “Chilliwack and FVRD Transit Future Action Plan” and FVX Service Update

RECOMMENDATION

THAT the Fraser Valley Regional District Board approve the draft “Chilliwack and FVRD Transit Future Action Plan” as it pertains to the Fraser Valley Regional District managed services.

BACKGROUND

BC Transit has been undertaking a Transit Future Action Plan for the Chilliwack and Fraser Valley Regional District (FVRD) service area for several years. As with many other things, the process has been interrupted by COVID-19 and as a result, the FVRD portions of the Plan were close to completion but not yet finalized in 2021. The City of Chilliwack endorsed the Chilliwack portion of the Plan in August 2021 and in order to facilitate design work and planning for the long-awaited Highway 1 expansion, the FVRD Board gave approval in principle to *Chapter 6: Fraser Valley Express (FVX)* on November 25, 2021.

The completion of *Chapter 7: FVRD Transit Services: Paratransit* covering the Agassiz-Harrison and Hope services was to be brought forward to the Board after final presentations to Kent, Hope and Harrison Hot Springs councils. Presentations to councils were completed in mid-2022 but final document review was delayed due to BC Transit staff turnover and the 2023 transit labour dispute. This report brings the final *Transit Future Action Plan for the Chilliwack and FVRD* (Appendix A) forward for approval as it will provide the basis for upcoming Transit Improvement Program (TIP) and budget discussions.

DISCUSSION

The Chilliwack and FVRD Transit Future Action Plan (TFAP) is an update to the Chilliwack Area Transit Future Plan (TFP), which was completed in 2012. The TFAP charts progress to the original TFP targets, distinguishes between the three service types (City of Chilliwack, Paratransit (Hope and Agassiz-Harrison) and the FVX), updates transit mode-share targets and defines improvements for service and

infrastructure over the next one to five years. It is important to note that the FVX and Hope services did not exist when the original 2012 TFP was completed.

A more fulsome discussion of the FVX section of the Plan is attached as Appendix B. The FVRD Board gave approval in principle to Chapter 6 (FVX) of the plan in November 2021 to ensure its incorporation **into MOTI's Highway 1 Improvement planning and design processes.**

Public input specific to the AGH and Hope services pointed to a need to expand service hours for both Route 71 and 72, and an interest in a new transit service between Agassiz and Mission. With new garage facilities in Chilliwack expected to come on-line within the next few years, expansion opportunities will become a reality, subject to provincial and local government support.

This report focuses on TFAP Chapter 7 which covers proposals for the Agassiz-Harrison (AGH) and Hope paratransit services administered by the FVRD as well as City of Chilliwack Route 56, which serves Cultus Lake during the summer months. **"Paratransit" services are smaller buses that follow a fixed route, but at designated times and locations the buses may make limited deviations from the route to pick-up or drop-off customers upon request.**

The document has been minimally updated from the 2021-22 version in that there are a few statistical updates and the route numbers have been updated to reflect the new numbering system that was introduced in 2022 to support the Next-Ride app. Chapter 7 provides an overview of the existing services and sets out potential future services (North of Fraser) and expansions of existing services.

The specific proposals have been organized into three time periods:

- Short-Term: Next 1-3 years
- Medium-Term: Next 3-4 years
- Longer-Term: 5 years and beyond

The short and medium-term implementation priorities show the potential for expansion for all three services for the next five years, subject to funding and local government approvals. Tables 35 and 36 from the report reflect input received during the engagement process.

Short to medium-term proposals for the Agassiz-Harrison service will see year-round Sunday and Statutory Holiday service and later weekday services to allow for better connections to the FVX. The lack of later evening service was identified as a barrier to transit use through the public engagement process. This proposal will add an additional trip on Monday through Thursday to match Friday evening service.

For Hope, proposals include additional hours for improved commuter services and improved local service within Hope.

For the seasonal Cultus Lake service, completing a local area plan for the service will be used to identify future service changes to better serve the community. The TFAP allocates hours to be held in reserve for future service changes.

Table 35: Short-Term Implementation Priorities

FVRD Paratransit: Short-Term Implementation Priorities (1-3 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack	56 Cultus Lake <i>Co-funded by FVRD</i>	Develop a Local Area Plan for Cultus Lake transit service to confirm future service changes	-	-
		Expansion hours held in reserve to address potential service changes.	500***	1***
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Introduce year-round Sunday and Statutory Holiday service.	600	1
TOTAL			1,100***	2

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Table 36: Medium-Term Implementation Priorities

FVRD Paratransit: Medium-Term Implementation Priorities (3-5 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack	56 Cultus Lake <i>Co-funded by FVRD</i>	Expansion hours held in reserve for Local Area Plan service changes	1,500***	1
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Later weekday service.	900	1
Hope	72 Hope PARATRANSIT	Improve service.	900	1
		Improve local Hope service.	500	
NEW SERVICE	New Route PARATRANSIT	Introduce new route from Kent to Mission via Highway 7.	2,500	2
Total			6,300*	5

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Long-Term implementation priorities for AGH will be to introduce hourly service between 9:00 am and 3:00 pm. For Hope long-term priorities will see an increase in service hours weekdays and Saturdays, and introducing Sunday service. Table 37 from the TFAP provides a summary of the improvements and the resources (buses) required to support such a service.

Table 37: Long-Term Implementation Priorities

FVRD Paratransit: Long-Term Implementation Priorities (5+ years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Introduce hourly service between 9:00 a.m. and 3:00 p.m.	1,800	1
Hope	72 Hope PARATRANSIT	Introduce Sunday service.	650	0
		Later Friday and Saturday service	250	0
Total			2,700	1

**All hours are estimated. Further refinement is required during implementation planning.*

***Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.*

**** Hours may not be fully required*

North of Fraser

In addition to improvements to existing AGH and Hope services, TFAP includes the creation of a new transit service between the City off Mission and Agassiz along Highway 7. The “North of Fraser” feasibility study is nearing completion and will be presented to the Board in coming months. The study will provide the basis for engagement with local governments, First Nations and the general public as the planning process moves forward.

FVX Service Update

The TFAP chapter addressing the FVX was given approval in principle in November 2021.

At that time, the province was just coming out of the worst of the COVID-19 pandemic and it was unclear how quickly ridership would recover. Ridership on the FVX has recovered strongly and additional ridership was generated in 2022 with the FVX extension to Lougheed Town Centre and its direct connection to SkyTrain service. However, with no provincial funding for transit expansions in both 2022-23 and 2023-24 fiscal years, capacity issues such as pass-ups and standing-room-only trips were increasing. **In September 2023, BC Transit was able to implement a “Critical Fix” of an additional 3,375 hours** which was intended to alleviate some of the pressures on the service.

Since full services resumed after the 2023 labour disruption, demand on the FVX has continued its upward trajectory and despite the September 2023 critical fix, is again experiencing capacity issues between Abbotsford and the Lougheed Station. Additional AM trips and short-turn PM trips are

helping to address capacity issues, but they still persist. The FVX will be receiving an expansion of 2,600 hours in January 2025 per the most recent provincial budget but in the meantime, BC Transit is looking to make service scheduling adjustments to reduce some of the capacity challenges. At this point, the TFAP High Growth Scenario is what is coming to fruition. In this scenario, investment in the service would be rapid to accommodate a significant increase in demand from the extension to Lougheed Town Centre, need for improving service reliability and improving weekend service. A more fulsome discussion of the FVX growth scenarios can be found as Appendix B.

BC Transit is closely monitoring performance on the FVX and other services and will bring expansion proposals forward to the Board during the next TIPs cycle in September 2024.

COST

The *Chilliwack and FVRD Transit Future Action Plan* itself is not a commitment to the timelines or levels of service identified in the Plan.

Expansions will be realized through the regular three-year TIP expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and subject to consultation with contributing partners. The TIP seeks to align municipal and regional budget processes to ensure funding availability is aligned with local needs and provincial funding.

CONCLUSION

The completion of *Chapter 7: FVRD Transit Services: Paratransit* covering the Agassiz-Harrison and Hope services is the final step in finalizing the *Chilliwack and FVRD Transit Future Action Plan*. This report brings the Plan forward for final approval as it will provide the basis for upcoming TIP and budget discussions.

BC Transit representatives will be attending the May 16, 2024 Board meeting and will be available to answer questions on this and other items.

COMMENTS BY:

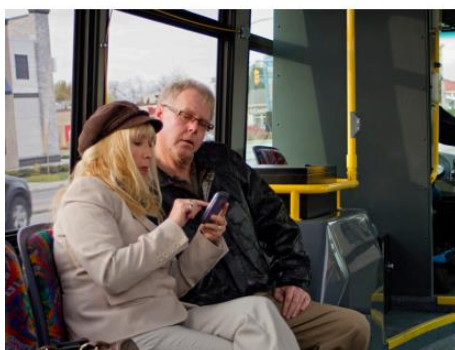
Stacey Barker, Director of Regional Services/Deputy CAO: Reviewed and supported.

Kelly Lownsbrough, Director of Corporate Services/CFO: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

Transit Future Action Plan

Chilliwack and FVRD



Ch. 5 Chilliwack (endorsed): August 2021

Ch. 6 FVRD FVX (approval in principle): November 2021

Ch. 7 FVRD Paratransit (draft): TBD

Acknowledgements

This plan was made possible by participation from provincial and local governments, key stakeholders and the public. BC Transit would like to thank staff from:

- Fraser Valley Regional District
- City of Chilliwack
- Ministry of Transportation and Infrastructure
- District of Kent
- District of Hope
- Village of Harrison Hot Springs
- City of Abbotsford (FVX)
- First Nations: Cheam, Seabird Island, Chawathil and Yale

We would like to acknowledge with respect that BC Transit carries out its work on the traditional territories of Indigenous nations throughout British Columbia.

The Fraser Valley Regional District lies within the ancestral and unceded traditional territories of the Stó:lō, Sts'ailes, Nlaka'pamux and St'at'imc Peoples.

In Victoria, we are on the lands of the Lekwungen People, also known as the Songhees and Esquimalt First Nations.

We thank them for allowing us to live, work and play on their lands.

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1.0 EXECUTIVE SUMMARY

Transit has tremendous potential to contribute to strong, more sustainable communities. The need to realize this potential in Chilliwack and the surrounding communities of Kent, Hope, Agassiz and Harrison Hot Springs is increasingly important due to factors such as population growth, climate change, traffic congestion and an aging demographic.

The 2020 Chilliwack and FVRD Transit Future Action Plan (TFAP) provides an update to the Chilliwack Area Transit Future Plan (TFP), completed in 2012. The changes that have occurred since 2012 enabled the Chilliwack, Agassiz- Harrison, Hope and Fraser Valley Express (FVX) Transit Systems to increase ridership by 106 per cent to 1,046,520 annual rides and 63,000 annual service hours. This plan supports a recovery of ridership, ongoing growth of the transit mode share and an annualized investment plan to direct future service and infrastructure changes.

The development of this plan was highly collaborative and included staff and representatives from BC Transit, City of Chilliwack, Fraser Valley Regional District, District of Kent, District of Hope, Village of Harrison Hot Springs, the operating company, First Nations, the public, and representatives from a wide array of stakeholder organizations.

As this plan was concluding in early 2020, the global COVID-19 pandemic began to take hold in Canada, causing significant and rapid changes to the transit landscape. During 2020 in Chilliwack, Agassiz, Harrison and Hope, transit ridership dropped more than 59 per cent compared to 2019 levels, requiring swift action to review the transit service to ensure efficiency while keeping transit available and accessible to those who require it. Transit is an essential service, and its continued operation during uncertain times is critical.

In recognition of the role of transit in maintaining strong communities and supporting economic recovery, on December 4, 2020 the Government of Canada and Province of BC announced Safe Restart funding for public transportation agencies in British Columbia. This funding ensures that essential service levels of transit systems are maintained over the next three years and that fares remain affordable.



The focus of this TFAP is on ridership recovery and continued improvement of the Chilliwack, Agassiz-Harrison, Hope, and FVX Transit systems over the next five years. It is acknowledged that the pandemic, subsequent shifts in demand and efforts to restore ridership may impact the timelines and service change priorities outlined in sections 5 and 6 of this report.

To increase transit ridership and improve the quality of transit the 2012 TFP proposed the development of a Transit Future Network (TFN). The transit network found within Chilliwack and the FVRD includes distinct layers of transit service to better match service to demand. The TFAP continues to develop the frequent network while improving local and regional services. More information on the TFN can be found in Section 5 of this report.




For the purposes of clarity the following colour scheme will be applied in some sections of this document to distinguish between the layers of transit service of the Chilliwack and FVRD Transit Future Action Plan:

City of Chilliwack Partnership:

Chilliwack Conventional Transit System

-  Frequent Transit Route
-  Local Transit Route

Fraser Valley Regional District Partnerships:

-  Agassiz-Harrison Paratransit System
-  Hope Paratransit System
-  Fraser Valley Express Connector System

The transit service and infrastructure priorities identified within this TFAP support the vision of the TFP and are based on a review of existing transit services, changing land uses, and feedback from stakeholders.

This plan provides a blueprint for the recovery of ridership in the Chilliwack and FVRD Transit Systems over the short and medium term. This includes options for both service optimization and expansion. Priorities have been phased according to local government feedback and community need, but implementation timing can be adjusted as appropriate and in conversation with local partners.

This plan recommends an increase of 21,200, 20,600, and 5,400 additional annual service hours to transit in the Chilliwack System, FVX System, and FVRD Paratransit Systems respectively to grow transit ridership over the next five years. A further additional 11,840 and 20,140 service hours for Chilliwack and FVRD services respectively are identified for beyond the five years. Table 1 summarizes the service hour increase proposed for each transit system. These expansions will support the region in supporting economic growth and social wellbeing, and in meeting climate change objectives and a transit mode share target of three per cent by 2040.

The plan also calls for capital investments that include:

- An additional 20 peak buses over the next five years and a further 16 peak buses identified for beyond five years.
- Upgrades to existing transit exchanges
- Improvements to customer amenities at transit stops
- A new operations and maintenance facility to accommodate increased vehicle capacity and be adaptable to the requirements of BC Transit's Low Carbon Fleet Program.

Local Government Partner	System	Short and Medium Term Total Service Hour Growth	Long Term Total Service Hour Growth
Chilliwack	Chilliwack Conventional	21,000	11,840
FVRD	Route 56 (Co-funded by FVRD)	2,000	
	FVX Connector	20,600	21,900
	Agassiz-Harrison Paratransit	1,500	1,800
	Hope Paratransit	1,400	900

	NEW SERVICE Kent-Mission	2,500	-
	TOTAL	49,000	31,890*

Table 1: Service Hour increases by scheduled system proposed over the Short and Medium to Long-Term Periods.

Short-Term Implementation Priorities (1-3 years)						
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses **		
1	51 Vedder FTN	Improve Sunday service frequency from 60 minutes to 30 minutes.	900	2		
	52 Evans LTN	Improve weekday and Saturday service frequency from 60 minutes to 45 minutes	1,500			
	57 Broadway LTN	Improve weekday and Saturday service frequency to 60 minutes	700			
	58 Tyson LTN	Improve weekday and Saturday service frequency to 60 minutes.	400			
	54 Promontory LTN	Add one additional trip on weekdays at peak afternoon time to address high demand	420			
		Improve Saturday service	260			
	Chilliwack System Service Package 1 Total			4,200	2	
2	51 Vedder FTN	Improve weekday service frequency to 15 minutes between 7:00 a.m. and 6:00 p.m.	2,200	1		
	52 Evans LTN 53 Fairfield LTN 54 Promontory LTN 57 Broadway LTN 58 Tyson LTN	Improve weekend service span by approximately two hours in the morning and one hour in the evening.	2,000			
	Chilliwack System Service Package 2 Total				4,200	1
	3	51 Vedder FTN	Improve weekend service span to 6:00 to 12:00 a.m. on Saturdays and 7:40 a.m. to 10:15 p.m. on Sundays.		1,100	1
		Modify 55 Yarrow and 59 Industrial	Restructure and convert from four to five loops trips, with a midday direction change	280		
NEW ROUTE Downtown to Malls via Young		Replace the northeastern section of Route 59; schedule in better alignment with community needs	810			

Short-Term Implementation Priorities (1-3 years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	<u>Peak</u> Expansion Buses **
	NEW ROUTE LTN	Introduce service to First Nation communities along Chilliwack River Road and Knight Road.	2,000 (TBC)*	
	Chilliwack System Service Package 3 Total		4,200	0
TOTAL			12,600	4

New emerging technologies will have a direct impact on future mobility within Chilliwack and the FVRD. SmartBus, BC Transit's Low Carbon Fleet Program, mobility as a service, autonomous vehicles, and other emerging bus technologies have the potential to reshape how people choose to move throughout their communities

Conventional Service Priorities 2020-2025 City of Chilliwack

Tables 2a and 2b below summarize the short-term and medium-term priorities for consideration over the next five years within Chilliwack.

Table 2a: Chilliwack Transit System - Short-Term Implementation Priorities

City of Chilliwack: Medium-Term Implementation Priorities (3-5 years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
4	NEW ROUTE 60 UFV/ Downtown via Eagle Landing Parkway	New route connecting the Webster Road Area with Downtown Chilliwack via Eagle Landing Parkway. Seven weekday round trips to start	3,440	2
		Six round trips on Saturday	720	
	Chilliwack System Service Package 4 Total		4,200	2
5	51 Vedder FTN	Improve weekday evening service frequency from 60 minutes to 30 minutes.	1,450	0
	52 Evans 53 Fairfield 54 Promontory 57 Broadway 58 Tyson	Improve weekend service span by approximately two hours in the morning and one hour in the evening.	2,350	
	Realign 53 Fairfield LTN	Consider realigning the route to extend to south Young and terminate at Cottonwood. Maintain current resources but reduce the frequency to accommodate the longer running time.	TBD	
	60 UFV/Downtown via Eagle Landing Parkway	Extend the Friday and Saturday service spans by one trip each	400	
	Chilliwack System Service Package 5 Total		4,200	0

City of Chilliwack: Medium-Term Implementation Priorities (3-5 years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
TOTAL			8,400	2

Table 2b: Chilliwack Transit System Medium -Term Implementation Priorities

* All hours are estimated. Further refinement is required during implementation planning

**Additional buses will be required beyond the peak expansion buses listed above to maintain spare ratios. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

Chilliwack Transit System Custom (handyDART) Priorities

A transit system should view Conventional and Custom Services holistically and not as independent systems. This means, while the service solution may vary based on a customer's abilities, availability and cost should not differ whenever possible. Custom Services should complement Conventional Services and, therefore, should endeavor to be available during all hours of the system.

The Chilliwack Custom span is shorter than and has inconsistent service days to the Conventional service. When and where possible, aligning the service span to reflect Conventional service would improve the accessibility of service for clients who are restricted to the Custom service options.

Long term Conventional priorities for Chilliwack Transit Services, and a more thorough description of the priorities described above are in section 5.5 of this plan.



Image 1: Eagle Landing Centre Completed in 2014, the service and employment centre at Eagle Landing has become a key destination within the Chilliwack Transit System propelling 52 Evans into the next most productive route after 51 Vedder

Service Priorities 2020-2025 FVX Transit

Tables 3a and 3b below summarize the short-term and medium-term service and infrastructure priorities for consideration over the next five years within the FVX Transit System.

FVX: Short-Term Implementation Priorities (1-3 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Fraser Valley Express	66 FX CONNECTOR	Extend service to Lougheed Station (January 2022)	6,000	4
Fraser Valley Express	66 FVX CONNECTOR	Improvements to accommodate demand associated with the Lougheed extension, travel time reliability and pull trips	2,600	0
Fraser Valley Express	66 FVX CONNECTOR	Improvements to accommodate demand associated with the Lougheed extension, travel time reliability and pull trips	4,700	4
TOTAL			14,400	10

Table 3a: FVX - Short-Term Implementation Priorities

* All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

FVX: Medium-Term Implementation Priorities (3-5 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Fraser Valley Express	66 FVX CONNECTOR	Weekday and Weekend Service Improvements	7,300	4
TOTAL			7,300	4

Table 3b: FVX Medium Term Implementation Priorities

* All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

Long term Conventional priorities the FVX Transit Systems, and a more thorough description of the priorities described above are in section 6.5 of this plan.

Service Priorities 2020-2025 FVRD Transit Services: Paratransit

Tables 4a and 4b below summarize the short-term and medium-term service and infrastructure priorities for consideration over the next five years within the Agassiz-Harrison, Hope, and other FVRD Transit Services.

FVRD: Short-Term Implementation Priorities (1-3 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack funded by FVRD	56 Cultus Lake	Develop a Local Area Plan for Cultus Lake transit service to confirm future service changes	-	-
		Expansion hours held in reserve to address service changes.	500	1***
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Introduce year-round Sunday and Statutory Holiday service.	600	1
TOTAL			1,100*	2**

Table 4a: FVRD Transit Systems (or funded by the FVRD) - Short-Term Implementation Priorities

* All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

FVRD: Medium-Term Implementation Priorities (3-5 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack funded by FVRD	56 Cultus Lake	Expansion hours held in reserve to address service changes identified in the short-term	1,500***	1***
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Later weekday service.	900	1
Hope	72 Hope PARATRANSIT	Improve commuter service.	900	1
	New Route PARATRANSIT	Improve local Hope service.	500	0
NEW SERVICE	New Route PARATRANSIT	Introduce new route from Kent to Mission via Highway 7.	2,500	2
TOTAL			6,300*	5***

Table 4b: FVRD Transit Systems (or funded by the FVRD) - Short-Term Implementation Priorities

* All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours and fleet may not be required

Long term Conventional priorities for FVRD Transit Systems, and a more thorough description of the priorities described above are in section 7.5 of this plan.

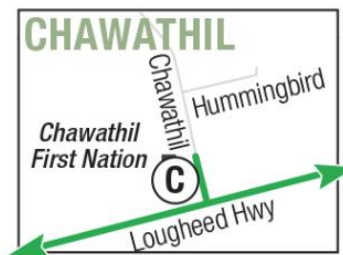


Image 2: A route 72 bus. In 2020 a highway pull-off loop and bus stop was constructed by Chawathil First Nation to enable transit service via the Hope Transit System Route 72. Note that route 22 was changed to route 72 in 2022.

Infrastructure and Strategic priorities 2020-2025

In order to enable and support service improvements and to enhance the customer experience, investment is required in the development of new transit exchanges and installation of new bus shelters at key bus stops is required. Table 5 summarizes the short- and medium-term infrastructure priorities and strategic priorities to support the development of the transit system over the next five years.

Short- and Medium-term Infrastructure Priorities		Local Government Partner
1	Downtown Chilliwack Exchange	Chilliwack
2	Facility Master Plan Strategy	Chilliwack and FVRD
3	Rapid Transit Study & Improvements for 1 Vedder	Chilliwack
4	South Chilliwack Exchange Part 1 (Planning Phase)	Chilliwack
5	South Chilliwack Exchange Part 2 (Detailed Design and Construction)	Chilliwack
6	Transit Priority Measure Study & Improvements	Chilliwack
7	Examine opportunities for a satellite garage in Kent	FVRD
8	Bus Stop Improvements (ongoing)	Chilliwack and FVRD

Table 5: Summary of Infrastructure Priorities

Strategic Priorities		Local Government Partner
1	Restore ridership to pre-COVID-19 levels by maintaining essential service levels through the Safe Restart Funding	Chilliwack and FVRD
2	Endorse Service Standards and Performance Guidelines	Chilliwack and FVRD
3	Improve off-peak service.	Chilliwack
4	Continue to develop the Frequent Transit Network	Chilliwack
5	Consider redistribution of essential service hours to address COVID-related shifts in demand and improve service options as ridership restores to pre-COVID levels	Chilliwack
6	Expand transit network to service new areas.	Chilliwack and FVRD
7	Consider Transit Facility readiness for BC Transit's Low Carbon Fleet Program	Chilliwack and FVRD

Table 6: Summary of Strategic Priorities

Proposed short-term service improvements will be integrated into the three-year Transit Improvement Process (TIP), which is updated on an annual basis. Infrastructure priorities will inform capital plans for both BC Transit and the local government partners. Prior to implementation of service changes, BC Transit planning staff will work with local government staff to ensure service improvements appropriately reflect local needs. Additional targeted engagement may be required.

2.0 COVID-19 IMPACT ON SERVICE PLANNING

In March 2020, the World Health Organization officially declared the novel coronavirus (COVID-19) global outbreak a pandemic. In response, the province of British Columbia declared a state of emergency. Within this, Emergency Management BC declared public transit to be an essential service. To mitigate the spread of the virus, the Office of the Provincial Health Officer (PHO) ordered the indefinite limitation of all travel and transportation (except for essential purposes only) and to suspend all mass gatherings to encourage physical distancing. This included the suspension of in-person classes at all schools, the closing of most service industry establishments, the transition of most office and administrative jobs to work remotely and the introduction of new strict protective health measures.

These orders had an immediate and profound impact on BC Transit services across the province. To comply with the PHO's new protective health measures, BC Transit implemented operational changes to protect the safety of frontline employees and transit riders. This included the following measures:

- Rear door boarding and no fare collection
- Passenger capacity constrained to 40 per cent to ensure social distancing could be accommodated
- Enhanced cleaning protocols
- Reduced transit services to reflect operator availability and decreased demand

As expected, given the PHO's advice to limit non-essential travel, transit ridership in Chilliwack and FVRD systems substantially decreased. Figure 1 below shows that transit usage decreased sharply at the end of March – reaching a low of 41 per cent relative to 2019 levels in the same week. As the curve of infections flattened, ridership showed a strong initial increase that ended upon the resumption of fare collection on June 1. Once the province reached Phase 3 in June and businesses reopened, ridership showed a steady modest rate of increase into the fall months. This summer to fall gradual ridership response was typical of large to medium size transit systems across the province.

Ridership in the Chilliwack and FVRD systems reached 73 per cent relative to 2019 levels at the beginning of November. In the weeks following Thanksgiving and Halloween, the onset of a second wave of new COVID 19 infections in Fraser Health began. Effective November 13 Fraser and Vancouver Coastal Health Authorities initiated a series of local health orders intended to again mitigate the spread of the virus. Non-essential travel outside of the regions was restricted; indoor gatherings for sport purposes were also suspended. With these new orders ridership on the Chilliwack and FVRD routes decreased, reaching about 60 to 63 per cent relative to 2019 levels until mid-December. During the week of December 18, a pandemic ridership high of 78 per cent ridership restoration, relative to 2019 levels, was reached.

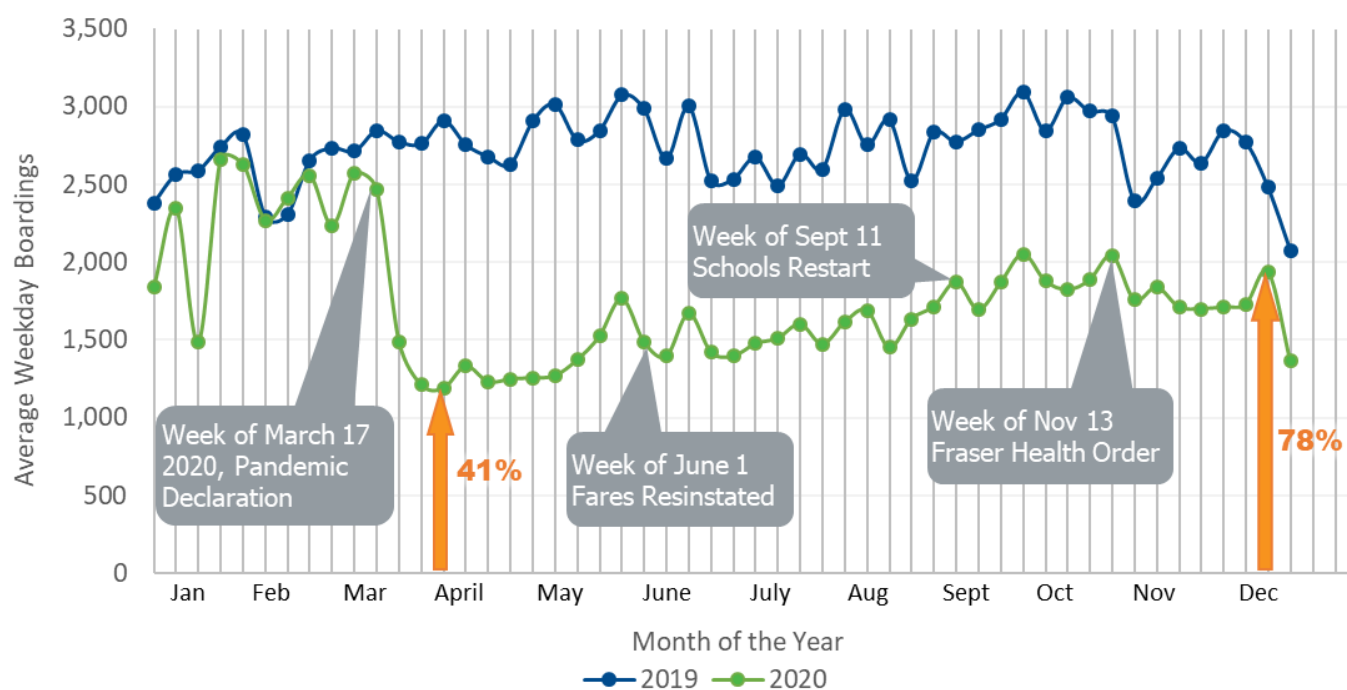


Figure 1: Chilliwack and FVRD Transit Systems - average weekday ridership comparison 2019 & 2020

The focus of this TFAP is the improvement of the Chilliwack, Agassiz-Harrison, Hope and FVX transit systems; however, due to the pandemic recovery, it is acknowledged that timelines and priorities established through community engagement in 2018 and 2019 may need to be re-evaluated as the system transitions through the recovery phases of the pandemic and ridership demand returns.

The progression of and recovery of transit service in the Chilliwack, Agassiz-Harrison, Hope and FVX systems is planned to align with the British Columbia Restart Plan. Table 5 outlines the four Phases of the BC Restart Plan and the corresponding transit response plan that has occurred or is planned to occur.

The Chilliwack, Agassiz-Harrison, Hope, and FVX transit systems are also positioned to respond as required to reduce capacity and restart phase 1 emergency procedures in the event of a third wave of COVID-19.

British Columbia's Restart Plan			BC Transit – Chilliwack Response Plan
Phase	Timeframe	Provincial Directive	
Phase 1: Response	March 2020 to mid-May 2020	Essential services and some businesses open	<ul style="list-style-type: none"> Consideration of reduced transit service – ultimately not pursued. Capacity limited to 40 per cent on buses Enhanced cleaning protocols Rear door boarding, no fare collection
Phase 2: Recovery	Mid-May 2020 to June 2020 and onwards	Restoration of some services, under enhanced protocols: <ul style="list-style-type: none"> Elective surgeries, dentists, chiropractic, physiotherapy, massage therapy More retail, cafes, restaurants, pubs and personal services Offices Recreation/sports 	<ul style="list-style-type: none"> Public education campaign encouraging the use of face coverings on buses Signage on buses and at stops encouraging personal etiquette Stabilize service levels, monitor demand Continued enhanced cleaning protocols Installation of driver barriers on all buses
Phase 3: Recovery	June 2020 to September 2020 and onwards December 2020	Further restoration of services, under enhanced protocols: <ul style="list-style-type: none"> K-12 schools (partial return in June, full return in September) Hotels Post-secondary institutions online <p>The Province initiates its BC Restart Plan, which recognizes that transit is an essential service required to support the social and economic recovery of communities.</p>	<ul style="list-style-type: none"> Return to front-door loading and fare payments Increased capacity on vehicles to approximately 66 per cent Ridership recovery campaign Face masks strongly encouraged for all passengers, with face masks becoming mandatory on August 24, 2020 Investigate proposed transit investment and service priorities developed for the Transit Future Action Plan, and determine timeframe for delivery over the next five years
Phase 4: Rebuild	TBD	Large gatherings permitted, conditional on vaccinations Post-Secondary institutions increase face to face classes Commuter demand starts to return as office type employment and attendance at place of work is increased throughout the workweek	<ul style="list-style-type: none"> Return to full capacity on buses Investigate proposed transit investment and service priorities developed for the Transit Future Action Plan, and determine timeframe for delivery over the next five years

Immediate Impact and Response

In response to the significant and rapid changes that occurred in mid-March across the Chilliwack and FVRD Transit landscape, BC Transit identified opportunities for a service reduction in Chilliwack, however officials ultimately decided to maintain service levels. Service levels have also been maintained throughout the second wave of COVID 19 infections.

An essential consideration when planning for post-COVID-19 recovery is the need to ensure service levels provide ridership demand with appropriate physical distancing opportunities. As with other BC Transit systems across the province, capacity on Chilliwack and FVRD Systems buses was reduced to 40 per cent of seated capacity at the early onset of the pandemic. Capacity on buses serving the Chilliwack, Agassiz-Harrison, Hope and FVX systems was raised in late summer to 100 per cent of seated capacity.

Planning for Transit Recovery and Rebuild

Transit is and will continue to be an essential service for communities as residents go about their daily lives. Transit in Chilliwack and the FVRD will continue to play a pivotal role in addressing challenges that will exist long after the pandemic is over, including climate change, congestion and affordability. BC Transit acknowledges that transportation demand characteristics across communities will be different, and the staged reopening of different sectors will impact ridership and potentially how service resources are delivered.

As of summer 2020, capacity on buses was increased from 40 per cent to a full seated load – approximately 50 to 65 per cent of full capacity. Capacity will be further increased in consultation with Provincial Health Authorities and Work Safe BC as appropriate based on vaccination rates.

It is important to acknowledge that until vaccination rates are high there may be significant anxieties of customers who do not feel comfortable riding in a bus that has many other passengers on it. Maintaining public trust and faith in the transit system to deliver safe and reliable service is critical. BC Transit, City and FVRD staff will continue to work together to ensure service is optimized and, where possible, hours reallocated to areas of greater need, such as along corridors that are seeing a swifter return of riders.

Welcome Back Ridership Demand

The University of the Fraser Valley has adopted a modified program delivery and building hours at the Chilliwack Campus for the fall 2020 semester. Based on bus stop activity data at the Chilliwack campus, ridership has dropped by 60 percent, however service remains at full levels to balance the diminished capacity on buses and continue to serve those requiring access to UFV and the surrounding institutions at the Canada Education Park. The resumption of regular program delivery at UFV is expected to generate a gradual return to the former ridership levels.

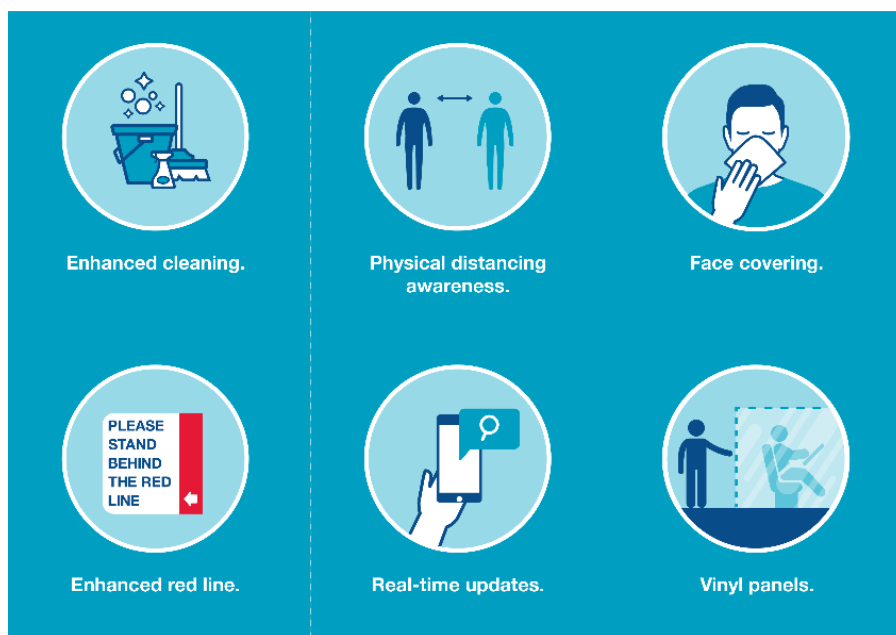


Figure 2: Measures taken to reduce the risk of spreading COVID-19.

Maintaining good service design during the recovery phase will ensure a solid platform continues to exist for essential services, physical distancing, customer comfort and the flexibility to respond to ridership demand as it returns over time. The goal is to make service safe and available to welcome back ridership. If these travel needs are not met, there is a risk of transit riders shifting to private vehicles and abandoning public transportation, increasing congestion and emissions, and reducing the long-term viability of the Chilliwack, Agassiz-Harrison, Hope and FVX systems transit systems.

Welcoming back ridership demand will be supported by BC Transit marketing initiatives, including a broad campaign encouraging the use of face masks on transit, personal etiquette signage on the bus and at stops. Table 7 below outlines the service recovery strategy followed between June 2020 and December 2020.

Area	Assumptions	June – August	September – December
Ridership Demand	<ul style="list-style-type: none"> Partial workplace returns throughout the summer Gradual increase in non-essential trips Secondary schools return in September Post-secondary schools transition to primarily online teaching through to the end of 2020 The administrative workforce continues to primarily work remotely through the fall 	50% - 65% compared to 2019 ridership during the same period	65% - 78% compared to 2019 ridership during the same period
Service Hours	<ul style="list-style-type: none"> Maintained service to enable sufficient passenger seats are available in light of the lower per-vehicle capacity. 	100% compared to 2019 service hours during the same period	100% compared to 2019 service hours during the same period
Capacity	<ul style="list-style-type: none"> Gradual increase in capacity on buses Reduced physical distancing requirements Face masks strongly encouraged for all passengers 	Capacity gradually lifted from 40% to seated load	Capacity limited to seated load (50%-60%)
Projected Revenue	<ul style="list-style-type: none"> Resumption of fare collection Revenue reflects ridership demand 	50% - 65% compared to 2019 revenue during the same period	65% - 78% compared to 2019 revenue during the same period

Table 7: Service Recovery Strategy



Image 2: On August 24 BC Transit, along with TransLink and BC Ferries made mask usage mandatory for customers.

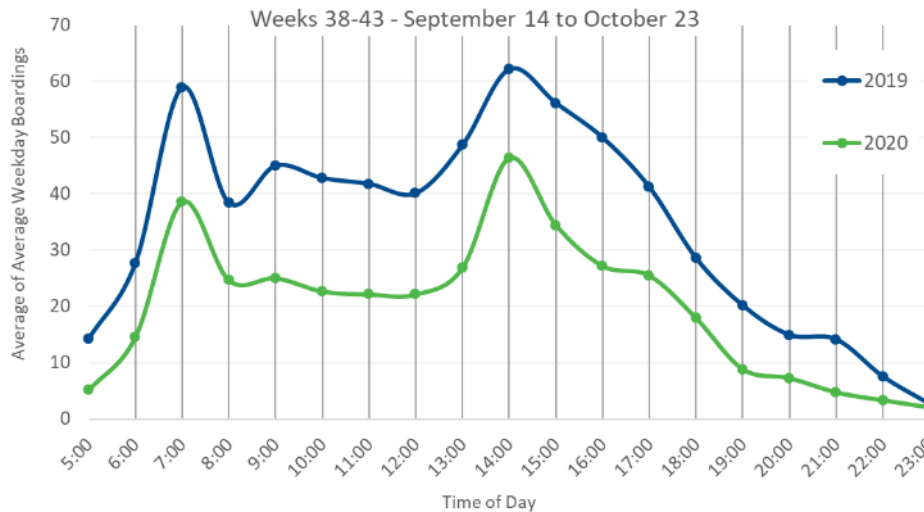


Figure 3: Ridership demand comparison 2019 vs 2020 - mid April to mid-May.

Peak Travel Demand

Figure 3 below shows that in Chilliwack and the FVRD near the start of the pandemic, there was an overall reduction of travel throughout the day, particularly in the morning when compared to 2019. Typically, the ridership demand in Chilliwack and the FVRD features distinct morning and afternoon peak periods of travel coinciding with commuter and college/secondary school demand. In comparison, ridership during the acute phase of the pandemic, April to mid-May, rises gradually from the morning to a lower afternoon peak demand.

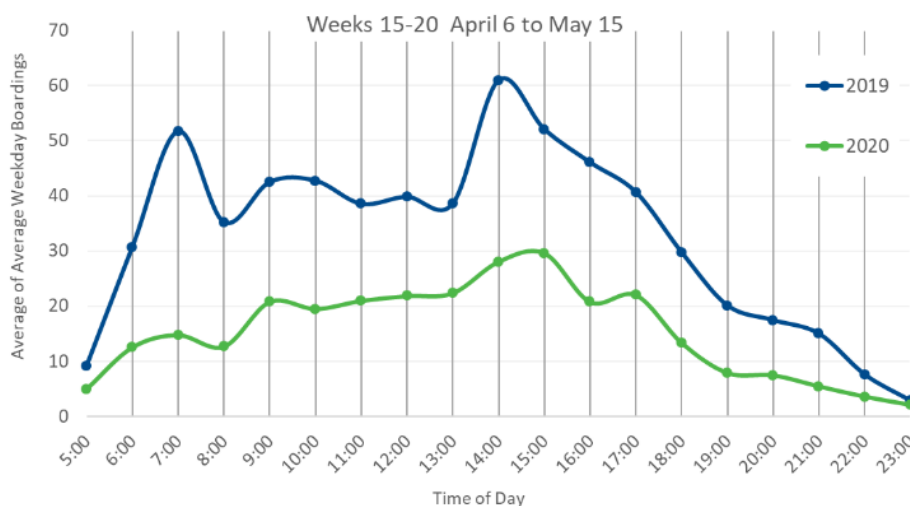


Figure 4: Ridership demand comparison 2019 vs 2020 - mid-September to October 23

More recent ridership data, shown in figure 4, recorded during the mid-September to end of October period shows ridership levels rising as well as a marked restoration of the typical peaks. This suggests that a maintenance of typical commuter-focused service frequency may be the best path to accommodate return ridership. BC Transit will continue to monitor these trends to inform service changes moving forward. Any service design changes that are warranted will be accompanied by awareness campaigns to guide passengers in adjusting their travel times to make best use of the service and ensure they feel comfortable traveling with their fellow passengers.

Rebuild Phase: Long-term Sustainability and the Transit Future Action Plan

The response and recovery phases over the short to medium term will stabilize services, rebuild trust, and regain ridership across the Chilliwack, Agassiz-Harrison, Hope and FVX systems transit systems.

On December 4, 2020, in recognition of the role in transit in maintaining strong communities the Government of Canada and Province of BC announced Safe Restart funding for public transportation agencies in British Columbia. This funding ensures that essential service levels of transit systems are maintained over the next three years and that fares remain affordable.

- The Chilliwack Transit system is assured of essential transit service at 42,043 annual hours until March 2024.
- The Agassiz-Harrison Paratransit system is assured of essential transit service at 5,389 annual hours until March 2024.
- The Hope Paratransit system is assured of essential transit service at 2,641 annual hours until March 2024.
- The FVX system is assured of essential transit service at 14,278 annual hours until March 2024.

Surveys have suggested that until vaccinations are widespread Canadians are less likely to return to their pre-COVID-19 use of transit, and their daily travel habits will include less unnecessary travel. When ridership returns, there are multiple scenarios that may occur. The goal is to ensure the Chilliwack system has the best transportation solution and a transit strategy that reflects the current impacts of COVID-19 and continues to be able to position the system to improve services for the community in the future and respond effectively to the Chilliwack's sustainable development goals.

In response to the COVID-19 pandemic, service expansions for the upcoming three fiscal years were deferred across all BC Transit systems until a later date.

- The Fraser Valley Express Connector Transit System had a proposed 6,000 hour service expansion identified for January 2021, which was intended to extend the FVX service westward to Lougheed Skytrain Station in Burnaby.
- The Chilliwack Conventional System had a proposed 3,500 hour service expansion identified for September 2021 which was intended to advance the initiatives contained in this plan.

These deferred expansions will be reexamined by the BC Transit three-year Improvement Program (TIP) for in consultation with the FVRD, Chilliwack and the Province. Subject to provincial funding, the earliest these expansions could occur would be in January 2022, and September 2022 respectively.

The TIP seeks to align municipal and regional budget processes to ensure funding availability is aligned with local needs and provincial funding. Similarly, service improvements outlined in Section 6 of the TFAP, will be integrated into the TIP as required. BC Transit will continue to work with Chilliwack and FVRD staff to monitor ridership and ensure future service improvements year over year appropriately reflect budgets and local needs. It is possible that ridership in certain areas or along certain routes will recover more swiftly than in others, and the

priorities discussed in this plan could be rearranged accordingly so that they best address the post-COVID-19 transit landscape in Chilliwack and the FVRD.

3.0 INTRODUCTION

Transit has tremendous potential to contribute to strong, more sustainable communities. The need to realize this potential in Chilliwack and the FVRD is increasingly important due to factors such as climate change, population growth, increasing traffic congestion and an aging demographic. The Chilliwack and FVRD Transit Services are comprised of a combination of four individual systems: Chilliwack Conventional, Agassiz-Harrison Paratransit, Hope Paratransit and the Fraser Valley Express Connector. The 2020 Chilliwack and FVRD Transit Future Action Plan (TFAP) builds on objectives and priorities identified in the [2012 Chilliwack Area Transit Future Plan](#).

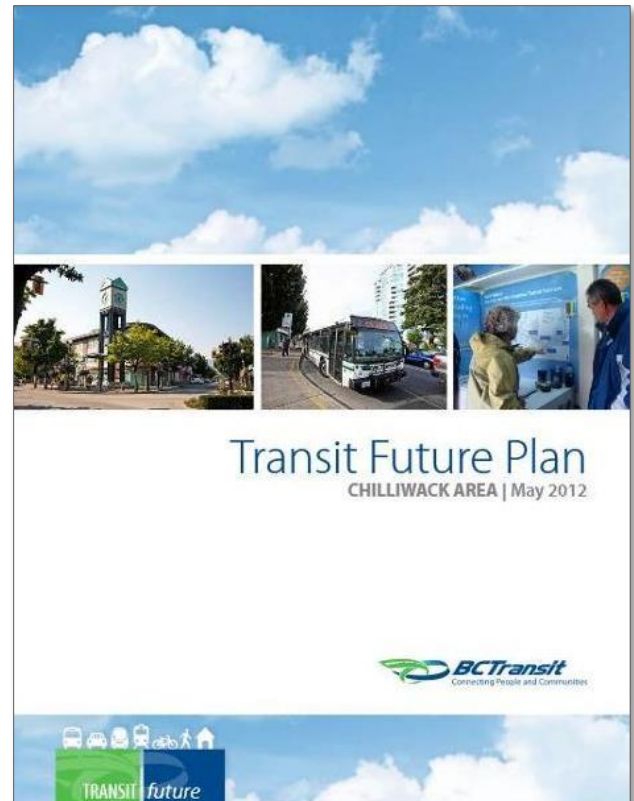


Figure 5: 2012 Transit Future Plan

This 2020 TFAP will continue to deliver on the 2012 Chilliwack Area TFP Goals:

1. Transit is efficient and cost effective

Transit is designed to optimize the use of resources and provide better value to the residents and businesses, resulting in improved value of transit investments and increased productivity.

2. Transit service is designed to complement and support the diverse land use patterns and community types

Chilliwack and the FVRD encompass communities that range in size from a few hundred to over 90,000 residents. Serving this diverse array of communities, from urban centres to rural communities requires tailored transit service that is appropriately sized.

3. Transit service is reliable, safe, convenient, and integrated with other transportation modes

The Chilliwack Area Transit Future Plan places a strong emphasis on the customer. This goal focuses on the best practices that make transit attractive and convenient to

customers. Transit is fast and direct, safe, convenient, accessible, modern and attractive. Transit is integrated with the transportation network, especially pedestrian and cycling networks.

4. Improve the image and marketing of transit through excellent customer service and communication

Transit relies on its operators, marketing, customer information, and fare products for its public image. To improve the image of transit, operators are excellent customer service agents. Customer information is widely available and accessible and fare products are diverse and easily attainable.

5. Service contributes to environmental sustainability

Transit contributes to the reduction of greenhouse gases, promotes healthy living, and encourages and supports more walkable and compact land use patterns. The Transit Future plan target for transit mode share is two per cent, or approximately double the current mode share for transit. This target translates to approximately 1.9 million riders annually.

The TFAP identifies and prioritizes transit service and infrastructure improvements to improve the transit network over the next five years and beyond. More specifically, this TFAP:



- Identifies opportunities to support and build upon the Chilliwack 2018 Transportation Master Plan goal to increase transit mode share to 3%
- Defines improvements for service and infrastructure over the next one to five years
- Provides revised transit routes that more efficiently connect neighbourhoods with key destinations to improve travel times and increase customer convenience.

TFAPs provide a number of defined service improvements for implementation over the next five years and ensure that transit improvement priorities are consistent with evolving local priorities, emergent transit trends and demands, and BC Transit operational capacity. The Plan is informed by the 2012 Chilliwack Area TFP, multiple forms of public engagement, analysis of existing and future land use and transit use, and feedback from local government partners, operating company staff and key stakeholder groups.




For the purposes of clarity, the following colour scheme will be applied in some sections of this document to distinguish between the layers of transit service of the Chilliwack and FVRD Transit Future Action Plan

City of Chilliwack Partnership:

Chilliwack Conventional Transit System

-  Frequent Transit Route
-  Local Transit Route

Fraser Valley Regional District Partnerships:

-  Agassiz-Harrison Paratransit System
-  Hope Paratransit System
-  Fraser Valley Express System (Connector)

3.1 Plan Area

The geographic boundary for this plan includes the City of Chilliwack, Kent, Agassiz, Harrison Hot Springs, and Hope, along with the 66 Fraser Valley Express corridor connecting Chilliwack, Abbotsford and Langley. See figure 6 below.

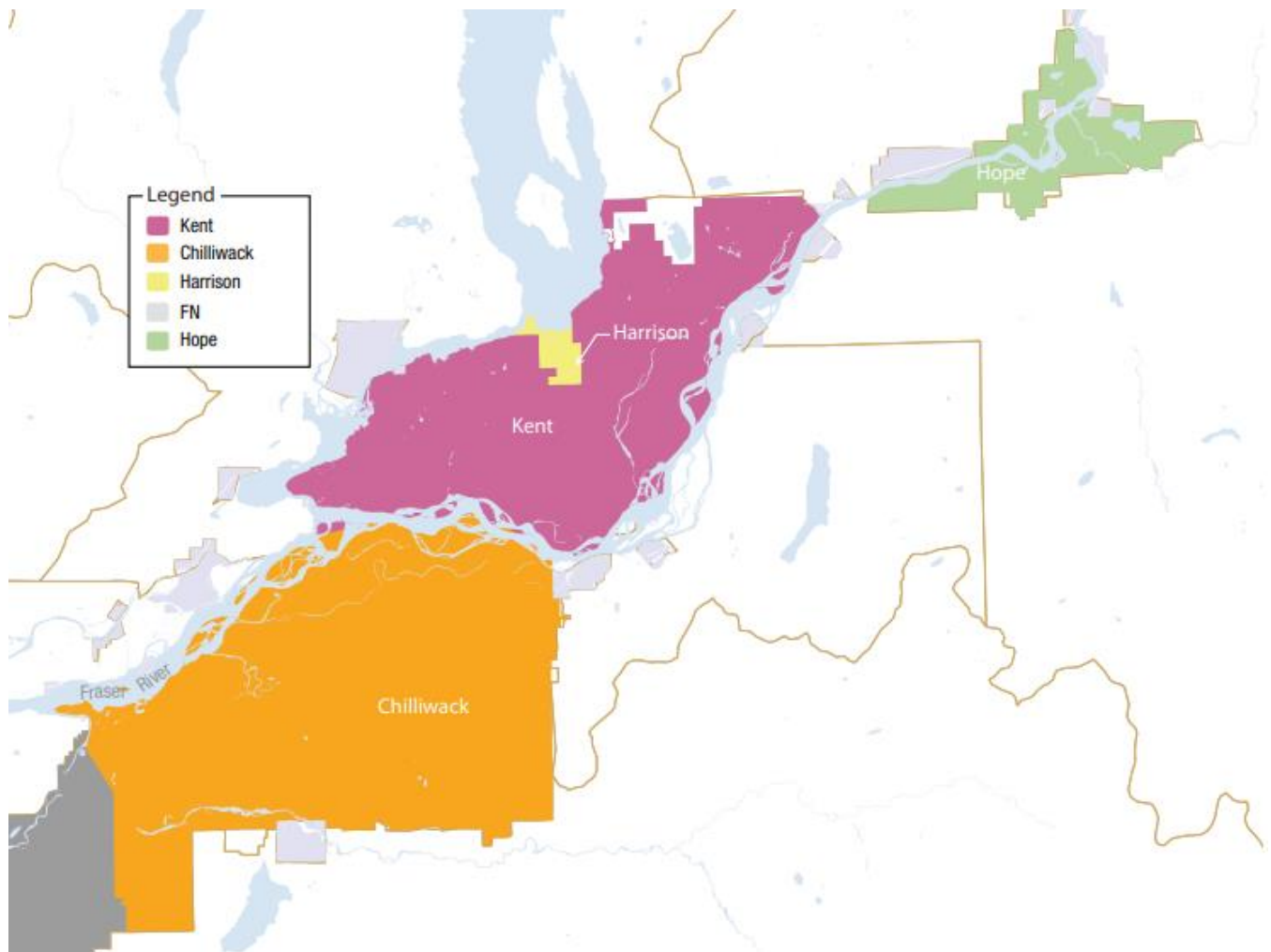
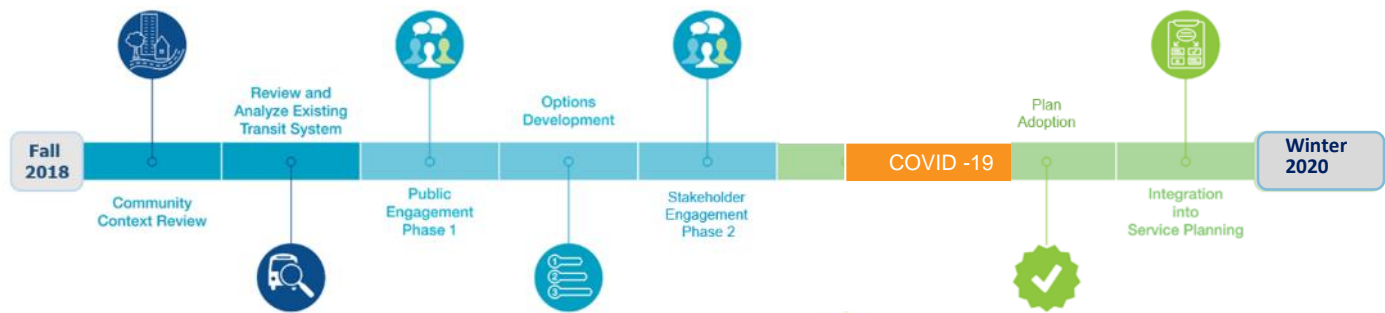


Figure 6: Transit Future Action Plan study area

3.2 Transit Future Action Plan Timeline

Development of this TFAP began in the fall of 2018 and included a number of phases to understand the current context, system performance, review of potential service changes with stakeholders. The resulting plan provides a framework for short-term to long-term growth of the transit system. Figure 5 illustrates the key steps involved in developing this TFAP. The intended Winter 2019/20 Plan endorsement was delayed due to the COVID-19 Pandemic in March 2020 and the snap provincial election called in the fall of 2020.



3.3 Historic Performance and Service Hours Overview

System-level context, detailed performance and service proposals corresponding to the City of Chilliwack and the FVRD are shown in sections 5.0 and 6.0 respectively. As the 2012 Transit Future Action Plan relates to the combined performance of

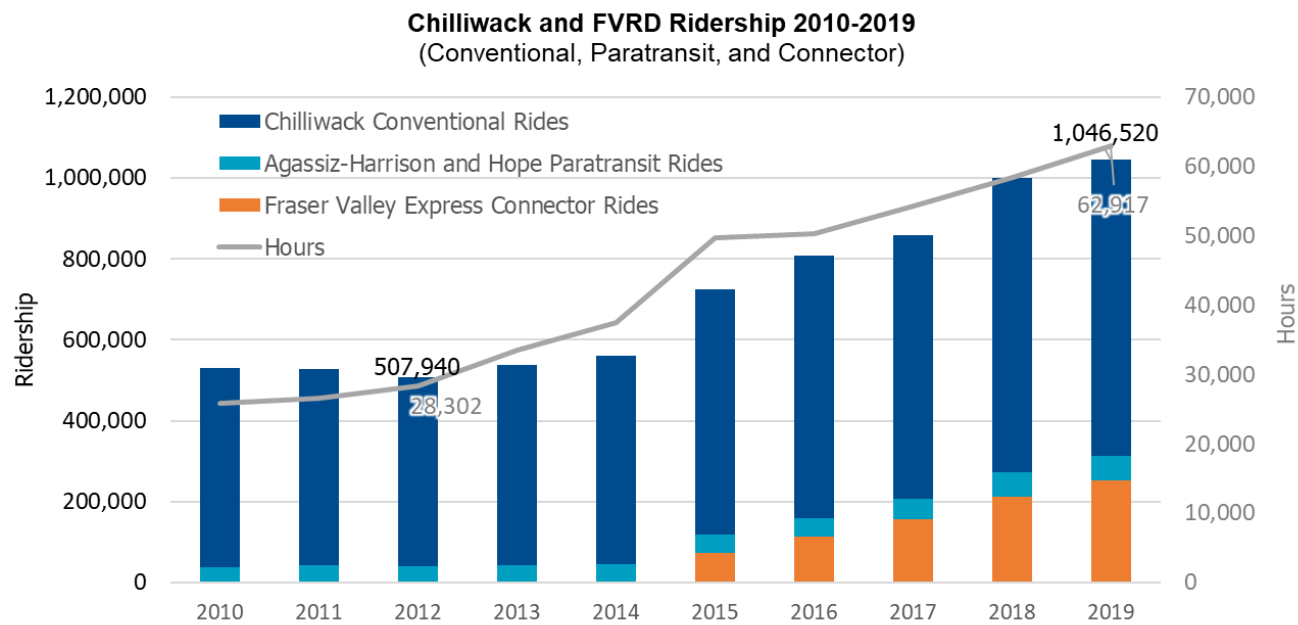


Figure 5: Chilliwack and the FVRD Transit systems, and the Fraser Valley Express Connector, will continue to be provided in Transit System ridership and service hours and outcomes of the systems in relation to one another.

The four scheduled transit systems in Chilliwack and the FVRD operate with a combined 63,000 annual service hours. Since the completion of the 2012 TFP, conventional ridership has grown significantly by more than 106 per cent. In the 2012/13 fiscal year ridership was at 507,940 and in the 2019/2020 fiscal year the routes carried a combined 1,046,520 transit rides. See figure 7.

A custom handyDART transit system operates within Chilliwack. Since 2012, ridership has dropped from 105,902 to 91,890. See figure 8.

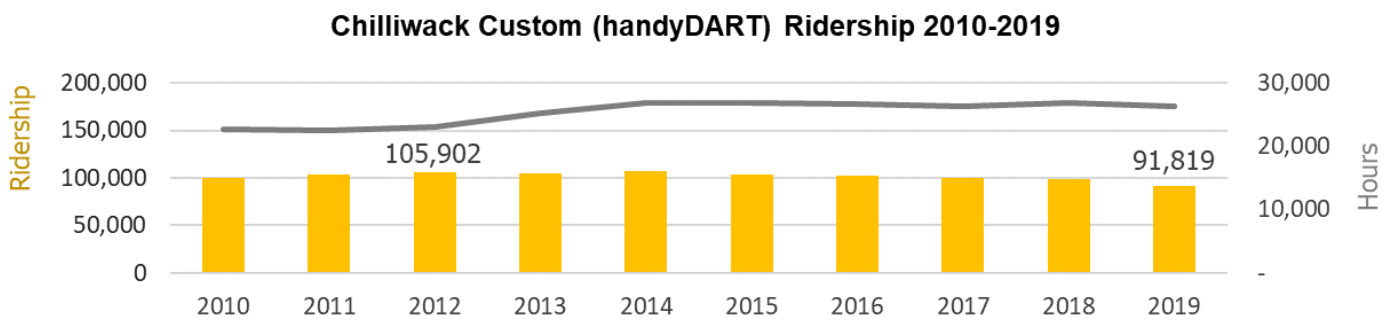


Figure 8: Chilliwack Custom (handyDART) Ridership 2010-2019

Progress towards the TFP Vision

The 2012 Chilliwack Area TFP identified an overall transit mode share target of two per cent by 2036, to increase from 491,000 annual rides in 2012 to 1.9 million rides in 2036. Ambitious mode share targets help to guide the service changes in the short, medium and long term.

Investments made in the Chilliwack and FVRD over the last eight years have delivered a strong growth in transit ridership with over 1 million rides recorded in 2019/2020.

Based on strong growth in the scheduled systems, the two per cent mode share target for 2036 appears modest for the Chilliwack Conventional and Fraser Valley Express Connector Transit Systems.

3.4 Principles of Prioritizing Transit Service Changes

Before increasing transit service or coverage, and in advance of implementing the larger transit service and infrastructure recommendations within this TFAP, it is important to ensure that the existing transit system is performing effectively. See figure 9 below for a Transit Service Improvement Priority Pyramid. Transit service improvement priorities are developed through the effective review of the system and routes to ensure they are satisfactorily meeting service design standards and performance targets and directing the appropriate service resources.

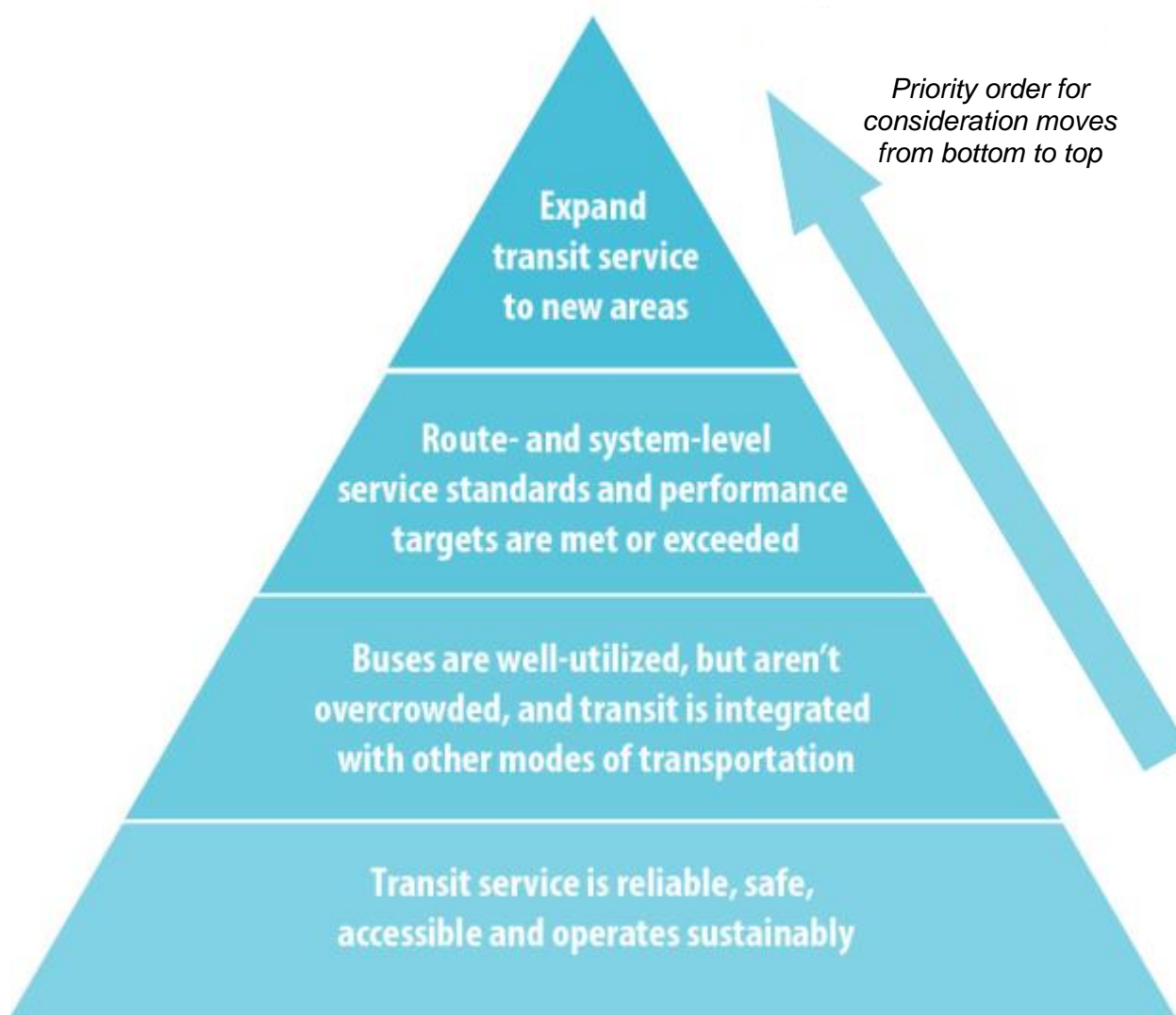


Figure 9: Approach to transit service change and improvement priorities

3.5 System Wide Performance Review

System-level Service Design Standards and Performance Guidelines exist for the Chilliwack, Agassiz, Harrison and Hope Transit System. These tools are developed to help facilitate future service planning decisions. Whether making an adjustment to existing services or planning additional service. The performance guidelines measure how the transit system is progressing towards achieving its goals of rides per service hour and rides per capita see table 8 below. These guidelines can also help to inform service delivery changes required in response to external forces that impact ridership, such as the COVID-19 pandemic or other, more localized changes.

Measure	Target	Minimum
Rides per service hour	35	12
Rides per service kilometer	1.5	0.5
Cost per ride	\$2.50	\$7.00
Cost recovery	35%	15%
Rides per capita	30	10

Table 8: System wide performance guidelines from 2012 TFP

An assessment of the system level performance over the last three service years and annual rides and service hours from 2012 to 2020 for each conventional transit system was conducted as part of this strategic planning process. Detailed route level performance guidelines will be developed to draw on additional information to assist in the implementation of future service priorities.

4.0 PUBLIC ENGAGEMENT

The development of the Transit Future Action Plan is collaborative and included engagement with stakeholders and residents of Chilliwack and the FVRD to ensure future transit service and infrastructure priorities align with public need. Phase 1 of the engagement consisted of an on-street customer satisfaction survey of transit riders in winter 2018. Phase 2 was held in spring of 2019 and consisted of four open houses held in Chilliwack (2), Agassiz-Kent (1) and Hope (1), as well as an online survey. Altogether, just under 900 people participated in the engagement events. Figure 10 (below) shows the distribution of participation across Phases 1 and 2.

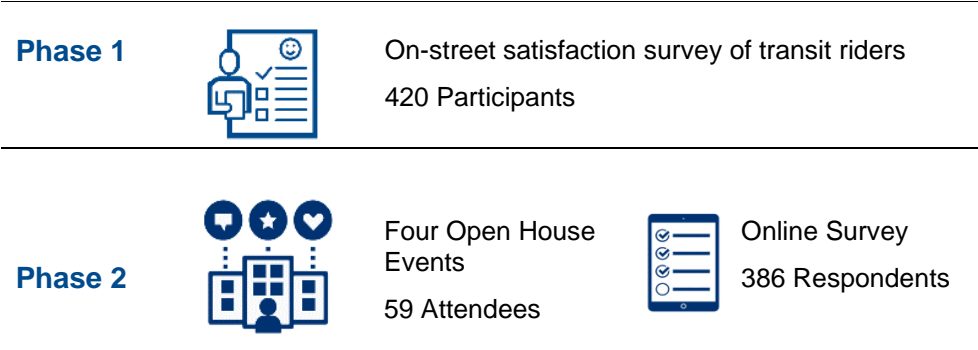


Figure 10: Public engagement participation summary

People were asked questions about all aspects of transit service, areas of improvement, opportunities, and priorities. Prominent themes that emerged from the feedback and have helped to inform the short- and medium-term service and infrastructure priorities include:

- More bus shelters, benches, and lighting – particularly in downtown Chilliwack and Agassiz, and Cultus Lake
- Route 51 & 52 need improvement
- More weekend and evening service for nearly all routes
- Improvements to on-time service
- Better connections to Metro Vancouver and TransLink’s system
- More 66 FVX trips during the weekday and midday peaks
- Expanding service on the 66 FVX into Metro Vancouver
- Expanded service hours for Route 71 Agassiz-Harrison and Route 72 Hope
- All-year service for Route 56 Cultus Lake



5.0 CHILLIWACK TRANSIT SERVICES

5.1 Transit Today

The City of Chilliwack Transit Services is comprised of two individual transit systems:

- Chilliwack Conventional Transit
- Chilliwack Custom system, providing handyDART service

5.1.1 Chilliwack Conventional Transit System

The Chilliwack Conventional Transit System operates a fixed route, fixed schedule transit system providing a frequent and local transit service within the City of Chilliwack. This system consists of nine routes categorized in three ways. See figure 11.

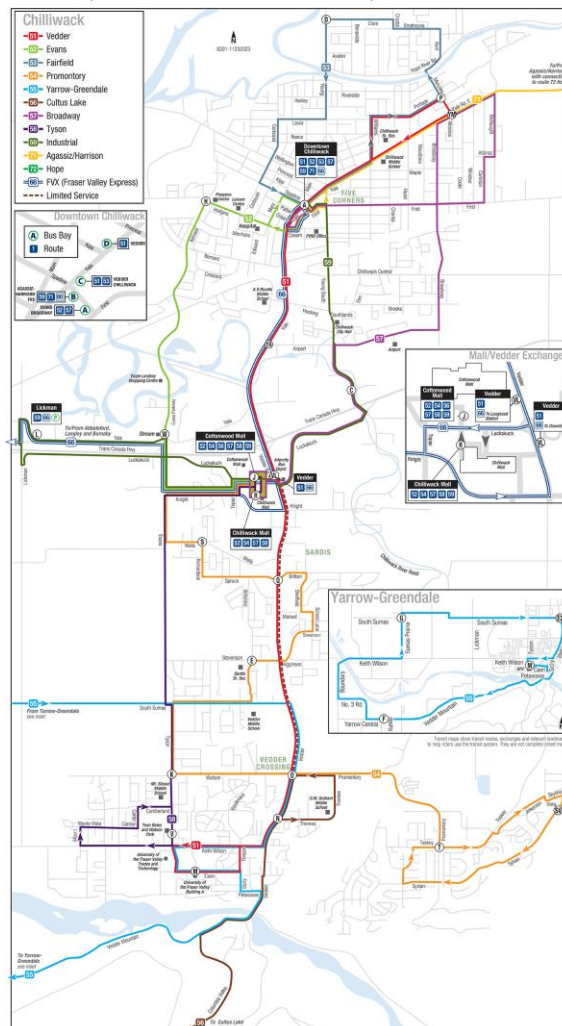
Frequent Transit Network (FTN) routes operate 15-minute frequency over a select span of service. Routes generally operate on arterial service corridors with mixed land use and provide connections between urban centres

51. Vedder (FTN)

Local Transit Network (LTN) routes generally less densely populated areas with a focus on connections to local centres and to frequent routes

- 52. Evans
- 53. Fairfield
- 54. Promontory
- 55. Yarrow/ Greendale*
- 56. Cultus Lake (summer only)*
- 57. Broadway
- 58. Tyson
- 59. Industrial

Figure 11: Chilliwack Conventional transit map



at a
roads,

serve
transit

***Targeted Services** Targeted routes are created to provide service to specific areas such as schools, universities, and/or peak commuter trips.

Chilliwack Conventional Transit Fleet

The conventional transit system in Chilliwack is provided by a fleet of 13 vehicles, with six medium-duty vehicles and seven heavy-duty vehicles. See table 9.

Vehicle Type	Make	Service Type	Length	Seated Capacity (Max Capacity)	No. of Vehicles
Medium-duty	Grande West Vicinity	Conventional	10.7 m (35')	30 (54)	5
Heavy-duty	Novabus LFS	Conventional	12.2 m (40')	32 (69)	12

Table 9: Chilliwack conventional transit fleet

5.1.2 Chilliwack Custom Transit System

The Chilliwack Custom Transit System operates a custom transit service within the City of Chilliwack. Custom Transit is a door-to-door, demand responsive or specialized service for customers with physical or cognitive impairments who cannot independently use the fixed-route transit system some or all of the time. Access to Custom service is reflective of the relative boundaries of Conventional services. BC Transit recommends a policy for service boundaries, established by the American Disabilities Association, as the area within 1.5 kilometers in all directions of existing Conventional routes. There are two different types of custom transit services available to registered custom transit clients in Chilliwack.

- handyDART:** Providing the majority of Custom Transit service, handyDART is a door-to-door, shared ride service that uses smaller vehicles. A client can arrange a time for pick-up and the operator will arrive at their home, help them board the vehicle, and safely get them to the door of the final destination. There are two types of handyDART trips:
 - Subscription trips are scheduled once a week or more at the same location and time for an extended period.
 - Reservation trips are one-time or occasional trips and are scheduled on a first-to-call basis.
- Taxi Saver:** For times when the handyDART system is unavailable, Taxi Saver vouchers provide registered handyDART clients with subsidized taxi service, giving them the flexibility to coordinate their own trips on their own time.

Hours of Operation

Service Offerings	Hours of Operation	Monday-Friday: 0530 to 0000	Monday, Tues, Thurs, Fri: 0745 to 1845	7.5 Hours
			Wednesday: 0745 - 2130	4.75 Hours
		Saturday: 0545 to 2330	Saturday: 0900 - 1700	9.75 Hours
		Sunday: 0840 to 1930	Sunday: No Service	11 Hours

Chilliwack Custom Transit Fleet

Custom Transit service in Chilliwack is provided by a fleet of eight vehicles, all light-duty vehicles. See table 10.

Vehicle Type	Make	Service Type	Length	Seated Capacity (Max Capacity)	No. of Vehicles
Light-duty	Chevrolet ARBOC	Custom	7.9 m (26')	20 (20)	8

Table 10: Chilliwack custom transit fleet

5.2 Changes since the 2012 Transit Future Plan

There have been several key improvements to the transit services in Chilliwack since the TFP was completed in 2012. Table 9 below summarizes these. One of the key accomplishments among these is the early phases of Frequent Transit Network 51 Vedder.

The transformation of the network over the last eight years has established the frequent and local route structure while expanding the regional connectivity and encouraging ridership growth to support continued development of the network into the future.

Year	System	Service Change
2012	Chilliwack	System restructure of local routes Implementation of Frequent Transit Network 51 Vedder
2013/ 2014	Chilliwack	Route 51 extended to UFV and Menzies downtown Routes 51 to 54 - Evening service introduced Routes 51 to 56 – Statutory holiday service introduced Routes 51, 52, and 54 - Additional early and late service Custom transit increased service
2016/ 2017	Chilliwack	Route 51 & 53 – service expansion during peak times Route 55 - Introduction of weekday service to Yarrow & Greendale Route 58 - extension west to Lindy's Drive Route 59 - Introduction of service to Yale Road industrial area
2018	Chilliwack	Route 54 – Promontory Heights extension Route 57 & 58 – weekday frequency boosted to 60 minutes Routes 51, 52, 53, 54 - New early morning trips to connect to early FVX departures
2019		No expansion
2020	Chilliwack	Expansion deferred due to COVID

Table 11: Service Change Improvements made to the Chilliwack Transit System since 2012

5.3 Developing Transit Future Action Plan Service Changes

5.3.1 Informing the Plan

BC Transit has worked with local government staff of Chilliwack and the FVRD to develop the TFAP to prioritize transit improvements that build upon and are informed by the TFP, existing and proposed land uses, the community's demographic composition, public input through public engagement (see section 4.0), and transit industry standards. Supporting work that contributed to this plan is summarized below.

5.3.2 Key Strategies

Along with existing land uses and transit system performance considerations, the TFAP process examined the short and medium-range community development directions for the City of Chilliwack and FVRD. The TFAP is explicitly linked to and informed by many key planning documents and policies, as well as broader regional aspirations that strongly influence transportation movements.

Key local planning documents from the City of Chilliwack guiding the development of this TFAP include:

- City of Chilliwack 2040 Official Community Plan (2015)
- City of Chilliwack Transportation Plan Update (2018)
- City of Chilliwack Integrated Air Quality, Energy and Greenhouse Gas Community Action Plan (2011)

The City of Chilliwack Official Community Plan recognizes that healthy community development gives priority to transit development, cycling, walking, and reducing automobile traffic within and without the City. For the short to medium term, the automobile will continue to be the dominant mode of transportation and the City's road capacity will be under pressure to expand – but only to the physical limits afforded by the urban corridor and road design improvements. As the capacity shortfall will have to be filled by public transit, cycling and walking, it is essential for the City to recognize the importance of alternative transportation, and in the long term achieve a pragmatic balance among the various transportation modes.

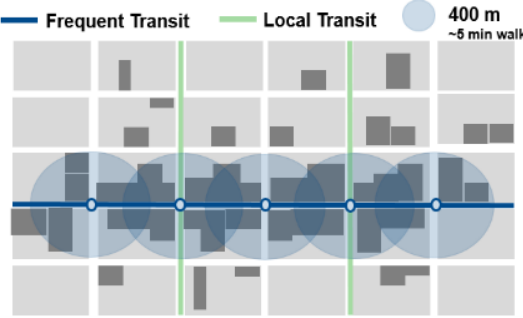


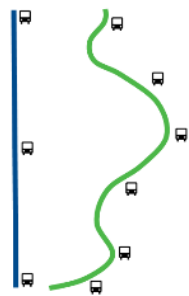

Improving local transit service and regional connections to reduce reliance on passenger vehicles is one of the key actions Chilliwack can take for reducing greenhouse gas emissions and improving air quality.

5.3.3 Transit Service Principles

Design Principles

To meet the goals of the TFAP, this plan proposes to make improvements to the transit system so that is more convenient and more cost-effective for potential transit users. To accomplish this, the plan proposes to streamline service to support the development of a frequent transit network along high-density corridors and local transit service to lower density areas with moderate transit demand.

The guiding design principles used to develop and refine routes for this TFAP are shown in figure 12:

Design Principle	Description
<p>Service Areas of Demand</p> 	<p>Transit service is most productive by providing service to areas with high demand. The City of Chilliwack TFP affirms that transit service should be focused on major activity centers and residential areas within urban areas to increase ridership.</p>
<p>Connections to Regional Centres</p> 	<p>Transit is most useful when it connects residents to regional centres. Concentrating mixed-used development along transit corridors will ensure consistent and high ridership.</p>
<p>Simplify Routes</p> 	<p>Routes that are as direct and consistent as possible are more likely to increase ridership. This helps ensure route legibility, which refers to how easy a service is to understand and remember.</p>
<p>Improve Speed and Reliability</p> 	<p>To be competitive with the automobile, transit travel time must be competitive. Spacing bus stops appropriately along a corridor can improve speed and reliability. Transit priority measures, such as queue jumper lanes or transit signal priority also improve speed and reliability.</p>
<p>Avoid Service Duplication</p> 	<p>Transit service should operate on different corridors so routes do not duplicate or compete for passengers. Routes that overlap reduce ridership on each route.</p>

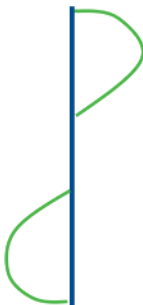
Design Principle	Description
<div><div><div><div></div><div>Frequent Transit</div></div><div><div></div><div>Local Transit</div></div></div><div></div></div>	<p>Standardizing service categories allows for predictability of service. Both frequencies and span of service are consistent, increasing customer legibility.</p>

Figure 12: Principles of transit service design

5.3.4 Transit Future Network

The 2012 Chilliwack Area TFP identified three layers of service that are designed to efficiently and effectively move people. These layers include the Frequent Transit Network, the Local Transit Network, and Targeted Service.

The Frequent and Local Transit Network can be seen in figure 14.

Frequent Transit Network (FTN)

Frequent routes that operate at a 15 minute frequency over a select span of service. Routes generally operate on arterial roads, service corridors with mixed land use and provide connections between urban centres.

Local Transit Network (LTN)

Local routes generally serve less densely populated areas with a focus on connections to local centres and to frequent transit routes.

Targeted Services

Targeted routes are created to provide service to specific areas such as schools, universities, and/or peak commuter trips.

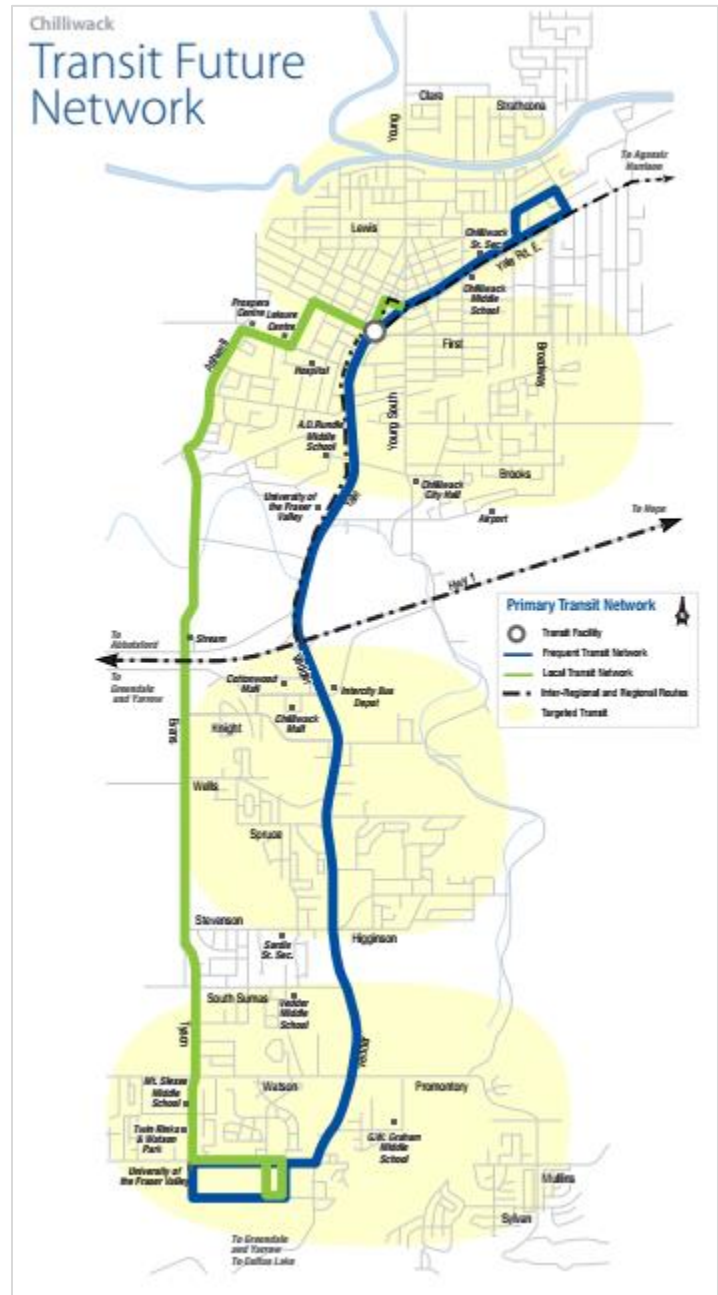


Figure 14: Transit Future Network from 2012 TFP

5.3.5 Transit Future Mode Share Targets

The TFP identified an overall transit mode share target of two percent by 2036, to increase from 491,000 annual rides in 2012 to 1.9 million rides in 2036. Ambitious mode share targets help to guide the service changes in the short, medium and long term. Investments made in the Chilliwack and FVRD over the last eight years have delivered a strong growth in transit ridership with over 1 million rides recorded in 2019/2020 and fueled the appetite for achieving a higher mode share for transit ridership by 2040.

Statistics from the 2021 Census, which examines mode shares of the journey-to-work, show a 1.6 per cent transit mode share for the City of Chilliwack (census subdivision), providing further evidence to support a lift in the mode share target.

Moving forward, this plan suggests a revised transit mode share target of three percent by 2040.

To reach a three per cent transit mode share by 2040, the Chilliwack transit service would need an investment of 69,000 additional hours, equating to a total of 110,161 annual hours by 2040*. Each year, on average, it is estimated this would require the addition of 3,500 to 4,000 annualized service hours and approximately two to three buses. This TFAP provides the scenarios for the short-, medium-, and longer-term service and infrastructure improvements to support this annualized service hour growth.**

**Assumes a municipal population of 131,670 by 2040 that rides per service hour will remain consistent or higher.*

*** Note: Additional buses may be required beyond the 1 to 2 peak expansion buses listed above to maintain the required spare ratio. The fleet department, through the three-year TIP process, will confirm bus numbers.*

5.4 Transit Performance

5.4.1 Average Daily Ridership (weekdays)

About 70 per cent of fixed schedule ridership across the Chilliwack and FVRD Transit Systems occurs within the nine local routes of the Chilliwack Conventional System. Figure 16 shows how ridership is distributed between these nine conventional routes. The majority of total ridership occurs on 51 Vedder, which is the designated future Frequent Transit Route (FTN) of the Chilliwack transit system and provides more frequent service along high density corridors, averaging 1,655 rides per weekday.

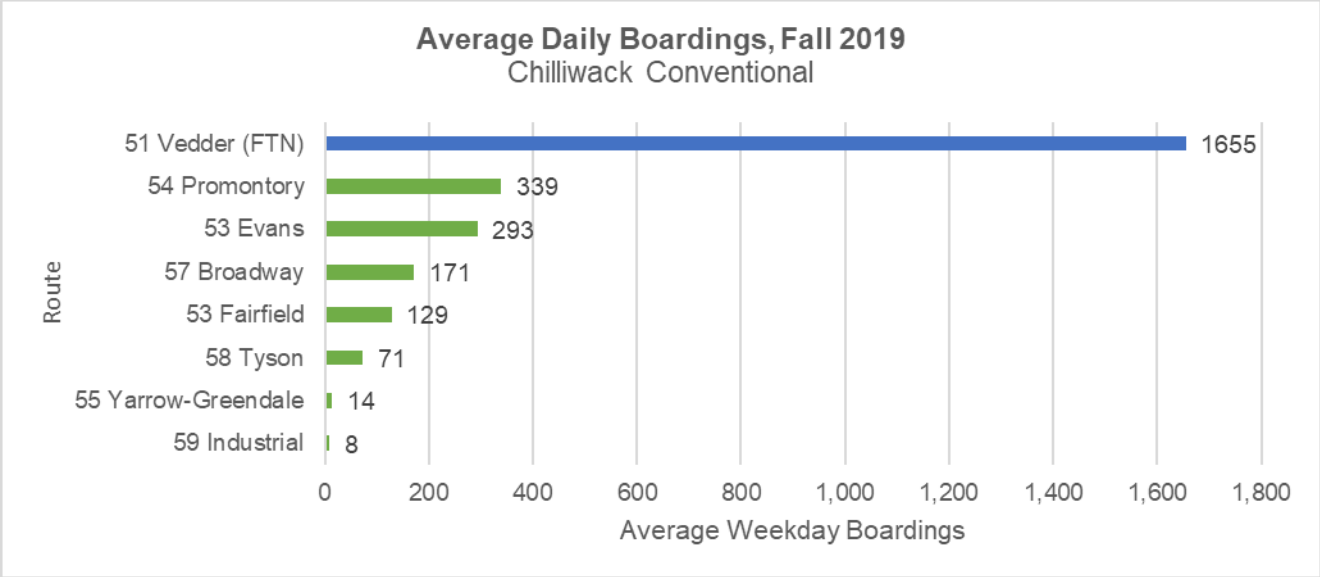


Figure 16: Chilliwack Conventional Transit, average weekday ridership by route, fall 2019

5.4.2 Productivity

Route productivity is a measure of how many boardings are made on a route relative to the hours of service that the route operates. The units reported are boardings per hour. This measure is valuable because it illustrates the passenger demand for service more effectively than total boardings. Additionally, by using industry standards as guidelines, this measure can indicate when routes are nearing capacity or may have surplus capacity.

Figure 17 shows productivity of the Chilliwack conventional system. 51 Vedder is the most productive route, operating at about 35.8 boardings per hour. This is typical of FTN and higher order routes. The next most productive route is 52 Evans – operating at 29.5 rides per hour –nearly twice that of the next lower routes.

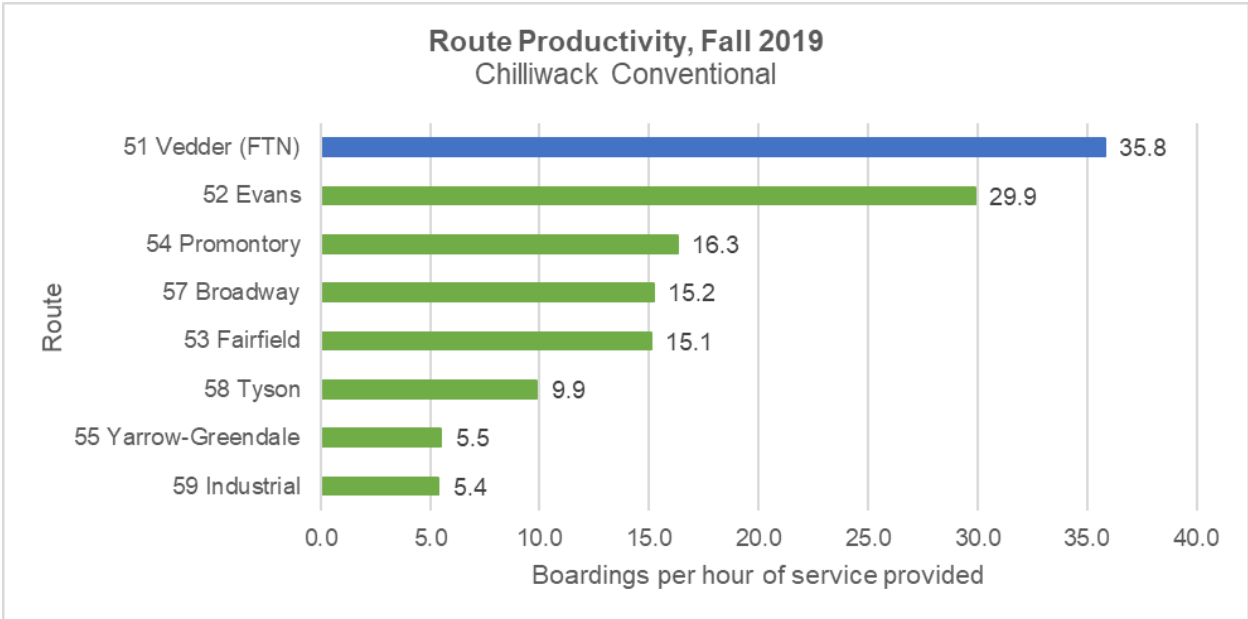


Figure 17: Chilliwack Conventional Transit, average weekday productivity by route, fall 2019

5.4.3 On Time Performance

On-time performance, or schedule adherence, is a measure of how often a bus arrives at a timing point very early, early, on-time, late, or very late. BC Transit defines those time periods as follows:

- **Very early:** More than three minutes early
- **Early:** Between one minute early and three minutes early
- **On-time:** Between one minute early and three minutes late
- **Late:** Between three minutes late and six minutes late
- **Very late:** More than six minutes late

On-time performance varies by route, time of day, and time of year as transportation patterns change. Figures 18 following shows the on-time performance for the Chilliwack Conventional System in the fall of 2019. The Chilliwack Transit System has not adopted a target for on-time performance, these will be developed as part of the revised system and route performance guidelines.

Industry best practice recommends that service hours be increased by one per cent annually, to invest in system on-time performance and schedule reliability as a response to increasing urban congestion and population. The Chilliwack Transit System currently provides approximately 41,000 annual service hours for transit; applying this 1 per cent increase would work out to an expansion of 410 annual service hours specifically dedicated towards on time performance measures.

On time performance improvement priorities will be identified regularly through the Annual Performance Summary (APS) process. Each service expansion will include a recommendation on whether or not on-time performance measures are required.

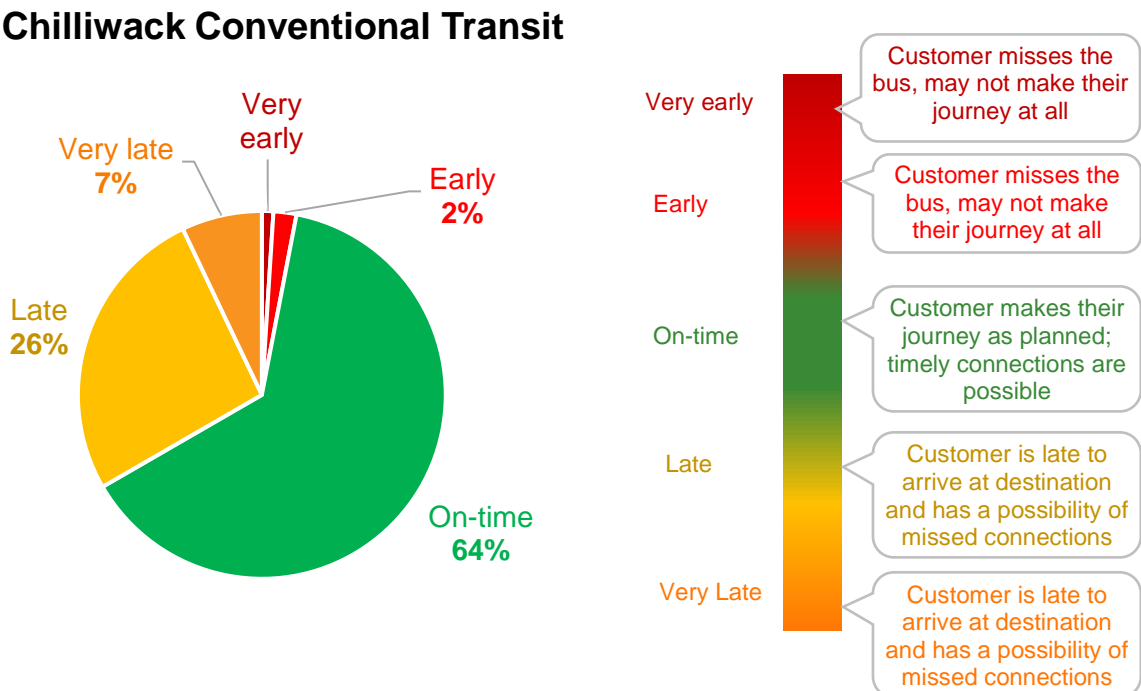


Figure 18: Chilliwack Area conventional transit on-time performance Fall 2019

5.5 Conventional Service Change Proposals

The following sections outline the proposed service improvements to the Chilliwack Transit System and the improvements and expansions.

The specific proposals have also been organized into three time periods:

- Short-Term: Next 1-3 years
- Medium-Term: Next 3-4 years
- Longer-Term: 5 years and beyond

All resource impacts for short-term and medium-term proposals presented are based on annual figures. Longer-term options are outlined as concepts considering estimates for these items may change substantially with community growth patterns, evolving technology and changing mode share targets. Due to the impact of COVID-19, these timeframes for implementation are subject to change based on demand and availability of funding.

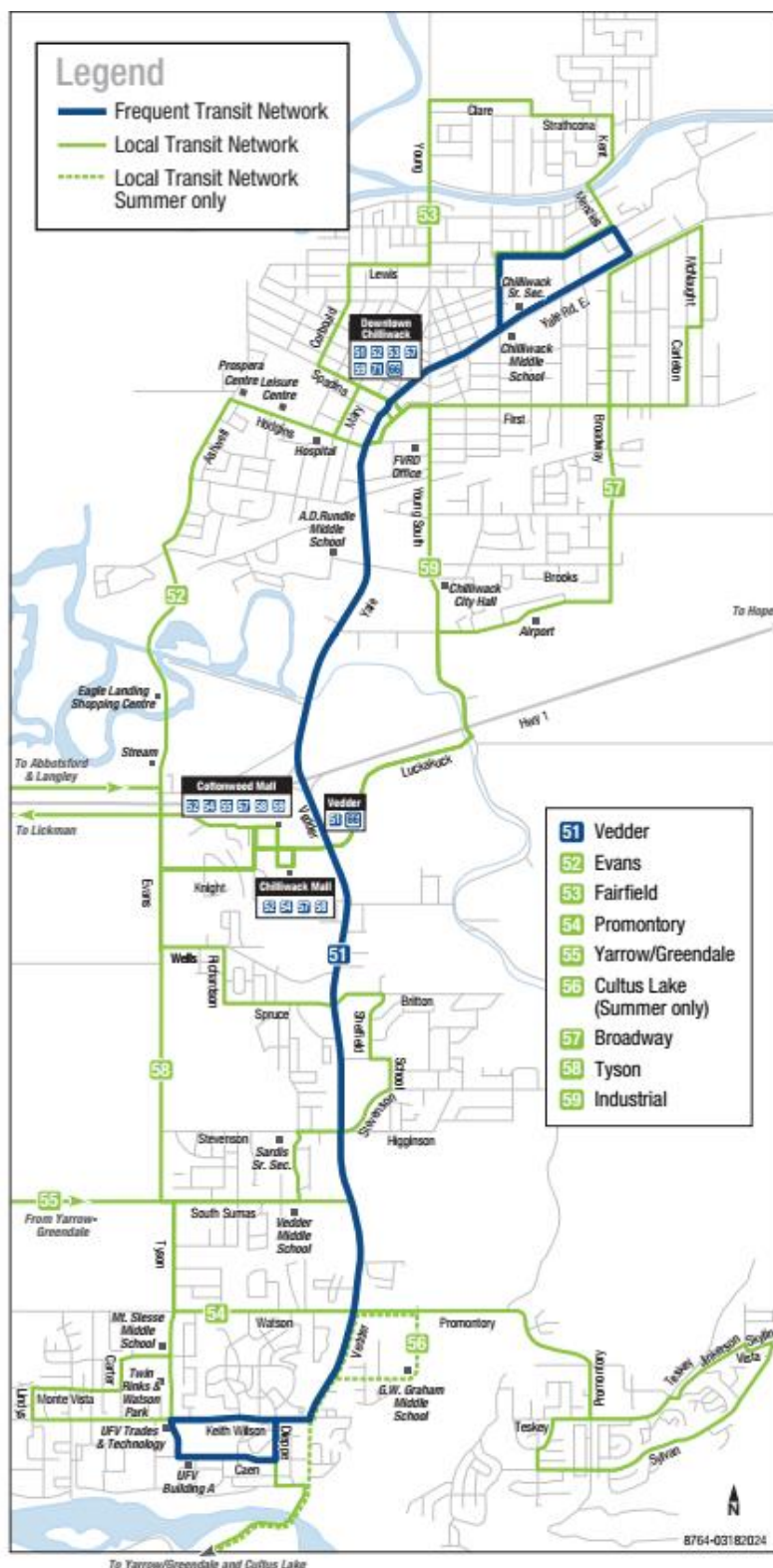


Figure 19: Chilliwack Conventional Transit Future Network

Table 12: Short-Term Implementation Priorities

Short-Term Implementation Priorities (1-3 years)						
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses **		
1	51 Vedder FTN	Improve Sunday service frequency from 60 minutes to 30 minutes.	900	2		
	52 Evans LTN	Improve weekday and Saturday service frequency from 60 minutes to 45 minutes	1,500			
	57 Broadway LTN	Improve weekday and Saturday service frequency to 60 minutes	700			
	58 Tyson LTN	Improve weekday and Saturday service frequency to 60 minutes.	400			
	54 Promontory LTN	Add one additional trip on weekdays at peak afternoon time to address high demand	420			
		Improve Saturday service	260			
	Chilliwack System Service Package 1 Total			4,200	2	
2	51 Vedder FTN	Improve weekday service frequency to 15 minutes between 7:00 a.m. and 6:00 p.m.	2,200	1		
	52 Evans LTN 53 Fairfield LTN 54 Promontory LTN 57 Broadway LTN 58 Tyson LTN	Improve weekend service span by approximately two hours in the morning and one hour in the evening.	2,000			
	Chilliwack System Service Package 2 Total				4,200	1
	3	51 Vedder FTN	Improve weekend service span to 6:00 to 12:00 a.m. on Saturdays and 7:40 a.m. to 10:15 p.m. on Sundays.		1,100	1
		Modify 55 Yarrow and 59 Industrial	Restructure and convert from four to five loops trips, with a midday direction change		280	
NEW ROUTE Downtown to Malls via Young		Replace the northeastern section of Route 59; schedule in better alignment with community needs	810			
NEW ROUTE		Introduce service to First Nation communities along Chilliwack River Road and Knight Road.	2,000 (TBC)*			
Chilliwack System Service Package 3 Total			4,200	1		
TOTAL			12,600	4		

Note:

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

Table 13: Medium-Term Implementation Priorities

City of Chilliwack: Medium-Term Implementation Priorities (3-5 years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses **
4	NEW ROUTE 60 UFV/DT via Eagle Landing Parkway <i>In lieu of the integration of route 52 and 58.</i>	New route connecting the Webster Road Area with Downtown Chilliwack via Eagle Landing Parkway. Seven weekday round trips to start	3,440	2
		Six round trips on Saturday.	720	
	Chilliwack System Service Package 4		Total	4,200
5	51 Vedder FTN	Improve weekday evening service frequency from 60 minutes to 30 minutes.	1,450	0
	52 Evans 53 Fairfield 54 Promontory 57 Broadway 58 Tyson	Improve weekend service span by approximately two hours in the morning and one hour in the evening.	2,350	
	Realign 53 Fairfield LTN	Consider realigning the route to extend to south Young and terminate at Cottonwood. Maintain current resources but reduce the frequency to accommodate the longer running time.	TBD	
	60 UFV/DT via Eagle Landing Parkway	Extend the Friday and Saturday service spans by one trip each	400	
	Chilliwack System Service Package 5		Total	4,200
TOTAL			8,400	2

Note:

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

Table 14: Long-Term Implementation Priorities

City of Chilliwack: Long-Term Implementation Priorities (5+ years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
6	60 UFV/DT via Eagle Landing Parkway	Increase weekdays to hourly service and extend to 9 pm	3,440	2
		Introduce on Sundays and extend Saturdays later	720	
	Chilliwack System Service Package 6 Total		4,200	2

City of Chilliwack: Long-Term Implementation Priorities (5+ years)				
Service Package	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
7	51 Vedder FTN	Improve Saturday service frequency to 15 minutes from 7:00 a.m. to 6:00 p.m.	1,100	1
		Improve Sunday service frequency to 20 minutes from 7:00 a.m. to 6:00 p.m.	1,000	
	52 Evans and or 60 UFV/DTN via Eagle Landing Parkway	Improve weekday peak service frequency	2,200	
	Chilliwack System Service Package 7 Total		4,200	1
8	60 UFV/DT via Eagle Landing Parkway	Weekdays: Introduce 30 minutes service at peak times	3,440	2
	54 Promontory LTN	Consider future routing restructure in alignment with the exchange development in South Chilliwack.	TBD	TBD
	57 Broadway LTN	Consider future routing restructure in alignment with exchange development in South Chilliwack.	TBD	
	58 Tyson LTN	Consider future routing restructure in alignment with exchange development in South Chilliwack and ridership on Route 60	TBD	
Chilliwack System Service Package 8 Total			3,440	2
TOTAL			11,740	5

5.5.1 Short-Term Implementation Priorities

These short-term transit proposals address operational, reliability, and customer concerns, and as such are presented for consideration in the short-term over the next one to three years. Further engagement will be held at the discretion of the City of Chilliwack for any route modifications.

Service Package 1

This service package includes expansions to four routes with the primary purpose being to support the increased frequency on the FTN 51 Vedder and busiest local route 52 Evans.

51 Vedder

Improve Sunday Service Frequency – Increase service frequency from 60 minutes to 30 minutes. Identified as a priority in the Transit Future Plan and supported by ridership data.

52 Evans

Improve Weekday and Saturday Service Frequency – Increase service frequency from 60 minutes to 45 minutes on weekdays and Saturday, and increase the span on Saturday by one to two trips in the morning. Current ridership supports increasing level of service.

57 Broadway

Improve Weekday and Saturday Service Frequency – Increase service frequency to 60 minutes on weekdays and Saturdays. Required for future network considerations.

58 Tyson

Improve Weekday and Saturday Service Frequency – Increase service frequency to 60 minutes on weekdays and Saturdays. Required for the improvements to 52 Evans.

54 Promontory

Address high weekday afternoon demand; improve Saturday service – Add one additional trip on weekdays at peak afternoon time; extend the Saturday span by one trip in the morning and one in the afternoon.

Table 15: Resources required for Chilliwack System -Service Package 1

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
51 Vedder FTN	Sunday	900	30 minutes (30 minutes)	9:15 a.m. – 6:15 p.m.	0
52 Evans LTN	Weekday	1,500	45 minutes (45 minutes)	7:00 a.m. – 10:30 p.m.	1
	Saturday			8:30 a.m. – 10:30 p.m.	
57 Broadway LTN	Weekday	700	60 minutes (60 minutes)	5:45 a.m. – 10:00 p.m.	0
	Saturday			9:30 a.m. – 10:00 p.m.	
58 Tyson LTN	Weekday	400	60 minutes (60 minutes)	5:30 a.m. – 9:30 p.m.	0
	Saturday			9:00 a.m. – 9:30 p.m.	
54 Promontory LTN	Weekday	420	60 minutes (60 minutes)	5:30 a.m. – 10:30 p.m.	1
	Saturday	260		8:30 a.m. – 10:30 p.m.	
Total	-	4,200	-	-	2

Service Package 2

This service package achieves the optimal FTN status for the 51 Vedder by making service frequency 15 minutes from 7:00 a.m. to 6:00 p.m. In addition to this, the weekend service span on local routes will be increased in order to improve access to the FTN as well as employment and leisure opportunities.

51 Vedder (FTN)

Improve Weekday Service Frequency – Increase service frequency on weekdays to 15 minutes from 7:00 a.m. to 6:00 p.m. Identified as a priority in the Transit Future Plan and supported by ridership data.

LTN Routes: 52 Evans, 53 Fairfield, 54 Promontory, 57 Broadway, and 58 Tyson

Improve Weekend Service Span – Increase the service span on weekends by operating approximately two hours earlier and one hour later. Identified as a priority in the Transit Future Plan and supported by public engagement.

Table 16: Resources required for Chilliwack System-Service Package 2

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
51 Vedder FTN	Weekday	2,200	15 minutes (20-60 minutes)	6:15 a.m. – 11:15 p.m.	1
52 Evans LTN	Saturday	2,000 ¹	45 minutes (45 minutes)	7:00 a.m. - 11:30 p.m.	0
	Sunday		60 minutes (60 minutes)	7:00 a.m. – 7:15 p.m.	0
53 Fairfield LTN	Saturday	2,000 ¹	40 minutes (40 minutes)	7:00 a.m. – 10:30 p.m.	0
	Sunday		60 minutes (60 minutes)	7:00 a.m. – 7:15 p.m.	
54 Promontory LTN	Saturday	2,000 ¹	60 minutes (70 minutes)	7:00 a.m. – 12:00 a.m.	0
	Sunday		60 minutes (70 minutes)	7:00 a.m. – 7:45 p.m.	
57 Broadway LTN	Saturday	2,000 ¹	60 minutes (60 minutes)	7:30 a.m. – 11:00 p.m.	0
	Sunday		60 minutes (60 minutes)	7:30 a.m. – 7:00 p.m.	
58 Tyson LTN	Saturday	2,000 ¹	60 minutes (60 minutes)	7:00 a.m. – 10:30 p.m.	0
	Sunday		60 minutes (60 minutes)	7:00 a.m. – 7:45 p.m.	
Total	-	4,200	-	-	1

¹Shared between other weekday service span improvements.

Service Package 3

This service package increases the span of service on weekends of the FTN - the current span of service was identified as a barrier to transit use through public engagement. Additionally, this package includes a route restructure and modest expansion for underperforming routes in order to improve efficiency and service; this restructure includes introduction of a new route connecting downtown with Cottonwood Mall. Finally, this service package introduces a new route to provide service to local First Nation communities.

51 Vedder (FTN)

Improve Weekend Service – Increase the service span on Saturdays to 6:00 a.m. to 12:00 a.m. with 30 minute service frequency from 6:00 a.m. to 10:00 p.m. and 60 minute service frequency from 10:00 p.m. to 12:00 a.m. Increase the Sunday service span from 7:40 a.m. to 10:15 p.m. Identified as a priority in the Transit Future Plan and supported by public engagement.

55 Yarrow and 59 Industrial – Restructure

Restructure and combine these routes; add one additional trip. Ridership on routes 55 and 59 is poor. Instead of discontinuing and reallocating the service, the routes will be restructured in an effort to improve their utility with a modest expansion. This restructure will result in an interlined route 9 and 5 combination that will intersect with 51 Vedder, and travel in a counterclockwise direction in the morning and clockwise direction in the afternoon. Resources saved by directional travel will enable the introduction of a 5th midday trip. See figure 20 for a visual concept.

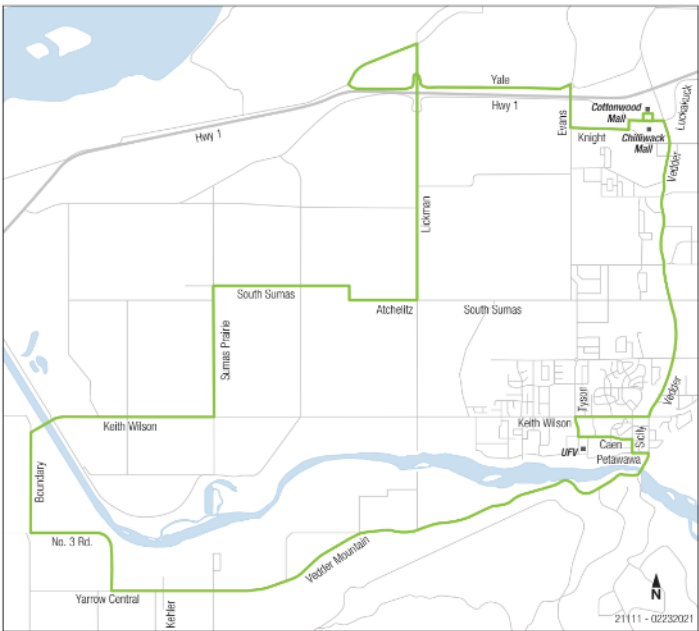


Figure 20: The concept alignment for the restructured Route 55 and 59 combo.

New Route- serving Young South and Luckakuck

Replaces portion of Route 59 - This new route will replace service removed in this corridor owing to the restructure of routes 55 and 59. This separation of service will enable the new route to operate in better alignment with the demand profile of this corridor.

New Route - serving Chilliwack River Road and Knight Road

Introduce Service to Chilliwack River Road and Knight Road – A new transit service for the communities on Chilliwack River Road and Knight Road. Identified as a priority through the public engagement, however additional engagement is required to determine where exactly this new route will go. Resources required to be determined, but are expected to require approximately 2000 annual service hours. There is a strong possibility of greater efficiencies by combining this new route with the one described above.

Table 17: Resources required for Chilliwack System -Service Package 3.

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses
51 Vedder FTN	Saturday	1,100	30 minutes (60 minutes)	6:00 a.m. – 12:00 a.m.	0
	Sunday		30 minutes (30 minutes)	7:40 a.m. – 10:15 p.m.	

55 Yarrow and 59 Industrial	Weekdays	280	TBD	6:30 a.m. – 6:30 p.m.	0
New Route <i>Young South and Luckakuck</i>	TBD	810	TBD	TBD	1
New Route <i>Chilliwack River Road and Knight Road</i>	All Days	2,000	TBD	TBD	
Total	-	4,200	-	-	1

5.5.2 Medium-Term Service Proposals (3-5 years)

The following section outlines proposals and costs for the consideration in the medium-term over the next three to four years.

Service Package 4

This service package introduces service for residents of the densely populated and rapidly growing Webster Road area to high demand destinations in Chilliwack. Originally identified in 2012, this route is anticipated to be highly effective and a rapid development is suggested.

New Route - 60 UFV/Downtown via Webster Road and Eagle Landing Parkway

Introduce new weekday and Saturday service between UFV and downtown which routes through the Webster Road area, and travels north on Evans passing by Eagle Landing Parkway before terminating in Downtown Chilliwack. Begin with seven trips on weekdays and six trips on Saturdays.

Table 18: Estimated resources required for Chilliwack System service package 4

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
New Route 60 UFV/Downtown <i>via Eagle Landing Parkway LTN</i>	Weekday	3,440	90 minutes (90 minutes)	7:30 a.m. – 18:00 p.m.	2
	Saturday	720	90 minutes (90 minutes)	9:00 a.m. – 18:00 p.m.	
Total	-	4,200	-	-	0

Service Package 5

This service package improves the service span on the busiest routes on weekends and weekday evening service frequency on 51 Vedder. These changes were identified through public engagement and further supported by the high ridership on the routes.

51 Vedder (FTN)

Improve Weekday Evening Service Frequency – Increase the service frequency on weekday evenings from 60 minutes to 30 minutes. Identified as a priority in the Transit Future Plan and supported by ridership data.

60 UFV/Downtown via Webster Road and Eagle Landing

Improvements to the evening span Extend service spans by one trip each.

53 Fairfield

Realignment – Consider realigning the route to extend to south Young and terminate at Cottonwood. Maintain current resources, but reduce the frequency to accommodate the longer running time. Ridership does not support current level of service.

LTN Routes: 52 Evans, 53 Fairfield, 54 Promontory, 57 Broadway, and 58 Tyson

Improve Weekday Service Span – Increase the weekday service span by operating approximately one hour earlier to meet the earlier 66 Fraser Valley Express trips. Medium-term priority. Identified as a priority in the Transit Future Plan and supported by public engagement.

Table 19: Estimated resources required for Chilliwack System service package 5

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
51 Vedder FTN	Weekday	1,450	15 minutes (30 minutes)	6:15 a.m. – 11:15 p.m.	0
60 UFV/Downtown <i>via Eagle Landing Parkway LTN</i>	Weekday	1,000	90 minutes (90 minutes)	7:30 a.m. – 19:30 p.m.	0
	Saturday	200	90 minutes (90 minutes)	9:00 a.m. – 19:30 p.m.	
53 Fairfield LTN	All trips	-	-	6:00 a.m. – 10:30 p.m.-	0
52 Evans LTN	Weekday	1,550 ¹	45 minutes (45 minutes)	5:30 a.m. – 10:30 p.m.	0
54 Promontory LTN	Weekday	1,550 ¹	60 minutes (60 minutes)	5:30 a.m. – 10:30 p.m.	
57 Broadway LTN	Weekday	1,550 ¹	60 minutes (60 minutes)	5:30 a.m. – 10:30 p.m.	
58 Tyson LTN	Weekday	1,550 ¹	60 minutes (60 minutes)	5:30 a.m. – 10:30 p.m.	
Total	-	4,200	-	-	0

¹Shared between other weekday service span improvements.

Service Package 6

This service package further develops the previously created Route 60, which connects the dense and rapidly growing Webster Road area to high demand destinations in Chilliwack. Originally identified in 2012 this route is anticipated to be highly effective and rapid development is suggested.

60 UFV/Downtown *via Webster Road and Eagle Landing*

Improve frequency on weekdays, improve span on weekdays and Saturdays and introduce on Sundays.

Table 20: Estimated resources required for Chilliwack System service package 6

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
60 UFV/Downtown <i>via Eagle Landing Parkway LTN</i>	Weekday	3,440	60 minutes (60 minutes)	7:30 a.m. – 21:00 p.m.	2
	Saturday	720	90 minutes (90 minutes)	9:00 a.m. – 19:30 p.m.	
	Sunday		90 minutes (90 minutes)	9:00 a.m. – 17:00 p.m.	
Total	-	4,200	-	-	2

5.5.3 Long-Term Service Proposals (5 years and beyond)

The following section outlines the proposal and costs for the consideration in the long-term.

Service Package 7

This service package develops the core routes within Chilliwack expanding 15 minutes service to weekends on the FTN.

51 Vedder (FTN)

Improve Saturday Service Frequency – Increase Saturday service frequency to 15 minutes from 7:00 a.m. to 6:00 p.m. Identified as a priority in the Transit Future Plan and supported by ridership data.

Improve Sunday Service Frequency – Increase Sunday service frequency to 20 minutes from 7:00 a.m. to 6:00 p.m. Supported by projected ridership data.

52 Evans (LTN) and or 60 UFV/Downtown (LTN)

Improve Weekday Peak Service Frequency – Increase weekday service frequency during the peak hours. Identified as a priority in the Transit Future Plan. The allocation of hours between Routes 52 and 60 will be determined based on ridership data.

Table 21: Estimated resources required for service package 7

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
51 Vedder FTN	Saturday	1,100	15 minutes (30 minutes)	6:00 a.m. – 12:00 a.m.	0
	Sunday	1,000	20 minutes (60 minutes)	7:40 a.m. – 10:15 p.m.	0
52 Evans and or 60 UFV/Downtown <i>via Eagle Landing Parkway LTN</i>	Weekday	2,100	20 minutes (45 minutes)	5:30 a.m. – 10:30 p.m.	1
			30 minutes (60 minutes)	7:30 a.m. – 21:00 p.m.	
Total	-	4,200	-	-	1

Service Package 8

The changes proposed in this service package are allocated to Local Transit Routes and are primarily related to the development of a new exchange in southern Chilliwack in proximity of the University of the Fraser Valley. Associated resources can be calculated after the final location of the new exchange is determined. Ridership data should be reviewed in order to identify further improvements to the Local Transit base and peak service levels.

52 Evans (LTN) and or 60 UFV/Downtown (LTN)

Improve Weekday Peak Service Frequency – Increase weekday service frequency during the peak hours. Identified as a priority in the Transit Future Plan. The allocation of hours between Routes 52 and 60 will be determined based on ridership data.

54 Promontory (LTN)

Route Restructuring – Consideration of future routing restructure in alignment with the development of the exchange in south Chilliwack. Long-term priority. Response to future network considerations. Estimated resources are to be determined based on final location of the exchange in south Chilliwack.

57 Broadway (LTN)

Route Restructuring – Consideration of future routing restructure in alignment with the development of the exchange in south Chilliwack. Required for the 52 Evans improvements. No resources are required for this service change.

58 Tyson (LTN)

Route Restructuring – Consideration of future routing restructure in alignment with the development of the exchange in south Chilliwack. Response to future network considerations. No resources are required for this service change.

Table 22: Estimated resources required for Chilliwack System-service package 8

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
52 Evans and or 60 UFV/Downtown <i>via Eagle Landing Parkway LTN</i>	Weekdays	3,440	20 minutes (45 minutes)	5:30 a.m. – 10:30 p.m.	2
	Weekdays		30 minutes (60 minutes)	7:30 a.m. – 21:00 p.m.	
54 Promontory LTN	All Days	TBD	TBD	TBD	TBD
57 Broadway LTN	All Days	TBD	TBD	TBD	TBD
58 Tyson LTN	All Days	TBD	TBD	TBD	TBD
Total	-	3,440	-	-	2

5.6 Custom Transit Proposals

5.6.1 Service Equity

A transit system should view Conventional and Custom Services holistically and not as independent systems. This means, while the service solution may vary based on a customer’s abilities, availability and cost should not differ whenever possible. Custom Services should complement Conventional Services and, therefore, should endeavor to be available during all hours of the system.

5.6.2 Access to Custom service

Access to Custom should also reflect the relative boundaries of Conventional services. BC Transit recommends a policy for service boundaries, established by the American Disabilities Association, as the area within 1.5 kilometers in all directions of existing Conventional routes. This not only provides holistic equality to services, it also ensures that custom transit is servicing the same densely populated zones as Conventional. Finally, the availability of the service should enable the same spontaneous travel decisions that Conventional Services afford.

Chilliwack Conventional and Custom Service Hour Comparison:

Service Offerings	Hours of Operation	Monday-Friday: 0530 to 0000	Monday, Tues, Thurs, Fri.: 0745 to 1045	7.5 Hours
			Wednesday: 0745 - 2130	4.75 Hours
		Saturday: 0545 to 2330	Saturday: 0900 - 1700	9.75 Hours
		Sunday: 0840 to 1930	Sunday: No Service	11 Hours

Table 23: A comparison of service levels between Conventional and Custom systems

Custom Service Span Variance to Conventional

Table 23 reflects the current average service span for both Conventional and Custom Transit. In the majority of communities across the province, the Conventional Transit service span is much longer than the service span provided for Custom service and, in some cases, inconsistent by days of service. When and where possible, aligning the service span to reflect Conventional service would improve the accessibility of service for clients who are restricted to the Paratransit service options.

This table also identifies the availability of handyDART, and where available Taxi Supplement, services in comparison to Conventional service span of hours, fares and boundaries. The variance identifies the opportunity to enhance the transit services available in your community by taking a holistic approach and promoting equity within the transit system by ensuring those requiring Custom services have equal access during the same periods as those who access the Conventional services. Progressively addressing the variance first in the available days of service followed by the span of hours each day, fares and boundaries should be a priority towards the goal of equitable service. It is important to note that the Taxi Saver program in your community provides coverage beyond the hours identified for handyDART service

6.0 FVRD TRANSIT SERVICES: FVX

FVRD Transit Services are comprised of three individual transit systems with different funding partners, service areas and service types to provide transit service through the eastern Fraser Valley and on the Highway 1 corridor west to Langley and other parts of Metro Vancouver. Chapter 6 focuses exclusively on the Fraser Valley Express (FVX).

6.1 Transit Today

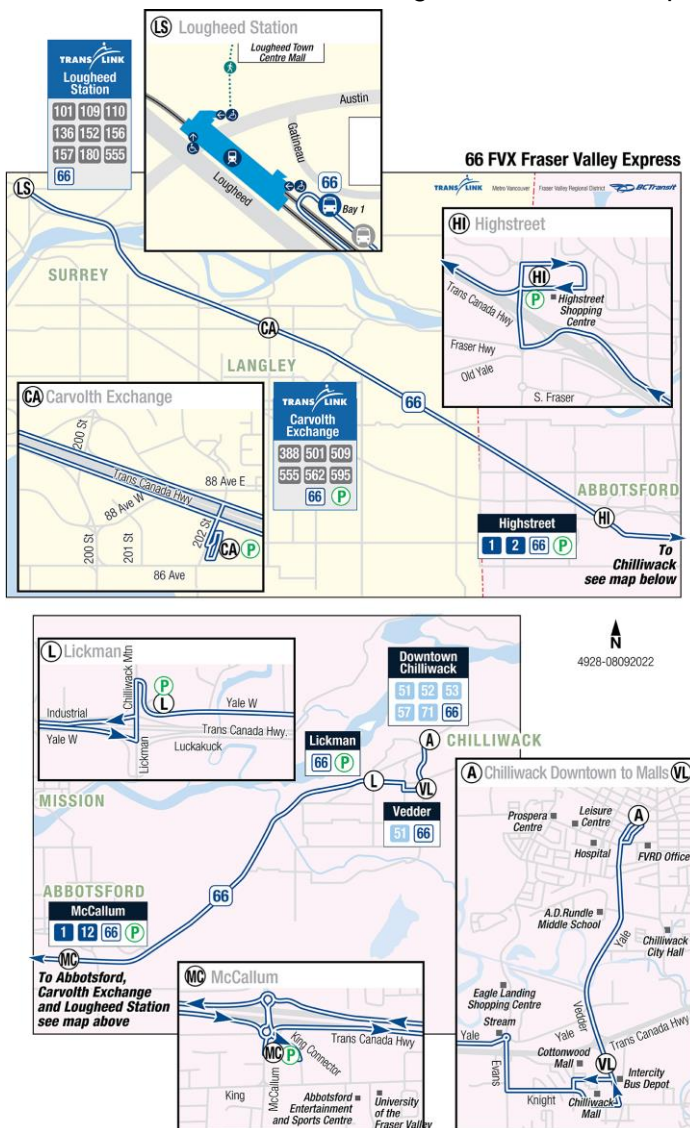
6.1.1 Fraser Valley Express Connector Transit System

The Fraser Valley Express Transit System was introduced in April 2015 and currently consists of one route – the 66 FVX, shown in figure 21. This route provides fixed-schedule limited stop interregional

transit service between exchanges in downtown Chilliwack and in Abbotsford (Fraser Valley Regional District) to and Carvolth Exchange in Langley (Metro Vancouver Regional District). By serving key exchanges, the route provides strategic connections for customers transferring from and to higher order local routes within Chilliwack Abbotsford, and Langley. Additionally, the FVX enables transit connections to regional-scale service offered by Translink.

Since implementation, annual ridership on the FVX has more than tripled rising from 72,000 to over 250,000 annual rides and underscoring the strong latent demand for this service.

Accommodating the significant future fleet to meet demand will shape the future facility and infrastructure development in the City of Chilliwack.



Fraser Valley Express Fleet

The Fraser Valley Express is provided by a fleet of 8 vehicles, all heavy-duty vehicles.

Figure 21: Route map for 66 FVX

Vehicle Type	Make	Service Type	Length	Seated Capacity (Max Capacity)	No. of Vehicles
Heavy-duty	Novabus LFS	Conventional	12.2 m (40')	32 (69)	14

Table 24: Fraser Valley Express transit fleet

6.2 Changes since the 2012 Transit Future Plan

Since 2012 FVRD Transit services have grown significantly – from only one transit system, the Agassiz-Harrison system to three transit systems:

- Agassiz-Harrison Paratransit
- Fraser Valley Express Connector
- Hope Paratransit

Of these, the introduction of the Fraser Valley Express Connector represents a key strategic step towards providing alternative modes for regional and interregional travel for both residents and visitors to the Fraser Valley. Table 25 below summarizes all of the changes.

Year	System	Service Change
2015/ 2016	FVX	New service created - 66 Fraser Valley Express launched
2017/18	FVX	Route 66 - Sunday and holiday service introduced
2018/19	FVX	Route 66 – Service doubled on weekends and holidays

Table 25: Service Change Improvements made to the Agassiz-Harrison, Hope and FVX Transit Systems since 2012

6.3 Developing Transit Future Action Plan Service Changes

6.3.1 Informing the Plan

BC Transit has worked with FVRD local government staff to develop the TFAP to prioritize transit improvements that build upon and are informed by the TFP, existing and proposed land uses, the community's demographic composition, public input through public engagement (see section 4.0), and transit industry standards. Supporting work that contributed to this plan is summarized below.

6.3.2 Key Strategies

The TFAP is explicitly linked to and informed by broader regional strategies and aspirations that strongly influence transportation movements.

Key local planning documents from the FVRD guiding the development of this TFAP include:

- FVRD Regional Growth Strategy
- FVRD Strategic Plan 2014-2018
- TransLink Travel Diary Survey (2017)

Municipal Official Community Plans and transportation plans within the region also provide important objectives and support for transit initiatives.

The FVRD Regional Growth Strategy, being updated in 2021 is the regional blueprint for coordinating strategic land use, parks, housing and transportation. Strategies focus on concentrating growth and development in a compact and sustainable manner, to direct the efficient delivery of community infrastructure, housing and transportation. Directions for transit include working regionally towards more reliable and accessible transit, core transit corridors, and better provision of transit infrastructure and bus stop amenities.

Several ongoing initiatives within the Lower Mainland will also influence the direction of transportation in the Fraser Valley, including TransLink's regional transportation strategy update *TransLink 2050*, as well as *Metro 2050*, Metro Vancouver's upcoming growth strategy. Major infrastructure upgrades on Highway 1, including transit supportive infrastructure, will increase the viability of transit long-term.

6.3.3 Transit Future Mode Share Targets

The 2012 TFP identified an overall transit mode share target for Chilliwack and the FVRD systems of two percent by 2036, to increase from 491,000 annual rides in 2012 to 1.9 million rides in 2036. Ambitious mode share targets help to guide the service changes in the short, medium and long term. Investments made in the Chilliwack and FVRD over the last eight years have delivered a strong growth in transit ridership with over 1 million rides recorded across Chilliwack and FVRD systems in 2019/2020. As systems mature, a more nuanced approach mode shares is recommended.

The FVX Connector, which connects all transit services and most communities within the FVRD accounts for over 250,000 annual rides, while the smaller Agassiz-Harrison and Hope Paratransit account for about 60,000 annual rides.

Fraser Valley Express Connector System

Statistics from the 2021 Census, which examines mode shares of the journey-to-work, show that the transit mode share of the FVRD as a whole is about 2 per cent. TransLink's 2017 Trip Diary, which examines trips made for all purposes, places the FVRD's existing overall transit mode share at 3.3 per cent.

Moving forward this plan suggests a revised transit mode share target for the Fraser Valley Express Connector of three percent by 2040.

The 2021 Census provides the proportion of journey-to-work trips from each FVRD census subdivision made to different destinations:

- Destinations within the local area
- Destinations outside of the local area, but within the FVRD
- Destinations outside of the local area and outside of the FVRD

Served by the FVX

The FVX serves journeys for all purposes that occur in the latter two destination categories. Based on the total trips from 2017 Trip Diary and the proportional distribution to different destinations from the

census, there are estimated to be 300,000 trips made per day to/from (1) destinations outside of the local area, but within the FVRD and (2) destinations outside of the local area and outside of the FVRD.

The following is a high growth scenario that will be driven by a number of factors, including:

- Completing the Lougheed Extension to reduce transfers, reduce costs and improve ease-of use for FVX passengers destined to/originating in Metro Vancouver destinations west of Langley.
- Completing Highway 1 widening to the Whatcom interchange and beyond, to accommodate transit infrastructure and increased service. This will be key to enabling transit travel times that are more auto-competitive and reliable.
- Central Fraser Valley transit system plans to establish an Abbotsford Airport route connecting to the FVX at Highstreet Mall, enabling airport access on transit for residents of both the FVRD and Metro Vancouver.
- Growing UFV interest in BC Transit services for students travelling to and from the Abbotsford campus from locations to the east and west.
 - Accommodating 2019 level of UFV shuttle riders could lift ridership by 250,000 to 400,000 rides per year
- Strong demand for transit access to Gloucester (for commuters originating in the east and west) and demand for improved transit access to Trinity Western University via Highway 1.

Servicing areas within Metro Vancouver opens an opportunity for collaboration with TransLink on the provision of the FVX service, the local share of which is currently funded by City of Abbotsford and City of Chilliwack residents/businesses.

By 2040 the population in the FVRD will have grown to approximately 449,000 and Metro Vancouver 3.56 million, for a Lower Mainland total population of just over 4 million. Based on the growth projections the number of trips (1) occurring outside of local areas but within the FVRD and (2) trips to/from outside of the FVRD will grow from about 300,000 per day to about 421,000 per day.

Accommodating 3 per cent of these journeys by transit translates to about 12,700 transit rides per weekday and necessitates an increase in weekday capacity more than sixteen times the existing FVX service. Based on high-capacity vehicles, service requirements would be 70 weekday round trips, 10 Saturday round trips, and 27 Sunday round trips.

To reach this aspirational service level by 2040, the Fraser Valley Express system would need investment of an additional 65,700 hours¹ and investment in high capacity buses by 2040 to lift rides from about 253,000 annual rides in 2019 to 2.6 million annual rides in 2040.

Every two years on average this would require the addition of about 7,300 annualized service hours and three additional buses

This TFAP provides the scenarios for the short, medium, and longer term service and infrastructure improvements to support the annualized service hour growth. The trajectory described above is an idealized high growth goal. **Actual growth of the FVX system will be determined by the regular three-year expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and subject to consultation with contributing partners.**

**Assume that the rides per service hour will remain consistent or higher.*

Note: Additional buses may be required beyond the peak expansion buses listed to maintain the required spare ratio. The fleet department, through the three-year TIP process, will confirm bus numbers.

¹ Assumes an average of 12,656 trips on weekdays, 10,125 on Saturdays; 5,063 on Sundays and a productivity of 50 rides per hour

6.3.4 COVID Recovery Investment Scenarios 2022-2027

The recommended investment trajectory in this plan is based on reaching the three per cent transit mode share of non-local journeys. Of all possible futures investment trajectory in the TFAP is a high growth scenario. Considerations shaping implementation timelines include passenger demand, availability of funding and other consideration for local transit implementations. In consideration of this, two other investment scenarios have been developed in the event that ridership demand grows slower, or demand increases more modestly than anticipated.

Scenario 1- Low Growth or Slow COVID-19 Recovery

In this scenario, growth in ridership demand is slower than it has been in the last five years (<28,000 rides/year). This scenario may occur due to longer-term impacts to ridership caused by COVID-19. This scenario assumes that the expansion to Lougheed Station will still occur and investment will be required to maintain service reliability, but other expansions will be delayed to the long-term. To accommodate the low growth and maintain capacity, the fleet dedicated to the 66 Fraser Valley Express could be up-sized from heavy duty buses to high capacity buses (subject to the garage facility).

Scenario 2 – Historic Growth

In this scenario, demand grows at a similar pace to what has happened since the service was introduced (approximately 28,000 rides/year). In the short-term the service on the 66 Fraser Valley Express will be extended to Lougheed Station and there will need to be investment to improve service reliability across the network. In the medium-term investments will focus on improvements to Saturday service. Long-term investments will seek to improve Sunday service and improve the weekday service span and frequency.

Scenario 3 – High Growth (TFAP Investment trajectory)

In the high growth scenario, demand grows faster than it has in the past (>28,000 rides/year). In this scenario, investment in the service over the next few years will be rapid to accommodate a significant increase in demand. Improving service reliability, extending service to Lougheed Station, and improving Saturday service will need to be accomplished within the next 1 to 2 years. Improving Sunday service, extending the weekday service span, and improving the weekday service frequency to 15 minutes in the peaks and 30 minutes in the off-peaks will need to be accomplished within 3-5 years. To ensure that capacity meets demand, the fleet dedicated to the 66 Fraser Valley Express should be up-sized from heavy duty buses to high capacity buses (subject to the garage facility).



Image 3: 66 FVX in Chilliwack Continued expansion of the FVX, along with the travel-time savings linked to the completion of transit priority lanes along Highway 1 will represent a solid contribution to shifting commuter mode shares and also addressing congestion problems on Highway 1.

6.4 Transit Performance

6.4.1 Average Daily Ridership

The 66 Fraser Valley Express (FVX) averages 725 rides per weekday. This represents about 5% of all weekday transit boardings (13,500) made across all transit services within the FVRD. Figure 22 below shows the FVX daily ridership in relation to the two strongest routes within the Chilliwack and CFV systems. For a relatively new route, ridership is strong, but relative to the route 1 of each of Chilliwack and CFV there is still opportunity for much further growth.

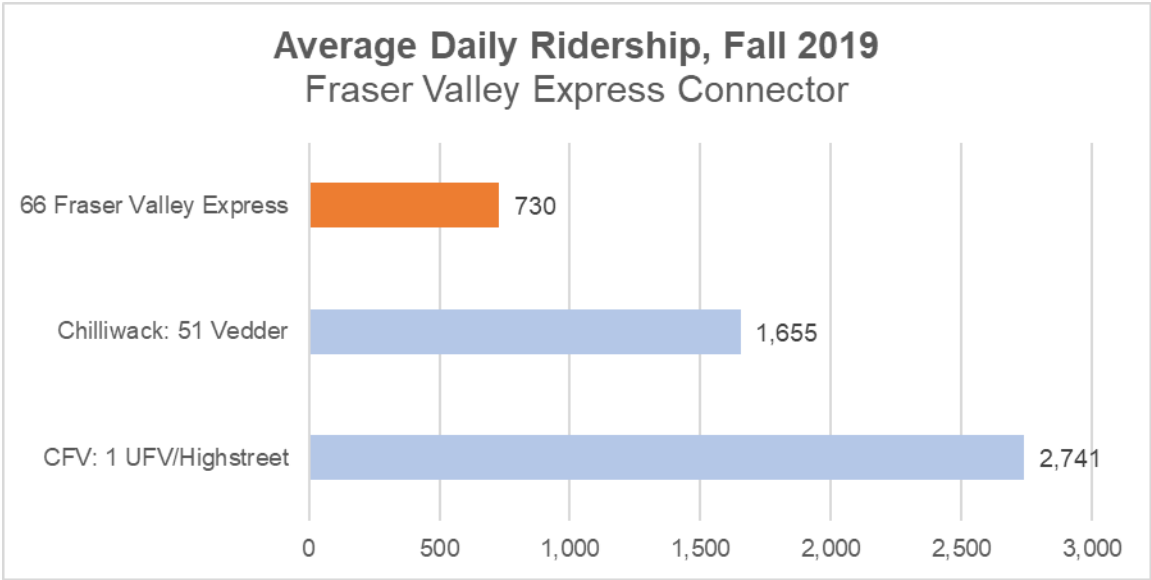


Figure 22: Fraser Valley Express, average weekday ridership, fall 2019 relative to 51 Vedder and 1 UFV/High Street

6.4.2 Route Productivity relative to Peers

Despite strong demand, owing to their long travel duration and limited passenger turnover, interregional connector routes such as the FVX typically have lower productivity than high order urban (FTN) routes such as Chilliwack's 51 Vedder or CFV's UFV/Highstreet.

If the vehicle type is a conventional heavy duty bus, the optimal productivity is about 25 boardings per hour. Figure 23 shows the productivity of the FVX relative to the productivity of BC Transit's other interregional connector and commuter systems in 2019/20. The FVX averages 17.33 boardings per hour, only slightly below the average of all systems, but about 7 boardings per hour below the optimal boardings per hour.

SYSTEM	Boardings/Hour
COWICHAN VALLEY COMMUTER	16.90
FRASER VALLEY EXPRESS	17.33
NORTH OKANAGAN CONNECTOR	25.72
SOUTH OKANAGAN CONNECTOR (year 1)	3.39
AVERAGE	18.28

Figure 23: Fraser Valley Express, average weekday productivity, BC Transit Annual Performance Summary, Actuals 2019/20

6.4.3 On-Time Performance

On-time performance, or schedule adherence, is a measure of how often a bus arrives at a timing point very early, early, on-time, late, or very late. BC Transit defines those time periods as follows:

- *Very early: More than three minutes early*
- *Early: Between one minute early and three minutes early*
- *On-time: Between one minute early and three minutes late*
- *Late: Between three minutes late and six minutes late*
- *Very late: More than six minutes late*

On-time performance varies by route, time of day, and time of year as transportation patterns change. Figure 24 following shows the on-time performance for the 66 FVX.

Industry best practice recommends that service hours be increased by one per cent annually, to invest in system on-time performance and schedule reliability as a response to increasing urban congestion and population. Broken down by individual system those hours would be approximately:

- Fraser Valley Express Connector System - 150 annual service hours

On time performance improvement priorities will be identified regularly through the Annual Performance Summary (APS) process. Each service expansion will include a recommendation on whether or not on-time performance measures are required.

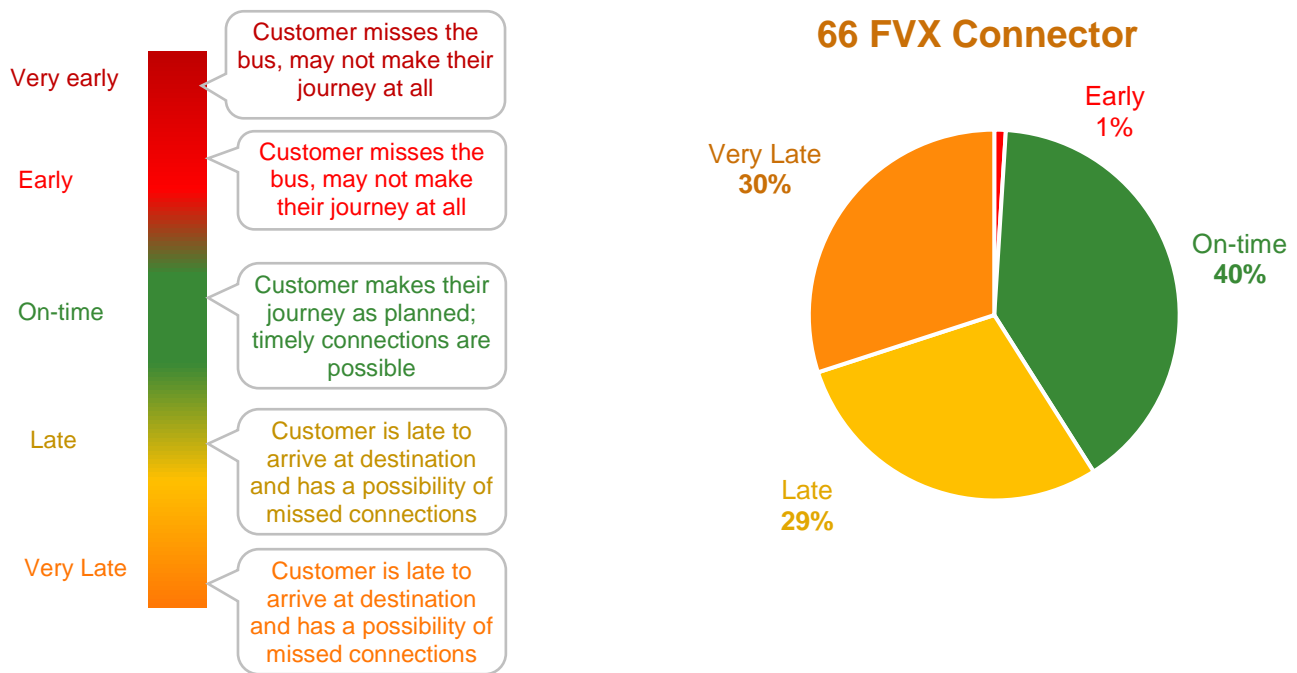


Figure 24: FVX Transit Systems transit on-time performance fall 2019

6.4.4 Maturation of FVX relative to peer Interregional Routes

Over the past 11 years, BC Transit has implemented various interregional connector and commuter systems. Some were developed in response to increased commuter demand, while others have developed in response to high mobility demands throughout the day between communities. Figure 25 shows that up to 2019/20 the FVX was tracking in close alignment with the expected ridership development.

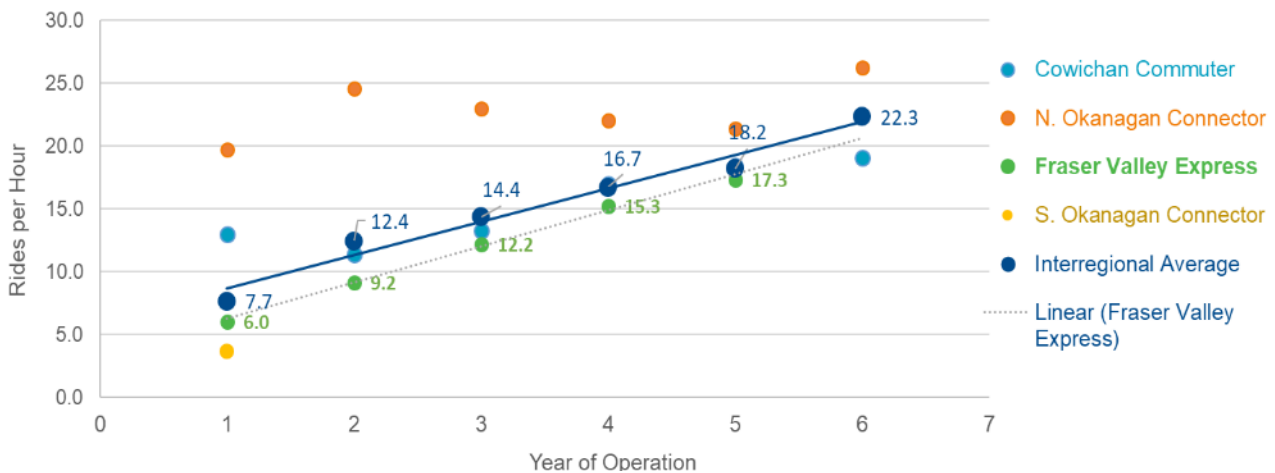


Figure 25: Service Performance as Interregional Routes Mature

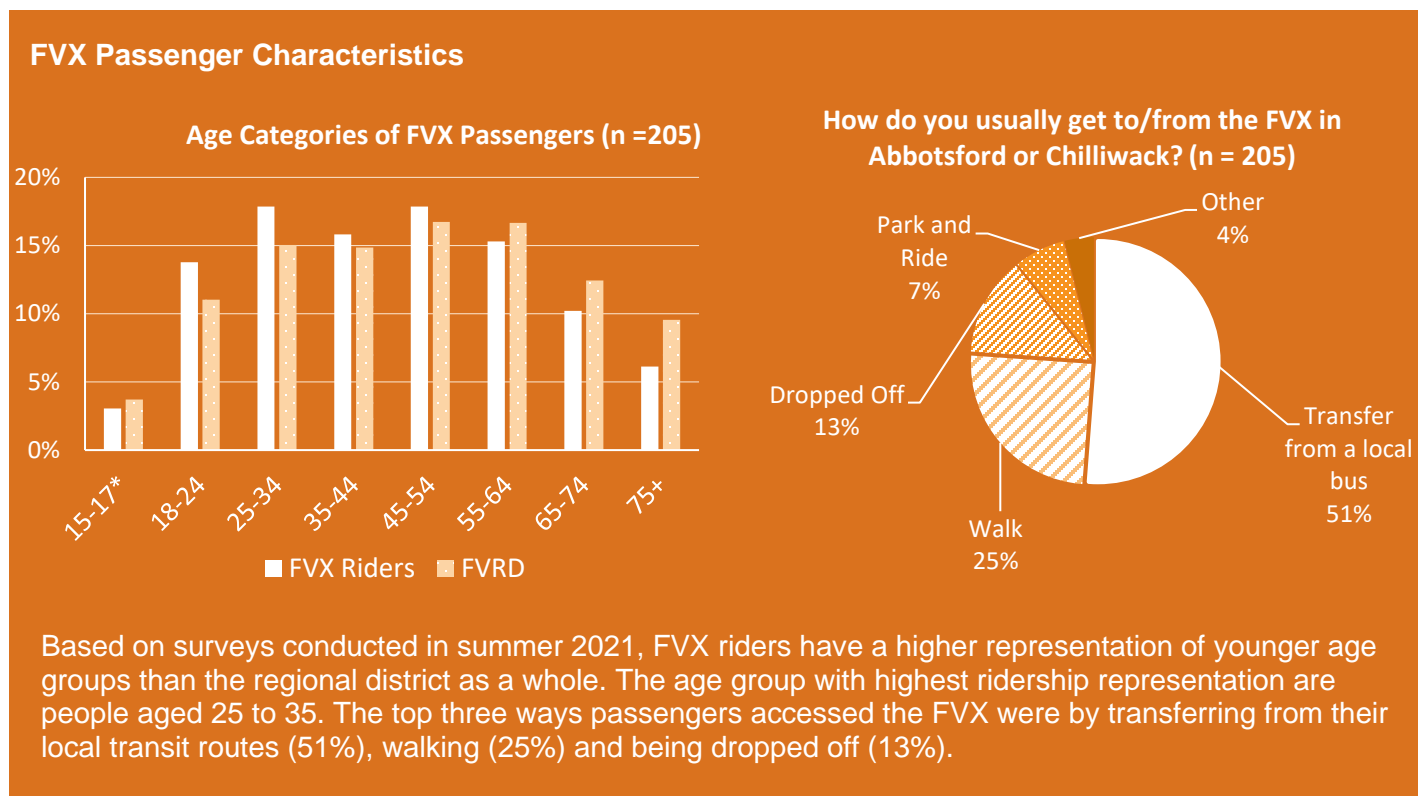


Figure 26: FVX Passenger Characteristics

6.5 Strategic and Service Proposals

The following sections outline the proposed strategic and service initiatives for the 66 Fraser Valley Express. Strategic initiatives presented below are shaped by a rapidly evolving land use and transportation landscape of the Fraser Valley. Service proposals are shaped by a three percent mode share target (high growth scenario) identified in section 6.3.3, which would necessitate an increase of 7,300 hours and about four additional vehicles every two years.

The specific proposals have also been organized into three time periods:

- Short-Term: Next 1-3 years
- Medium-Term: Next 3-4 years
- Longer-Term: 5 years and beyond

6.5.1 Summary of Strategic Initiatives Specific to the FVX

The planned extension of the FVX to Lougheed will require careful monitoring in the short-term and the emerging demand patterns should be used to shape service design of the next two to three expansions following the extension. Concurrent to this BC Transit and the FVRD should continue to work with both

student union and administration of the University of the Fraser Valley to examine opportunities to expand the UPass program to include the FVX in order to serve student travel needs from both west and east of the Abbotsford campus. BC Transit and FVRD staff will need to continue to work with MOTI, TransLink, and Langley to examine the use of the FVX to enable regional and inter-regional travelers with transit connections to Gloucester and Trinity Western University.

As the five-year mark of this TFAP approaches, BC Transit needs clarity from TransLink regarding the timelines and terminal designs for the planned City of Langley Skytrain extension. The subsequent iteration this Transit Future Action Plan will need to consider connectivity to the new Langley City Skytrain station from the FVRD, whilst taking into account MOTI changes on highway 1, potential growth of the UFV UPass Program to encompass the FVX, and other changing transit market demand factors.

These strategic initiatives should be carried out regardless of implementations but may be used to inform them.

Table 26: Short and Medium-Term Strategic Initiatives

FVRD: Short and Medium -Term Strategic Initiatives (1-5 years)			
System	Route	Description	Involves
Fraser Valley Express	66 FX CONNECTOR	Carefully monitor ridership changes in response to the FVX Lougheed Extension	-
Fraser Valley Express	66 FX CONNECTOR	Seek an exchange of fleet from urban specification buses to commuter specification vehicles with forward-facing seats	-
Fraser Valley Express	66 FVX CONNECTOR	Continue to work with both Student Union and administration of the University of the Fraser Valley to examine opportunities to expand the UPass program to include the FVX.	FVRD, UFV
Fraser Valley Express	66 FVX CONNECTOR	Work with TransLink towards improving transit user-friendliness by streamlining fare products and information	BCT, FVRD, TransLink
Fraser Valley Express	66 FVX CONNECTOR	Support MOTI as needed in the development of Transit Priority on Highway 1	MOTI

Table 27: Long Term Strategic Initiatives

FVRD: Long-Term Strategic Initiative (5+ years)		
System	Route	Description
Fraser Valley Express	66 FVX CONNECTOR	<p>UPDATE THE FVX PLAN</p> <ul style="list-style-type: none"> Review progress towards the 3 per cent mode share target Identify ways to redistribute or expand the FVX to enable connectivity to the new Skytrain station in Langley Assess trip origins and chaining patterns among existing FVX ridership and potential markets within the FVRD and examine opportunities for more direct travel options

		<ul style="list-style-type: none">• Review the Mission LATP and ensure that regional-scale travel is possible in a comprehensive manner.• Update the expansion trajectory as needed• Begin the lift to high capacity buses (subject to facility)
--	--	--



Image 4: High Capacity Fleet Vehicles. Some very high demand routes in BC Transit systems use high capacity buses. Continued expansion of the FVX, along with the travel-time savings linked to the completion of transit priority lanes along Highway 1 may lead to dramatic increases in ridership.

Service Proposals

All resource impacts for short-term and medium-term proposals presented are based on annual figures. Longer-term options are outlined as concepts considering estimates for these items may change substantially with community growth patterns, evolving technology and changing mode share targets.

These timeframes for implementation are suggestions based on a high growth scenario. Actual growth of the FVX system will be determined by the regular three-year expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and consultation with contributing partners. Considerations shaping implementation timelines include passenger demand, availability of funding and other considerations for local transit implementations.

6.5.2 Summary of

Table 28: Short-Term Implementation Priorities

FVRD: Short-Term Implementation Priorities (1-3 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Buses**
Fraser Valley Express	66 FX CONNECTOR	Extend service to Lougheed Station.	6,000	4
Fraser Valley Express	66 FVX CONNECTOR	Improvements to accommodate demand associated with the Lougheed extension, travel time reliability and pull trips	2,600	0
Fraser Valley Express	66 FVX CONNECTOR	Improvements to accommodate demand associated with the Lougheed extension, travel time reliability and pull trips	4,700	4
TOTAL			13,300	8

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Table 29: Medium-Term Implementation Priorities

FVRD: Medium-Term Implementation Priorities (3-5 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Buses**
Fraser Valley Express	66 FVX CONNECTOR	Adjust FVX service in response to completion of MOTI Highway 1 improvements from 264 th to Mount. Lehman Road.	7,300	4
		Begin introducing service frequency at 15 minutes in the peaks; continue to address travel time reliability and pull-trip needs.		
Total			7,300	4

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Table 30: Long-Term Implementation Priorities (to be adjusted in the next update of the TFAP)

FVRD: Long-Term Implementation Priorities (5+ years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Buses**
Fraser Valley Express	66 FVX CONNECTOR	Improve weekday service frequency to 15 minutes in the peaks and 30 minutes in the off-peaks	7,300	4
Fraser Valley Express	66 FVX CONNECTOR	Continue building service levels towards targets associated with the 3% mode share	7,300	4
Fraser Valley Express	66 FVX CONNECTOR	Continue building service levels towards targets associated with the 3% mode share	7,300	4
Total			21,900	12

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Short-Term Implementation Priorities

These short-term transit proposals address operational, reliability, and customer concerns, and as such are presented for consideration in the short-term over the next one to three years. Further engagement will be held at the discretion of the Fraser Valley Regional District for any route modifications.

The Fraser Valley Express and its associated service change priorities are different than changes to other regional or local routes. This route serves as an interregional connection and has its own challenges which set it apart from other routes. The primary purpose of the 66 Fraser Valley Express is to provide a rapid, limited stop trip connecting Chilliwack and Abbotsford to one another and also to Metro Vancouver. The route serves the public and provides an alternative to private automobile use for regional and interregional journeys. Challenges for developing service changes for the 66 Fraser Valley Express include:

- Long trip distance/time
- Delays and variable travel times due to auto congestion
- Destinations are broadly dispersed within the FVRD (the majority of journeys), Langley and other parts of Metro Vancouver
- Vehicle capacity vs. service frequency – the existing fleet only offers 32 seats

The next expansion of the FVX will further improve connectivity to Metro Vancouver service by extending to Lougheed Skytrain station. This expansion will increase the FVX fleet from 8 to 12 vehicles.

Accommodating the significant future fleet to meet demand will shape the future facility and infrastructure development in the City of Chilliwack.

- **66 Fraser Valley Express**

Extend Service to Lougheed Station - This proposal would extend service all the way to Lougheed Station, providing connections through Metro Vancouver. This was identified as a priority through public engagement and customer comments.

Estimated Resources: 6,000 annual service hours and 3 peak buses.

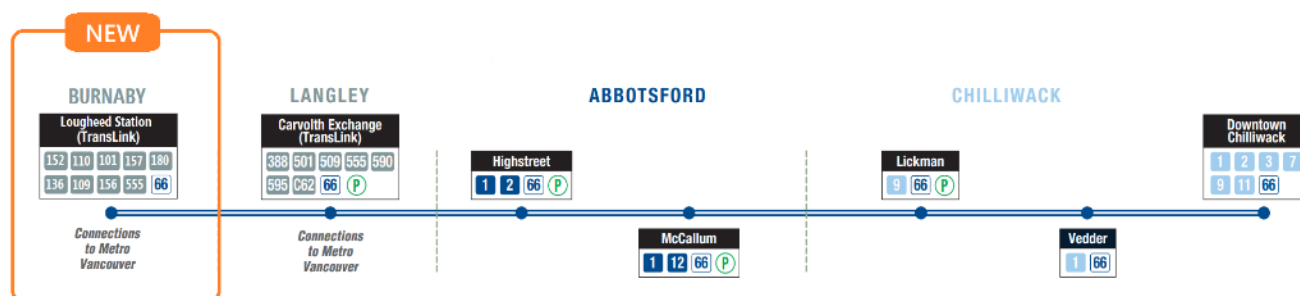


Figure 27: Extending the FVX to Lougheed Skytrain, planned for January 2022

- 66 Fraser Valley Express**

Meeting demand increases and maintaining service reliability – The Lougheed extension is estimated to lead to an increase in ridership demand of about 15 per cent. A modest expansion in the year immediately following the extension is strongly advised. The specific allocation of the time will be determined based upon ridership patterns and service reliability data emerging from the extension.

Prior to the COVID 19 pandemic customer comments and public engagement, it was noted that there are issues with service reliability on the 66 Fraser Valley Express.

Estimated Resources: 2,600 annual service hours and 0 peak buses.

- 66 Fraser Valley Express**

Meeting demand increases and maintaining service reliability – In the 18 months following the FVX extension to Lougheed demand patterns will begin to change as the market reshapes to take advantage of the new connections. A subsequent expansion will pair with the previous 2,600 hours to form the targeted 7,300, but most importantly introduce additional buses to enable more trips in the peaks: Four new rush hour trips could be added on weekdays. This expansion may also enable the wholesale exchange of the FVX fleet to more suitable forward-seated heavy duty buses.

Prior to the COVID 19 pandemic customer comments and public engagement, it was noted that there are issues with service reliability on the 66 Fraser Valley Express.

Estimated Resources: 4,700 annual service hours and 3 peak buses.

Table 29: Resources required for short-term service priorities for 66 FVX

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses	Spare Expansion Buses
66 FVX CONNECTOR	All days	6,000	No Change	Modest weekday mornings	3	1
66 FVX CONNECTOR	Weekdays	2,600	TBD	No Change	0	
66 FVX CONNECTOR	As Needed	4,700	Improved	No Change	3	1
Total		13,300	-	-	6	2

6.5.2 Medium-Term Service Proposals (3-5 years)

The following section outlines proposals and costs for consideration in the medium-term over the next three to four years.

- **66 Fraser Valley Express**

Accommodating new highway stops and continuing expansion to address demand growth. MOTI anticipates completing upgrades to Highway 1 in 2026. This expansion will serve two purposes – it will (1) enable a service design adjustment to include the new stop opportunities associated with the MOTI Highway 1 improvements², and (2) Continue to improve the service frequency and trips. Additionally, new hours can address travel time reliability and pull-trip needs.

Estimated Resources: 7,300 annual service hours and 3 peak buses.

Table 30: Resources required for medium-term service priorities for the Fraser Valley Express

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses	Spare Expansion Buses
66 FVX CONNECTOR	As Needed	15 minutes (30 minutes)	TBD	TBD	3	1
Total	-	7,300	-	-	4	

6.5.3 Long Term Proposals (to be adjusted in the next update of the TFAP)

- **66 Fraser Valley Express**

Over the long term, the Fraser Valley Express should target expansion in increments of 7,300 hours every two years. This will enable the continued growth in service levels, spans and frequencies towards targets associated with the 3 per cent mode share for regional and interregional trips. Allocations will be informed by operational indicators as well as the strategic priorities contained in this plan.

Initiatives should consider the following:

Improved Weekday Service Frequency. Continue to improve frequency to 15 minutes in the peaks and 30 minutes in the off-peaks. BC Transit and local government partners have advocated strongly to the Ministry of Transportation for the introduction of transit priority lanes as part of planned improvements to the Highway 1 corridor, coinciding with the FVX route. Partners should be

² Servicing destinations within Metro Vancouver such as Gloucester and Trinity Western University opens an opportunity for collaboration with TransLink on the provision of the FVX service, the local share of which is currently funded by City of Abbotsford and City of Chilliwack residents/businesses.

prepared to continue to build FVX transit service levels commensurate with this type of infrastructure investment in order maximize the benefit as soon as possible.

Improved Sunday Service – This proposal would increase the Sunday service span by one additional trip in both the morning and evening. This was identified as a priority through public engagement.

Improved Saturday Service – This proposal would continue efforts planned for 2022 to increase the Saturday service span. This was identified as a priority through public engagement.

Estimated Resources: 21,900 annual service hours and 9 peak buses.

Table 31: Resources required for long-term service priorities for the FVX Connector

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses
66 FVX CONNECTOR	Primarily weekdays	7,300	15 minutes (30 minutes)	TBD	4
66 FVX CONNECTOR	TBD	7,300	TBD	TBD	4
66 FVX CONNECTOR	TBD	7,300	TBD	TBD	4
Total	-	21,900	-	-	12

7.0 FVRD TRANSIT SERVICES: PARATRANSIT

Aside from the FVX, FVRD Transit Services are comprised of two individual paratransit systems with different funding partners to provide transit connections through the eastern portions of Fraser Valley.

7.1 Transit Today

7.1.1 Agassiz-Harrison Paratransit System

The Agassiz Harrison Paratransit System was introduced in 1999 and currently consists of one route – 71 Agassiz Harrison, shown in figure 28. This route operates a fixed route, fixed schedule with some flexible on-request service between Chilliwack, Agassiz, and Harrison Hot Springs. The most recent expansion occurred in 2017. Route 71 Agassiz-Harrison is interlined with route 72 Hope in downtown Agassiz and provides regional residents with access to FVX services in Chilliwack.

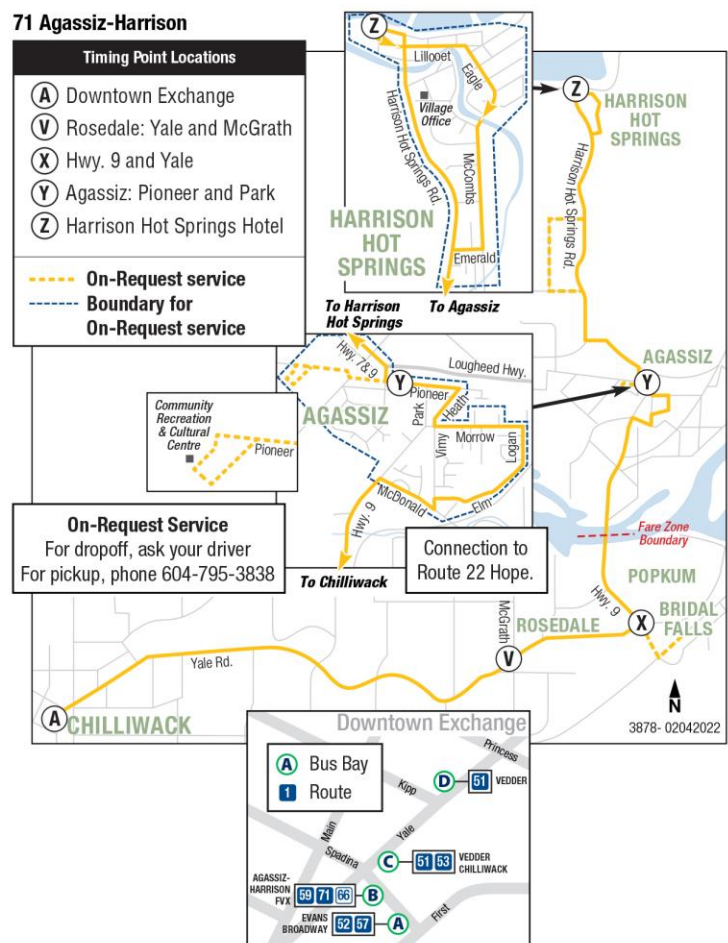


Figure 28: Route map for 71 Agassiz-Harrison

Agassiz-Harrison Paratransit Fleet

The Agassiz-Harrison Paratransit System consists of three medium-duty vehicles. See table 32 below.

Vehicle Type	Make	Service Type	Length	Seated Capacity (Max Capacity)	No. of Vehicles
Medium-duty	Grande West Vicinity	Paratransit	9.1 m (30')	23 (39)	3

Table 32: Agassiz-Harrison Paratransit fleet

7.1.2 Hope Paratransit System

The Hope Paratransit System was introduced in September of 2017 and currently consists of route 72 Hope, shown in figure 23. This route provides fixed-route, fixed schedule regional transit service between downtown Agassiz and Hope, with stops at First Nations communities of Seabird Island, Yale and Chawathil along Highway 7. Route 72 Hope connects with 71 Agassiz Harison to provide regional residents with access to FVX services in Chilliwack. See figure 29.

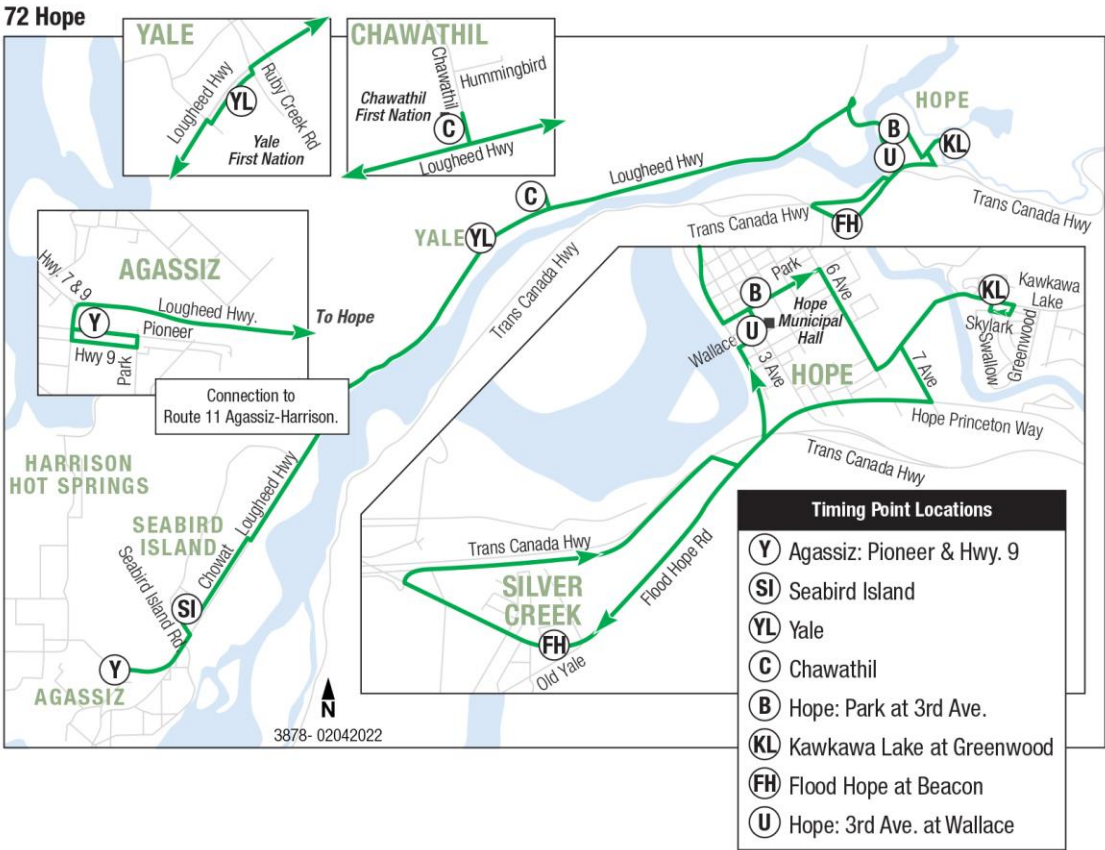


Figure 29: Route map for 72 Hope

Hope Paratransit Fleet

The Hope Paratransit System consists of two vehicles, both medium-duty. See table 33

Vehicle Type	Make	Service Type	Length	Seated Capacity (Max Capacity)	No. of Vehicles
Medium-duty	Grande West Vicinity	Paratransit	9.1 m (30')	24 (44)	2

Table 33: Hope Paratransit fleet

7.2 Changes since the 2012 Transit Future Plan

Since 2012, FVRD Transit services have grown significantly from only one transit system, the Agassiz-Harrison system, to three transit systems:

- Agassiz-Harrison Paratransit
- Fraser Valley Express Connector
- Hope Paratransit

Of these, the introduction of the Fraser Valley Express Connector represents a key strategic step towards providing alternative modes for regional and interregional travel for both residents and visitors to the Fraser Valley. Table 34 below summarizes all of the changes.

Year	System	Service Change
2017/18	Agassiz-Harrison	Route 71 – on-request routing to the Recreation Centre
2017/18	Hope	New service created - Route 72 between Hope and Agassiz
2018/19	Agassiz-Harrison	On-request service introduced to the Golf Road area
2019/20	Hope	Service change to create access to Route 72 for Chawathil First Nation
2020/21	Hope	Service change to introduce access to Route 72 for Yale First Nation

Table 34: Service Change Improvements made to the Agassiz-Harrison, Hope and FVX Transit Systems since 2012.

7.3 Developing Transit Future Action Plan Service Changes

7.3.1 Informing the Plan

BC Transit has worked with FVRD local government staff to develop the TFAP to prioritize transit improvements that build upon and are informed by the TFP, existing and proposed land uses, the community's demographic composition, public input through public engagement (see section 4.0), and transit industry standards. Supporting work that contributed to this plan is summarized below.

7.3.2 Key Strategies

The TFAP is explicitly linked to and informed by broader regional strategies and aspirations that strongly influence transportation movements.

Key local planning documents from the FVRD guiding the development of this TFAP include:

- FVRD Regional Growth Strategy
- FVRD Strategic Plan 2014-2018
- TransLink Travel Diary Survey (2017)

Official Community Plans within the region for communities of Kent, Hope, and Harrison Hot Springs also provide important objectives and support for transit initiatives.

The FVRD Regional Growth Strategy, being updated in 2021 is the regional blueprint for coordinating strategic land use, parks, housing and transportation. Strategies focus on concentrating growth and development in a compact and sustainable manner, to direct the efficient delivery of community infrastructure, housing and transportation. Directions for transit include working regionally towards more reliable and accessible transit, core transit corridors, and better provision of transit infrastructure and bus stop amenities.

7.3.3 Transit Future Mode Share Targets

The 2012 TFP identified an overall transit mode share target for Chilliwack and the FVRD systems of two percent by 2036, to increase from 491,000 annual rides in 2012 to 1.9 million rides in 2036. Ambitious mode share targets help to guide the service changes in the short, medium and long term. Investments made in the Chilliwack and FVRD over the last eight years have delivered a strong growth in transit ridership with over 1 million rides recorded across Chilliwack and FVRD systems in 2019/2020. As systems mature, a more nuanced approach to mode shares, which recognizes the different context between rural and urban areas is recommended.

The Agassiz-Harrison and Hope Paratransit account for about 60,000 annual rides.

Statistics from the 2021 Census, which examines mode shares of the journey-to-work, show that the transit mode share within the Kent District Municipality and Hope District municipality is lower than 2 per cent.

Moving forward this plan suggests maintaining a transit mode share target of two percent by 2040 for rural and small community FVRD areas.

This trajectory is an idealized high growth goal. Actual growth for each of the Paratransit systems will be determined by the regular three-year expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and subject to consultation with contributing partners.

To reach a two per cent transit mode share by 2040, Agassiz-Harrison and Hope Paratransit Systems would need the combined investment of an additional 11,877 hours³ by 2040 to lift ridership from about 60,000 annual rides in 2019 to 200,000 annual rides in 2040.

³ Assumes an average of 788 transit trips per day and productivity of 10 rides per hour.

Each four years on average it is estimated this would require the addition of about 2,500 annualized service hours and one peak bus.

7.4 Transit Performance

7.4.1 Average Daily Ridership

The Agassiz-Harrison Paratransit and Hope Paratransit average 187 and 29 boardings per weekday. Collectively these two routes account for about 2 per cent (214) of the total average weekday boardings of routes contained within the Chilliwack and FVRD Riders Guide. See Figure 30.

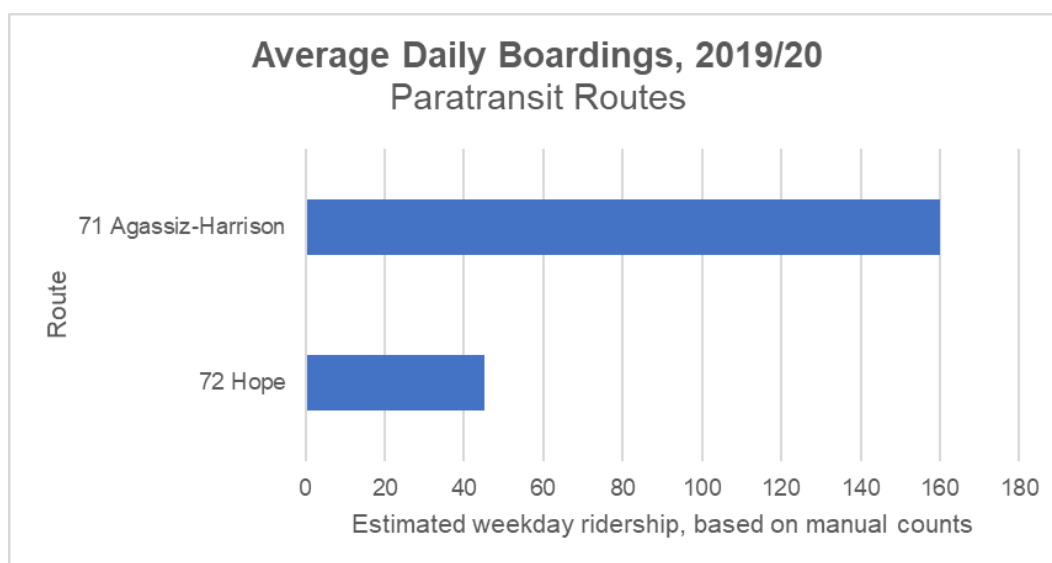


Figure 30: Agassiz-Harrison and Hope Transit, average weekday ridership by route, fall 2019

7.4.2 Route Productivity Relative to Similarly Resourced Paratransit Systems

Because paratransit routes typically serve much lower density rural areas or very small communities, rating their productivity against urban routes is not helpful. Instead, similarly resourced paratransit systems are more suitable comparisons. Figures 31a and 31b show productivity of the Agassiz-Harrison and Hope routes.

Paratransit System	Scheduled Annual Hours	Boardings /Hour
NORTH OKANAGAN PARA TRANSIT	4,414	5.60
MOUNT WADDINGTON PARA TRANSIT	4,490	6.03
REVELSTOKE PARA TRANSIT	4,990	2.99
AGASSIZ-HARRISON PARA TRANSIT (Route 71)	5,364	8.69
KIMBERLEY PARA TRANSIT	5,550	3.86
MERRITT PARA TRANSIT	7,043	12.95
AVERAGE	5,309	7.54

Figure 31a: Agassiz-Harrison Paratransit productivity, BC Transit Annual Performance Summary, Actuals 2019/20

Figures 30a and 30b show that both Route 71 and Route 72 are performing at a higher productivity than their similarly resourced Paratransit systems.

Paratransit System	Scheduled Annual Hours	Rides/ Hour
COLUMBIA VALLEY PARA TRANSIT	2,388	2.43
BULKLEY-NECHAKO	2,565	3.04
HAZELTON PARA TRANSIT	2,583	2.61
HOPE PARA TRANSIT (Route 72)	2,632	4.87
CLEARWATER PARA TRANSIT	2,757	2.60
QUATHET REGIONAL DISTRICT	2,931	5.87
AVERAGE	2,643	3.80

Figure 31b: Hope Paratransit productivity, BC Transit Annual Performance Summary, Actuals 2019/20

On-Time Performance

On-time performance, or schedule adherence, is a measure of how often a bus arrives at a timing point very early, early, on-time, late, or very late. BC Transit defines those time periods as follows:

- *Very early: More than three minutes early*
- *Early: Between one minute early and three minutes early*
- *On-time: Between one minute early and three minutes late*
- *Late: Between three minutes late and six minutes late*
- *Very late: More than six minutes late*

On-time performance varies by route, time of day, and time of year as transportation patterns change. Figure 32 following shows the on-time performance for the 71 Agassiz-Harrison and 72 Hope in the fall of 2019. The Agassiz-Harrison and Hope Transit Systems have not adopted a target for on-time performance, these will be developed as part of the revised system and route performance guidelines.

Industry best practice recommends that service hours be increased by 1 per cent annually, to invest in system on-time performance and schedule reliability as a response to increasing urban congestion and population. Agassiz-Harrison and Hope transit systems currently provide approximately 9,000 annual

service hours for transit; applying this 1 per cent increase would work out to an expansion of 90 annual service hours specifically dedicated towards on time performance measures. Broken down by individual system those hours would be approximately:

- Aggasiz-Harrison Paratransit System - 50 annual service hours
- Hope Paratransit System - 40 annual service hours

On time performance improvement priorities will be identified regularly through the Annual Performance Summary (APS) process. Each service expansion will include a recommendation on whether or not on-time performance measures are required.

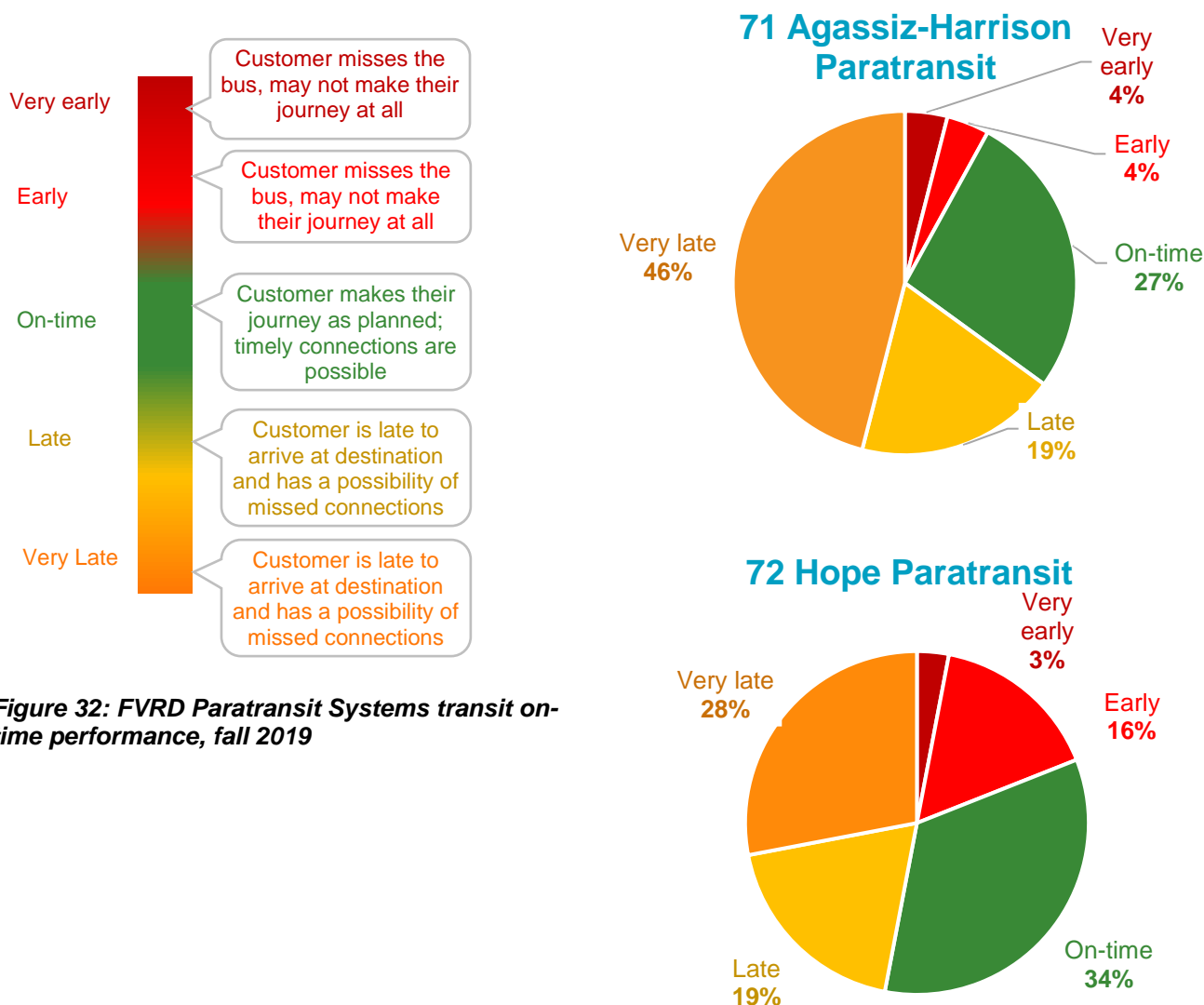


Figure 32: FVRD Paratransit Systems transit on-time performance, fall 2019



Image 5: Light Duty Fleet Vehicles. Routes serving rural or remote areas in BC Transit systems often use smaller buses. Continued expansion of transit to rural communities within the FVRD may be best served with these smaller vehicle types.

7.5 Service Change Proposals

The following sections outline the proposed service improvements to FVRD Paratransit systems.

The specific proposals have also been organized into three time periods:

- Short-Term: Next 1-3 years
- Medium-Term: Next 3-4 years
- Longer-Term: 5 years and beyond

Summary of Service Priorities

All resource impacts for short-term and medium-term proposals presented are based on annual figures. Longer-term options are outlined as concepts considering estimates for these items may change substantially with community growth patterns, evolving technology and changing mode share targets. Due to the impact of COVID-19, these timeframes for implementation are subject to change based on demand and availability of funding.

Table 35: Short-Term Implementation Priorities

FVRD Paratransit: Short-Term Implementation Priorities (1-3 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack	56 Cultus Lake <i>Co-funded by FVRD</i>	Develop a Local Area Plan for Cultus Lake transit service to confirm future service changes	-	-
		Expansion hours held in reserve to address potential service changes.	500***	1***
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Introduce year-round Sunday and Statutory Holiday service.	600	1
TOTAL			1,100***	2

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Table 36: Medium-Term Implementation Priorities

FVRD Paratransit: Medium-Term Implementation Priorities (3-5 years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Chilliwack	56 Cultus Lake <i>Co-funded by FVRD</i>	Expansion hours held in reserve for Local Area Plan service changes	1,500***	1
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Later weekday service.	900	1
Hope	72 Hope PARATRANSIT	Improve service.	900	1
		Improve local Hope service.	500	
NEW SERVICE	New Route PARATRANSIT	Introduce new route from Kent to Mission via Highway 7.	2,500	2
Total			6,300*	5

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

Table 37: Long-Term Implementation Priorities

FVRD Paratransit: Long-Term Implementation Priorities (5+ years)				
System	Route	Service Priorities	Estimated Annual Service Hours*	Peak Expansion Buses**
Agassiz-Harrison	71 Agassiz-Harrison PARATRANSIT	Introduce hourly service between 9:00 a.m. and 3:00 p.m.	1,800	1
Hope	72 Hope PARATRANSIT	Introduce Sunday service.	650	0
		Later Friday and Saturday service	250	0
Total			2,700	1

*All hours are estimated. Further refinement is required during implementation planning.

**Additional spare buses may be required beyond the peak expansion buses listed above to maintain the required spare ratio. These hours will shift dependent on what route re-alignments occur. Cost fluctuation may occur.

*** Hours may not be fully required

7.5.1 Short Term Implementation Priorities

These short-term transit proposals address operational, reliability, and customer concerns, and as such are presented for consideration in the short-term over the next one to three years. Further engagement will be held at the discretion of the Fraser Valley Regional District for any route modifications.

Chilliwack Route 56 - Cultus Lake (Limited Chilliwack system targeted service)

Develop a Local Area Plan for Cultus Lake – Route 56 Cultus Lake serves a unique targeted market with changing needs. A more thorough investigation of the transit market as well as community and employee priorities are needed to inform future service changes.

Implement modest service changes (Hours may not be fully required) 500 hours will be identified for service changes leading from the Cultus Lake Local Area Plan.

Table 38: Resources required for short-term service priorities for 56 Cultus Lake

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses
56 Cultus Lake	All Days	500*	30 minutes (145 minutes)	9:30 a.m. – 7:30 p.m.	1
Total	-	500*	-	-	1

* Hours may not be fully required

71 Agassiz-Harrison Paratransit

Introduce year-round Sunday & Statutory Holiday Service - This proposal was identified in the Transit Future Plan and would provide an opportunity to use transit between these communities every day of the week.

Table 39: Resources required for short-term service priorities for 71 Agassiz-Harrison

Transit System/Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses
71 Agassiz-Harrison	Sunday	600	TBD	TBD	1
Total	-	600	-	-	1

7.5.2 Medium-Term Service Proposals (3-5 years)

The following section outlines proposals and costs for consideration in the medium-term over the next three to four years.

56 Cultus Lake

Implement potential service changes as identified in the Cultus Lake Local Area Plan Building upon the work of the Transit Future Plan.

Table 40: Resources required for medium-term service priorities for 56 Cultus Lake

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
56 Cultus Lake	All Days	1,500*	Variable	9:30 a.m. – 7:30 p.m.	0
Total	-	1,500	-	-	0

*Hours may not be fully required

Agassiz-Harrison Paratransit

Improve Weekday Evening Service Span – Lack of later evening service was identified as a barrier to transit use through the public engagement. This proposal would add an additional trip on Monday through Thursday to match Friday evening service.

Table 41: Resources required for medium-term service priorities for 71 Agassiz-Harrison

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses
71 Agassiz-Harrison	Monday - Thursday	900	Variable	5:00 a.m. – 10:30 p.m.	1
Total	-	900	-	-	1

Hope Paratransit

Improved Commuter Service – Adds an additional trip to the morning and afternoon peaks to coincide with shift start times. This was identified through public engagement.

Local Hope Service - This proposal adds additional trip time to provide additional local service within Hope. This proposal was identified through public engagement.

On-Demand Service – Examine options for introducing On-Demand service serving Hope-area neighbourhoods. This proposal was identified by District of Hope staff.

Table 42: Resources required for medium-term service priorities for 72 Hope

Transit System	Service Day/Service Area	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
Hope Paratransit	72 Hope/Agassiz	900	TBD	5:45 a.m. – 5:45 p.m.	1
	NEW Local Hope Service	500	N/A	N/A	0
	Examination of opportunities for On-Demand Service				
Total	-	1,400	-	-	1

New

Paratransit Service: Kent to Mission via Highway 7

Introduce New Route - Medium-term priority. This proposal introduces a new route connecting Kent to Mission via Highway 7. This proposal was identified through the Transit Future Plan and through public

engagement. BC Transit is currently completing a feasibility study to determine service options. A satellite light duty parking garage facility in Kent, near Agassiz may be beneficial.

Table 43: Resources required for implementation of a new route between Kent and Mission via Highway 7

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Expansion Buses (TOTAL)
New Route	All Days	2,500	TBD	TBD	2
Total	-	2,500	-	-	2

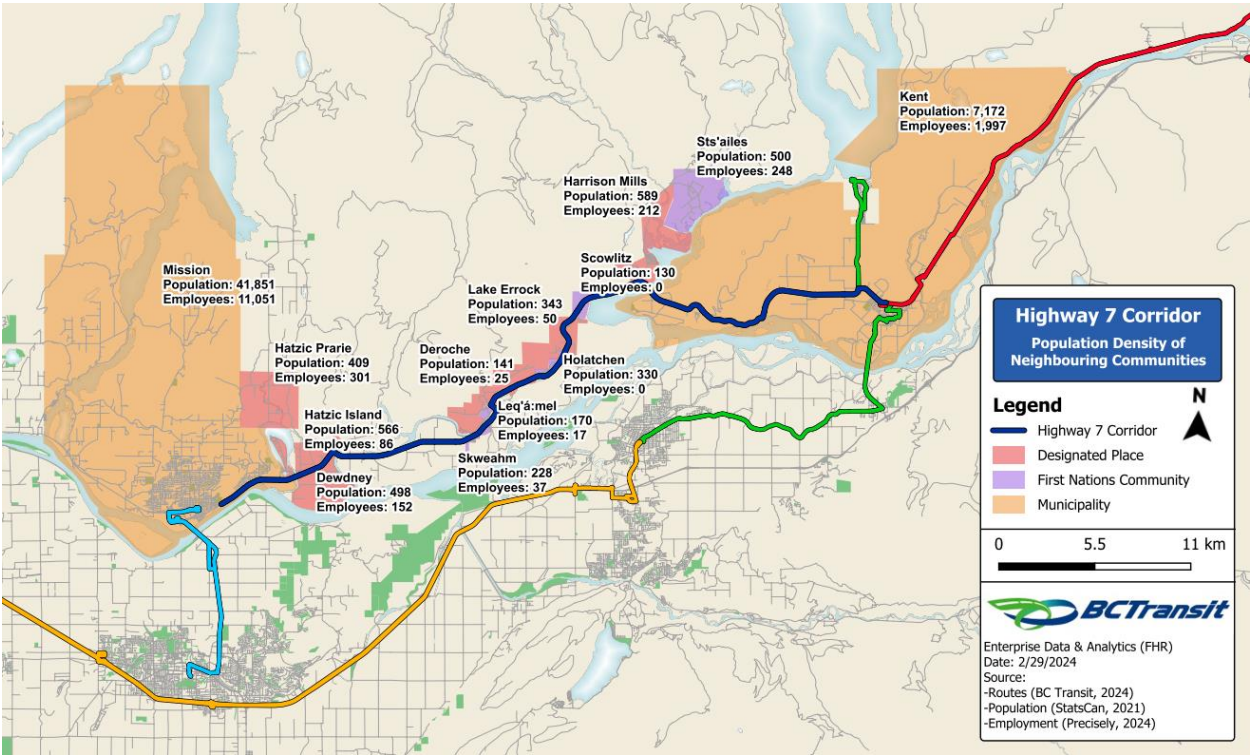


Figure 33: The concept alignment for a new Kent to Mission service

7.5.3 Long Term Proposals

Agassiz-Harrison Paratransit

Improve Peak Service Frequency - This proposal would improve the frequency to hourly from 9:00 a.m. to 3:00 p.m. daily. There currently is support for this improvement.

Table 44: Resources required for long-term service priorities for 71 Agassiz-Harrison

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
71 Agassiz-Harrison		1800			1
	Saturday		60 minutes (75-120 minutes)	7:15 a.m. - 10:30 p.m.	
	Sunday		60 minutes (120 minutes)	9:00 a.m. – 6:15 p.m.	
Total	-	1,800	-	-	1

Hope Paratransit

Introduce Sunday Service - Introduces service on Sundays. This proposal was identified through public engagement.

Improve Friday & Saturday Service Span - This proposal adds one additional evening trips to the Friday and Saturday schedule. This proposal was identified through public engagement.

Table 45: Resources required for long-term service priorities for 72 Hope

Transit Route	Service Day	Est. Service Hours	Frequency Peak (Base)	Service Span	Peak Expansion Buses
72 Hope	Friday	250	Variable	5:45 a.m. – 8:30 p.m.*	0
	Saturday		Variable	8:30 a.m. – 7:30 p.m.*	
	Sunday	650	TBD	TBD	
Total	-	900	-	-	0

**Exact service span subject to change on implementation.*

8.0 STRATEGIC PRIORITIES

Table 46 below provides an overview of the strategic priorities for the Chilliwack and FVRD transit services to be developed in decreasing priority.

Table 46: Strategic Priorities

Initiatives		
1	Restore ridership and service to pre-COVID-19 levels	BC Transit will work with Chilliwack and FVRD partners to monitor ridership levels, directing service towards areas that require it while remaining flexible and able to accommodate unexpected demands.
2	Endorse a revised Service Standards and Performance Guidelines that provides targets and guidelines for the TFP layers including Frequent transit, local transit and targeted transit routes. Include on time performance targets for each transit system	The 2012 TFP introduced system-level service standards and performance guidelines. As the transit systems of Chilliwack and the FVRD develop and frequent and Local transit routes evolve, establishing layer-level service standards and performance guidelines will enable a more nuanced approach to guide ongoing investments and service changes.
3	Consider service optimization for underperforming routes	Underperforming routes indicate a weak transit demand; overall system productivity and utility can be improved by reallocating a portion of hours from these low-demand routes to those routes where demand is strong
4	Continue to develop the Chilliwack Transit System's Frequent Transit Network	The 2012 TFP introduced the FTN service concept, leading to significant improvements of Route 51 Vedder. This has contributed significantly to ridership gains for the Chilliwack Transit system. Continued investment to establish 15-minute service levels is a critical priority.
5	Improve Off-Peak Service	One of the most consistent themes communicated through engagement was a desire for improved weekend and evening service throughout almost all routes within Chilliwack and the FVRD.
6	Expand transit network to service new areas	Unserved or newly densifying parts of Chilliwack and the FVRD represent opportunities to capture new ridership and provide residents with new transportation choices.
7	Consider transit facility readiness for the continued roll out of the BC Transit Low Carbon Fleet Program	Working with the low carbon fleet department at BC transit to develop the project plan for deployment of low carbon fleet for transit systems of Chilliwack and the FVRD.

9.0 INFRASTRUCTURE PROPOSALS

Infrastructure to support the transit system takes many forms from exchanges and bus stops to operations and maintenance facilities. Proper infrastructure can reduce operational costs and improve safety. However, some infrastructure projects can have a high capital cost and can take years of planning, design, and construction before they become operational, which highlights the importance of identifying them and planning for them.

9.1 Short-Term Infrastructure Proposals (1-3 years)

Table 47: Short-term infrastructure proposals

Infrastructure Proposals		
Chilliwack and FVRD		
1	Transit Facility Strategy	Complete a Facility Master Plan strategy. This is needed to ensure that transit systems in Chilliwack and the FVRD are able to accommodate the additional vehicles associated with this TFAP. Facility capacity to ensure resilience over the long term should be for about 75 buses and designs should not preclude high-capacity buses.
Chilliwack		
2	Downtown Chilliwack Exchange	The Downtown Chilliwack Exchange needs to be implemented. This is a short-term priority. The 2018 study completed by Stantec identified two potential configurations for the Downtown exchange, and the City subsequently selected Option 1 in 2019, a parallel configuration on Spadina.
3	Rapid Transit Study & implementation – 1 Vedder	A Rapid Transit Study should be conducted to identify the detailed requirements to develop the 51 Vedder into a true Rapid Transit Network. Details to identify include stop/station location, any routing or schedule changes, supporting infrastructure or policy changes. This is a short-term priority and could be done in conjunction with the South Chilliwack exchange strategy.
4	South Chilliwack Exchange Part 1	Develop a South Chilliwack Exchange strategy in order to determine location and functional requirements for a south Chilliwack Transit Exchange located somewhere in the proximity to the University of the Fraser Valley.
FVRD		
5	Satellite Light Duty Garage in Kent	Examine opportunities and feasibility of a satellite bus garage situated in the Agassiz area with a capacity of two to three vehicles to support new service connecting Kent to Mission.

9.2 Medium-Term Infrastructure Proposals (3-4 years)

Infrastructure Proposals		
1	South Chilliwack Exchange Part 2	Pursue construction of the South Chilliwack Exchange based upon the strategy developed in the short-term.
2	Transit Priority Measure Study & Implementation	Transit priority measures are infrastructure and policy tools used to reduce the amount of time buses are stopped in congestion to improve trip times, improve service reliability, and reduce costs. This study would look to identify appropriate transit priority measures for Chilliwack looking at the whole system with specific focus to key corridors facing congestion. This is a medium to long-term priority.
3	Bus Stop Improvements	The attractiveness of transit is based not only on transit services, but also on passenger amenities provided at bus stops and exchanges. Having amenities at stops and exchanges can have a positive impact on passenger safety and comfort, in addition to attracting new customers. Passenger amenities and accessibility fall within the local partner's jurisdiction. In the longer term the City and FVRD should strive to focus passenger amenities at all FTN stops. It is recommended that a prioritization methodology approach be developed for bus stop amenity improvements, with a focus on FTN routes, high-activity bus stops, and transit exchanges. The tables below provide a recommendation of priority locations within the system.

Table 48: Medium-term infrastructure proposals

9.3 Bus Stops

Bus stops are the first and last way passengers physically interact with the transit system every time they take a trip. Bus stops should be a safe, accessible, and comfortable space for passengers to board and alight from a bus. Investing in bus stops to improve any of these aspects will improve the passenger experience while they wait for the next bus to arrive.

Improving bus stops is an ongoing process. With nearly 267 bus stops in the Chilliwack area, investment in improving bus stops needs to be strategic to improve the experience for as many customers as possible. Therefore, investments should be targeted at bus stops with a high volume of passengers.

Transit stops with lower levels of passenger activity should, at a minimum, meet BC Transit's accessibility guidelines. [BC Transit's Infrastructure and Design Guidelines](#) provides additional design recommendations and engineering specifications for bus stops and transit exchanges.

Table 42 below identifies the high boarding activity bus stops which could be considered for shelter improvements and other associated passenger comfort amenities. Shelters, investment should be considered on an annual basis through the [BC Transit shelter program](#).

Bus Stop Location & ID#	Description	Amenities Required
Chilliwack		
Vedder at Luckakuck #108078	High-activity stop, FTN	Shelter
Vedder at Wren (Garrison Village – southbound) #108086	High-activity stop, FTN	Shelter
Yale at Hodgins (southbound) #108073	High-activity stop, FTN	Shelter
Vedder at Knight (northbound) #108102	High-activity stop, FTN	Shelter
Vedder at Promontory (southbound) #108084	High-activity stop, FTN	Shelter
Sunnyside at Spruce (Cultus Lake School – northbound) #124068	High-activity stop	Shelter, bench
Caen at Festubert (UFV, eastbound) #108263	High-activity stop, FTN	Shelter/bench
Vedder at Luckakuck SB #108078	Exchange	Shelter
Vedder at Luckakuck NB #124000	Exchange	Shelter
Agassiz Pioneer & Park (EB) #132012	Exchange	Shelter

Table 49: High activity bus stops

10.0 EMERGING TECHNOLOGY

New emerging technologies will have a direct impact on future mobility within the Chilliwack Area: Mobility as a service, autonomous and electric vehicles, and other emerging bus technologies have the potential to reshape how people choose to move throughout their communities.

The following section outlines some of these future technologies and how they could potentially influence the transit system in the Chilliwack area.

10.1 Fleet-Related Technology

BC Transit is committed to continuously enhancing the rider experience. As part of this endeavor, BC Transit is moving forward with the installation and development of technology initiatives to improve efficiency, increase security and put passengers in control of their BC Transit experience. Two of the primary fleet-related technology improvements planned for the near future include the SmartBus program and the Low Carbon Fleet Program. Additional information on both of these projects is provided below.

10.1.1 SmartBus

Phase 1

The first phase of the SmartBus program at BC Transit introduces real-time bus information, automated stop announcements, and closed-circuit TV Cameras onboard each bus. The implementation of these bus technology improvements was planned for 2020, but due to the ongoing impacts of the COVID-19 pandemic, has been delayed. An update on this project will be provided in fall 2020.

Phase 2

BC Transit is beginning a review of fare technology and fare payment systems with the intent to move to an advanced fare collection system.

BC Transit has undertaken a project to procure and introduce new fare collection technology to replace the existing fareboxes on its buses. The goal of this project is to introduce an electronic fare collection system where customers bring their own ticket (i.e. mobile phone app or credit card) and will require the introduction of onboard fare validators and a backend system for fare validation, payment processing, account management and payment reconciliation. The NRFP for this project was posted in June 2020, with the implementation plan for the transit systems in scope to be determined with the selected vendor post-contract award.

10.1.2 Low Carbon Fleet

In November 2018, BC Transit approved a Low Carbon Fleet Program to support provincial targets for greenhouse gas (GHG) emissions and to align with the provincial CleanBC plan. Core to this program is a 10-year fleet replacement strategy to replace over 1,200 existing buses and expand the fleet by an additional 350 buses by using the potential of advanced GHG reducing technology. Across the province of B.C., there is growing expectation from all partners that BC Transit endeavor to find prudent ways to support its emission reduction goals. BC Transit is actively pursuing new and emerging low carbon technologies, supported by the use of renewable fuels, as we strive towards a cleaner, greener fleet. Based on the fleet replacement needs required in each vehicle classification, an initial pathway to full

electrification has been established. More information on this program is available in BC Transit's [Low Carbon Fleet Program](#).



Image 5: BC Transit's Low Carbon Fleet Program aims to have a fully zero-emission provincial fleet by 2040.

10.2 Mobility as a Service

Mobility as a Service (MaaS) is the transition away from personally owned forms of transportation to mobility options that are purchased as a service. Recent technology improvements have provided consumers options to plan, reserve, and pay for travel using an application on their electronic device. Mobility as a Service applications are capable of combining multiple travel modes into one trip, allowing multi-modal travel options for customers including walking, public transit, car share, bike share, or ride hailing.

10.2.1 Car and Bike Sharing

Car and bike sharing leverages the sharing economy to extend the benefits of car or bicycle ownership to individuals without the upfront costs, maintenance, and storage required for ownership. Touted benefits of car and bicycle sharing include decreasing the incidence of car ownership and promoting multimodal travel within communities, which could help build transit ridership within a community. Car and bike sharing programs can help address the first and last mile issue with transit; in other words, car and bike sharing services can extend the reach of transit by connecting transit riders between a bus stop and their trip origin or destination.

There are several different car sharing models including station based, A to B, and free-floating models. Further, there are several different car sharing business models including business to consumer, business-to-business, peer to peer, and not for profit.

Similar to car sharing, there are several different bicycle sharing models include docked, dockless, workplace pool bikes, bike loans, and peer to peer sharing. Another distinguishing factor within these models is whether the bikes are geo-fenced or not.

Many transportation-sharing services are currently seeing significant investment as technology improvements and profitable business models emerge for these services.

10.2.2 Ride Hailing

Ride hailing is the provision of immediate or on-demand service whereby a vehicle and driver are hired for a fee to transport a passenger, or a small group of passengers, between locations of their choice. This service may be provided by Transportation Network Companies (TNCs) or traditional taxi operators.

Beginning in 2019, TNCs are permitted to operate in British Columbia. As seen in many other cities that currently permit TNCs, the widespread adoption of ride hailing services can either supplement or substitute existing fixed-route transit services depending on various contextual factors.

10.2.3 Digital on-Demand Transit

Digital on-demand transit uses technology to dynamically dispatch a bus, van or fleet of vehicles to locations dictated by the riders. Real-time information and mobile platforms for customers and drivers support the transition to more flexible service models. A typical digital on-demand bus service will have no (or limited) fixed schedules and customers can request it as they need it by using an app. It also has flexible and responsive routing, but may still have fixed route stops so it can be more efficient and allow multi-user boardings.

A digital on-demand project has been on the radar for some time, and aligns with [BC Transit's Strategic Plan](#). As part of the Action Area on Safe and Responsive Delivery, BC Transit is looking at innovative and flexible delivery models. After conducting initial research, the Kelowna Regional Transit System has been selected as the pilot community for digital on-demand, to be launched in April 2024. The lessons learned through this pilot will inform how and when this type of service is introduced in other communities across the province.

10.3 Autonomous Vehicles

Autonomous vehicle technology is rapidly emerging, and has the potential to drastically alter the way people move throughout their communities. The widespread implementation of autonomous vehicles would change the variety and cost of mobility options available to the public, and consequently would have implications for how public transit is planned and delivered within Chilliwack. By changing how people get around, the emergence of autonomous vehicle technology also has implications for future land use and transportation related policy and infrastructure.

11.0 MOVING FORWARD

11.1 Funding the Plan

To achieve the goals of this TFAP, capital and operating investments in the transit system will be required over the next five years and beyond. Annual operating costs are based on service hours that are projected to increase by over 70,090 hours*. The plan also calls for capital investments that include:

- An additional 26 buses added to the transit fleet
- New transit exchanges or upgrades to transit exchanges
- Improvements to customer amenities at transit stops

Given the level of transit investment anticipated over the coming decades, BC Transit and its funding partners will need to evaluate stable and predictable funding sources beyond the existing mechanisms.

**These estimates do not include long-term expansions, which may see cost fluctuation*

11.2 Keys to Success

Guiding the plan from vision to reality will require an on-going dialogue between the Province, BC Transit and the City of Chilliwack on transportation policy, funding and the connection between land use and transit planning.

The Chilliwack and FVRD TFAP builds upon the TFP as well as local land use and transportation plans and will be used to support the vision and direction for transit in the region. Steps required for the success of the plan include integrating the transit strategy into other municipal projects, supporting travel demand management measures, transit-oriented development and transit-friendly land use practices.

This plan will be presented to the City of Chilliwack Council and the FVRD for approval. Service improvements will be integrated into the three-year Transit Improvement Process (TIPs), which is updated on an annual basis. Infrastructure improvements will be incorporated into BC Transit's Capital Plan. Prior to implementation of service changes, BC Transit planning staff will work with staff at the City of Chilliwack to ensure service improvements appropriately reflect local needs. Additional targeted engagement may be conducted.

To: Regional and Corporate Services Committee
From: Alison Stewart, Manager of Strategic Planning

Date: 2021-11-12
File No: 8330-02-19744

Subject: FVRD Transit Future Action Plan – Chapter 6: Fraser Valley Express

RECOMMENDATION

THAT the Fraser Valley Regional District Board give Approval in Principle to the Draft FVRD Transit Future Action Plan - Chapter 6, relating to the Fraser Valley Express service to facilitate the ongoing Highway One Expansion planning and design process;

AND THAT the Final Transit Future Action Plan covering the Fraser Valley Regional District services be brought forward to the Board for endorsement at a future date.

BACKGROUND

BC Transit has been undertaking a Transit Future Action Plan for the Chilliwack and FVRD service area for several years. As with many other things, the process has been interrupted by COVID-19 and as a result, the FVRD portions of the Plan are close to completion but are not yet finalized. In the meantime, the provincial government announced earlier in 2021 that the long-awaited Highway 1 Expansion will go ahead, with an aggressive construction start date in 2022. As such, planning and design work has been accelerated and information relating to long-term future growth of the Fraser Valley Express (FVX) service is needed to finalize its planning and design work around the provision of transit infrastructure on Highway 1.

DISCUSSION

BC Transit has been undertaking a Transit Future Action Plan (TFAP) for the Chilliwack and FVRD service area for several years. The draft plan as it relates to the FVRD services is nearing completion but not all sections are ready for final approval. The final TFAP will be brought forward for approval early next year. Chapter 6 of the draft plan specifically addresses the FVX and presents a long-term view of potential growth out to 2040 in terms of long-term ridership and service potential. The Ministry of Transportation and Infrastructure (MoTI) is asking for this information now to help finalize the Highway 1 expansion planning and design work currently underway.

The Highway 1 expansion project is the first major expansion in the FVRD since the freeway was built in the 1960's. Climbing lanes and several interchanges/bridges have been built or replaced over the years, but nothing as comprehensive as the improvements being proposed today. Given the time it

has taken for this expansion to be realized, it is easy to speculate that this will be the last for some time. With that in mind, it is important that long-term transit requirements be incorporated into the planning and design today. **The TFAP itself is not a commitment to these timelines or levels of service.**

Chapter 6 of the draft TFAP is specifically dedicated to the Fraser Valley Express and provides an overview of the existing service and sets out three growth scenarios:

“Scenario 1- Low Growth or Slow COVID-19 Recovery

In this scenario, growth in ridership demand is slower than it has been in the last five years (<28,000 rides/year). This scenario may occur due to longer-term impacts to ridership caused by COVID-19. In the short-term the service on the 66 Fraser Valley Express will be extended to Lougheed Station (approved in 2020) and this scenario assumes that investment will be required to maintain service reliability, but other expansions will be delayed to the long-term. To accommodate the low growth and maintain capacity, the fleet dedicated to the 66 Fraser Valley Express could be up-sized from heavy duty buses to high capacity buses (subject to the garage facility).

Scenario 2 – Historic Growth

In this scenario, demand grows at a similar pace to what has happened since the service was introduced (approximately 28,000 rides/year). In the short-term the service on the 66 Fraser Valley Express will be extended to Lougheed Station and there will need to be investment to improve service reliability across the network. In the medium-term investments will focus on improvements to Saturday service. Long-term investments will seek to improve Sunday service, and improve the weekday service span and frequency.

Scenario 3 – High Growth (TFAP Investment trajectory)

In the high growth scenario, demand grows faster than it has in the past (>28,000 rides/year). In this scenario, investment in the service over the next few years will be rapid to accommodate a significant increase in demand. In the short-term the service on the 66 Fraser Valley Express will be extended to Lougheed Station (approved in 2020), and there will be an associated lift in demand that will need to be addressed through modest expansion.

Improving service reliability and improving Saturday service will need to be accomplished within the next 1 to 2 years. Improving Sunday service, improving the weekday service frequency to 15 minutes in the peaks and 30 minutes in the off-peaks, and extending the weekday service span will need to be accomplished within 3-5 years. To ensure that capacity meets demand, the fleet dedicated to the 66 Fraser Valley Express should be up-sized from heavy duty buses to high capacity buses (subject to the garage facility).”

For planning purposes, BC Transit is using the High Growth scenario to establish long term service requirements to accommodate potential demand over time. The High Growth Scenario envisions a

service level that would need investment of an additional 65,700 hours and investment in high capacity buses by 2040 to lift ridership from about 253,000 annual rides in 2019 to 2.6 million annual rides in 2040. This is very aggressive and while the TFAP uses a twenty-year time horizon, it is possible that such levels of demand will not be achieved until 2050 or later, resulting in a less aggressive investment trajectory.

Actual growth of the FVX service will be realized through the regular three-year Transit Improvement Program (TIP) expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and subject to consultation with contributing partners. Considerations shaping implementation timelines include population and employment growth, passenger demand, revenue growth, availability of funding, transit infrastructure needs and other considerations for local transit implementations.

The High Growth scenario will be driven by a number of factors, including:

- Completing the Lougheed Extension to reduce transfers, reduce costs and improve ease-of use for FVX passengers destined to/originating from Metro Vancouver destinations west of Langley.
- Completing Highway 1 widening to the Whatcom interchange and beyond, to accommodate increased transit service and related infrastructure.
- Central Fraser Valley transit system connecting Abbotsford Airport to the FVX at Highstreet Mall, enabling airport access on transit for residents of both the FVRD and Metro Vancouver.
- Growing UFV interest in BC Transit services for students travelling to and from the Abbotsford campus from locations to the east and west. Accommodating 2019 level of UFV shuttle riders could lift ridership by 250,000 to 400,000 rides per year.
- Strong demand for transit access to Gloucester (for commuters originating in the east and west) and demand for improved transit access to Trinity Western University via Highway 1.

Servicing areas within Metro Vancouver opens an opportunity for collaboration with TransLink or others on funding the service, the local share of which is funded by City of Abbotsford and City of Chilliwack residents/businesses. In addition, as the Langley SkyTrain extension moves forward, a regional connection between Abbotsford and City of Langley along the Fraser Highway needs to be considered. The Langley SkyTrain expansion has a 2028 completion date. It is possible that some of the hours allocated to the FVX in the draft TFAP may be applied to this extension as demand warrants. Both the Highway 1 and Fraser Highway express service alignments are identified by TransLink in its draft Transport 2050 Plan.

The High Growth scenario provides clear direction as to the type of capacity that an upgraded Highway 1 should accommodate. Whether the level of service reaches this level in 2040 or 2050, the infrastructure must be built today to accommodate long-term growth. This scenario will help MoTI finalize its planning and design work around the provision of transit infrastructure on Highway 1.

COST

The Transit Future Action Plan itself is not a commitment to the timelines or levels of service identified in the Plan.

Expansions will be realized through the regular three-year Transit Improvement Program (TIP) expansion agreements signed annually between BC Transit and the Fraser Valley Regional District and subject to consultation with contributing partners. The TIP seeks to align municipal and regional budget processes to ensure funding availability is aligned with local needs and provincial funding.

Where a proposed expansion requires a tax requisition above the cap allowed in the FVX Service Area Bylaw (Fraser Valley Regional District Fraser Valley Express Sub-Regional Transit System Service Area Establishment Bylaw No. 1236, 2013 as amended) must be amended, with statutory consent of the funding partners. As an example, the upcoming 6,000 hour expansion in 2022 required an amendment to the FVX Service Area Bylaw, which increased the requisition cap from \$992,000 to \$1,250,000 to accommodate the expansion.

CONCLUSION

With a 2022 construction start-date, planning and design work for the Highway 1 expansion from 264th Street to Whatcom Road has been accelerated and information relating to long-term future growth of the Fraser Valley Express (FVX) service is needed to finalize this work. Supporting the Draft FVRD Transit Future Action Plan - Chapter 6 in principle will allow MoTI to finalize its planning and design work around the provision of transit infrastructure on Highway 1.

BC Transit will provide a presentation of the material when this report comes before the Board.

COMMENTS BY:

Stacey Barker, Director of Regional Services: Reviewed and supported.

Kelly Lownsbrough, Director of Corporate Services/CFO: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

To: Regional and Corporate Services Committee

Date: 2024-05-09

From: Melissa Geddert, Planner 1 and Andrea Antifaeff, Planner 1

File No: 8330-20-17938

Subject: FVRD Active Transportation Network Plan Phase 3 – Round Two Engagement Summary

INTENT

This report is intended to advise the Fraser Valley Regional District Board of information pertaining to **the Fraser Valley Regional District Active Transportation Network Plan's second round of public engagement**. Staff is not looking for a recommendation and has forwarded this information should members want more clarification or to discuss the item further.

BACKGROUND

In February 2023, the Fraser Valley Regional District (FVRD) secured funding through the Ministry of **Transportation and Infrastructure's BC Active Transportation Infrastructure Grants Program** to develop **the FVRD Active Transportation Network Plan (ATNP)**. This initiative aligns with the FVRD's Strategic Plan and Regional Growth Strategy goals to integrate transportation and land use, promote health, and mitigate climate change impacts. The plan focuses on electoral area communities, incorporating existing and planned networks to connect communities and key destinations. The project is now in phase four – plan development. Phase one focused on the project launch, phase two involved background research and round one engagement, phase three included setting plan priorities and round two engagement. The draft plan will be presented to the FVRD Board and completion of this project is expected in the third quarter of 2024.

Community input forms the foundation of the FVRD ATNP. The initial round of engagement for the plan took place in November 2023, and the information received provided valuable insight from the communities, setting the base for the ATNP's network priorities, strategies, and actions. The information received revealed the importance of active transportation (AT) to community members in promoting exercise, facilitating the enjoyment of the outdoors, and enhancing overall health. The first round of engagement identified the desire for effective connectivity, street lighting and traffic calming mechanisms, dedicated active transportation facilities, and safer connections to bus and school bus stops. The integration of dikes and undedicated roads into the network was also highlighted, as these would enhance connections within communities, member municipalities and Indigenous communities. **This feedback was incorporated into the plan's guiding principles and proposed network routes and brought back to the public in a second round of engagement to determine the communities' level of support and ensure the proposed recommendations reflected the initial feedback.**

DISCUSSION

Strategies and actions to improve active transportation in the FVRD have been developed based on the feedback received during the first round of engagement, which took place in the fall of 2023. The second round of community engagement focused on presenting the initial policy direction and the proposed active transportation network. The aim was to gather community input on these recommendations, ensuring that the interests and priorities voiced in the initial engagement were accurately reflected.

During round two of public engagement, members of the public, including those living in Indigenous communities and community interest groups, were invited to participate by visiting the online project page *Have Your Say FVRD – ATNP* and by attending community meetings held in four locations throughout the electoral areas. The engagement period took place between February 26 and April 10, 2024.

The following outreach methods were used to promote the ATNP project and engagement opportunities:

- FVRD website and social media posts (Facebook and Instagram)
- Paid social media ad campaign to boost awareness and promote the project to the larger FVRD geographical region
- Featured newspaper article in the Chilliwack Progress (print and online version)
- **Electoral area directors'** outreach (inclusion in community newsletters and re-sharing information on social media platforms)
- Information posters distributed throughout the electoral areas at central locations and on community notice boards
- Community newsletter issued to registered users through Have Your Say FVRD (400+ recipients)
- Informational email to resident associations, ratepayer groups, and dike authorities

Online Engagement

The following is a summary of the online engagement from round two taking place from February 26 to April 10, 2024:

- 714 visits to the Have Your Say FVRD - ATNP project page
 - 675 aware visits – aware participants visited at least one page on the project website
 - 395 informed visits – informed participants interacted with the project website by downloading a document or visiting one of the project pages (eg. key dates page and/or FAQ page)
 - 54 engaged visits - participants engaged in the project by filling out the online survey, placing a pin and comment on the interactive webmap, adding a comment on the forum, and/or asking a question.
- Interactive tools: 39 survey responses received, 8 pins placed on the interactive webmap

- 80% of survey respondents lived in an electoral area
- Electoral Areas G and H had the highest representation of survey responses

Participation in the second round of online engagement was lower compared to the first round of public engagement. Across both phases of public engagement, there was a total of 1,814 views on the project page. During the second round of engagement, there was a 21% decrease in visits to the project page. Of those visitors, only 5% completed the online survey. Whereas during round one engagement, there was a 14% survey response rate from the 1,100 project page visits. A detailed account of round two online engagement and survey response analysis is attached as an appendix: *FVRD Active Transportation Network Plan: Round Two Online Engagement Summary*.

Online survey responses and public feedback from the community meetings highlighted the importance of providing a separate space for people to safely and comfortably walk and cycle throughout their electoral area, especially in areas with high traffic volumes and communities that interface with Highways 1, 7 and 9. Community members, particularly those living in an Indigenous community, often walk and cycle along these highway corridors. Safety is a paramount concern, and the need for safe, delineated pathways was clearly expressed.

In Electoral Area H, residents expressed concerns about the safety of active transportation users and advocated for better integration with the City of Chilliwack. They emphasized the need for a multi-use pathway along Columbia Valley Highway to the City of Chilliwack boundary, especially during peak tourism season when heavy recreational vehicle and gravel truck traffic, coupled with narrow road shoulders, pose safety risks to users.

Similarly, in Areas C, F, and G, the Lougheed Highway serves as the primary transportation route, and concerns were raised about its suitability for active transportation due to high traffic volumes, speed, and large trucks. Public feedback indicated varying degrees of community support for utilizing alternative routes, such as undedicated roadways and sections of the Dewdney and Nicomen Dikes, for walking and cycling. These separate paths would redirect pedestrians and cyclists away from the highway, enhancing safety, local connectivity and community accessibility. While community support exists across the electoral areas for incorporating undedicated roads and dike sections into the Active Transportation Network Plan, some residents expressed opposition to these initiatives. The majority of community members who opposed the incorporation of the dikes into the ATNP reside in Electoral Area G.

Community Meetings

FVRD staff and Urban Systems staff collaborated to host four community meetings, aiming to keep community members informed about the progress of the ATNP. These meetings provided the opportunity for staff to present the results of the analysis of current conditions and previous community input. Staff provided an update on the plan's progress and introduced the proposed guiding principles, strategies, actions, and draft active transportation networks. Community members were encouraged to interact with staff through a question and answer session at the meeting, ranking their level of support for the proposed strategies on display boards and providing comments on the

proposed network maps. The open house presentation and display boards are attached as appendices.

Community meetings were held as follows:

- Electoral Area C, F & G – Deroche Community Hall, February 26, 2024
- Electoral Area E & H – Cultus Lake Community School, February 27, 2024
- Electoral Area D, Rosedale Community School, March 5, 2024
- Electoral Area A & B, Yale Community Centre, March 7, 2024

Overall, staff counted approximately 84 attendees across all community meetings combined.

The display boards at the community meetings provided the opportunity for the public to provide their level of support. Below is a summary of the feedback received on each display board.

Recommendation	Support	Somewhat Support	Neutral	Somewhat do not support	Do Not Support
Proposed Network & Projects	7	4	0	1	0
Guiding Principles	9	0	0	0	0
Decision-Making Process	9	1	0	0	0
Strategy 1: Create Community Active Transportation Connections	19	0	0	0	1
Strategy 2: Build a regional active transportation network	13	1	0	0	0
Strategy 3: Enhance active transportation connections to transit and school buses	16	0	0	0	0
Strategy 4: Improve safety for active transportation users	18	0	0	0	0
Strategy 5: Maintain the active transportation network	18	2	0	0	0
Strategy 6: Improve awareness of active transportation	14	0	0	0	0
Strategy 7: Enhance capacity and coordination to implement the active transportation plan	19	2	0	0	0

*Not all attendees provided feedback on the display boards and instead had conversations with staff at the community meetings.

Comments received at the community open houses are summarized in the table below:

ACTIVE TRANSPORTATION PROMOTION & INFRASTRUCTURE	<ul style="list-style-type: none"> • Focus on community-centric networks over regional ones • Promote the use of undedicated roadways for transportation • Address narrow sidewalks, especially for school children's safety • Develop bike trails and routes connecting neighbouring communities with traffic barriers • Implement pedestrian overpasses and support new AT development with development cost charges (DCCs) • Provide safe bike storage at transit connections and schools • Preserve the old Dewdney Bridge for an active transportation route connection • Request active transportation infrastructure to be included on both sides of the new Dewdney Bridge (MOTI) • Expand the Lakeside trail in Electoral Area H • Advocate for safe active transportation infrastructure on the Agassiz-Rosedale Bridge • Collaborate with the City of Chilliwack on cycling vision plans and cross-jurisdictional active transportation, particularly in connection with Area E and H
MAINTENANCE	<ul style="list-style-type: none"> • Maintain clean and safe bike lanes, including gravel removal • Implement a monthly garbage cleanup program on the AT network involving school children • Adopt a highway program for the AT network
SAFETY & EMERGENCY PREPAREDNESS	<ul style="list-style-type: none"> • Enhance monitoring of commercial vehicles and gravel trucks • Prioritize creating an alternate route from Area H to City of Chilliwack • Address concerns regarding wildfire risks and access to community areas • Ensure safe crossings on bridges and prioritize practical connections in Chilliwack • Enhance street lighting in areas close to Indigenous Communities along Highway 1 and 7 • Enforce speed limits, particularly in areas like Dogwood Valley and Yale • Consider speed reduction where Highway 1 intersects with community areas throughout the Canyon
DATA & AWARENESS	<ul style="list-style-type: none"> • Introduce cycling programs for both school children and adults • Promote active transportation initiatives • Include recreation and tourism data in road volume and speed analyses • Raise awareness of road maintenance mechanisms through utility bills and community groups • Consider direct mailouts for community meeting notification

Nicomen Island Dike

Many community members from Electoral Area G participated in the February 26, 2024 community meeting. The meeting presented information and proposed network routes specific to communities in

Electoral Areas C, F and G. A lively discussion ensued as community members provided input on the ATNP project and proposed networks. Participants expressed both support and opposition regarding the consideration of including portions of the Dewdney and Nicomen Island Dike within the FVRD active transportation network.

A focal point of the discussion revolved around concerns raised by those whose properties and/or agricultural operations directly intersect with the Nicomen Island Dike. Nicomen Island has a mixed ownership structure, including Nicomen Island Improvement District (NIID), private ownership, First Nation Reserve, and Crown land. A petition opposing the utilization of the dike for active transportation was circulated during the meeting and was endorsed with 35 signatures. The addresses of the signatories were not included in the petition. Concerns highlighted in both the petition and during the meeting regarding the integration of the Nicomen Island Dike in the FVRD Active Transportation Network are outlined below:

- Agriculture disruption - Portions of the dike serve as a corridor for farmers to access their fields for farm operations including planting, harvesting and livestock management. Concerns were raised that active transportation use and farming interface may disrupt farm operations when farmers need to move large equipment along sections of the dike to access their fields and encounter people walking and cycling.
- Safety and liability – Potential risks associated with the interface between active transportation users, farm machinery, and livestock were raised. Some community members were concerned about the complexities of navigating the dike as a shared space and the potential safety and liability implications to all users.
- Economic considerations - Community members outlined potential economic impacts that may be required if farming operations need to adapt to the dike opening to the public for active transportation. These concerns included costs associated with installing fencing and gates to safeguard farm assets and farm operations.
- Privacy and security – Concerns were raised regarding the potential consequences of granting public access to segments of the dike adjacent to private properties. These included worries about trespassing and vandalism and prompted a discussion on safeguarding landowners' privacy rights and property security. Participants highlighted existing enforcement challenges with trespassing, squatting, theft and other deviant behaviours. There was sentiment expressed that opening the dike for public use could exacerbate these challenges.

Dewdney Dike

Much of the February 26th community meeting discussion focused on the Nicomen Island Dike. The Dewdney Dike was identified as a route that may be feasible to include as part of the FVRD active transportation network and there was community interest in piloting this section of the dike for active transportation. The Dewdney Dike is owned and maintained by the Dewdney Area Improvement District (DAID), collaboration with DAID and property owners whose properties interface with the dike would be required before a pilot project would be considered.

The community meeting provided an opportunity for FVRD staff to gather feedback regarding potential areas suitable for being included in the active transportation network. While there was both support and opposition to including the dikes in the network, more comprehensive data and community consultation is required to assess what areas of the dike could be integrated into the FVRD active transportation network and what areas may not be suitable. The discussion highlighted the complex considerations involved in integrating active transportation infrastructure with agricultural landscapes. Navigating these concerns requires a collaborative approach that balances the promotion of sustainable active transportation options with the preservation of agricultural sustainability to enhance community well-being. Staff will continue working with community members and other stakeholders to finalize the proposed active transportation network for the Dewdney and Nicomen dikes.

Next Steps

Building upon the input gathered in both phases of community engagement, the next steps in the ATNP project involve integrating the information received from public engagement, Electoral Area Directors, Indigenous communities, the Ministry of Transportation and Infrastructure and other government agencies, community user groups and the technical data analysis to develop the draft FVRD Active Transportation Network plan. Staff will also collaborate with FVRD municipalities to ensure alignment between the FVRD ATNP and municipal active transportation plans, establishing a cohesive regional network.

The FVRD ATNP will establish a vision for active transportation applicable to the FVRD and electoral area communities, integrating both existing and new policy recommendations to support pedestrian and cycling initiatives. It will identify specific infrastructure projects and locations where active transportation infrastructure is needed, addressing concerns such as safety and accessibility. Additionally, the plan will create avenues for accessing grant funding to implement the recommendations so that the proposed improvements can be effectively realized. The draft plan will be presented to the FVRD Board and then posted to the *Have Your Say FVRD – ATNP* project page for community feedback. Completion of this project is expected in the third quarter of 2024.

COST

The total cost of the FVRD ATNP project is \$92,421. The project is funded through the Ministry of Transportation and Infrastructure's 2022 Infrastructure Grants Program, through Destination BC's Targeted Regional Tourism Development Initiative, and Experience the Fraser grant funding.

CONCLUSION

Through engagement for the FVRD Active Transportation Network Plan, staff have received valuable insights. These insights will serve as the basis for finalizing the network priorities, plan recommendations, and ATNP vision, which will ultimately create the final plan. Through detailed discussions around community priorities and feedback, key takeaways from the engagement highlight the significance of active transportation to community members. The identified community priorities, which include upgrading road infrastructure, integrating appropriate dikes and undedicated

roads into the network, and improving connections with member municipalities, Indigenous communities, and neighbouring electoral communities, offer a clear direction for the plan's development.

COMMENTS BY:

Graham Daneluz, Director of Planning and Development: Reviewed and supported.

Stacey Barker, Director of Regional Services/Deputy CAO: Reviewed and supported.

Kelly Lownsbrough, Director of Corporate Services/CFO: Reviewed and supported.

Jennifer Kinneman, Chief Administrative Officer: Reviewed and supported.

WELCOME

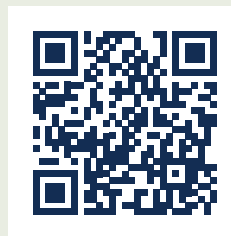
The Fraser Valley Regional District (FVRD) is developing an Active Transportation Network Plan to **improve walking, cycling, and rolling connections across the FVRD** and **make active transportation a more comfortable and convenient option** for people of all ages and abilities.

This project is focused on the communities in the FVRD electoral areas, identifying opportunities for improved network connections and creating routes that are safe and accessible for everyone. Connections to neighbouring municipalities and major trail networks will also be considered.

The Plan will identify new policies, programs, and infrastructure recommendations to improve access to active transportation options for everyone.

We collected your suggestions on improving active transportation in the FVRD and have developed draft guiding principles, policy direction, and a proposed network plan.

We are now looking for your feedback on the draft elements of the Plan!



Scan the QR Code **using the camera on your phone** or visit **HAVEYOURSAY.FVRD.CA/ATNP**

PURPOSE OF TODAY

- Provide an update on the project and work completed so far.
- Present what we heard during the first round of engagement.
- Gather community input to gauge support and refine the draft recommendations to inform the final Plan.

NEXT STEPS

After this round of engagement, the project team will review the results and provide a summary of input received online and in-person.

We will take the input received and develop the final Active Transportation Network Plan to be completed in spring 2024.



GUIDING PRINCIPLES

The following principles will be used to guide active transportation decisions in the FVRD:

COLLABORATIVE

Incorporate working together with residents and community and agency partners to ensure the success and implementation of the plan.

ADAPTIVE

Reflect the unique communities of the FVRD that span across jurisdictional, cultural, and/or geographical boundaries.

EQUITABLE

Provide safe, accessible, and affordable access to active transportation for people regardless of age, ability, and income.

RECONCILIATION

Strengthen and sustain relationships through continued conversations and active transportation connections.

CLIMATE ACTION

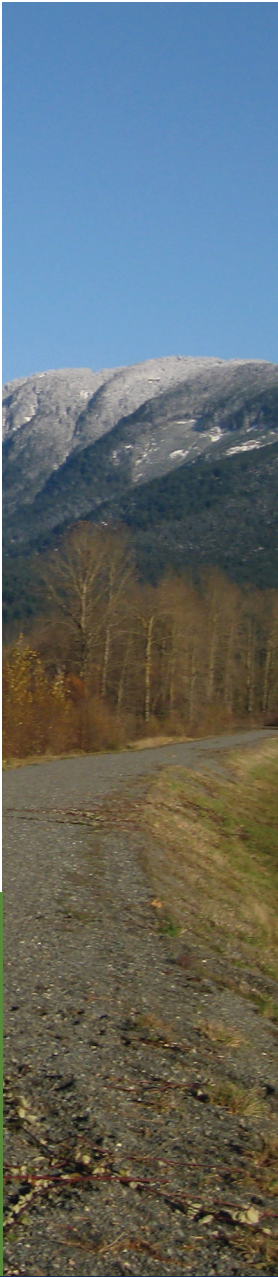
Encourage modal shift to active travel (walking, cycling, and taking transit) to help reduce greenhouse gas emissions.

IMPLEMENTABLE

Develop a realistic and implementable plan that can be achieved through phases and cost-share funding opportunities.

Do you support these guiding principles? Place a dot sticker next to your answer below.

SUPPORT	SOMEWHAT SUPPORT	NEUTRAL	SOMEWHAT DO NOT SUPPORT	DO NOT SUPPORT



DECISION MAKING PROCESS

A series of criteria was developed to guide the prioritization of proposed active transportation infrastructure improvements in the FVRD, the results of which are presented today.

The prioritization criteria includes:

- Road volumes and speeds
- Proximity to transit bus stops
- Proximity to school bus stops
- Proximity to community destinations (parks, schools, community centres, recreation centres, etc.)
- Future residential and commercial development areas
- Connections between electoral areas, Indigenous communities, and member municipalities
- Network connectivity (fills pedestrian and bicycle network gaps)
- Population density (number of people served/impacted)

Do you support the approach to prioritizing active transportation infrastructure improvements?

Place a dot sticker next to your answer below.

SUPPORT	SOMEWHAT SUPPORT	NEUTRAL	SOMEWHAT DO NOT SUPPORT	DO NOT SUPPORT



STRATEGIES

Based on what we heard from the first round of engagement and a review of existing plans and policy documents we have developed seven strategies for the FVRD active transportation network plan. Under each strategy there is a series of actions that can be implemented to make it easier to walk and bicycle within the FVRD electoral areas.

Strategy 1: Create Community Active Transportation Connections

Strategy 2: Build a Regional Active Transportation Network

Strategy 3: Enhance Active Transportation Connections to Transit and School Bus Stops

Strategy 4: Improve Safety for Active Transportation Users

Strategy 5: Maintain the Active Transportation Network

Strategy 6: Improve Awareness of Active Transportation

Strategy 7: Enhance Capacity and Coordination to Implement the Active Transportation Plan

We are seeking your input on these policy directions. The following boards will provide more detail on each of the strategies and their supporting actions.



STRATEGY 1: CREATE COMMUNITY ACTIVE TRANSPORTATION CONNECTIONS

This strategy focuses on creating active transportation connections for rural communities in the electoral areas. This includes providing walking and cycling routes where people live in the electoral areas that connect to local destinations and can also be used for recreation.

SUGGESTED ACTIONS:

- Create active transportation routes that connect to local destinations and recreational areas.
- Created multi-use trails for recreational use.
- Formalize routes that are already being used for active transportation.
- Consider opportunities to utilize undedicated roadways for active transportation.
- Consider piloting dikes for public access to use for active transportation.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 2: BUILD A REGIONAL ACTIVE TRANSPORTATION NETWORK

This strategy focuses on building a regional active transportation network that provides seamless connections within, to, and from the FVRD. This includes providing and enhancing regional connections between neighbouring jurisdictions such as electoral areas, Indigenous communities, and member municipalities.

SUGGESTED ACTIONS:

- Provide safe and comfortable active transportation routes on roads to connect people to neighbouring communities and destinations.
- Support the Experience the Fraser initiative.
- Utilize utility and rail corridors and other right-of-way agreements to expand the trail network.
- Enhance infrastructure for active transportation users on bridges.
- Pursue opportunities to provide new active transportation routes and facilities in conjunction with projects, plans, and developments within the FVRD.
- Support opportunities to integrate active transportation in the FVRD through collaboration with community and agency partners.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 3: ENHANCE ACTIVE TRANSPORTATION CONNECTIONS TO TRANSIT AND SCHOOL BUSES

This strategy focuses on enhancing the integration of active transportation to other modes such as transit and school buses.

SUGGESTED ACTIONS:

- Improve connections to transit.
- Provide safe and direct pedestrian connections to school bus pick-up and drop-off locations.
- Support School District 33, 75, and 78 with exploring ways to encourage more biking to school or to school bus stops.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 4: IMPROVE SAFETY FOR ACTIVE TRANSPORTATION USERS

This strategy focuses on making it safer to get around by addressing safety-related barriers to active transportation.

SUGGESTED ACTIONS:

- Provide active transportation infrastructure types that are appropriate to the conditions of the roads within the FVRD.
- Support the Ministry of Transportation and Infrastructure to evaluate speed limits in transition zones that approach rural communities.
- Advocate for safe crossings in communities that straddle numbered highways and major roads.
- Address parked motor vehicles on paved shoulders impeding active transportation access.
- Improve visibility through pedestrian-scale lighting where appropriate.
- Monitor the use of active transportation infrastructure and consider the impact of new mobility technologies.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 5: MAINTAIN THE ACTIVE TRANSPORTATION NETWORK

This strategy focuses on improving maintenance to make sure that active transportation can be used year-round.

SUGGESTED ACTIONS:

- Work with community and agency partners to advocate for improved maintenance to address gravel, debris, and overgrown vegetation on roads.
- Design active transportation infrastructure to provide adequate drainage, gravel and sand removal, and snow storage and removal.
- Raise awareness among community members regarding the mechanisms available to request maintenance on roads.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 6: IMPROVE AWARENESS OF ACTIVE TRANSPORTATION

This strategy focuses on how to increase awareness about active transportation in the FVRD to existing and future active transportation users.

SUGGESTED ACTIONS:

- Collaborate with community and agency partners to develop a FVRD Cycling Guide to include maps showing common cycling routes and active transportation infrastructure in the FVRD.
- Collaborate with community and agency partners to develop a wayfinding and signage approach for consistency of signage across the FVRD.
- Educate community members and decision makers on the benefits of active transportation.

Place a sticky note if there is anything missing.



What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

STRATEGY 7: ENHANCE CAPACITY AND COORDINATION TO IMPLEMENT THE ACTIVE TRANSPORTATION PLAN

This strategy focuses on building capacity and coordination at the FVRD to implement the active transportation network plan.

SUGGESTED ACTIONS:

- Consider dedicating additional funds for active transportation infrastructure and maintenance.
- Pursue opportunities to leverage additional funding sources to develop active transportation infrastructure.

Place a sticky note if there is anything missing.



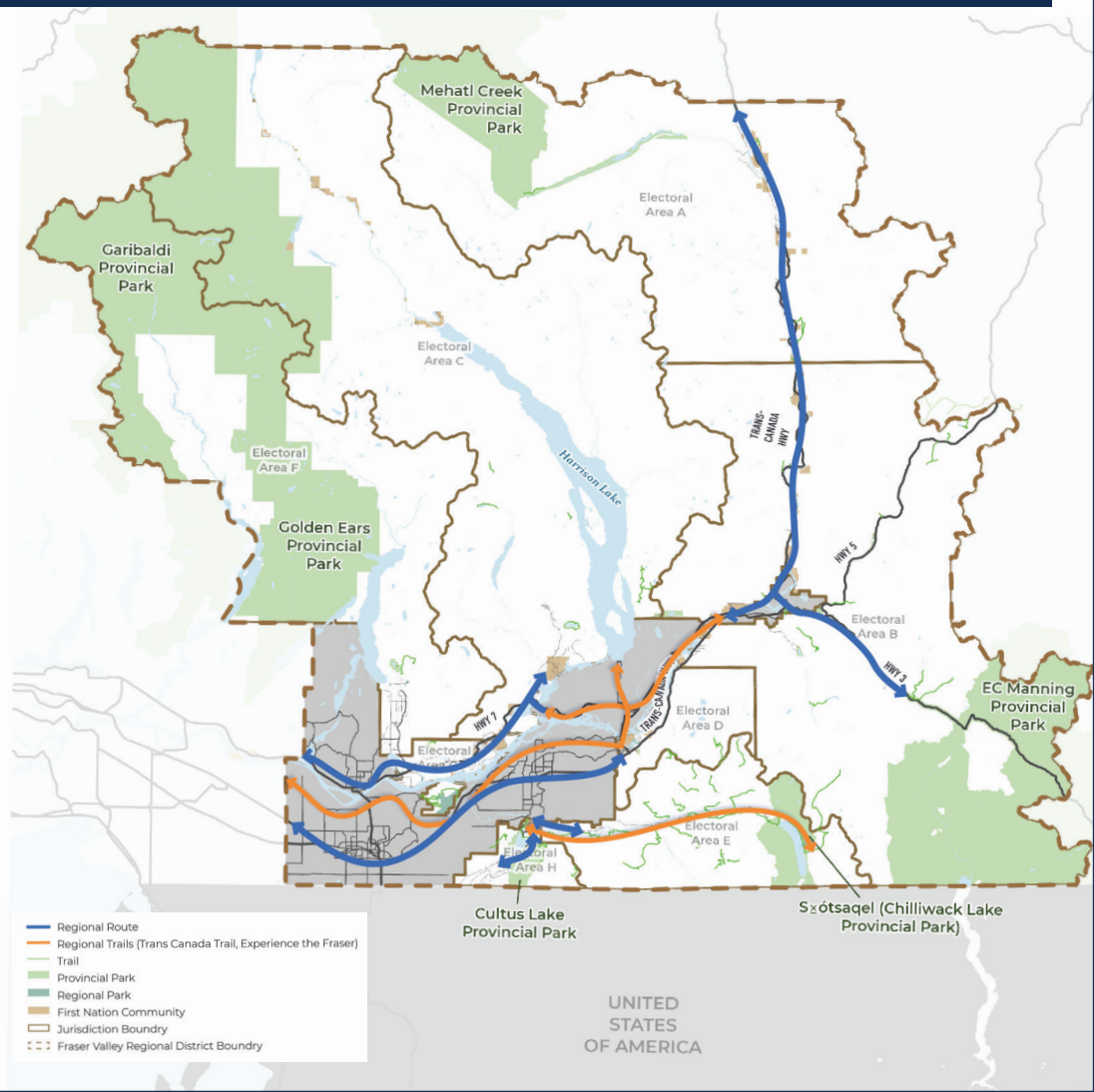
What is your level of support for this strategy?

Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

PROPOSED NETWORK AND PROJECTS

FVRD DRAFT ACTIVE TRANSPORTATION NETWORK



The draft concept for the long-term active transportation network establishes a long-term vision for active transportation infrastructure in the FVRD. It provides walking and cycling connections within, to, and from the FVRD.

Regional routes provide connections between and within electoral areas and member municipalities. Regional trails such as the Trans Canada Trail and the Experience the Fraser concept are also a part of the draft concept regional active transportation network.

What is your level of support with the draft regional active transportation network?

Place a dot sticker next to your answer below.

SUPPORT	SOMEWHAT SUPPORT	NEUTRAL	SOMEWHAT DO NOT SUPPORT	DO NOT SUPPORT

Place a sticky note with any additional comments here.



ROUTE TYPES

Route types within the long-term active transportation network have been identified as the following:

COMMUNITY ROUTES

Provide local active transportation routes to access key community destinations (schools, community halls, recreation facilities, transit and school bus stops) as well as routes for recreational purposes close to where people are living.

UNDEDICATED ROAD

An undedicated road right-of-way is space that has been dedicated for a road where the road has not been constructed. Some of these locations could be used to provide active transportation connections.

REGIONAL ROUTES

Provides connections between electoral areas, member municipalities, and Indigenous communities. Regional routes generally follow a highway, but do not need to be directly adjacent to or on the highway.

CONCEPTUAL DIKE PILOT

Sections of an existing dike that have been identified as a conceptual pilot location to allow public access for active transportation.

PRIORITY ROUTES

Priority routes were selected from the long-term network and fill important network gaps and connect key destinations. Not all priority routes will be implemented in the short-term and some may be challenging to implement.

The following boards identify priority projects for the FVRD's active transportation within the electoral areas.



Community Route: Off-street Trail, Morris Valley Road



Regional Route: Paved Shoulders, Highway 7



Conceptual Dike Pilot: Elbow Creek Dike

ELECTORAL AREA G: DEWDNEY, NICOMEN ISLAND, DEROCHE



- Priority Route
- Long-Term Active Transportation Network
- Dike
- Community Hall
- School
- School Bus Stop
- Trailhead
- Railway
- Trail
- Resource / Service Road
- First Nation Community
- Regional Park
- Electoral Area
- Jurisdiction Boundaries

A HIGHWAY 7 – SHOOK AVENUE (CITY OF MISSION) TO BROOKS ROAD (EA C)

Provide a designated space for people to safely and comfortably walk and cycle along Highway 7, Nicomen Slough Bridge, and Deroche Bridge.

Route Type: Regional route
Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

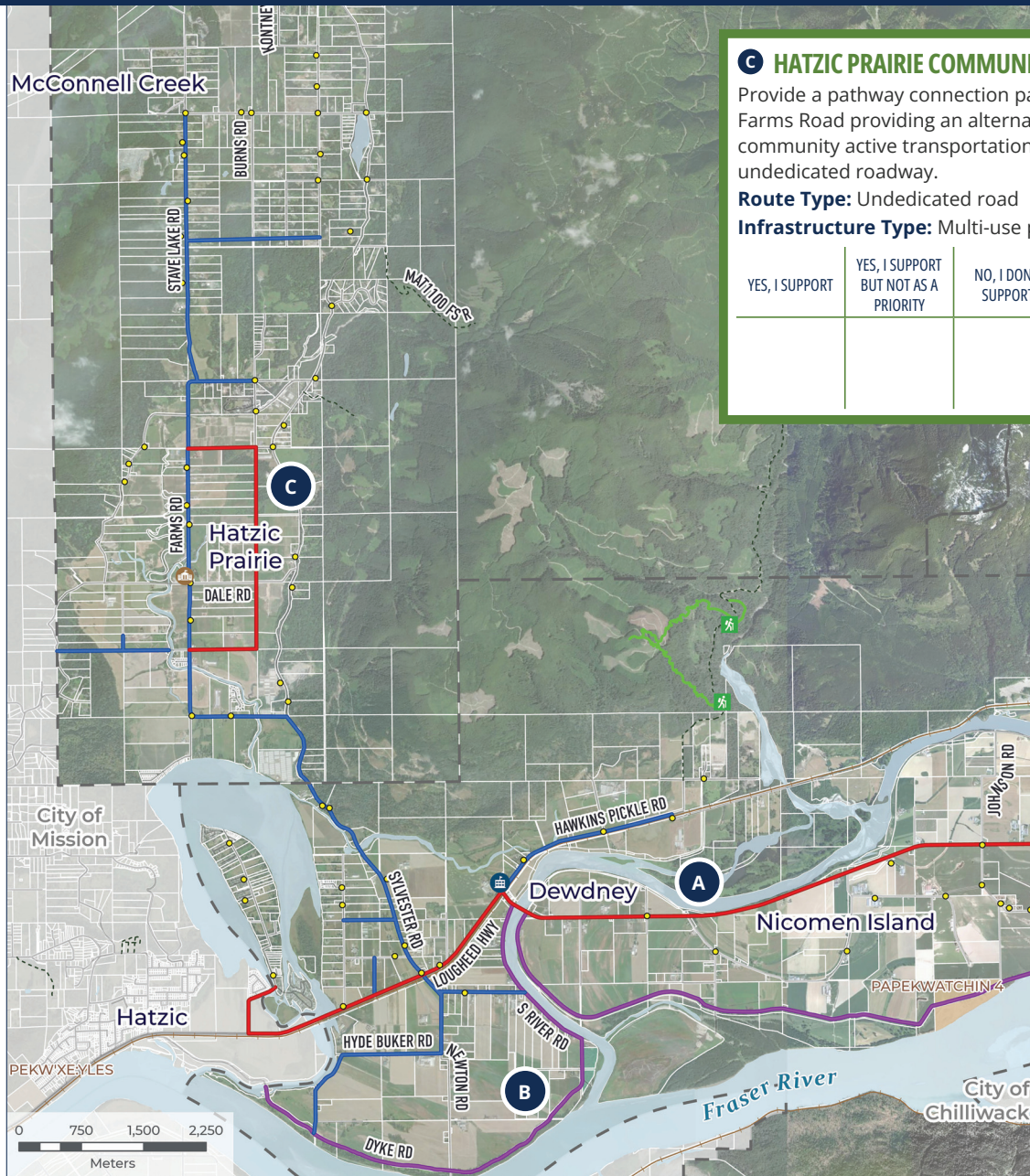
B CONCEPTUAL DEWDNEY AND NICOMEN ISLAND DIKE PILOT

The first round of engagement identified the dikes as a potential ATNP route to permit people walking and cycling. Consultation and approval from private landowners, Dewdney Area and Nicomen Island Improvement Districts and Indigenous communities would be required prior to any pilot.

Route Type: Conceptual dike pilot
Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA F: MCCONNELL CREEK, HATZIC PRAIRIE, HATZIC, DEWDNEY



C HATZIC PRAIRIE COMMUNITY ROUTE

Provide a pathway connection parallel to Farms Road providing an alternative off-street community active transportation route along an undedicated roadway.

Route Type: Undedicated road

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

A HIGHWAY 7 – SHOOK AVENUE (CITY OF MISSION) TO BROOKS ROAD (EA C)

Provide a designated space for people to safely and comfortably walk and cycle along Highway 7 and Nicomen Slough Bridge.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

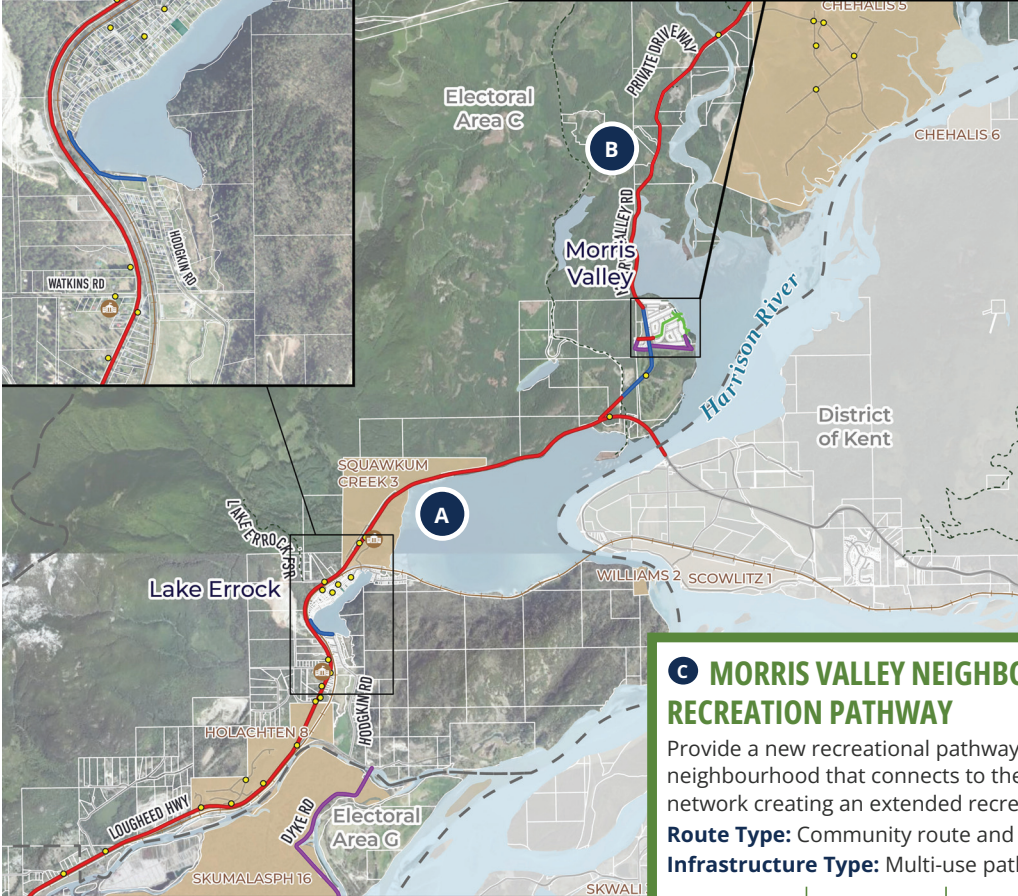
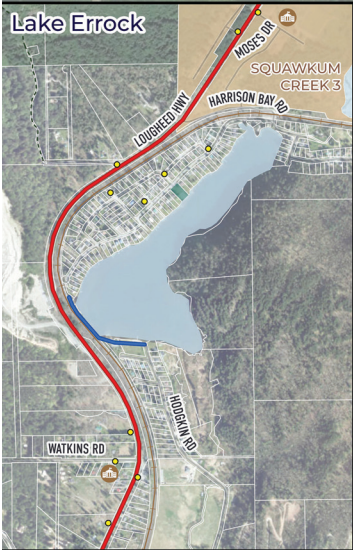
B CONCEPTUAL DEWDNEY AND NICOMEN ISLAND DIKE PILOT

The first round of engagement identified the dikes as a potential ATNP route to permit people walking and cycling. Consultation and approval from private landowners, Dewdney Area and Nicomen Island Improvement Districts and Indigenous communities would be required prior to any pilot.

Route Type: Conceptual dike pilot

Infrastructure Type: Multi-use pathway

ELECTORAL AREA C: MORRIS VALLEY & LAKE ERROCK



- Priority Route
- Long-Term Active Transportation Network
- Dike
- Community Hall
- School Bus Stop
- Railway
- Trail
- Resource / Service Road
- First Nation Community
- Community Park
- Electoral Area
- Jurisdiction Boundaries

C MORRIS VALLEY NEIGHBOURHOOD RECREATION PATHWAY

Provide a new recreational pathway in the Morris Valley neighbourhood that connects to the existing pathway network creating an extended recreational loop route.

Route Type: Community route and conceptual dike pilot
Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

A HIGHWAY 7 – BROOKS ROAD TO DISTRICT OF KENT

Provide a designated space for people to safely and comfortably walk and bicycle along Highway 7 and on the Harrison Mills Bridge.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

B MORRIS VALLEY ROAD – MORRIS VALLEY NEIGHBOURHOOD TO HEMLOCK VALLEY ROAD

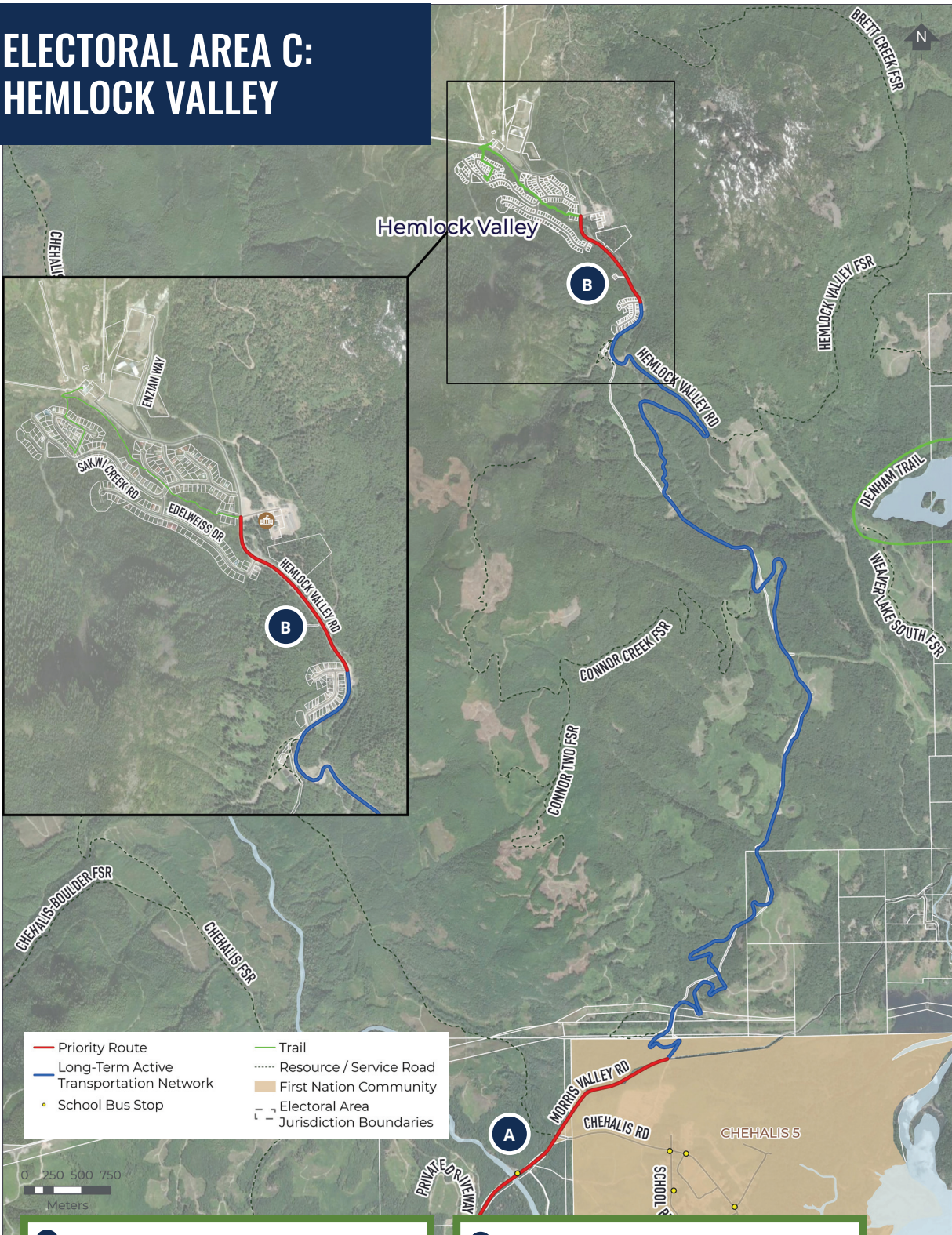
Provide a designated space for people to safely and comfortably walk and bicycle along Morris Valley Road.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA C: HEMLOCK VALLEY



A MORRIS VALLEY ROAD – MORRIS VALLEY NEIGHBOURHOOD TO HEMLOCK VALLEY ROAD

Provide a designated space for people to safely and comfortably walk and cycle along Morris Valley Road.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

B HEMLOCK VALLEY ROAD – SNOWMIST DRIVE TO LAUREL PLACE

Provide a community active transportation route adjacent to Hemlock Valley Road that connects to the existing Village Loop Trail within the community.

Route Type: Community route

Infrastructure Type: Multi-use pathway

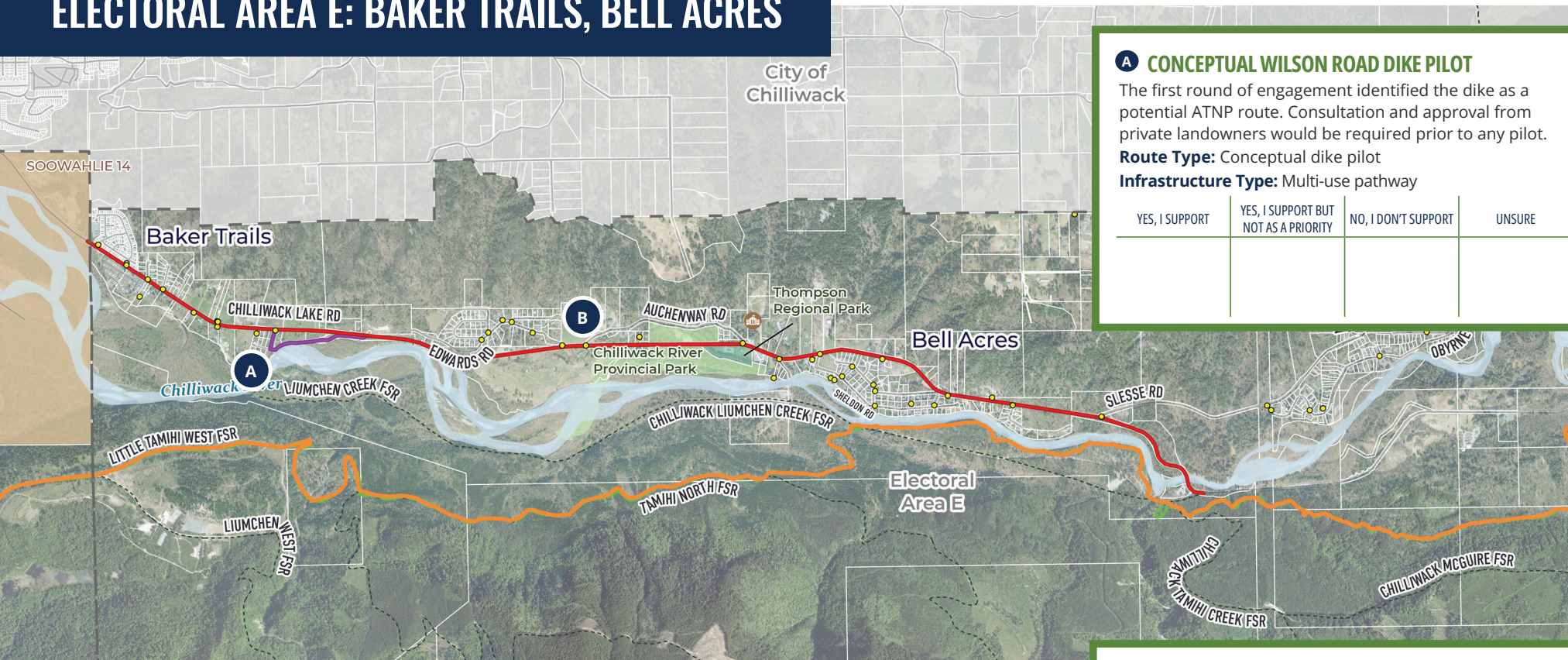
YES, I SUPPORT

YES, I SUPPORT
BUT NOT AS A
PRIORITY

NO, I DON'T
SUPPORT

UNSURE

ELECTORAL AREA E: BAKER TRAILS, BELL ACRES



A CONCEPTUAL WILSON ROAD DIKE PILOT

The first round of engagement identified the dike as a potential ATNP route. Consultation and approval from private landowners would be required prior to any pilot.

Route Type: Conceptual dike pilot

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

- Priority Route
- Long-Term Active Transportation Network
- Dike

- Community Hall
- School Bus Stop
- Trail

- Trans Canada Trail
- Resource / Service Road
- First Nation Community

- Provincial Park
- Regional Park
- Electoral Area
- Jurisdiction Boundaries

B CHILLIWACK LAKE ROAD - SOOWAHLIE FIRST NATION TO TAMIHI FOREST LIUMCHEN SERVICE ROAD

Address parked vehicles encroaching on the paved shoulder by providing designated parking locations and widen shoulders for people walking and cycling.

Route Type: Regional route

Infrastructure Type: Widen shoulders and formalize parking.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA E: PAULSEN ROAD



- Priority Route
- Long-Term Active Transportation Network

- Trail
- Trans Canada Trail
- Resource / Service Road
- Provincial Park

- Electoral Area
- Jurisdiction Boundaries

A PAULSEN ROAD COMMUNITY CONNECTION

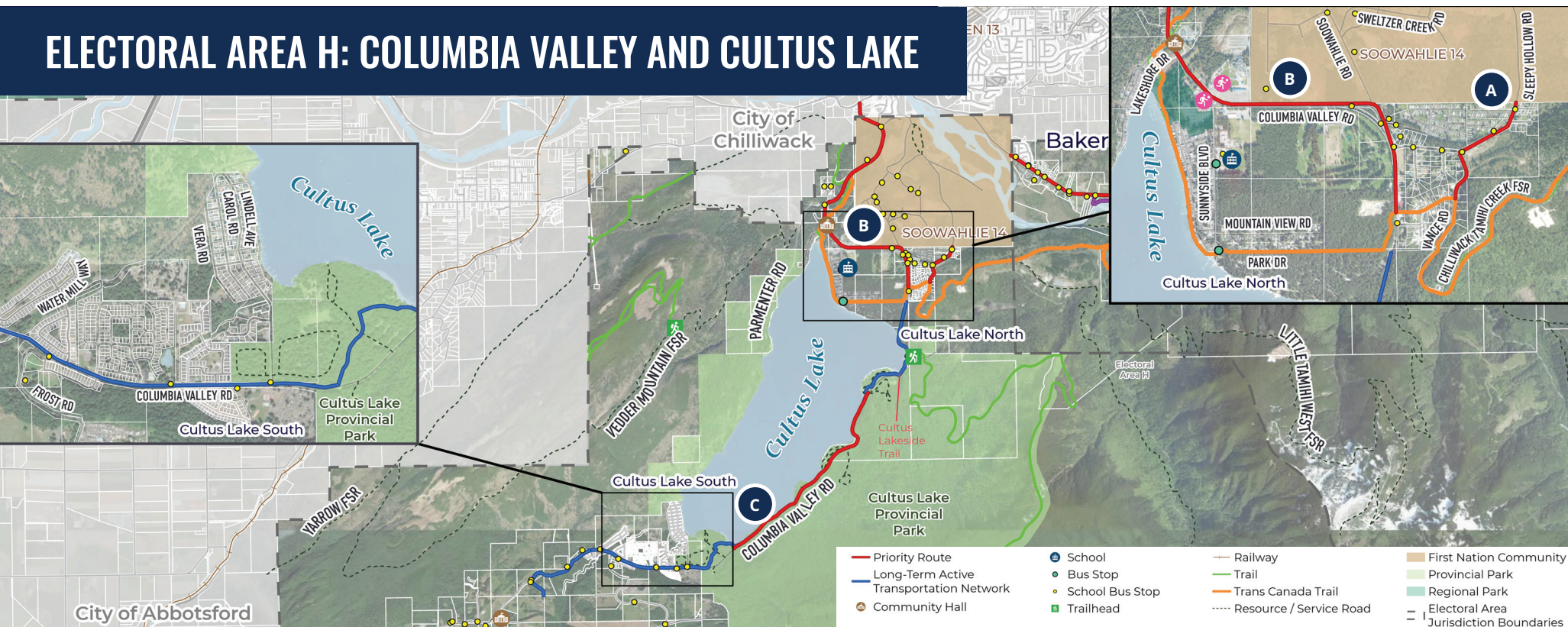
Provide a pathway connection between Chilliwack Lake Road to Paulsen Road along an undedicated roadway.

Route Type: Undedicated road

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA H: COLUMBIA VALLEY AND CULTUS LAKE



A SLEEPY HOLLOW ROAD CONNECTION

Provide a community active transportation connection between Vance Road to Soowahlie First Nation.

Route Type: Community route

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

B COLUMBIA VALLEY ROAD - PARMENTER ROAD TO RACHAEL PLACE

In partnership with the Cultus Lake Park Board, provide an active transportation route along this section of the roadway.

Route Type: Community route

Infrastructure Type: Widen shoulders with barrier separation or provide an off-street pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

C CULTUS LAKESIDE TRAIL EXPANSION

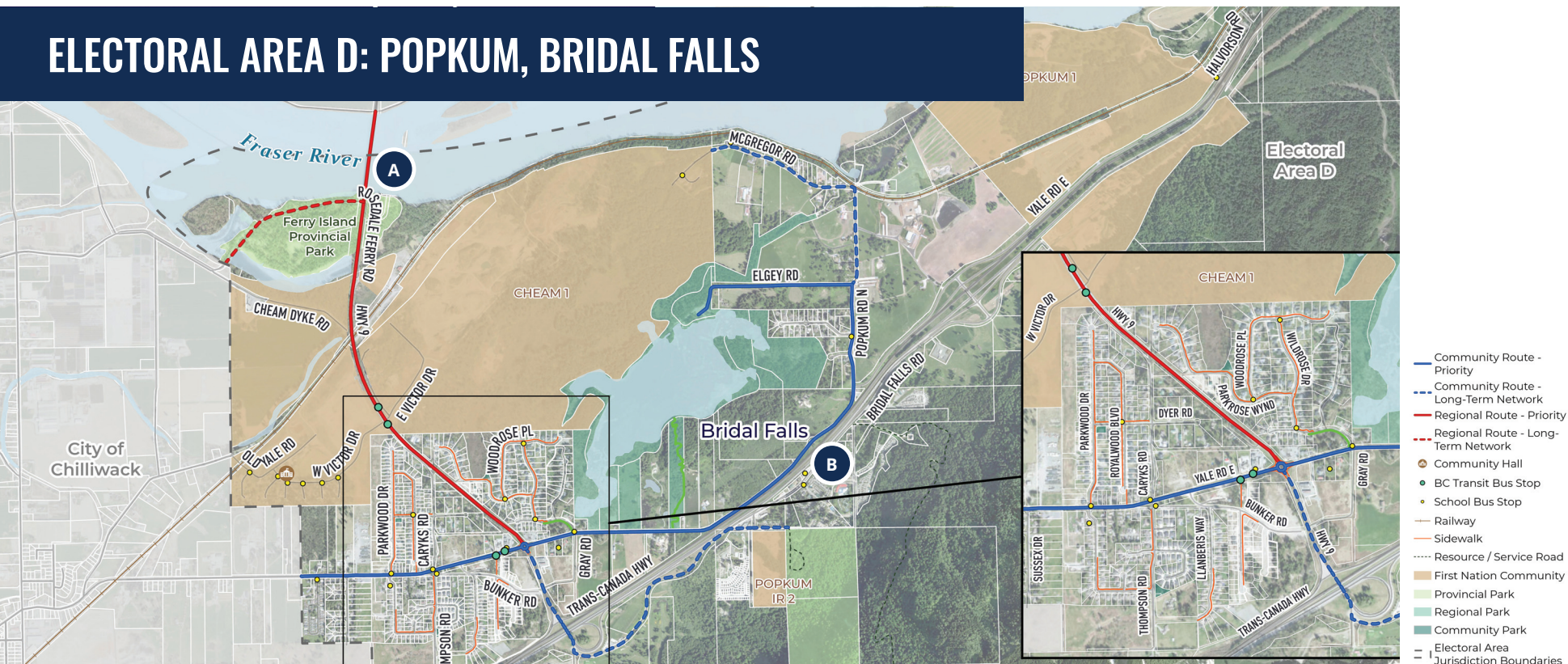
Complete the Cultus Lakeside Trail between Cultus Lake South and Cultus Lake North filling in the gap in the existing trail route.

Route Type: Community route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA D: POPKUM, BRIDAL FALLS



A HIGHWAY 9 – AGASSIZ ROSEDALE BRIDGE TO HIGHWAY 9 AND YALE ROAD ROUNDABOUT

Provide a designated space for people to safely and comfortably walk and bicycle along the Agassiz-Rosedale Bridge and Highway 9.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

B POPKUM COMMUNITY ROUTE – YALE ROAD, POPKUM ROAD NORTH, ELGEY ROAD

Provide a connection for people to safely walk and cycle in Popkum along Yale Road and access the Popkum Community Trail and Cheam Lake Wetlands Regional Park.

Route Type: Community route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include enhancing the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA A: CANYON AND NORTH BEND, BOSTON BAR

Legend:

- Community Route - Priority
- Regional Route - Priority
- Regional Route - Long-Term Network
- Recreation Facility
- Community Hall
- School
- School Bus Stop
- Railway
- Resource / Service Road
- First Nation Community
- Electoral Area
- Jurisdiction Boundaries

Map Labels:

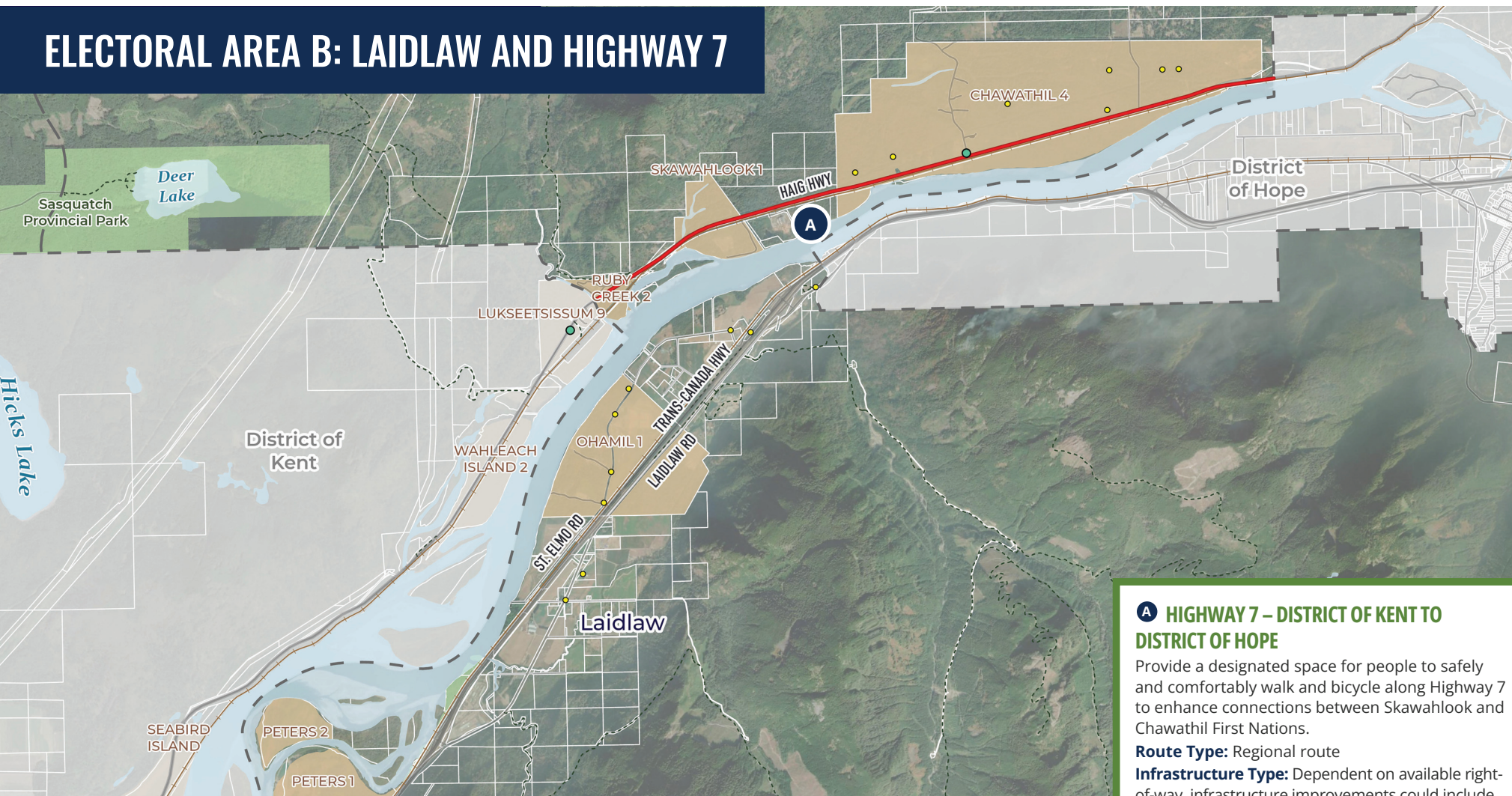
- CHAUMOX 11
- SPEYUM 3
- TSAWAWMUCK 1
- MINIERS RD
- SAM ADAMS 12
- CHAMOOK RD
- Canyon Alpine
- BUCKTUM 4
- North Bend
- CHAMOOK RD
- HIGHLINE RD
- NORTH BEND CRES
- 1ST AVE
- 2ND AVE
- FRASER RIVER
- TRANS-CANADIAN HWY
- KOPCHITCHIN IR 2
- North Bend
- BOSTON BAR IR 9
- KOPCHITCHIN IR 2
- BOSTON BAR
- GREEN RANCH RD
- RAILWAY AVE
- OLD BOSTON BAR RD
- ASH RD
- POPLAR RD
- Boston Bar
- TRANS-CANADIAN HWY
- BOSTON BAR 8
- BOSTON BAR 10

Scale: 0 250 500 750 Meters

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA B: LAIDLAW AND HIGHWAY 7



- Regional Route - Priority
- BC Transit Bus Stop
- School Bus Stop
- Railway
- Resource / Service Road
- First Nation Community
- Provincial Park
- Electoral Area Jurisdiction Boundaries

A HIGHWAY 7 – DISTRICT OF KENT TO DISTRICT OF HOPE

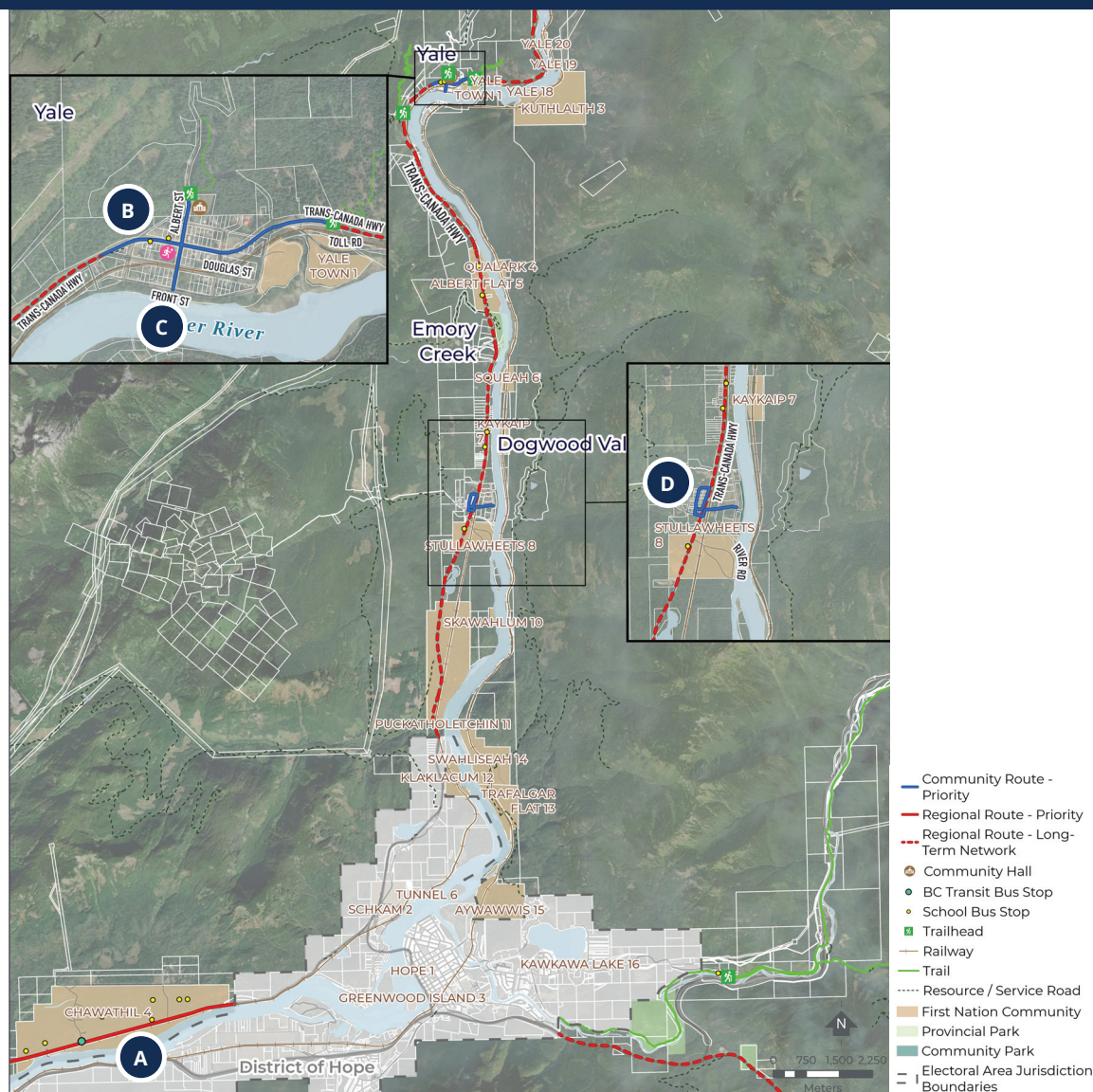
Provide a designated space for people to safely and comfortably walk and bicycle along Highway 7 to enhance connections between Skawahlook and Chawathil First Nations.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA B: YALE, EMORY CREEK, DOGWOOD VALLEY



A HIGHWAY 7 – DISTRICT OF KENT TO DISTRICT OF HOPE

Provide a designated space for people to safely and comfortably walk and bicycle along Highway 7 to enhance connections between Skawahlook and Chawathil First Nations.

Route Type: Regional route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

B HIGHWAY 1 – YALE

Provide a designated space for people to safely and comfortably walk and bicycle along Highway 1 throughout Yale

Route Type: Community route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include widening the existing shoulder or providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

C ALBERT STREET – FRONT STREET TO YALE LIBRARY

Provide a designated space for people to safely and comfortably walk and bicycle along Highway 1 throughout Yale

Route Type: Community route

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

D DOGWOOD VALLEY CONNECTOR

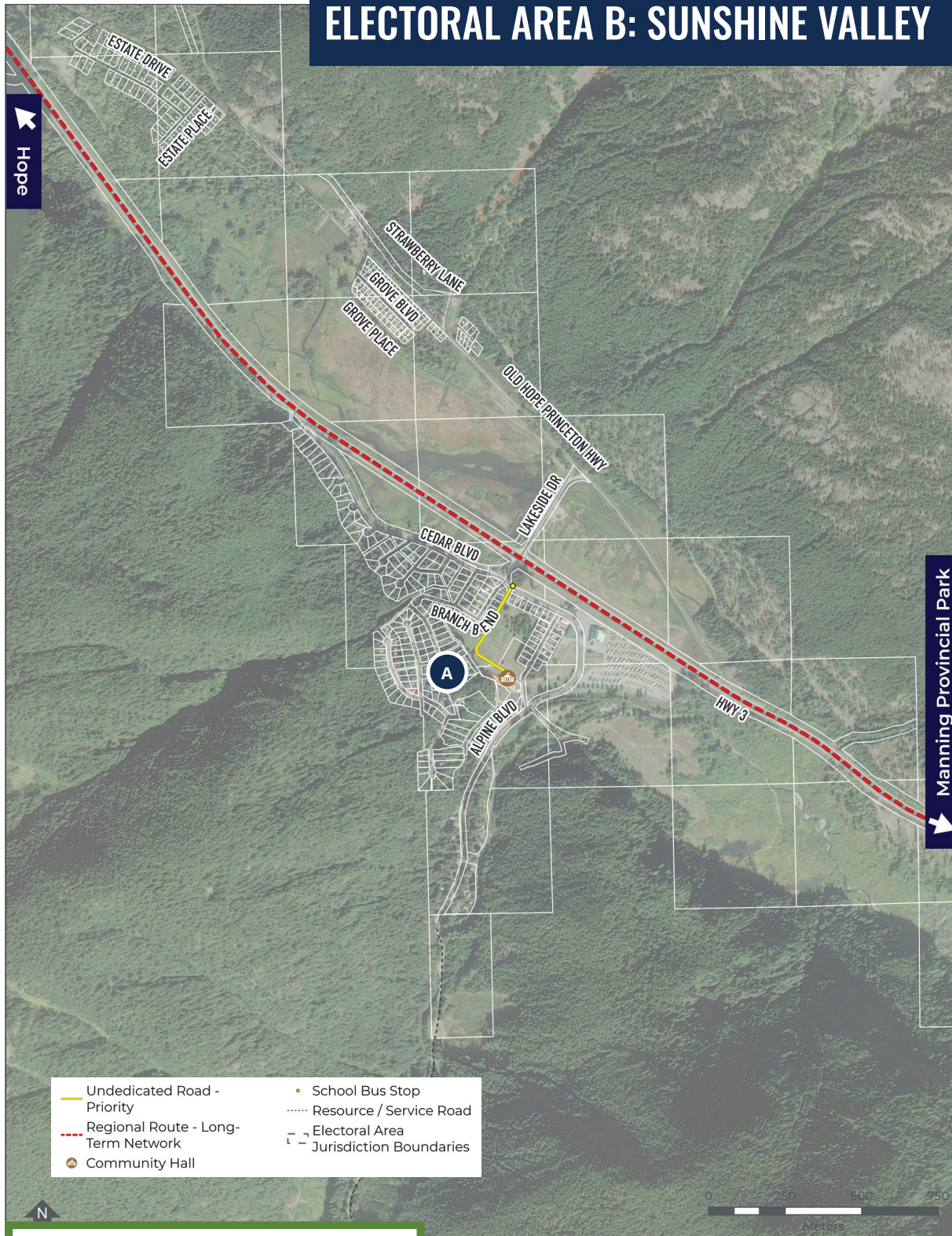
Provide a designated space for people to safely and comfortably walk and bicycle along Reynolds Road, Nickel Mine Road, and Park Lane Drive.

Route Type: Community route

Infrastructure Type: Dependent on available right-of-way, infrastructure improvements could include providing a separated pathway.

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

ELECTORAL AREA B: SUNSHINE VALLEY



A SUNSHINE VALLEY PATHWAY

Formalize the pathway to access Sunshine Valley Community Center

Route Type: Undedicated road

Infrastructure Type: Multi-use pathway

YES, I SUPPORT	YES, I SUPPORT BUT NOT AS A PRIORITY	NO, I DON'T SUPPORT	UNSURE

FVRD ACTIVE TRANSPORTATION NETWORK PLAN

Open House
February & March 2024



WELCOME & INTRODUCTIONS

Fraser Valley Regional District

- Melissa Geddert
- David Urban
- Andrea Antifaeff

Urban Systems Ltd.

- Sarah Freigang



LAND ACKNOWLEDGEMENT

The Fraser Valley Regional District is located on the traditional, ancestral and unceded territory of the Stó:lō, St'át'imc, Sts'ailes, and Nlaka'pamux Peoples. Indigenous Peoples have lived in the region since time immemorial.

We are committed to conducting this project in a manner that is true and contributes to lasting reconciliation with the Indigenous peoples of this region.

The ATNP will support expanding and enhancing Indigenous communities' active transportation connections within the FVRD while also promoting opportunities to enhance connections with land and culture.



PURPOSE



Provide an update on the project planning process



Share findings from the existing condition analysis and community input



Present the preliminary plan, policy direction and proposed network



Collect your input and confirm plan direction

AGENDA

- 1. Presentation**
 - a. ATNP Project Overview**
 - b. Existing Conditions and Context**
 - c. Draft Policy Direction and
Proposed Network**
- 2. Open House**

The background image shows a wide, flat landscape with green fields and scattered trees. In the distance, there are rolling hills and a prominent, snow-capped mountain peak under a clear blue sky. A semi-transparent green rectangle is centered over the middle of the image, serving as a backdrop for the title text.

ATNP PROJECT OVERVIEW

WHAT IS ACTIVE TRANSPORTATION



Any form of human-powered transportation



It includes people walking, biking, skateboarding, and using mobility devices such as walkers, strollers, and wheelchairs



New and emerging transportation modes such as e-scooters and e-bikes also fit in this category and may use the same trails and pathways

WHAT IS THE FVRD ATNP?

A planning document that aims to create a comprehensive and connected network for active transportation

Focus is on the FVRD's eight electoral areas

Roadways within the FVRD's electoral areas are under the Ministry of Transportation and Infrastructure jurisdiction

Collaboration and partnerships is key to the success of the ATNP

THE PLAN WILL ...

- Establish a **vision** for active transportation
- Integrate and identify existing and new **policy** recommendations to support active transportation
- Identify **infrastructure** projects and locations for active transportation infrastructure
- Create opportunities to access grant **funding** to implement the plan's recommendations

WORKPLAN AND METHODOLOGY



Phase 1
Project Launch
Fall 2023



Phase 2
Background Research +
Round 1 Engagement
Fall 2023 – Winter 2024



Phase 3
Setting Future Direction +
Round 2 Engagement
Winter 2024

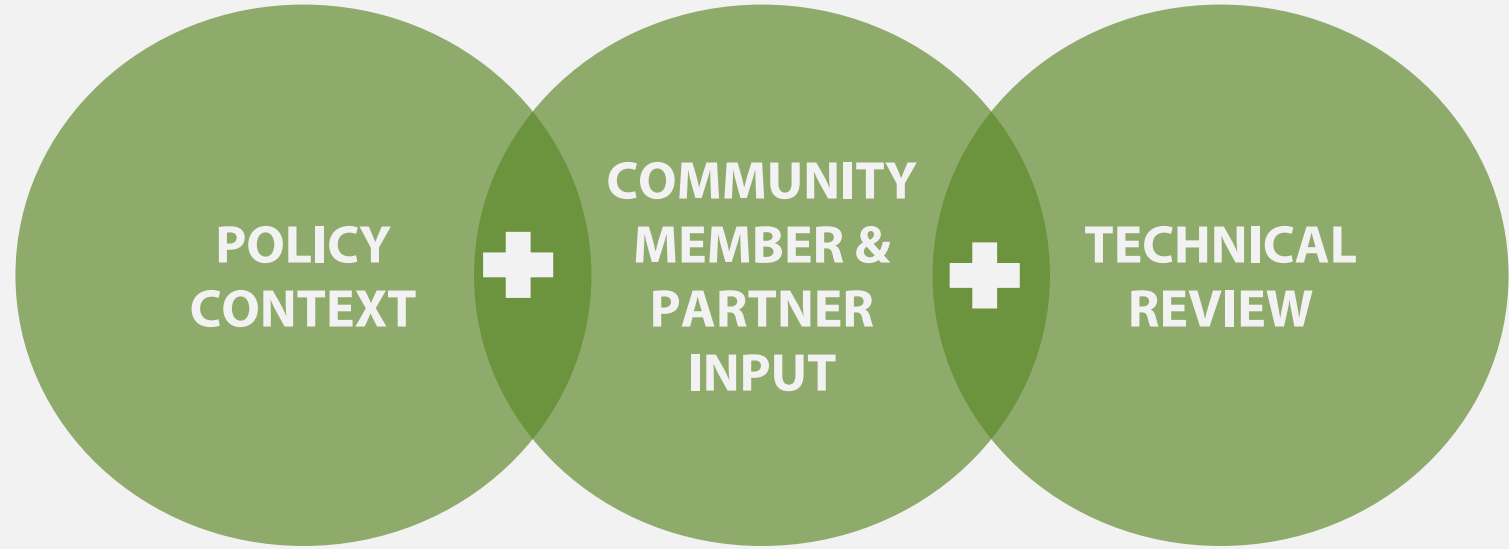


Phase 4
Implementation +
Reporting
Spring 2024

The background image shows a wide, flat landscape under a clear blue sky. In the distance, a large, rounded mountain peak is visible. The foreground and middle ground consist of green fields, some with small clusters of trees or shrubs. A line of trees runs across the lower part of the image. A semi-transparent green rectangle is centered over the image, containing the title text in white.

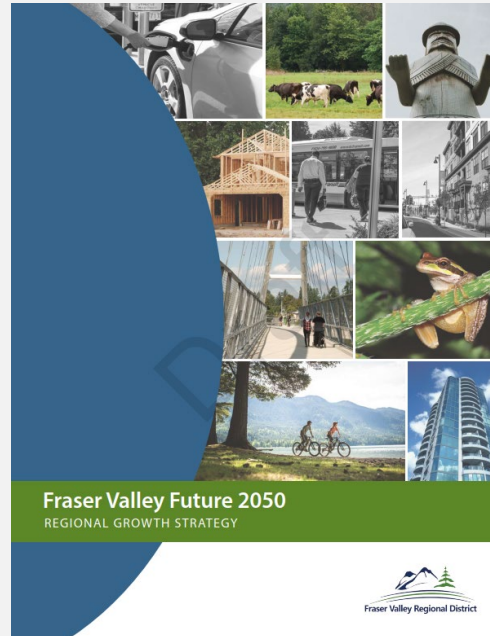
EXISTING CONDITIONS AND CONTEXT

HOW THE PLAN WILL BE DEVELOPED



POLICY CONTEXT

- Regional Growth Strategy (Draft)
- Electoral Area Official Community Plans
- Regional Parks Strategic Plan
- 2023-2026 Strategic Plan
- Regional Trail Projects
- Member municipality transportation and active transportation plans



COMMUNITY AND STAKEHOLDER ENGAGEMENT

ROUND 1

- Identify **issues and opportunities**, understand **priorities**
 - **Community Survey #1** – 155 responses
 - **Interactive Map** – 85 pins
 - **Open Houses** – 90 attendees
 - **Community and Agency Partner Meeting** – 21 attendees



ROUND 2

- **Present themes, strategies, actions and draft network** and seek input
- Gather input through:
 - **Open Houses** – underway!
February – March 2024
 - **Community Survey #2**
March 7 – 29, 2024
 - **Community and Agency Partner Meeting**
April 29, 2024
- The results will be used to finalize the ATNP and to develop the implementation and phasing strategy

ENGAGEMENT SUMMARY AND COMMUNITY PROFILE

FVRD ACTIVE TRANSPORTATION NETWORK PLAN ROUND 1 ENGAGEMENT SUMMARY



FVRD ACTIVE TRANSPORTATION NETWORK PLAN COMMUNITY PROFILES - DRAFT



TRAVEL PATTERNS

TOP REASONS FOR WALKING



Enjoy Nature,
Parks, and Trails



Exercise



Enjoyment

TOP REASONS FOR CYCLING



Exercise



Enjoyment



Enjoy Nature,
Parks, and Trails

BARRIERS

TOP BARRIERS TO WALKING



Lack of Sidewalks



Lack of Trails



Lack of Paved Shoulders

TOP BARRIERS TO CYCLING



Too Many Large Vehicles and Trucks Near Sidewalks and Trails

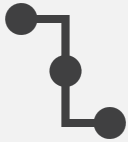


Lack of On-street Bicycle Routes Including Painted Bicycle Lanes and Paved Shoulders



Lack of Trails

ROUND 1: EMERGING THEMES FROM WHAT WE LEARNED



Enhance Connections



Formalize What Is
Already Being Used



Improve Safety



Create a Better Experience



Enhance Multi-Modal
Integration



DRAFT POLICY DIRECTION AND PROPOSED NETWORK

GUIDING PRINCIPLES

COLLABORATIVE

ADAPTIVE

EQUITABLE

RECONCILIATION

CLIMATE ACTION

IMPLEMENTABLE

POLICY DIRECTION

Strategy 1

Create Community Active Transportation Connections

Strategy 2

Build a Regional Active Transportation Network

Strategy 3

Enhance Active Transportation Connections to Transit and School Bus Stops

Strategy 4

Improve Safety for Active Transportation Users

Strategy 5

Maintain the Active Transportation Network

Strategy 6

Improve Awareness of Active Transportation

Strategy 7

Enhance Capacity and Coordination to Implement the Active Transportation Plan

DECISION MAKING PROCESS

NETWORK PRIORITIZATION CRITERIA

- Road volumes and speeds
- Proximity to transit bus stops
- Proximity to school bus stops
- Proximity to community destinations (parks, schools, community centres, recreation centres, etc.)
- Future residential and commercial development areas
- Connections between electoral areas, Indigenous communities, and member municipalities
- Network connectivity (fills pedestrian and bicycle network gaps)
- Population density (number of people served/impacted)

PROPOSED NETWORK

A REGIONAL ACTIVE TRANSPORTATION NETWORK

- Draft concept for the long-term vision for active transportation infrastructure in the FVRD
- Composed of:
 - Regional routes (connections between and within electoral areas and member municipalities)
 - Regional trails (Trans Canada Trail and Experience the Fraser)



- Regional Route
- Regional Trails (Trans Canada Trail, Experience the Fraser)
- Trail
- Provincial Park
- Regional Park
- First Nation Community
- Jurisdiction Boundry
- Fraser Valley Regional District Boundry

PROPOSED NETWORK

TYPES OF ROUTES

- Community routes
- Undedicated road
- Regional routes
- Conceptual dike pilot
- Priority routes



Regional Route: Paved Shoulders, Highway 7



Community Route: Off-street Trail, Morris Valley Road

273



Conceptual Dike Pilot: Elbow Creek Dike

The background image is a scenic landscape featuring a wide river in the foreground, a lush green valley with scattered farmhouses and fields in the middle ground, and a large, forested mountain range in the background under a clear blue sky. A semi-transparent green rectangular box is centered over the image, containing the text 'OPEN HOUSE' in white, bold, sans-serif capital letters.

OPEN HOUSE

OPEN HOUSE FORMAT

We have boards around the room!

They provide a more detailed overview on the different draft components of the plan.

Let us know your level of support on the:

- Guiding principles
- Approach to prioritizing active transportation infrastructure improvements
- Proposed strategies
- Identified priority projects

STRATEGY 1: CREATE COMMUNITY ACTIVE TRANSPORTATION CONNECTIONS

This strategy focuses on creating active transportation connections for rural communities in the electoral areas. This includes providing walking and cycling routes where people live in the electoral areas that connect to local destinations and can also be used for recreation.

SUGGESTED ACTIONS:

- Create active transportation routes that connect to local destinations and recreational areas.
- Create multi-use trails for recreational use.
- Formalize routes that are already being used for active transportation.
- Consider opportunities to utilize undedicated roadways for active transportation.
- Consider piloting dikes for public access to use for active transportation.

Place a sticky note if there is anything missing.

What is your level of support for this strategy?
Place a dot sticker next to your answer below.

SUPPORT	
SOMEWHAT SUPPORT	
NEUTRAL	
SOMEWHAT DO NOT SUPPORT	
DO NOT SUPPORT	

FVRD ACTIVE TRANSPORTATION NETWORK PLAN

PROPOSED NETWORK AND PROJECTS

FVRD DRAFT ACTIVE TRANSPORTATION NETWORK

The draft concept for the long-term active transportation network establishes a long-term vision for active transportation infrastructure in the FVRD. It provides walking and cycling connections within, to, and from the FVRD.

Regional routes provide connections between and within electoral areas and member municipalities. Regional trails such as the Trans Canada Trail and the Experience the Fraser concept are also a part of the draft concept regional active transportation network.

What is your level of support with the draft regional active transportation network?
Place a dot sticker next to your answer below.

SUPPORT	SOMEWHAT SUPPORT	NEUTRAL	SOMEWHAT DO NOT SUPPORT	DO NOT SUPPORT

Place a sticky note with any additional comments here.

NEXT STEPS

- **Round 2 Engagement**

- Upcoming Open Houses ([February/March 2024](#))

Electoral Areas C, F, and G
[February 26](#)

Electoral Areas E, H
[February 27](#)

Electoral Areas D
[March 5](#)

Electoral Area A, B
[March 7](#)

- Community survey #2 ([March 7-29, 2024](#))
- Next Community Partners Meeting ([April 29, 2024](#))

- **Final Active Transportation Network Plan**

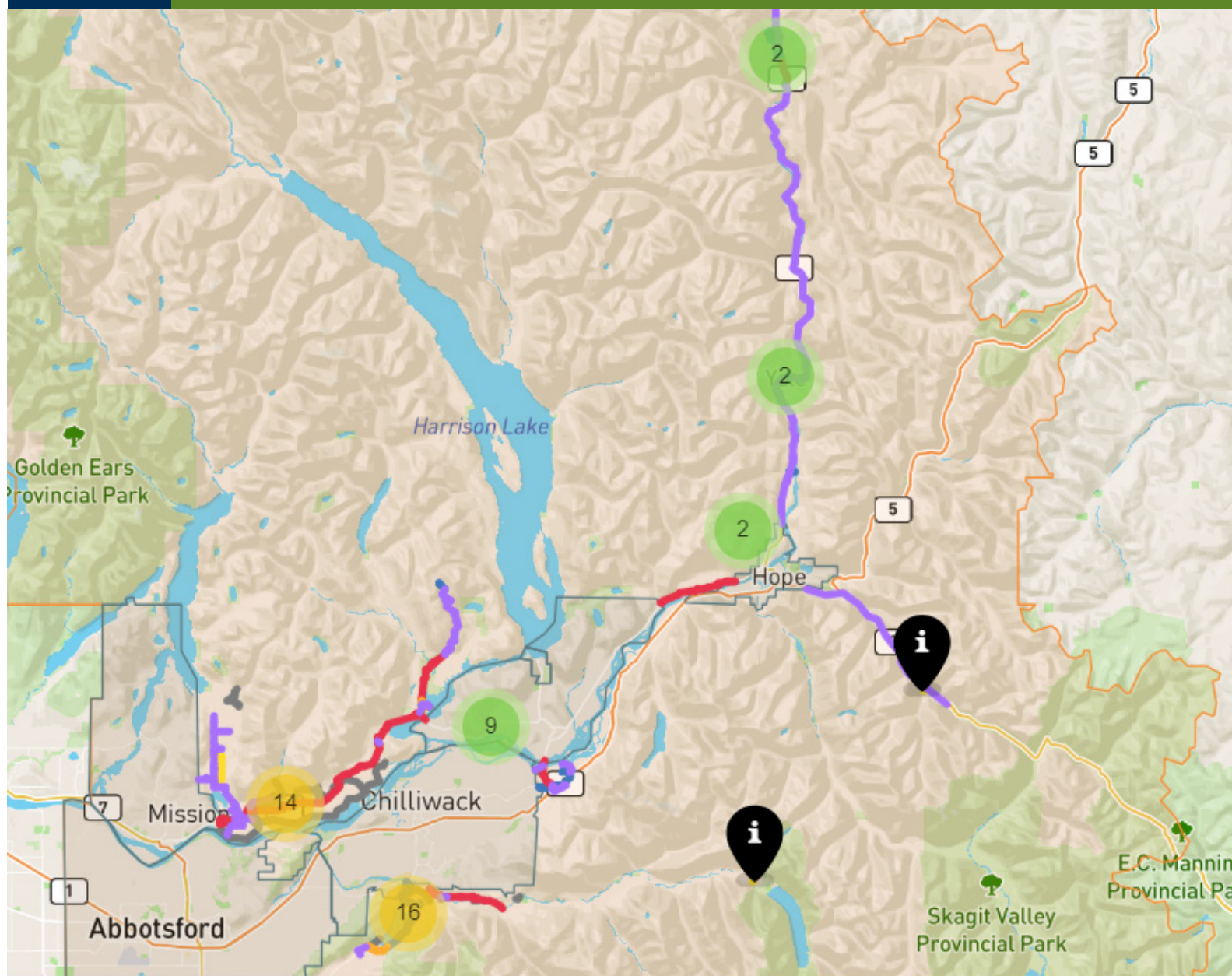
- **Board Presentation**



THANK YOU!

FVRD ACTIVE TRANSPORTATION NETWORK PLAN

ROUND 2 ONLINE ENGAGEMENT SUMMARY



INTRODUCTION

The Fraser Valley Regional District (FVRD) is developing a comprehensive Active Transportation Network Plan (ATNP). The focus of the ATNP will be within communities in the electoral areas, to improve active transportation infrastructure, connectivity, and safety for residents. The ATNP will incorporate existing and planned inter-regional trail networks and connect key community and regional destinations. The active transportation routes will integrate with municipal active transportation plans, especially at jurisdictional boundaries, to create a strong and collaborative network that enhances long-distance commuting and recreational trips across the region.

DISCUSSION

The foundation of the FVRD ATNP is built on information received during the community engagement, ensuring the plan aligns with the needs and travel patterns of electoral area communities in present day and for the future. The initial round of public engagement took place in November 2023 and provided invaluable insights, setting the groundwork for the plan's network priorities, strategies, and actions. The feedback received highlighted the significance of active transportation (AT) in promoting physical activity, enhancing outdoor recreation, and fostering overall well-being. Key themes emerged from the initial engagement, including the need for enhanced connectivity, improved on-street maintenance, street lighting and traffic calming measures, dedicated AT facilities, and safer links to transit nodes and school bus stops. The integration of dikes and undedicated roads emerged as opportunities to create safe, delineated pathways to improve community connections.



The communities' input shaped the plan's guiding principles and proposed network routes. The second round of engagement focused on gaining community feedback on these principles and the proposed AT network, ensuring alignment with initial input and community needs. The second round of community engagement took place between February 26 and April 10, 2024, and present the initial policy direction and proposed network, seeking further input to determine alignment with community interests and priorities.

During the second phase of engagement, electoral area community members, residents from Indigenous communities, electoral area directors and community interest groups were invited to participate via the online platform "Have Your Say FVRD – ATNP" and through community meetings hosted across four electoral areas. Various outreach channels were used to promote the ATNP project and engagement opportunities, ensuring broad community representation and participation. This summary focuses on the information received through the FVRD's online engagement platform and provides an the results of the online survey.

Outreach

A variety of tools used to raise awareness for the ATNP and associated engagement opportunities are outlined as follows:

- FVRD project website – the dedicated project website Have Your Say FVRD – ATNP is the primary online platform used to share information on the project, opportunities for engagement, frequently asked questions, and related documents such as staff reports, replications of the open house display boards, and the community meeting presentation.
- Social media posts – engagement opportunities were promoted through the FVRD social media accounts, including the FVRD Facebook and Instagram pages. Five different posts during the engagement period were issued to raised awareness, inviting community members to complete the online survey, place a pin and comment on the interactive web map, and/or attend a community meeting.
- Social media ad campaign – further to the social media posts, a paid eight day ad campaign was used to boost awareness and promote the project to the larger FVRD geographical region.
- Media – The Chilliwack Progress featured a newspaper article in the print and online versions of its newspaper on February 26 and March 1, highlighting the project and promoting the engagement opportunities taking place in Electoral Areas D and H.

Fraser Valley Regional District

COMMUNITY MEETING

ACTIVE TRANSPORTATION NETWORK PLAN

Your Voice Matters!

Thank you to everyone who gave us feedback in person at our November open houses and online.

We will be sharing what we heard at four community meetings throughout our region.

Join us to:

- » Get a summary of the key feedback and insights shared through a staff presentation
- » Discuss the proposed strategies and actions
- » Share your thoughts on priorities

Can't make it? No worries! Visit <https://haveyoursay.fvrd.ca/ATNP> or scan the QR Code to learn more.

MONDAY, FEB 26
6 PM - 8 PM
Deroche Community Hall
41555 N Nicomen Rd, Deroche

TUESDAY, FEB 27
6 PM - 8 PM
Cultus Lake Community School
71 Sunnyside Blvd, Cultus Lake

TUESDAY, MAR 5
6 PM - 8 PM
Rosedale Community School
50850 Yale Rd, Rosedale

THURSDAY, MAR 7
6 PM - 8 PM
Yale Community Centre
65050 Albert St, Yale

Please be advised that photographs will be taken by the Fraser Valley Regional District (FVRD) at this event for use on the FVRD website, reports, social media, and all other FVRD publications and platforms. By entering this event, you consent to the FVRD photographing and using your image.

- Direct outreach – an informational email was sent to all Electoral Area Directors, resident associations, ratepayer groups, and diking authorities to help promote engagement opportunities. Many included the information in their community newsletters and re-shared it on their social media platforms. An invitational letter went out to all Indigenous communities whose unceded territories overlap with the FVRD, inviting representatives from each Nation to further collaborate on the plan development.
- Information posters – 51 posters were distributed throughout the electoral areas at central locations, within Indigenous communities, and on community notice boards.
- Community newsletter – A newsletter was issued to registered users through Have Your Say FVRD and to those who signed up to stay informed on the ATNP project during the initial round of engagement (400+ recipients). In addition to the community newsletters sent by the FVRD, Tourism Chilliwack helped promote the ATNP engagement opportunities by including the project in their February ENewsletter.

Social media is a valuable tool that helped raise awareness of the project. Each social media post reached an average of 1,230 people, and led people to visit the ATNP project page. During the engagement period there were 714 visits to the Have Your Say FVRD - ATNP project page. The following is a breakdown of how visitors interacted with the project page:

- 675 aware visits – aware participants visited at least one page on the project website
- 395 informed visits – informed participants interacted with the project website by downloading a document or visiting one of the project pages (eg. key dates page and/or FAQ page)
- 54 engaged visits - participants engaged in the project by filling out the online survey, placing a pin and comment on the interactive web map, adding a comment on the forum, and/or asking a question
- Interactive tools: 39 survey responses were received and 8 pins placed on the interactive web map.

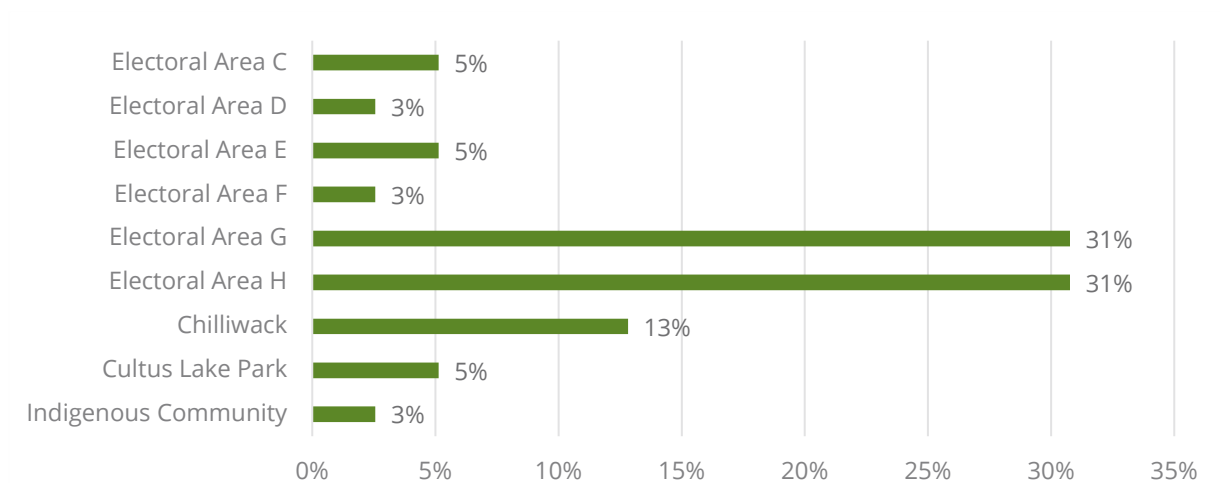
Participation in the second round of online engagement was lower compared to the first round of public engagement. Across both phases of public engagement, there was a total of 1,814 views on the project page. During the second round of engagement, there was a 21% decrease in visits to the project page. Of those visitors, only 5% completed the online survey. Whereas during round one engagement, there was a 14% survey response rate from the 1,100 project page visits.

WHAT WE HEARD - COMMUNITY SURVEY RESULTS

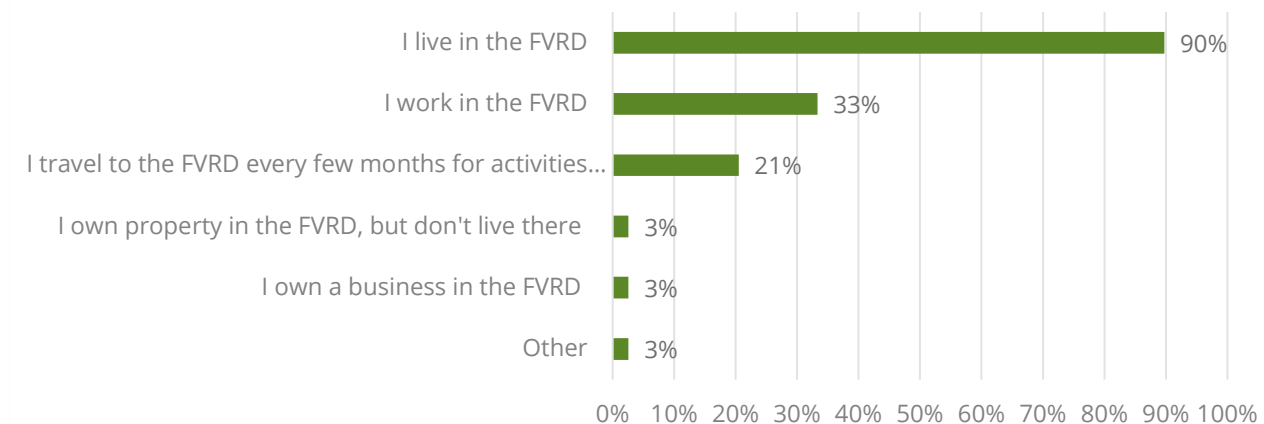
An online survey was available on the project website from February 26 – April 10. In total 39 people completed the survey. Electoral Areas G and H had the highest representation of survey responses, and 80% of survey respondents lived in an electoral area compared to 59% of respondents during the first round of engagement living in an electoral area.

Connection to the FVRD

If you live in the FVRD, which area do you live in?

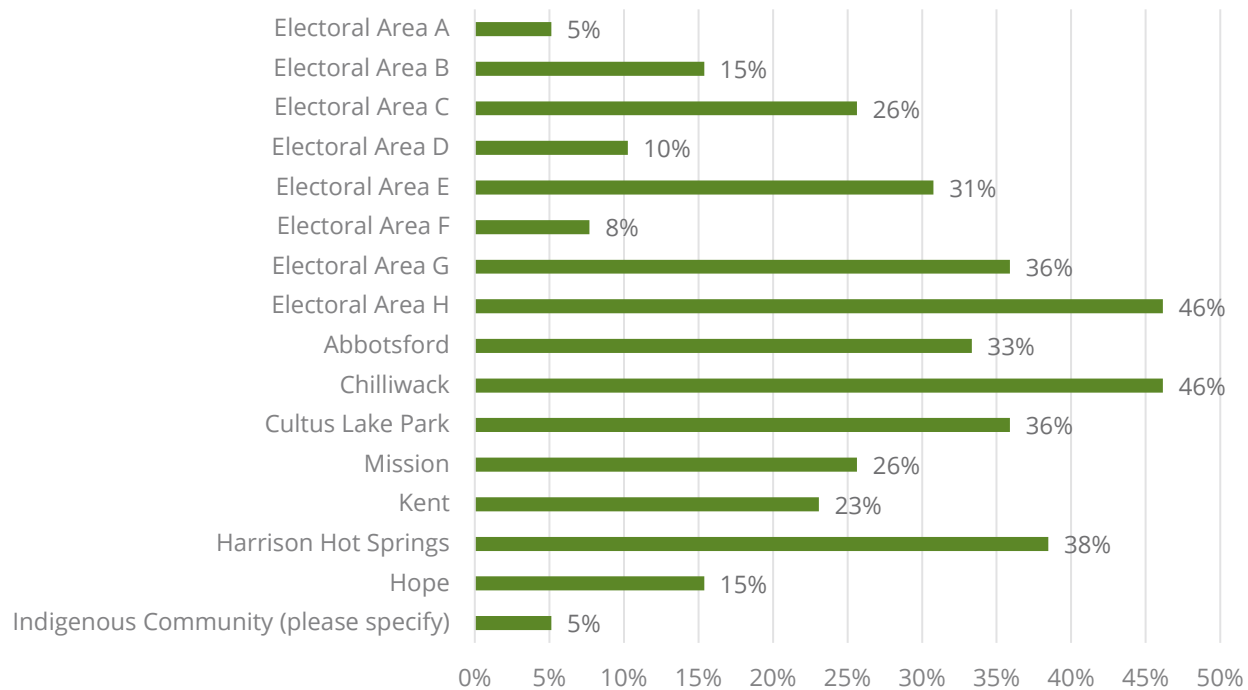


What is your connection to the FVRD? (Select all that apply)

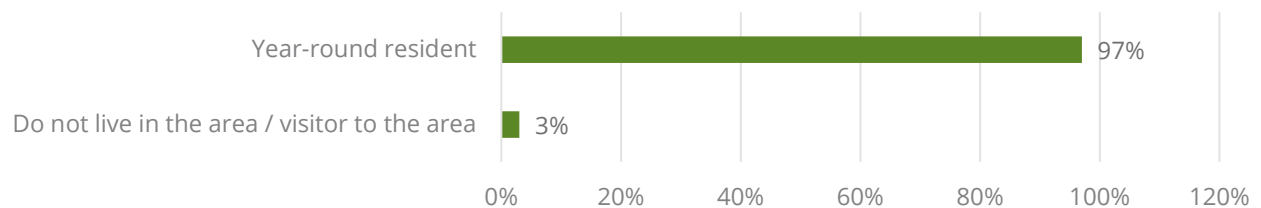


Which area of the FVRD do you work or recreate in? Select all that apply.

Understanding where people are spending time in the region will help us attribute their responses and suggestions to the relevant area.



Which best describes your residence in the FVRD?



Key Themes

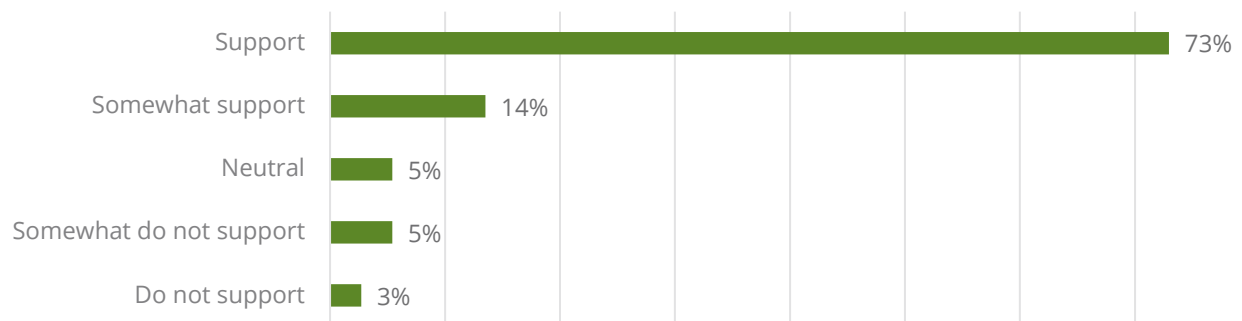
Based on what we heard in the first round of engagement, six principles that will guide active transportation in the FVRD emerged:

- 1) Collaborative: Incorporate working together with residents and community and agency partners to ensure the success and implementation of the plan.
- 2) Adaptive: Reflect the unique communities of the FVRD that span across jurisdictional, cultural, and/or geographical boundaries.

- 3) Equitable: Provide safe, accessible, and affordable access to active transportation for people regardless of age, ability, and income.
- 4) Reconciliation: Strengthen and sustain relationships through continued conversations and active transportation connections.
- 5) Climate Action: Encourage modal shift to active travel (walking, cycling, and taking transit) to help reduce greenhouse gas emissions.
- 6) Implementable: Develop a realistic and implementable plan that can be achieved through phases and cost-share funding opportunities.

On a scale of 1 – 5 (one being not important, 5 being of critical importance), participants were asked to rate how important they thought each of these actions would be for improving connections in the FVRD.

Do you support these guiding principles?



Strategies and Actions

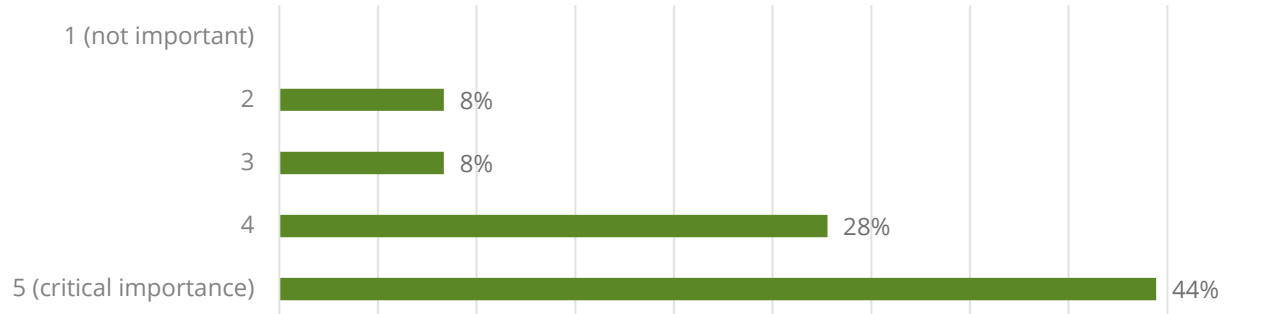
Based on feedback from the first round of community and stakeholder engagement, seven key strategies emerged. With each strategy a series of action have been developed to support improving active transportation in the region. It is important to note that to implement these actions, the FVRD will work closely with other agencies and community partners.

STRATEGY 1: CREATE COMMUNITY ACTIVE TRANSPORTATION CONNECTIONS

This strategy focuses on creating active transportation connections for communities in the electoral areas. This includes providing walking and cycling routes where people live in the electoral areas that connect to local destinations and can also be used for recreation.

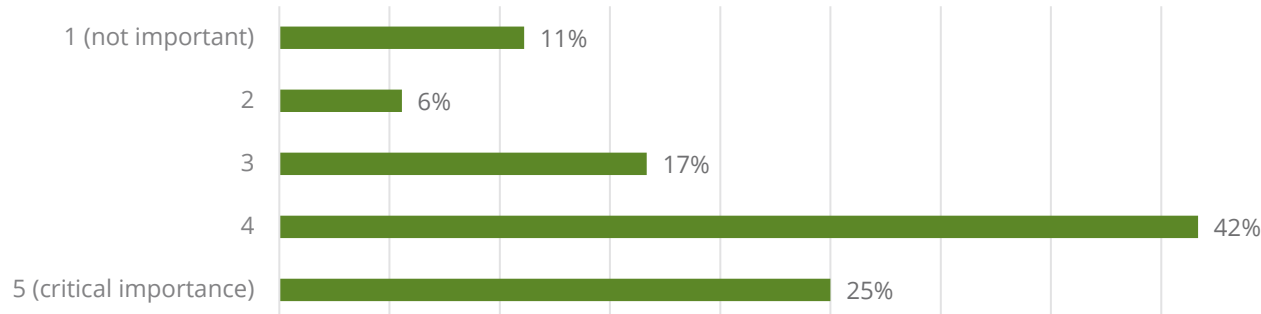
- 1) Create active transportation routes that connect to local destinations and recreational areas.

This includes building routes that provide connections to access local destinations such as community halls, recreation facilities, and schools as well as routes for recreational purposes close to where people are living.



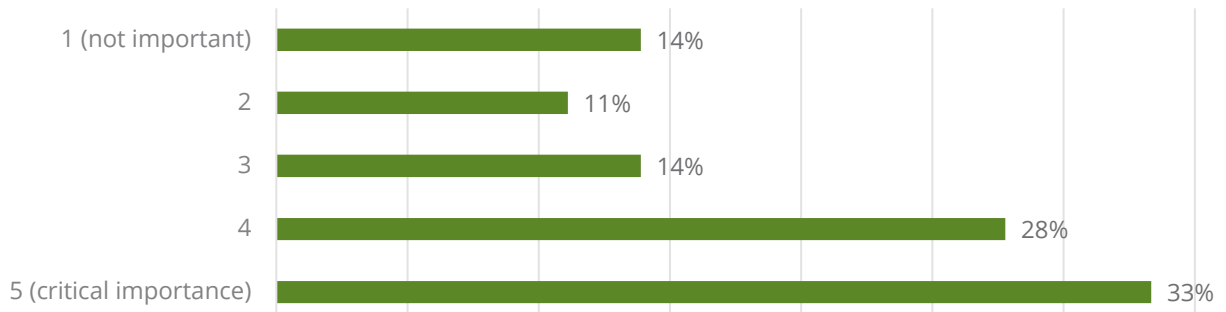
- 2) Formalize routes that are already being used for active transportation.

This includes exploring the use of resource roads for active transportation connections.



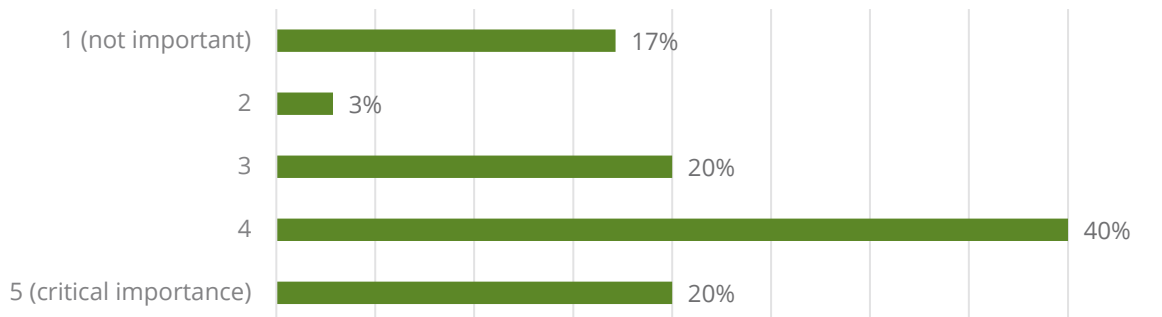
- 3) Consider opportunities to utilize undedicated roadways for active transportation.

This includes using undedicated roadways (space that has been dedicated for a road that has not been constructed) to provide more active transportation routes.



- 4) Consider piloting dikes for public access to use for active transportation in locations that are appropriate.

Community engagement with residents, community partners such as Improvement Districts, and property owners would be required to determine the feasibility of any dike pilot project.

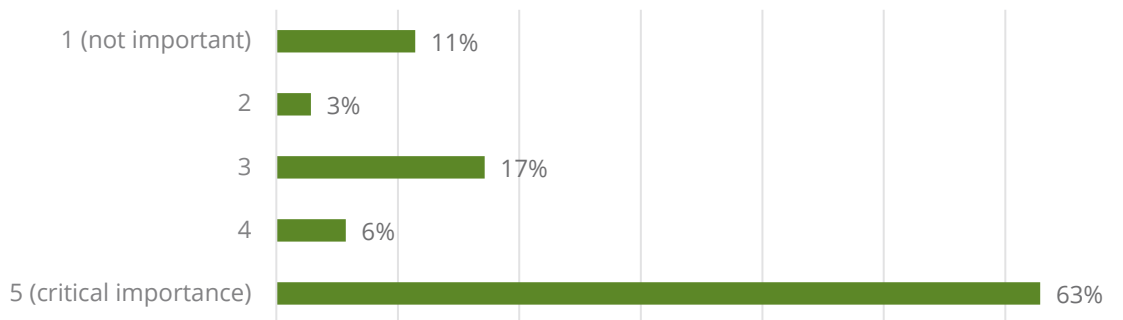


STRATEGY 2: BUILD A REGIONAL ACTIVE TRANSPORTATION NETWORK

This strategy focuses on building a regional active transportation network that provides seamless connections within, to, and from the FVRD. This includes providing and enhancing regional connections between neighbouring jurisdictions such as electoral areas, Indigenous communities, and member municipalities. Many of the actions in this section will require working with community and agency partners to implement.

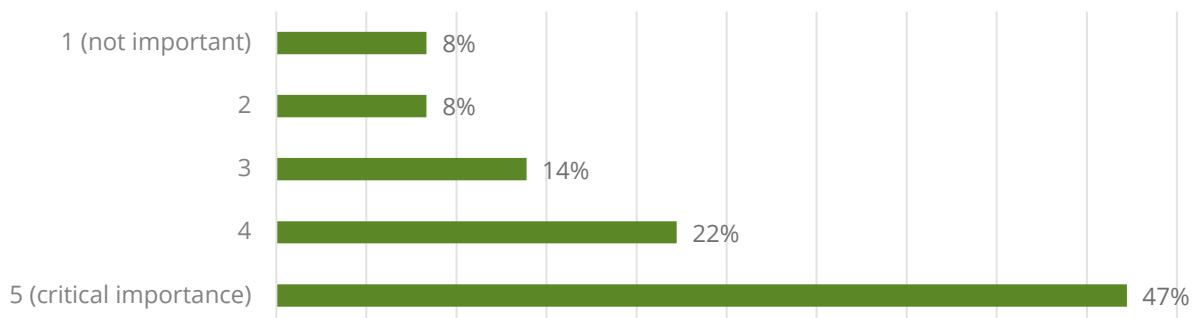
- 1) Provide safe and comfortable active transportation routes on roads to connect people to neighbouring communities and destinations.

This includes providing connections to key destinations within the FVRD and neighbouring municipalities and Indigenous communities.



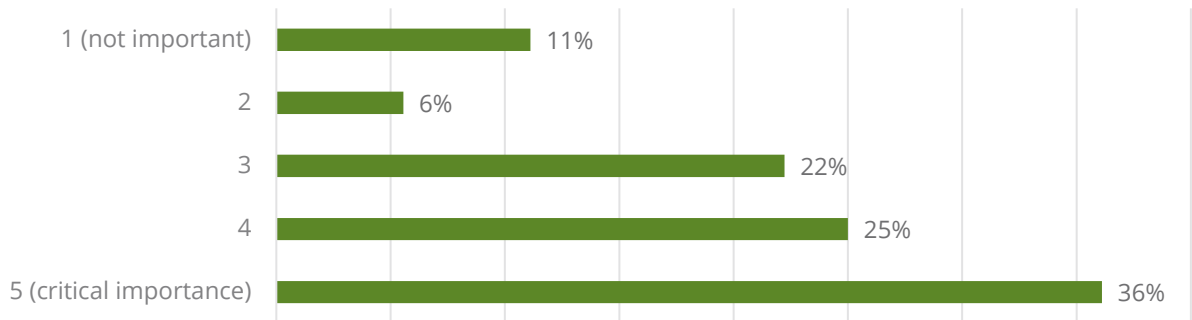
- 2) Support opportunities to integrate active transportation in the FVRD through collaboration with member municipalities, Indigenous communities, the Province, park boards, and other community and agency partners.

This includes working together with community and agency partners to identify opportunities to collaborate through existing and future plans and projects.



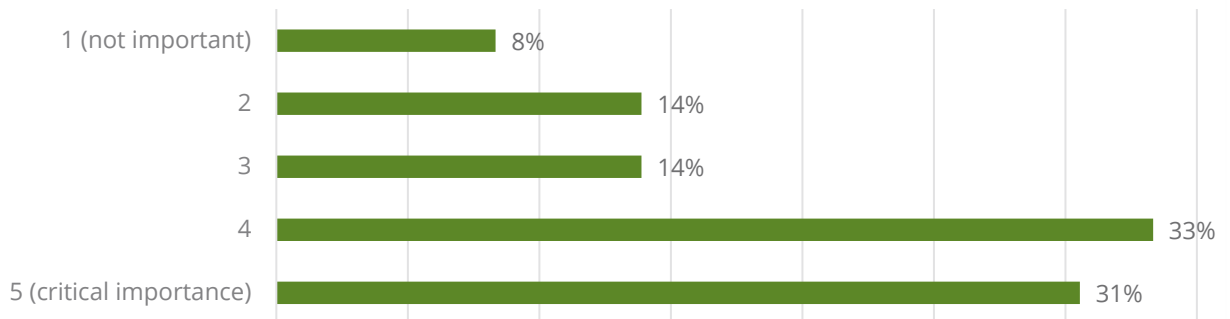
- 3) Support the Experience the Fraser initiative.

This includes collaborating with community and agency partners during the Experience the Fraser planning and implementation process. This will include working together to determine the trail and pathway alignment and continuing to collaborate on ways to enhance the experience through wayfinding and signage.



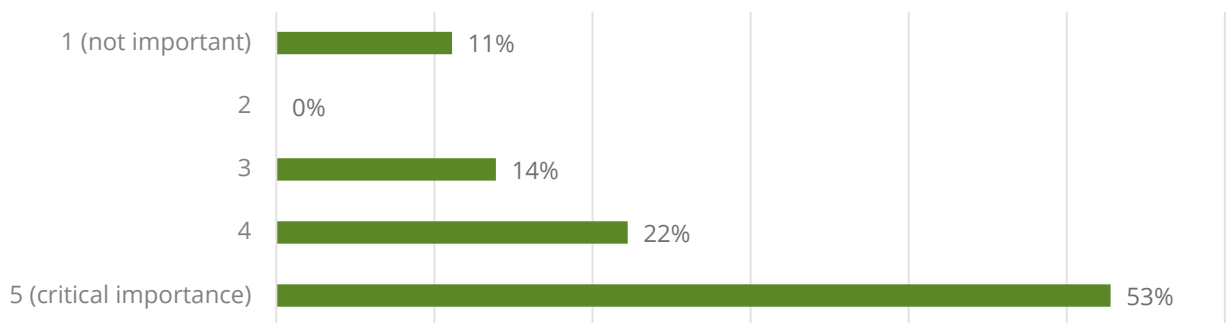
- 4) Utilize utility and rail corridors and other right-of-way agreements to expand the trail network.

This includes identifying utility and rail corridors that could be incorporated into the active transportation network.



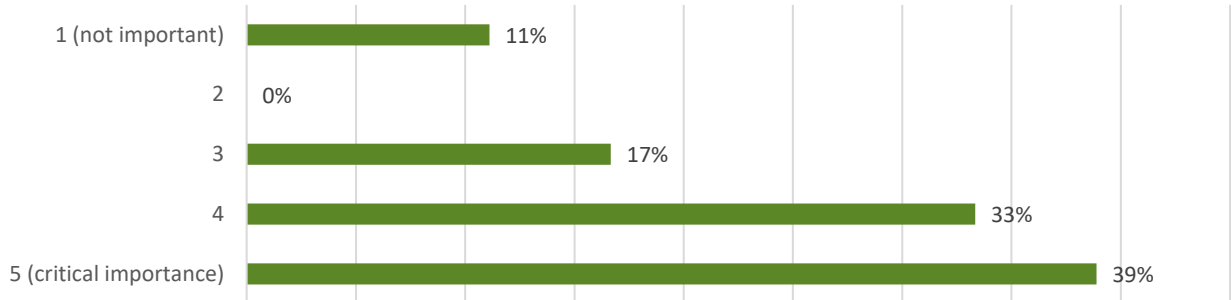
- 5) Enhance infrastructure for active transportation users on bridges.

This includes identifying bridges in the FVRD that need improvements to make it safer to use active transportation.



- 6) Pursue opportunities to provide new active transportation routes in conjunction with projects, plans, and developments within the FVRD.

This includes ensuring active transportation best practices are integrated into the Official Community Plans, Subdivision and Development Servicing Bylaw and Zoning Bylaws, advocating for appropriate active transportation facilities as part of any development project.

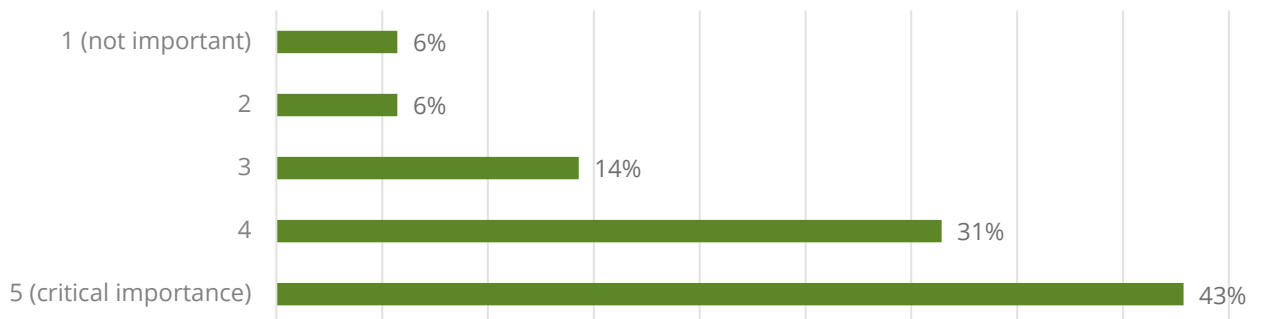


STRATEGY 3: IMPROVE ACTIVE TRANSPORTATION CONNECTIONS TO TRANSIT AND SCHOOL BUS STOPS

This strategy focuses on enhancing the integration of active transportation to other modes such as transit and school bus stops.

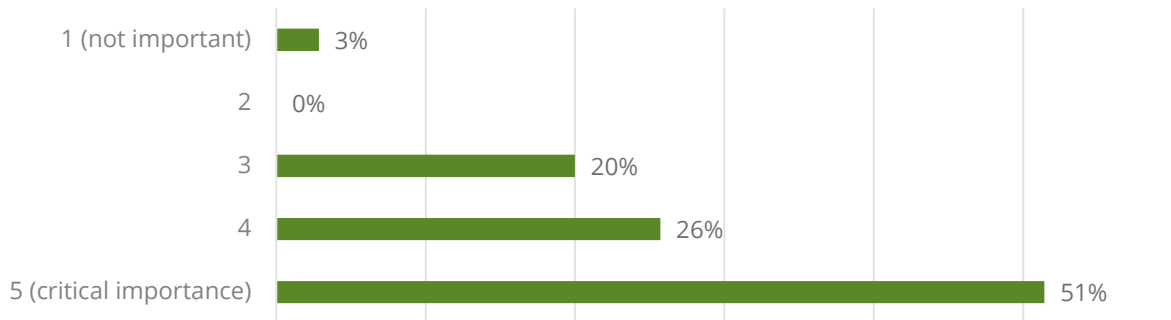
- 1) Improve connections to transit.

This includes working with the agency partners to provide direct, safe, and comfortable pedestrian connections and crossing enhancements to bus stops as well as bicycle parking.



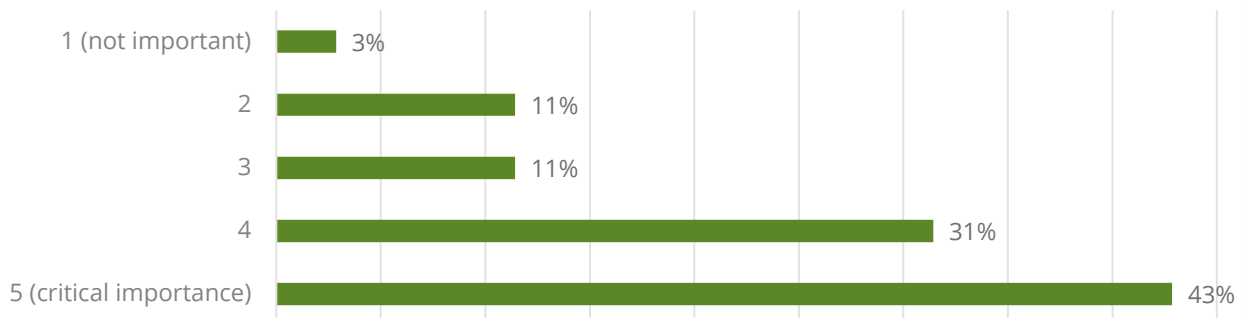
- 2) Provide safe and direct pedestrian connections to school bus pick-up and drop-off locations.

This includes working to provide pedestrian infrastructure to school bus stops such as pathways, crossings, weather protection, and seating.



- 3) Support School District 33, 75, and 78 with exploring ways to encourage more biking to school or school bus stops.

This includes collaborating with the Chilliwack, Mission, and Fraser-Canyon School Districts to provide bicycle parking at school bus stops and explore dedicated active transportation storage on school sites.

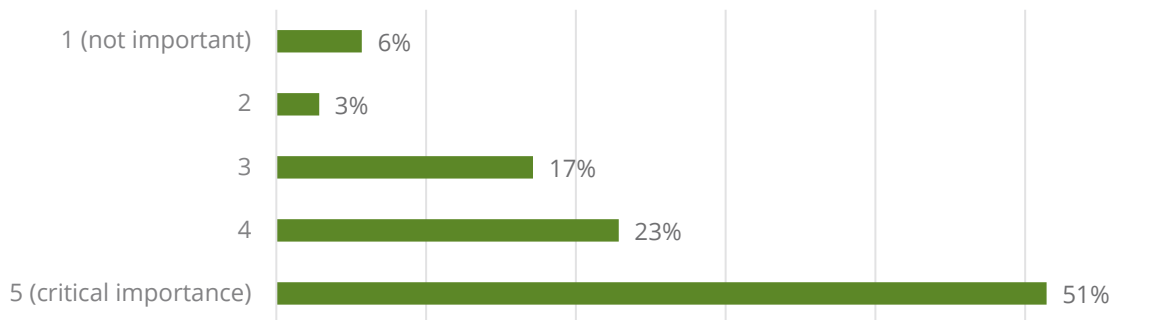


STRATEGY 4: IMPROVE SAFETY FOR ACTIVE TRANSPORTATION USERS

This strategy focuses on making it safer to get around by addressing safety-related barriers to active transportation. Most of the actions in this section will require working with the Ministry of Transportation and Infrastructure (MOTI) and other agencies.

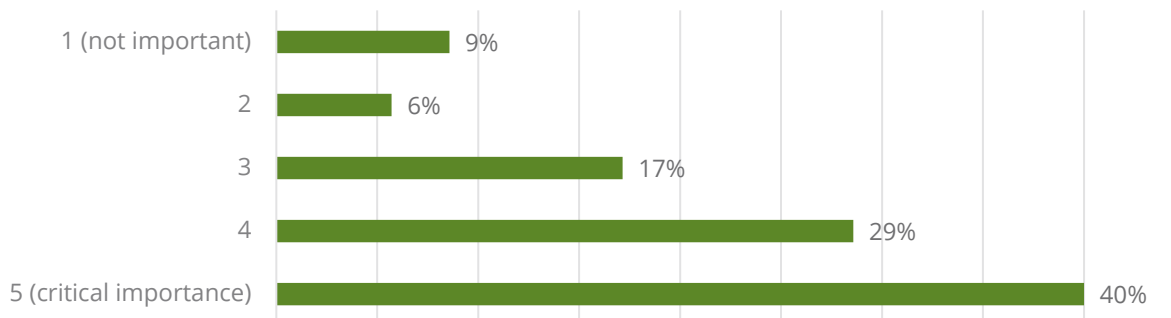
- 1) Provide active transportation infrastructure types that are appropriate to the conditions of the roads within the FVRD.

This includes ensuring that the active transportation infrastructure are appropriate for the speed and volume of motor vehicle traffic using the roadway.



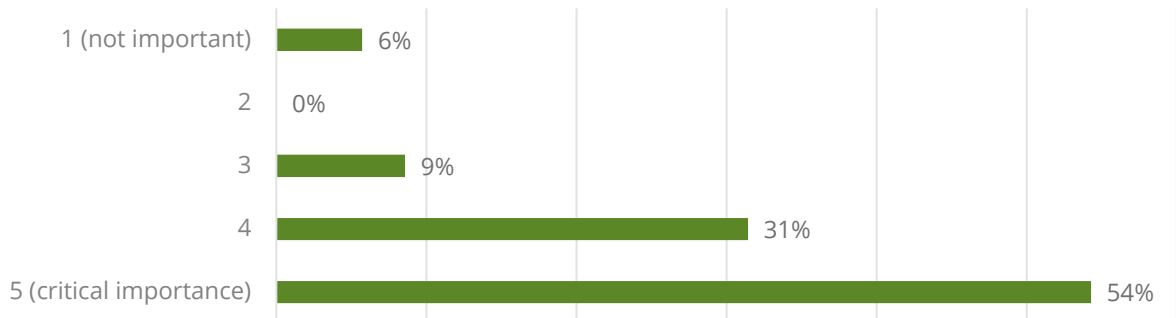
- 2) Support the Ministry of Transportation and Infrastructure to evaluate speed limits in transition zones that approach rural communities.

This includes identifying corridors to reduce speed limits to address speeding concerns.



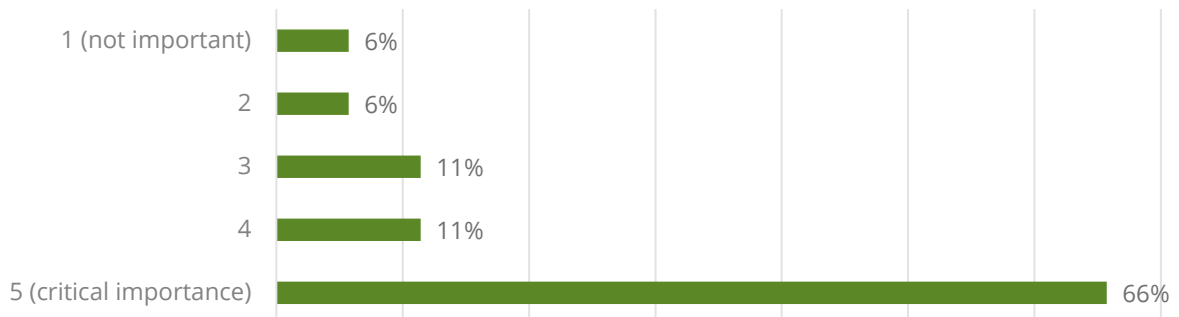
- 3) Advocate for safe crossings in communities that straddle numbered highways and major roads.

This includes identifying locations where there is a desire for new or enhanced crossings to address safety concerns.



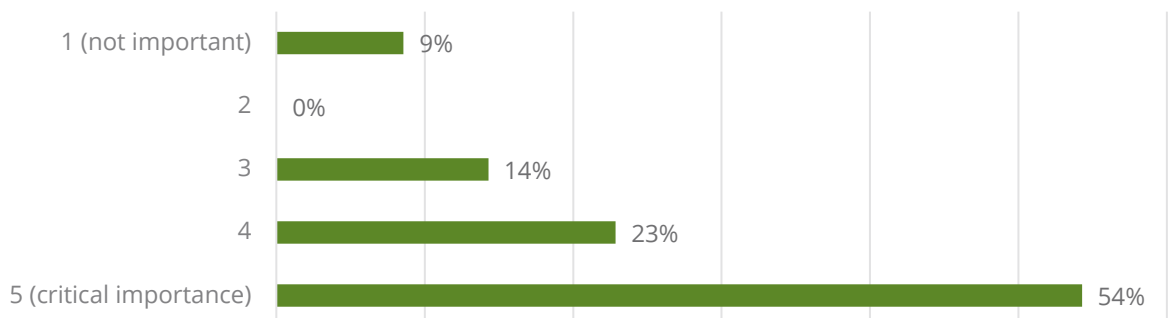
- 4) Address parked motor vehicles on paved shoulders impeding active transportation access.

This includes providing alternative parking locations and widening shoulders to reduce the impact of parked vehicles encroaching onto paved shoulders and bicycle lanes.



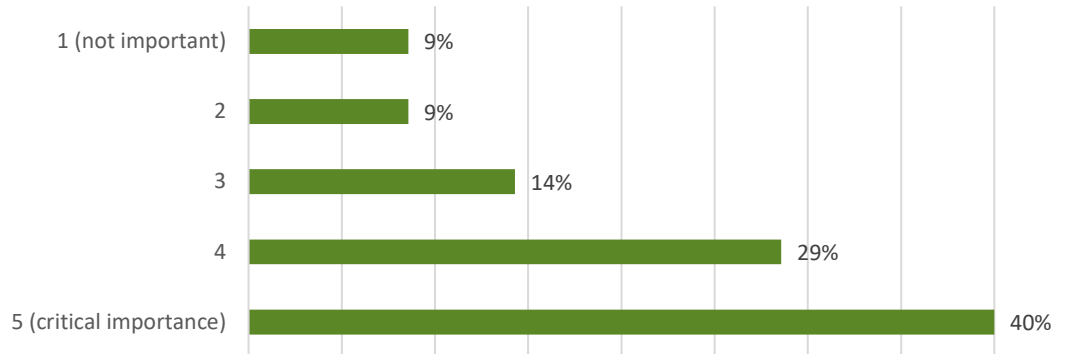
- 5) Improve visibility through pedestrian-scale lighting where appropriate.

This includes identifying areas where providing more lighting would improve safety and comfort for active transportation users.



- 6) Monitor the use of active transportation infrastructure and consider the impact of new mobility technologies.

This includes reviewing how new mobility technologies such as e-bikes and e-scooters are interacting with other active transportation.

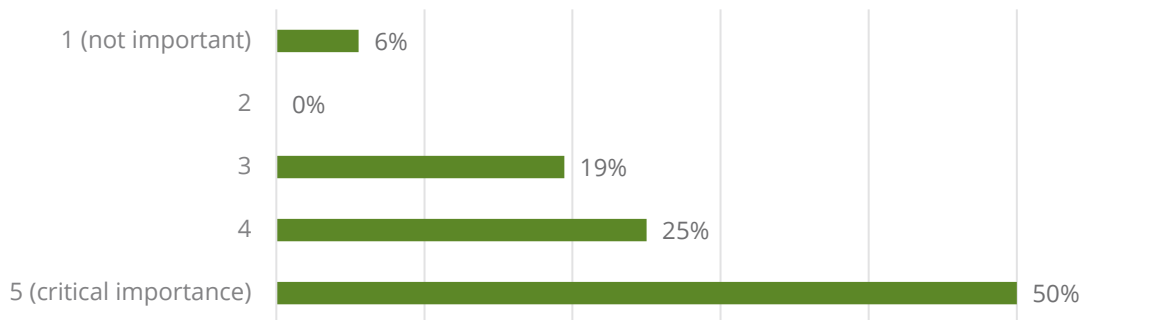


STRATEGY 5: MAINTAIN THE ACTIVE TRANSPORTATION NETWORK

This strategy focuses on improving maintenance to make sure that active transportation can be used year-round. All of the actions in this section will require working with MOTI and other agencies.

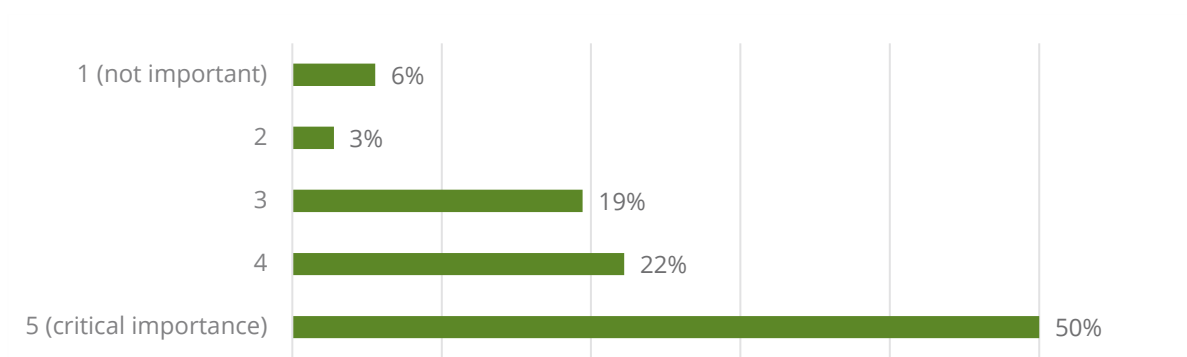
- 1) Work with community and agency partners to advocate for improved maintenance to address gravel and sand removal, and snow storage and removal.

This includes identifying priority areas where additional maintenance on active transportation routes are recommended.



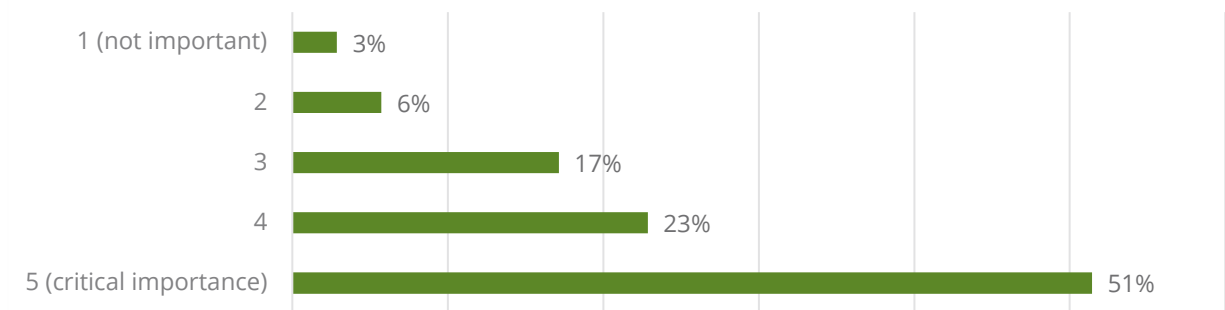
- 2) Design active transportation infrastructure to provide adequate drainage, gravel and sand removal, and snow storage and removal.

This includes working together with MOTI and other agencies to design active transportation infrastructure to be used in all seasons and be easier to maintain.



- 3) Raise awareness among community members regarding the mechanisms available to request maintenance on roads.

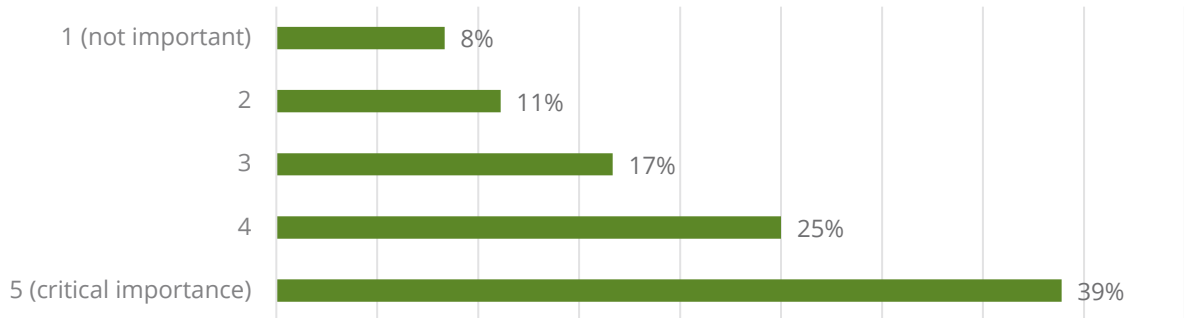
This includes creating materials and resources to raise awareness about how to request maintenance for roads by directly contacting the maintenance operator.



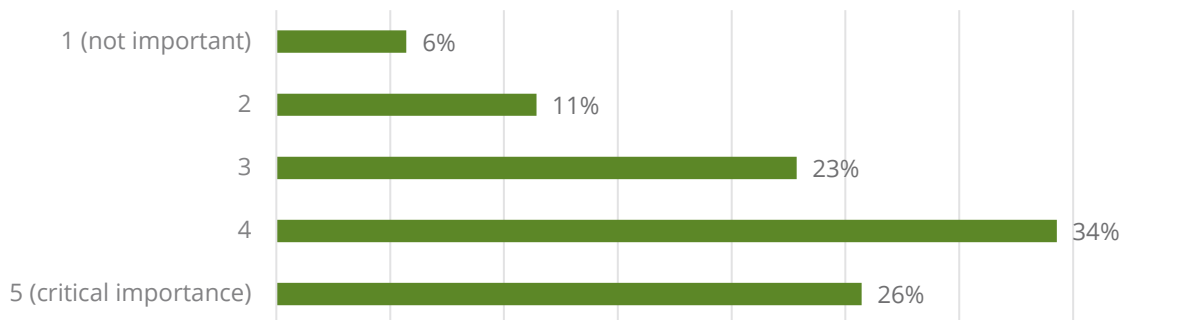
STRATEGY 6: IMPROVE AWARENESS OF ACTIVE TRANSPORTATION

This strategy focuses on how to increase awareness about active transportation in the FVRD to existing and future active transportation users.

- 1) Collaborate with community and agency partners to develop a FVRD Cycling Guide to include maps showing common cycling routes and active transportation infrastructure in the FVRD.



- 2) Educate community members and decision-makers on the benefits of active transportation.

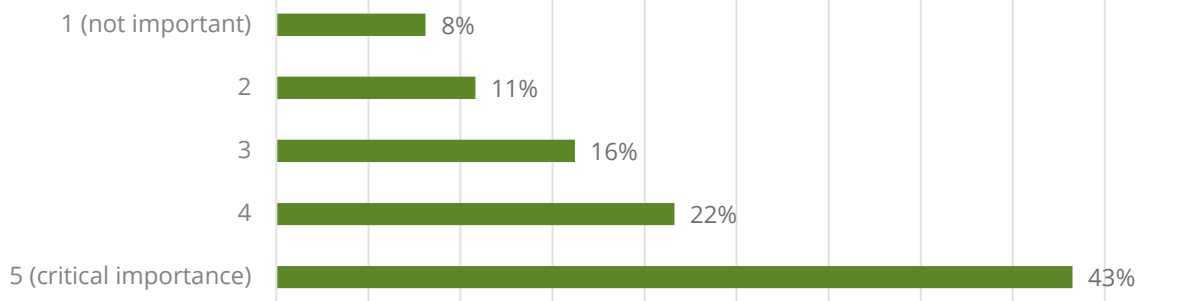


STRATEGY 7: ENHANCE CAPACITY AND COORDINATION TO IMPLEMENT THE ACTIVE TRANSPORTATION PLAN

This strategy focuses on building capacity and coordination at the FVRD to implement the active transportation network plan.

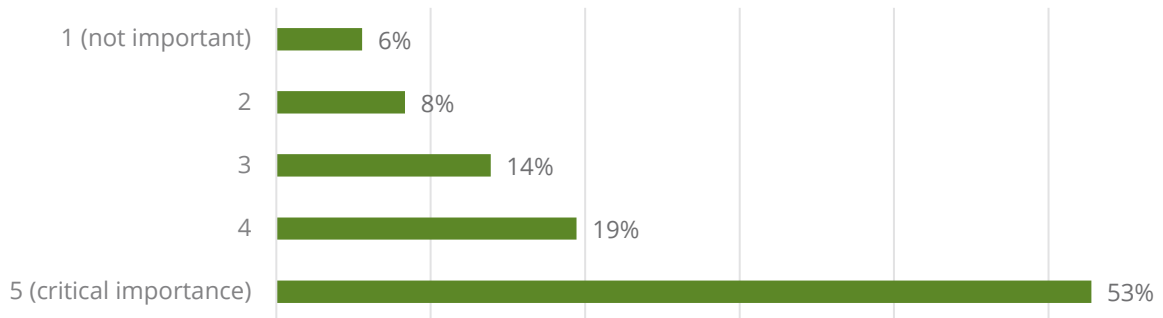
- 1) Consider dedicating additional funds for active transportation infrastructure and maintenance.

This includes enhancing funding sources to build out the active transportation network in the FVRD.



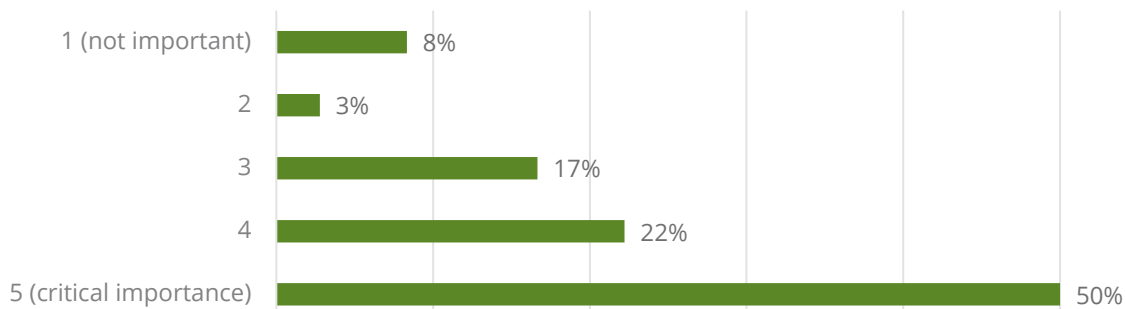
- 2) Pursue opportunities to leverage additional funding sources to develop active transportation infrastructure.

This includes applying for grant opportunities and community partnerships.



- 3) Continue to build capacity within the organization to enhance active transportation within the FVRD.

This includes enhancing regional coordination, grant writing, and updating the existing routing to further implement the active transportation network.



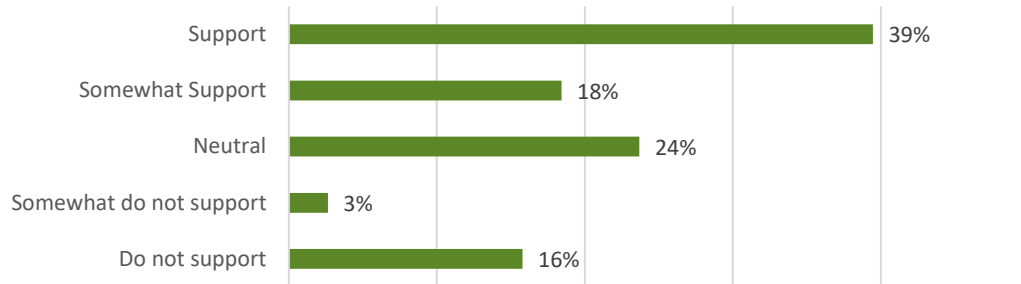
PROPOSED NETWORK

The draft concept for the long-term active transportation network establishes a long-term vision for active transportation in the FVRD. It provides connections within, to, and from the FVRD.



- Regional Route
- Regional Trails (Trans Canada Trail, Experience the Fraser)
- Trail
- Provincial Park
- Regional Park
- First Nation Community
- Jurisdiction Boundry
- - - Fraser Valley Regional District Boundry

What is your level of support for the draft concept of the regional active transportation network?

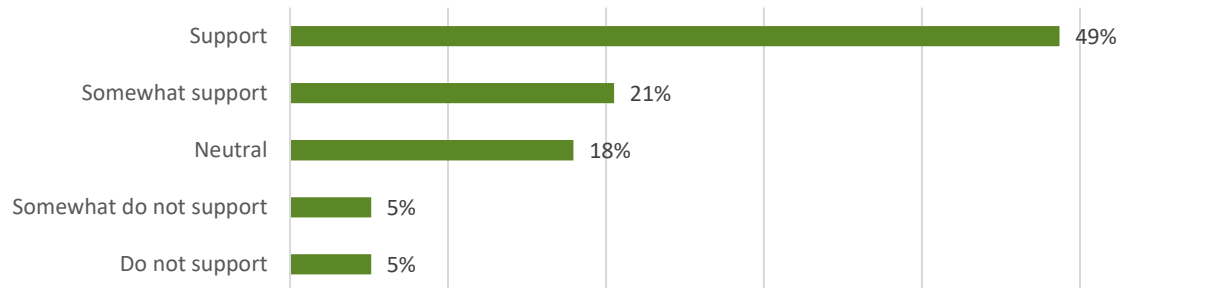


Prioritization of Network Improvements

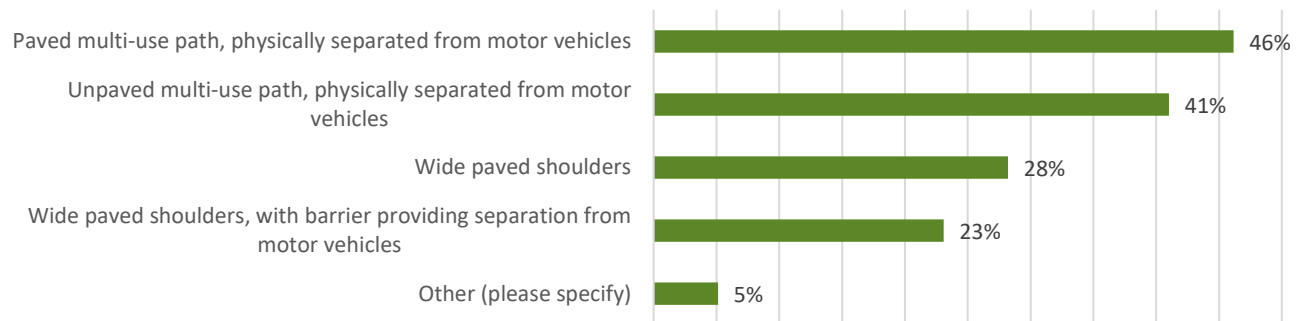
A series of criteria was developed to guide the prioritization of proposed / potential transportation infrastructure improvements in the FVRD. These criteria have been used to identify priority projects featured throughout this survey. The prioritization criteria include:

- Road volumes and speeds
- Proximity to transit bus stops
- Proximity to school bus stops
- Proximity to community destinations (parks, community centres, recreation centres, etc.)
- Future residential and commercial development areas
- Connections between electoral areas, Indigenous communities, and member municipalities
- Network connectivity (fills pedestrian and bicycle network gaps)
- Population density (number of people served/impacted)

Do you support the approach to prioritizing transportation infrastructure improvements?

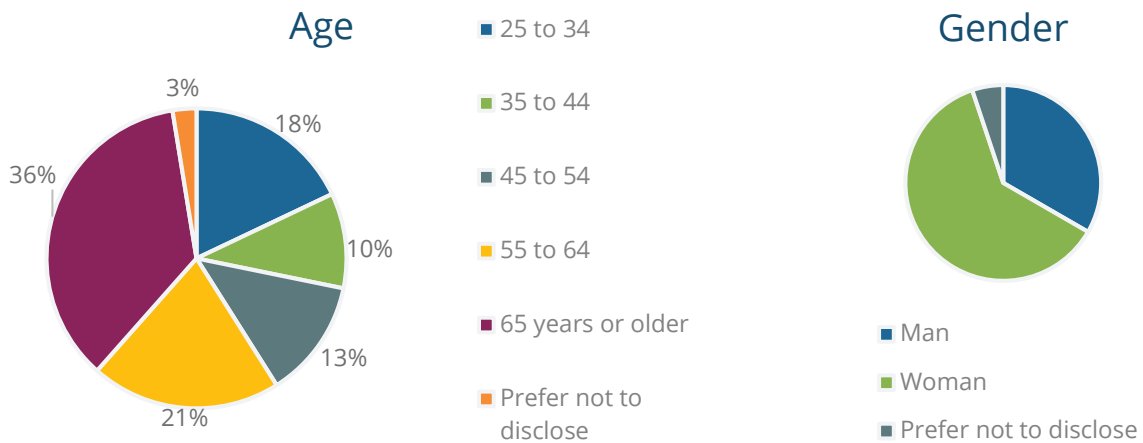


What type of facility would you prefer to use if you are walking or cycling next to a major road?

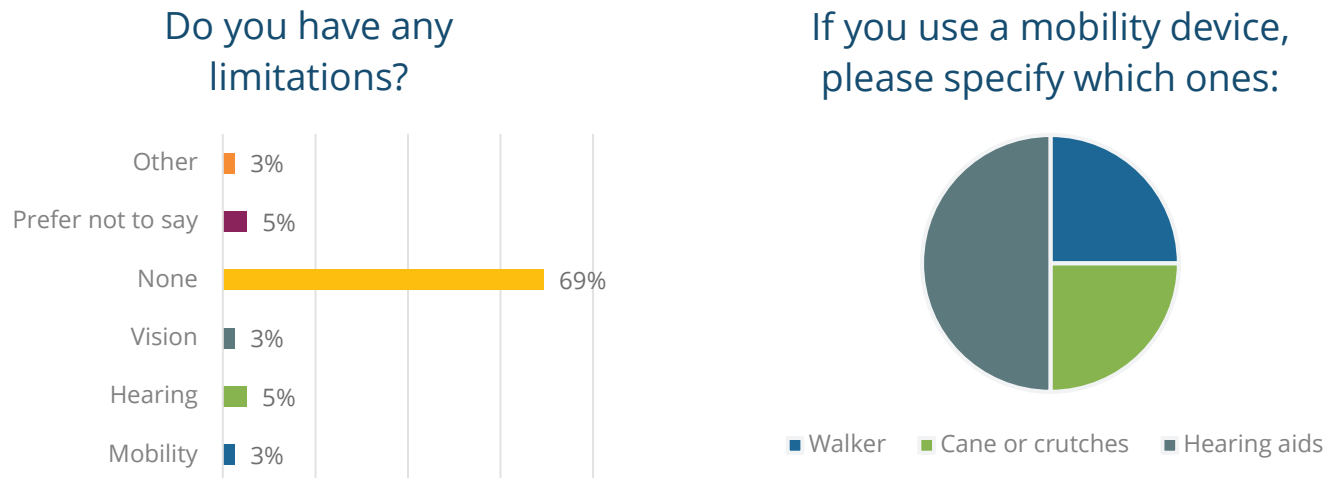


Participant Demographics

Knowing who participated in the survey will help us tell the story of this engagement process and helps identify groups we may have missed and need to seek out.



11% of survey participants use a mobility device. Mobility devices and those who use a mobility device are outlined as follows:



NEXT STEPS

Thank you to all community members who participated in this second round of engagement, collaboration and partnerships is key to the success of the ATNP. The information collected for the Active Transportation Network Plan is a main component to finalizing the draft FVRD Active Transportation Network Plan and associated network routes, strategies and actions as it confirms the plan direction.

Feedback from this round of engagement indicated that community connections are more of a priority than regional connections and that there is varied support for the proposed active transportation network priorities within and throughout each electoral area. The importance of network alignment with FVRD member municipalities and improved connections between Indigenous communities, member municipalities and electoral area communities was also highlighted.

The project team will consider the information received along with input from other community partners such as Indigenous communities, municipal and provincial governments, and community user groups. With the input collected, the project team will finalize the draft ATNP, which will then be presented to the FVRD Board and posted to the ATNP project page.