

REGIONAL DISTRICT OF NANAIMO
TRANSIT SELECT COMMITTEE
AGENDA

Thursday, September 27, 2018

1:00 P.M.

RDN Board Chambers

Pages

1. CALL TO ORDER
2. APPROVAL OF THE AGENDA
3. ADOPTION OF MINUTES
 - 3.1 Transit Select Committee Meeting - July 12, 2018 2

That the minutes of the Transit Select Committee meeting held July 12, 2018, be adopted.
4. DELEGATIONS
5. UNFINISHED BUSINESS
6. BC TRANSIT UPDATES
 - 6.1 Planning Update 4
 - 6.2 South Area Local Area Transit Plan 25
7. REPORTS
 - 7.1 Feasibility of Transit in Electoral Area F 33

That the Board direct staff to begin Phase II planning for transit in Electoral Area F, using Option 2: Flex-Route/Paratransit and an ARBOC bus, with a forecasted expansion of 5-10 years.
8. BUSINESS ARISING FROM DELEGATIONS
9. NEW BUSINESS
10. ADJOURNMENT

**REGIONAL DISTRICT OF NANAIMO
MINUTES OF THE TRANSIT SELECT COMMITTEE MEETING**

**Thursday, July 12, 2018
1:00 P.M.
RDN Board Chambers**

In Attendance:	Director T. Westbroek	Chair
	Director A. McPherson	Electoral Area A
	Director M. Young	Electoral Area C
	Director B. Rogers	Electoral Area E
	Director J. Stanhope	Electoral Area G
	Director B. Veenhof	Electoral Area H
	Alternate	
	Director M. Biel	City of Parksville
	Director B. Colclough	District of Lantzville
	Director D. Brennan	City of Nanaimo
	Director B. Bestwick	City of Nanaimo
	Director J. Hong	City of Nanaimo
Regrets:	Director B. McKay	City of Nanaimo
Also in Attendance:	P. Carlyle	Chief Administrative Officer
	D. Pearce	Director, Transportation & Emergency Services
	B. Miller	A/ Mgr, Transit Operations
	N. Hewitt	Recording Secretary

CALL TO ORDER

The Chair called the meeting to order and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

APPROVAL OF THE AGENDA

It was moved and seconded that the agenda be approved as amended with the addition of Town of Qualicum Beach - Free Fare Program to New Business.

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Transit Select Committee Meeting - May 24, 2018

It was moved and seconded that the minutes of the Transit Select Committee meeting held May 24, 2018, be adopted.

CARRIED UNANIMOUSLY

REPORTS

DayPASS Fare Product Update

It was moved and seconded that the Board receive the DayPASS Fare Product Update for information.

CARRIED UNANIMOUSLY

Fleet Update – Future Innovations

It was moved and seconded that the Board receive the Fleet Update – Future Innovations report for information.

CARRIED UNANIMOUSLY

NEW BUSINESS

Town of Qualicum Beach - Free Fare Program

It was moved and seconded that the Town of Qualicum provide free transit within the Town of Qualicum on routes 97 and 98 for a trial period of August 1, 2018 to September 30, 2018 with no cost to the Regional District of Nanaimo.

CARRIED UNANIMOUSLY

ADJOURNMENT

It was moved and seconded that the meeting be adjourned.

TIME: 1:33 PM

CARRIED UNANIMOUSLY

CHAIR

SUBJECT: PLANNING UPDATE

PURPOSE

This update on transit planning activities in the Regional District of Nanaimo is provided to the Transit Select Committee (“TSC”) for **INFORMATION**.

SERVICE PLANNING SUMMARY

Winter 2019 Service

Upon direction from the Regional District of Nanaimo Board, Route 40 improvements are being developed for implementation in January 2019.

Key changes include:

- Additional peak morning and afternoon trips
- Additional Sunday trips

PLANNING INITIATIVES

Work undertaken or proposed since the last Transit Select Committee meeting includes:

- **South Nanaimo Local Area Transit Plans** – BC Transit staff and RDN reviewed the input collected from Phase 1 of public consultation. A summary of the comments received from public engagement sessions and workshops is attached as *Appendix B and C*. Based on the feedback from Phase 1, staff are pursuing phase II of public engagement to receive feedback on potential route changes. Public engagement will be held in late November and the final Plan will be completed in Winter 2019.
- **Nanaimo Transit Service Improvements Priorities** - BC Transit and the Regional District of Nanaimo have developed a living document that prioritizes transit improvements based on the strategic direction of the South Nanaimo Local Area Transit Plan, land use and demographic changes, and public input. It will provide a list of initiatives for future service expansions. *See Appendix A*.
- **Area F Feasibility Study**: BC Transit completed Phase I of the Feasibility Study for Electoral Area F. Service options include proposed routing and high-level cost estimates. Upon Transit Select Committee Direction, Phase II will commence.

INFRASTRUCTURE INITIATIVES

- **Bus Pullouts on Highway 19A at Rutherford Road / Mostar Road** – In Collaboration with the Ministry of Transportation, new bus pullouts on Highway 19A at Rutherford Road and Mostar Road will be constructed.

- **Woodgrove and Country Club Transit Exchanges** – The RDN and BC Transit contracted Watt Consulting LTD to evaluate transit exchange options, produce concept developments and Class D cost estimates to submit to the Investing in Canada Infrastructure Program.
- **Downtown Transit Exchange** - The RDN and BC Transit contracted Watt Consulting LTD to evaluate transit exchange options, produce concept developments and Class D cost estimates to submit to the Investing in Canada Infrastructure Program.
- **Smart Bus / NextRide** – The Smart Bus program, which equips the fleet with security cameras (CCTV) and automatic passenger counters (APCs), as well as provides real-time technology (AVL) to the entire fleet has been completed as of May 2018. This will improve schedule reliability and provide stop level activity data.

Related Local Initiatives

The Regional District of Nanaimo participated in a number of local initiatives on behalf of the Transit Select Committee over the last few months, including the following:

- Transit training with locals groups: Seniors Connect & VIU International Students
- Event booths: Parksville KidsFest, Nanaimo Silly Boat Regatta, and Touch-A-Truck events
- Float (Bus) entry: Heritage Day, Canada Day, and Bathtub parades

RECOMMENDATION

It is recommended that the Transit Select Committee receive this report for **INFORMATION**.

Respectfully,

Kailey Laidlaw
Transit Planner
BC Transit

Erica Beauchamp
Superintendent Transit Planning & Scheduling
Transportation & Emergency Services
Regional District of Nanaimo

Attachments:

- A: Regional District of Nanaimo Transit Expansion Priorities
- B: South Nanaimo Local Area Transit Plan Public Engagement Results
- C: South Nanaimo Local Area Transit Plan Stakeholder Meeting Overview

Appendix A

Service Expansion Priorities

This working list of priorities is developed in alignment with the goals and vision of the Transit Future Plan (2014). It provides a service description and an associated high level hour estimate and vehicle estimate. The scoring system below acts as an assessment tool for ranking priorities to help guide decision making. The highest score indicates the highest priority. The metrics were applied to the service improvement in order to identify priorities.

Scoring Matrix

Metric	Weight
Population and Employment Access ¹	15%
Route Productivity ²	15%
Route Directness and Legibility ³	15%
On-Time Performance ⁴	50%
Coverage to Unserved Areas ⁵	5%

Service Type	Service Improvement	Additional Buses	Additional Hour Estimates	Scoring /50
Frequent Transit Network	Route 40: Route modification to provide more residents with access to frequent transit.	2 (heavy-duty)	5000	45
Local Transit Network	Routes 5,6, and 7: Simplify routes	2 (heavy-duty)	4500	35
	Route 30: Simplify route	2 (heavy-duty)	3500	35
	Route 20 Realignment: Connects Woodgrove, Linley Valley/Rutherford, and Country Club Centre.	3 (heavy-duty)	6500	30
	Route 1: Realignment: Connects Country Club, Prideaux Exchange, and Vancouver Island University.	4 (heavy-duty)	10000	30
	Parksville and Qualicum: General service increases	2 (light-duty)	3000	25
	Cassidy Paratransit Service	2 (light-duty)	2500	10
	Service to Area F	2 (light duty)	3000	10
Regional Connection	Service to Ladysmith: peak hour weekday service that connects the downtown core, VIU, airport, and Ladysmith	2 (heavy-duty)	2500	10
HandyDART	Increased service based on Transit Future Plan	1 (light-duty)	2000	-

¹ Population and employment density within a 400m walk distance

² Rides per revenue hour

³ Direct and consistent to improve travel times

⁴ The degree to which the bus meets scheduled times

⁵ Coverage to areas currently not serviced by transit

Public Engagement Report

South Nanaimo Local Area Transit Plan Phase I

March 2018



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1. Introduction

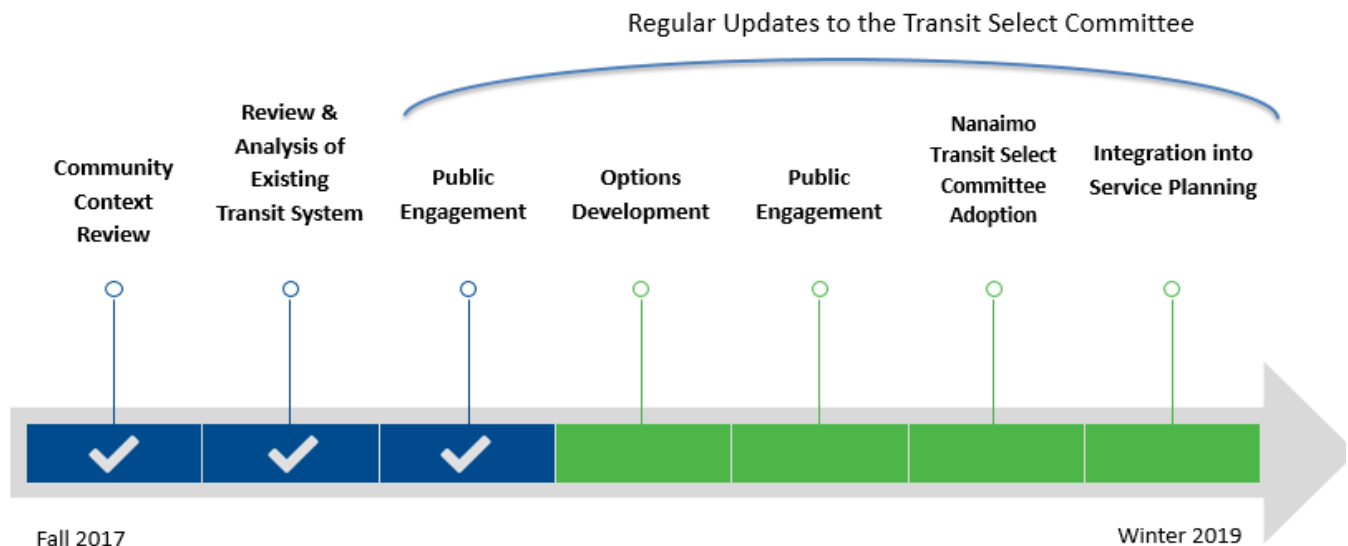
The Regional District of Nanaimo and BC Transit are developing the South Nanaimo Local Area Transit Plan. The plan builds from priorities identified in the Transit Future Plan (2014). The plan’s primary goals include:

- A. Define interim improvements for transit service and infrastructure over the next seven years.
- B. Simplify Route 5,6,7, and 30 to provide more convenient service between neighborhoods and key destinations.
- C. Continue to support the Regional District of Nanaimo’s Transit Future Plan goal to increase the transit mode share to 5 per cent.

Background

The development of the Local Area Transit Plan began in fall 2017. The first step included discussions to ensure transit priorities still aligned with the Official Community Plan, Transportation Master Plan, and neighborhood plans. Next, a detailed review and analysis of the existing transit service, including ridership statistics and demographics was conducted. Using this information, in February and March 2018, BC Transit and the Regional District of Nanaimo collaborated on an engagement process to assist in developing short and medium service options for the area. The engagement process included five open houses and an online survey. The remainder of this document presents the results of this engagement process and the next steps in the process.

Project Timeline



2. Engagement Methods

In February and March of 2018 an online survey was administrated and five open houses were hosted to provide space to gather information on customer priorities and travel behavior to specific destinations within South Nanaimo. In total, approximately 500 people participated in the engagement process. This information is further summarized on the following page. An extensive media awareness initiative was conducted to promote the open houses. Media included: Website Customer Alerts, Fare Page Alerts, Facebook, Twitter, Rack Cards, Interior Bus Cards, and radio advertisements.


The engagement boards and survey instrument are included in Appendix A and B.



Five Open Houses



**Over 400
Total Comments** 

Online Survey
February 8th – March 19th
185 respondents 

**300 Open House
Attendees** 

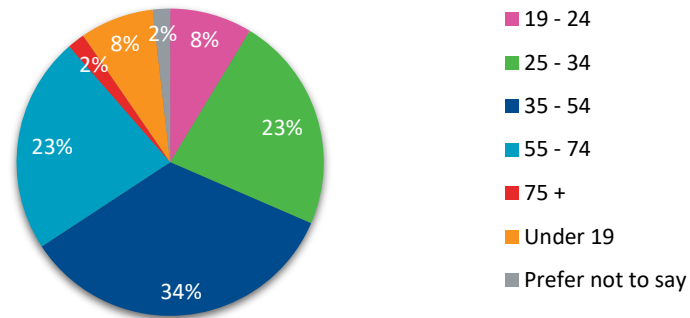
3. Findings

The online survey introduced participants to the Local Area Transit Plan study area, which includes Routes 5 Fairview,6 Harewood,7 Cinnabar/Cedar and 30 NRGH (See Appendix B).

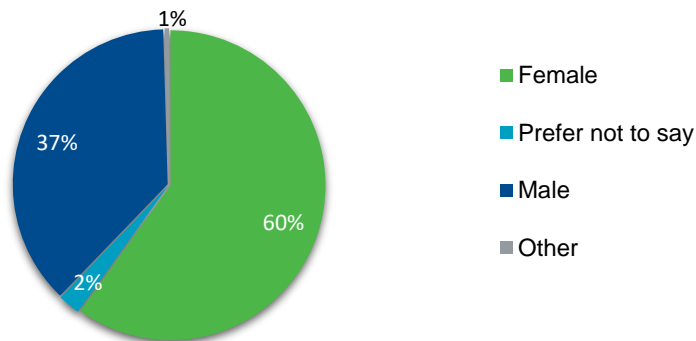
3.1 Demographics

The online survey asked detailed demographic and travel patterns to help inform service design by building a picture of how and which residents use transit.

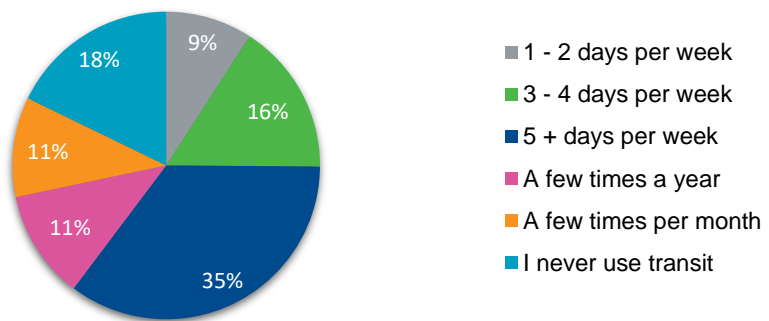
Which age category best describes you?



Which gender do you identify with?



In the past 6 months, how often have you used transit?



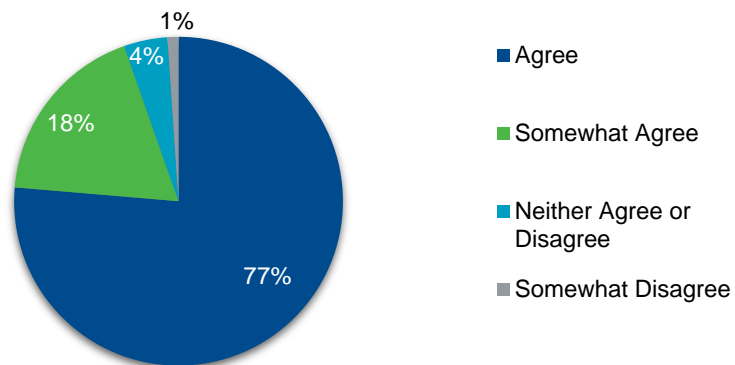
3.2 Transit Priorities

Nanaimo’s Transit Future Plan (2014) identified priorities for the South Nanaimo area. Respondents were asked how agreeable they are to the following priorities:

- Realign routes to provide more direct service between key destinations and neighborhood centers
- Provide more frequent service and longer service hours on the Local Transit Network
- Improve service information e.g. real-time, online schedules and information
- Improve bus stop amenities e.g. benches, shelters, and bike racks
- Introduce Transit Priority Measures e.g. transit signal priority or queue jumper lanes.

95 per cent of respondents either agreed or somewhat agreed with these priorities.

Do you agree with these priorities?



3.3 Transit Improvements

The online survey asked respondents to rank seven specified transit improvements from most to least important. These improvements included:

- Transit service to the Duke Point area
- More direct service between key destinations and neighborhood centers
- Improved transfer opportunities
- Improved service frequency at peak travel times (7-9 a.m., 4-6 p.m.)
- Improved service frequency during the midday (9 a.m.-4 p.m.)
- Improved service frequency on weekends
- Improved service frequency during the evenings (starting at 7 p.m.).

More direct service between key destinations and neighborhood centers was identified as the highest priority for 27 per cent of respondents. 28 per cent of respondents identified Duke Point service as the lowest priority.

Please rank the following transit improvements from most to least important

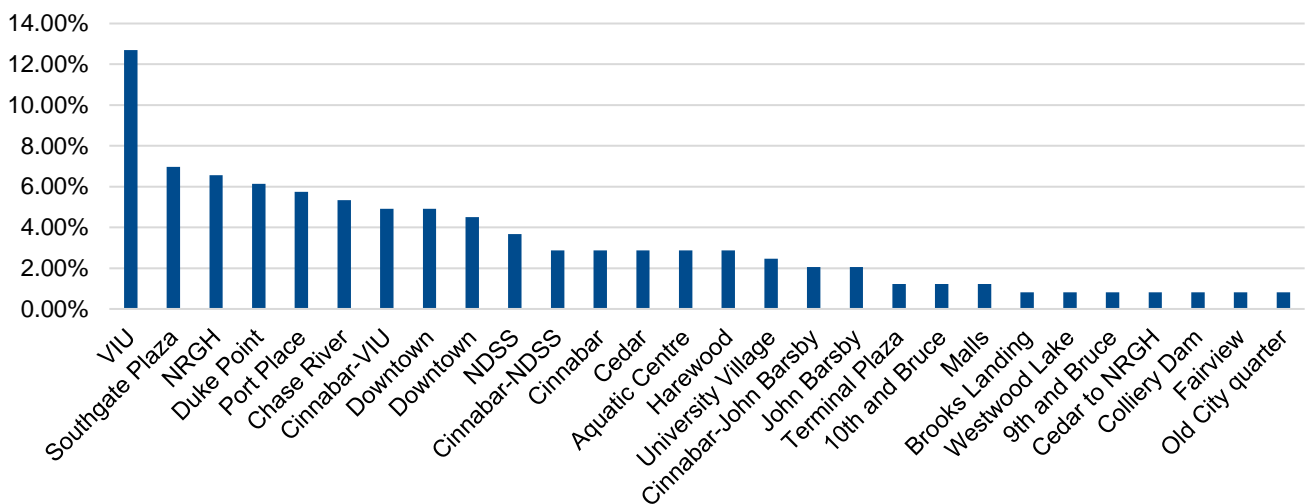
Rank	Duke Point Service	More direct service	Transfer opportunities	Improved frequency at peak times	Improved midday frequency	Improved weekend frequency	Improved evening frequency
First	20%	16%	7%	18%	8%	14%	11%
Second	10%	10%	13%	11%	7%	14%	14%
Third	10%	11%	14%	12%	16%	8%	11%
Fourth	8%	4%	10%	14%	17%	15%	14%
Fifth	5%	9%	14%	8%	15%	15%	9%
Sixth	5%	5%	11%	10%	11%	13%	17%
Seventh	28%	5%	7%	4%	10%	5%	19%

*Ranking percentages may not add up to 100%, it was not mandatory to rank all seven items.

3.4 Destinations Within South Nanaimo

Open house and survey respondents were provided opportunities to identify key destinations within the South Nanaimo area. Participants often identified multiple destinations; VIU was identified as the most important, confirming that a significant portion of ridership is generated from students.

Which specific destinations in the South Nanaimo area are more important to you?

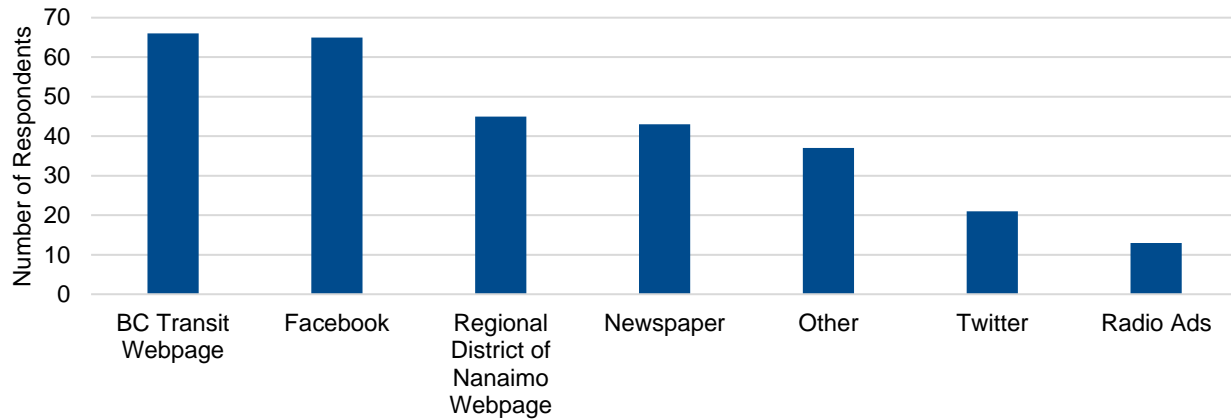


Other responses were specific address locations which are not included in the graph.

3.5 Transit Media Awareness

As part of the engagement, visitors were also asked about their source of information for transit updates. This will help both BC Transit and the Nanaimo staff more effectively communicate information.

On which media platforms do you usually hear about transit updates?



3.6 Open-ended Feedback: Comments & Suggestions

Both the online survey and open houses provided opportunities for respondents to provide open-ended comments and general feedback. Overall, participants were supportive of service improvements to the south Nanaimo area. Key themes that emerged through these comments included:

- **Duke Point Service:** Participants requested service expansion to the Duke Point area, an area currently unserved by transit.
- **Route 7 frequency and routing:** Respondents identified Route 7 as needing increased frequency to provide better service to Cedar and Cinnabar, as well as improved routing and increased transfer opportunities.
- **Ladysmith service:** Inter-regional service to Ladysmith was identified as a desired connection.
- **Airport/Cassidy service:** Respondents indicated that expanding service to the Nanaimo Airport and the surrounding Cassidy area is a priority.
- **Route 30 frequency and routing:** Respondents indicated they would like a more legible route and more frequent service.
- **Route 6 routing:** Respondents desired increased frequency and more direct routing to key destination, such as Vancouver Island University. Service on 10th street was also identified by respondents.

- **Route 6 frequency:** Respondents identified a desire for increased frequency on Route 6.

3.7 Key Findings

Among the online survey and the open houses, the following key themes emerged:

- **Duke Point service:** Participants consistently requested service to Duke Point through the online survey and at open houses.
- **More direct service:** Participants identified more direct service between key destinations, such as Vancouver Island University and Southgate Plaza and neighborhood centers as a high priority.
- **Improved service frequency at peak times:** Service during peak hours (7-9 a.m, 4-6 p.m.) was identified as needing improved frequency on Route 5,6, and 7.
- **Improved weekend and evening frequency:** Improvements to service frequency on weekends and evenings was identified as a priority by respondents, especially by those who rely on transit to travel to and from work.
- **Ladysmith service:** Respondents identified interregional service to Ladysmith as a desirable connection.
- **Route 7 frequency and routing:** Route 7 was identified as needing improvements to both service and frequency to increase service to Cedar and Cinnabar.

4. Next Steps

The engagement process for the South Nanaimo Local Area Transit Plan has been a collaborative process between the Regional District of Nanaimo and BC Transit.

The responses for the engagement process have been tabulated and analyzed to support the future development of the South Nanaimo Local Area Transit Plan. The next step in the process is to use this information to assist in the development of draft short and medium term transit service changes to continue to support transit ridership in the area. These proposals will then be shared during Public Engagement II in fall 2018.

For more information on this project, please contact NanaimoPlanning@BCtransit.com

Appendix A Open House Boards



The Regional District of Nanaimo Transit Future Plan envisions the transit network long-term and describes the services, infrastructure and investments that are needed to get there.

South Nanaimo Area Transit Plan

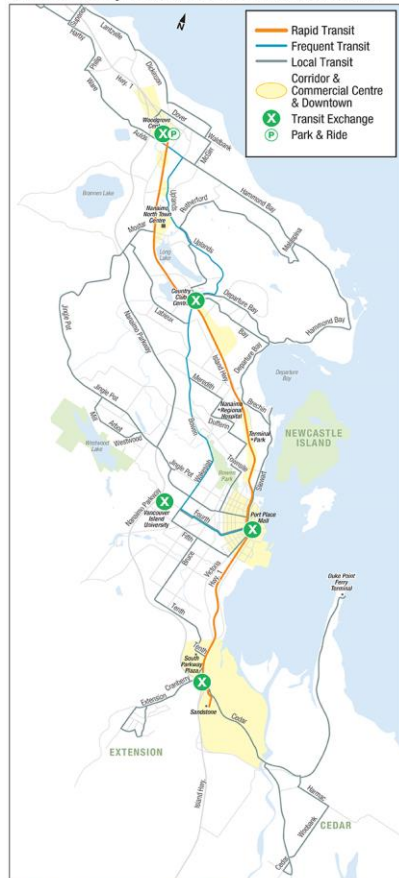
Your input will shape the Local Area Transit Plan for South Nanaimo. This plan will:

- Determine transit service and infrastructure priorities
- Support the Regional District of Nanaimo’s Transit Future Plan goal to increase the transit mode share to 5%



Transit Future Plan Conceptual Maps

Lantzville & City of Nanaimo Transit Future Network



South Nanaimo Transit Future Network



Rapid Transit: 15 minutes service frequency along key corridors and more direct service

Frequent Transit: 15 minutes service frequency along medium to high density mixed land use corridors

Local Transit: connects neighborhoods to local destinations, the Rapid Transit Network and the Frequent Transit Network





South Nanaimo Local Area Transit Plan

Where are your key destinations?	
Within South Nanaimo (e.g. University, recreation centres, shopping malls or health care facilities)	
Outside South Nanaimo	

Use sticky notes for comments

Comments

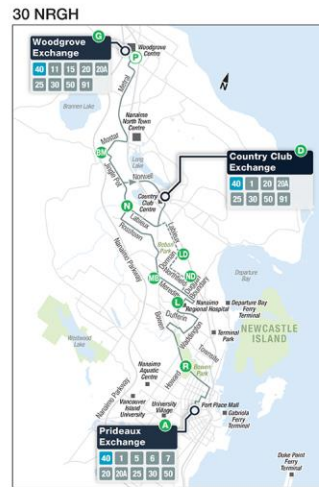
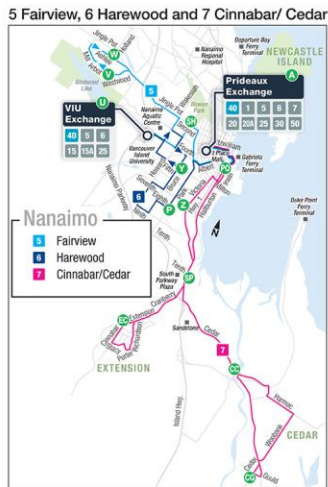
Use sticky notes for comments





South Nanaimo Local Area Transit Plan

The study area encompasses 5 Fairview, 6 Harewood, 7 Cinnabar/Cedar and 30 NRGH.



What are your priorities? Select up to three options.

Realign routes to provide more direct service between key destinations and neighborhood centres	<input type="checkbox"/>
Provide more frequent service and longer service hours on the Local Transit Network	<input type="checkbox"/>
Improve service information e.g. real-time, online schedules and information	<input type="checkbox"/>
Improve bus stop amenities e.g. benches, shelters and bike racks	<input type="checkbox"/>
Introduce Transit Priority measures such as transit signal priority or queue jumper lanes	<input type="checkbox"/>

Do you have any other comments or suggestions?

Thank you!



Appendix B Online Survey



Regional District of Nanaimo Transit System - South Nanaimo Local Area Transit Plan

The South Nanaimo Local Area Transit Plan is currently being developed and we need your input to help improve existing transit routes and identify future service needs. The study area encompasses **Routes 5 Fairview, 6 Harewood, 7 Cinnabar/Cedar, and 30 NRGH.**



Individuals who are under the age of 19 must have permission from their parents or guardians to complete this survey. Collection and use of the information requested for this survey is for the sole purposes of enhancing transit services and is compliant with the Freedom of Information and Protection of Privacy Act. For more information, please contact BC Transit's Privacy Officer at FOI_Request@BCTransit.com or phone 1-844-482-6161.

Regional District of Nanaimo Transit System - South Nanaimo Local Area Transit Plan

About You!

***1. Which age category best describes you?**

- under 19
- 19 - 24
- 25 - 34
- 35 - 54
- 55 - 74
- 75 +
- Prefer not to say

2. Which gender do you identify with?

- Female
- Male
- Other
- Prefer not to say

***3. In the past 6 months, how often have you used transit?**

- 5 + days per week
- 3 - 4 days per week
- 1 - 2 days per week
- A few times per month
- A few times a year
- I never use transit

Regional District of Nanaimo Transit System - South Nanaimo Local Area Transit Plan

Transit Priorities

4. Previously identified priorities for transit improvements in the south Nanaimo area include:

- Realign routes to provide more direct service between key destinations and neighbourhood centres
- Provide more frequent service and longer service hours on the Local Transit Network
- Improve service information e.g. real-time, online schedules and information
- Improve bus stop amenities e.g. benches, shelters, and bike racks
- Introduce Transit Priority Measures e.g. transit signal priority or queue jumper lanes

Do you agree with these priorities?

- Agree
- Somewhat Agree
- Neither Agree nor Disagree
- Somewhat Disagree
- Disagree

5. Please rank the following transit improvements from 1-7 with 1 being your highest priority and 7 being your lowest priority

	1	2	3	4	5	6	7
Transit service to the Duke Point area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More direct service between key destinations and neighbourhood centres	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved transfer opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved service frequency at peak travel times (7 - 9 am, 4 - 6 pm)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved service frequency during the midday (9 am to 4 pm)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved service frequency on weekends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved service frequency during the evenings (starting at 7 pm)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please explain below)

6. Which specific destinations in the south Nanaimo area are most important to you? Please provide a specific name, location or nearest intersection. Think of places you go to multiple times per week or most often - shopping, employment, healthcare, recreation, education.

Regional District of Nanaimo Transit System - South Nanaimo Local Area Transit Plan

Additional Information

7. Do you have any additional comments or ideas to improve transit in the south Nanaimo area?

8. On which media platforms do you usually hear about transit updates? (select up to three)

- Newspaper
- Facebook
- Twitter
- Radio Ads
- BC Transit Webpage
- Regional District of Nanaimo webpage
- Other

BC Transit and the Regional District of Nanaimo thank you for your input. Your comments from the survey will be used to shape transit service in the area. Watch for next steps: <https://bctransit.com/nanaimo/transit-future/nanaimo-transit-future-plan>. We are also looking for regular transit riders to participate in a workshop in the Spring, please contact us via email: NanaimoPlanning@Bctransit.com

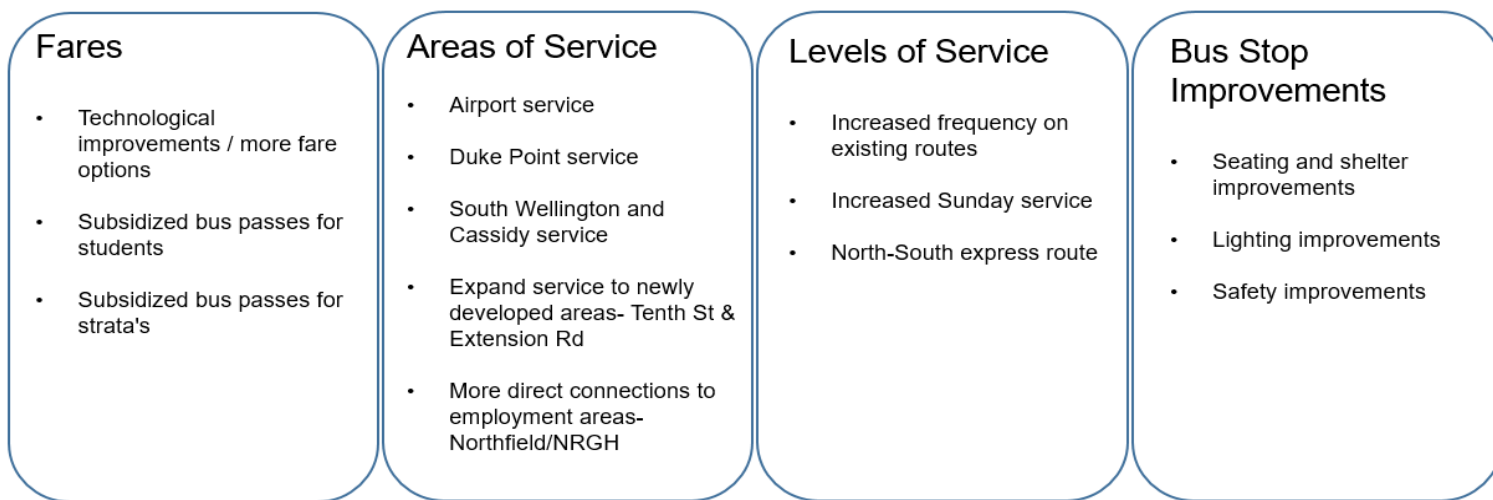
South Nanaimo Local Area Transit Plan Workshop I Summary

Background

As part of the development of the South Nanaimo Local Area Transit Plan, multiple public engagement sessions have and will be conducted to help shape priorities. To ensure we heard residents correctly in Phase I of public engagement (public booths and surveys) and to test-drive ideas, a workshop with key stakeholders was held. Stakeholders included City of Nanaimo staff, South End Community Association representatives, Nanaimo Youth Council representatives, Cassidy residents, and regular transit users. An overview of priorities and key comments identified in the workshop are detailed below.

Priorities

Priorities identified during the stakeholder workshop are detailed in the graphic below.

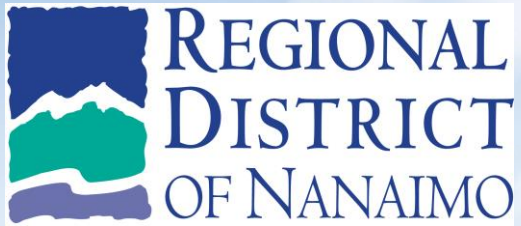


Other key comments from the workshop included:

- More direct connections to employment nodes
- Route 40 Realignment: route modification to improve travel times and operational efficiency

Next Steps

The input collected will help inform service planning priorities and route alignments. Public engagement will be held in the fall of 2018 once options have been developed. Stay up to date by following <https://bctransit.com/nanaimo/transit-future/local-area-transit-plans/project-updates>

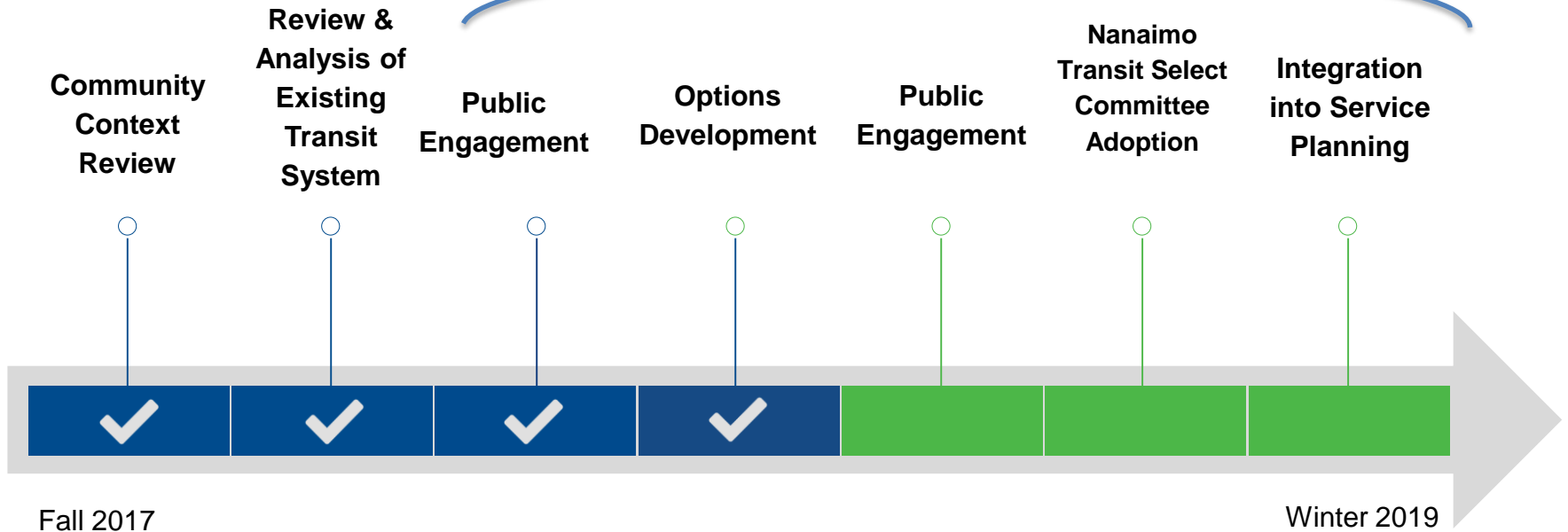


South Nanaimo Local Area Transit Plan

September 2018

Local Area Planning Process

Regular Updates to the Transit Select Committee



Engagement Summary

Five Open Houses

NRGH February 21 11:00 – 2:00	~80
VIU February 22 10:00 -12:30	~55
Port Place Mall February 22 2:00 – 6:00	~135
Country Grocer Chase River March 15 11:00 – 1:30	~20
49 th Parallel Grocery Cedar March 15 2:30 – 6:00	~15

Online Survey
~175 participants



What We Heard

- More direct service between key destinations
- Increased service frequency for all routes
- Duke Point Service
- Route 7 Cinnabar/Cedar frequency and routing
- Ladysmith service
- Airport/Cassidy service
- Route 30 NRGH frequency and routing
- Route 6 Harewood routing



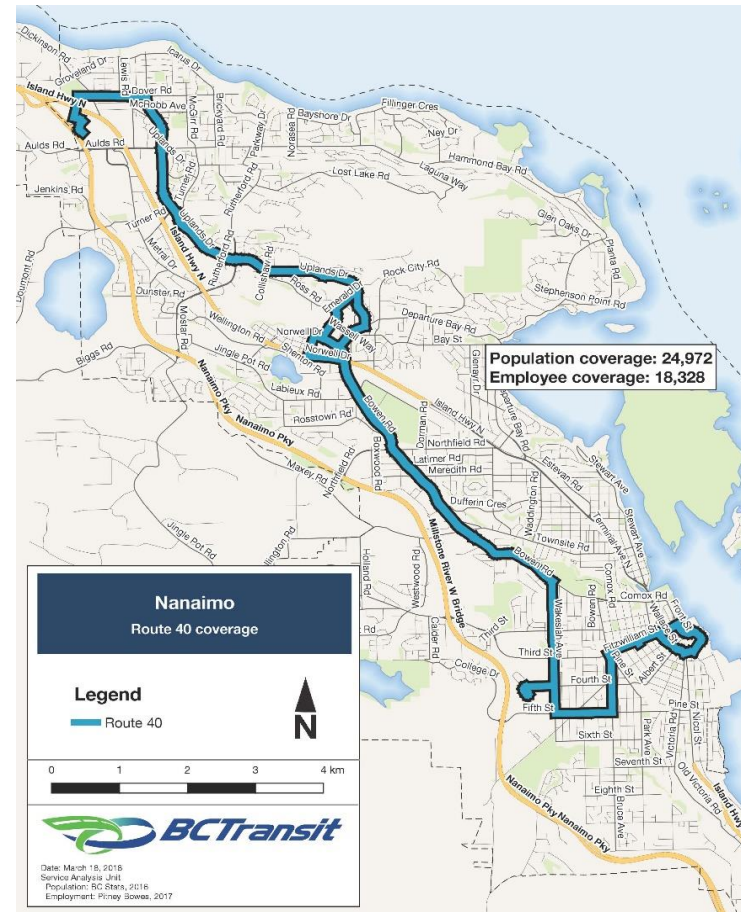
Stakeholder Workshop

- City of Nanaimo staff
- Nanaimo Youth Council
- South End Community Association representatives
- Cassidy Residents
- Cedar residents
- Regular Transit Users



Workshop Summary

- More direct connections to urban residential and employment nodes
- Route 40 realignment options
- Route 5,6,7,30 realignment to improve travel time for customers and simplify routes
- Increase weekend frequency



What's Next?

- **November 2018: Open Houses and Survey**
- **Presentation to Neighbourhood Associations and other stakeholders**
 - » Feedback on a new route alignments (Route 40, 5, 6, 7, 30)

Final Plan

- List of transit service improvements and infrastructure priorities over the next 7 years.

Follow our progress at:

<https://bctransit.com/nanaimo/transit-future/local-area-transit-plans>



Thank you!

Questions or Comments?



Kailey Laidlaw

Transit Planner

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Senior Manager, Government Relations

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Daniel Pearce

Director, Transportation
and Emergency Services

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250-390-6501

Erica Beauchamp

Superintendent, Transit
Planning and Scheduling

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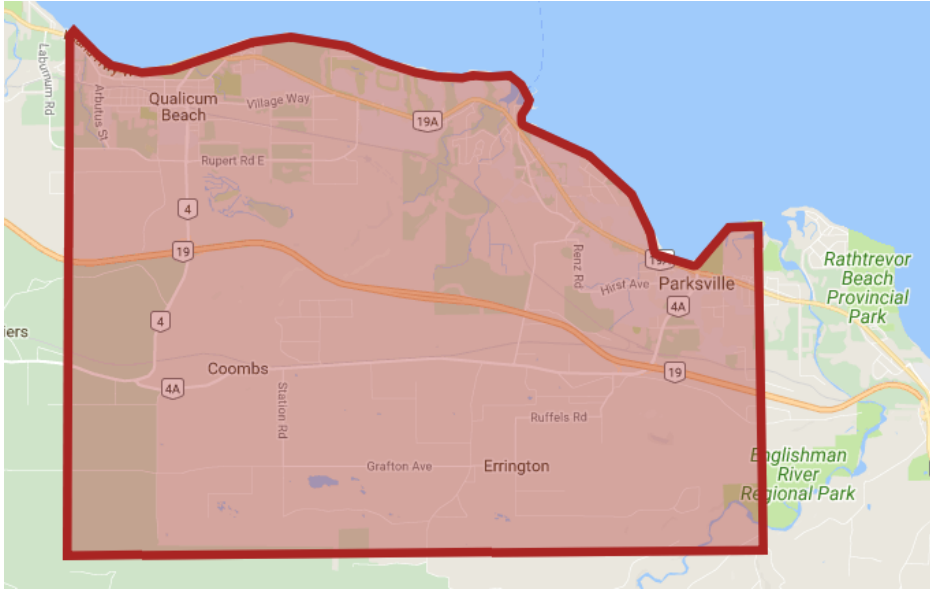


Figure 1: Study Area (BC Transit: Area F Feasibility Study)

According to population statistics (Statistics Canada, 2016) for the communities of Coombs and Errington, 20% of the population is aged 65 years and over, and 13% is under 14 years of age. Transit research indicates that seniors (those over 60 years), as well as those aged under 19 years, have a greater propensity towards transit use. As well, as seniors age they are more dependent on transit and are more likely to benefit from door-to-door service.

Residents of Electoral Area F generally access services in the communities of Qualicum Beach and Parksville, as well as Nanaimo, since available services within Electoral Area F are few. As well, many residents travel outside the area for employment opportunities. As a result, a transit route in Electoral Area F would best benefit residents by reducing car dependency and connecting them to the centres where services are currently utilized: Parksville, Qualicum Beach and Nanaimo.

BC Transit, in partnership with the Regional District of Nanaimo, examined the population demographics noted above, as well as land use characteristics within Electoral Area F. This research was used to generate two transit service options, which would connect residents of Coombs & Errington to Parksville, Qualicum Beach and the whole of the Regional District of Nanaimo transit system. A summary of the service options can be found in Table 1.

Service Options	Service Type	Routing	Buses Required	Estimated Hours	Estimated Ridership	Estimated Local Share Cost (ARBOC)	Estimated Local Share Cost (CNG New Flyer)
Option 1	Fixed route	Qualicum to Parksville along Hwy 4	2	4,000	6,000	\$272,600	\$273,200
Option 2	Flex route, paratransit	Same as Option 1 with deviation up to 2km	2	3,000	3,000	\$222,500	\$223,100

Table 1: Service Option Summary (financial estimates provided by BC Transit)



Figure 2: Service Option 1, fixed route conventional (BC Transit: Area F Feasibility Study)

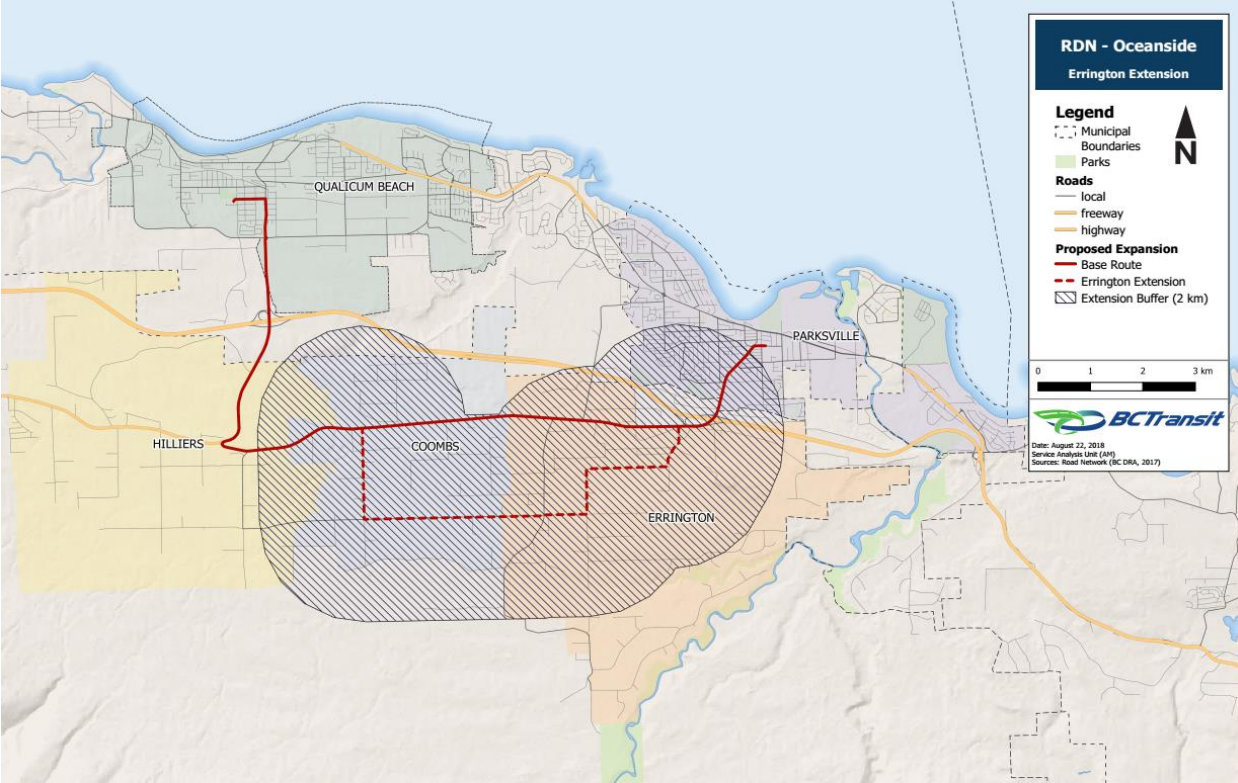


Figure 3: Service Option 2, flex-route conventional (BC Transit: Area F Feasibility Study)

Each of the 2 service options for transit to Electoral Area F would require 2 additional buses. Option 1 requires an estimated 2,500 hours while Option 2 requires an estimated 1,500 hours, with potentially less trips per day, however with the flexible option to venture off-route up to 2 kilometres.

Transit service to Electoral Area F is a medium-long term priority based on the expansion priorities matrix, making it an expansion possibility in 5 to 10 years.

ALTERNATIVES

1. That the Board direct staff to begin Phase II planning for transit in Electoral Area F, using Option 2: Flex-Route/Paratransit, and an ARBOC bus, with a forecasted expansion of 5-10 years.
2. That alternate direction be provided.

FINANCIAL IMPLICATIONS

As this project is a medium-long term priority, it places an expansion of transit into Area F within a 5-10 year time frame. A more detailed cost analysis will be provided during Phase II planning, and will outline cost allocation for each Northern Electoral Area according to Bylaw No. 1196: 'Northern Community Transit Service Committee'.

Current estimated financial implications are as follows:

- Option 1: \$272,600 (ARBOC) to \$273,200 (CNG) annually
- Option 2: \$222,500 (ARBOC) to \$223,100 (CNG) annually.

These costs are estimates, are dependent on option selected, and are reliant on BC Transit having expansion hours available.

STRATEGIC PLAN IMPLICATIONS

This service expansion aligns with the RDN Strategic Plan Key Focus Area to 'Focus on Service and Organizational Excellence', specifically the strategic priority to "...advocate for transit improvements and active transportation". Improving and expanding transit within the service area results in greater access for the public to more sustainable transportation and economic opportunities throughout the RDN and surrounding municipalities.



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September 4, 2018

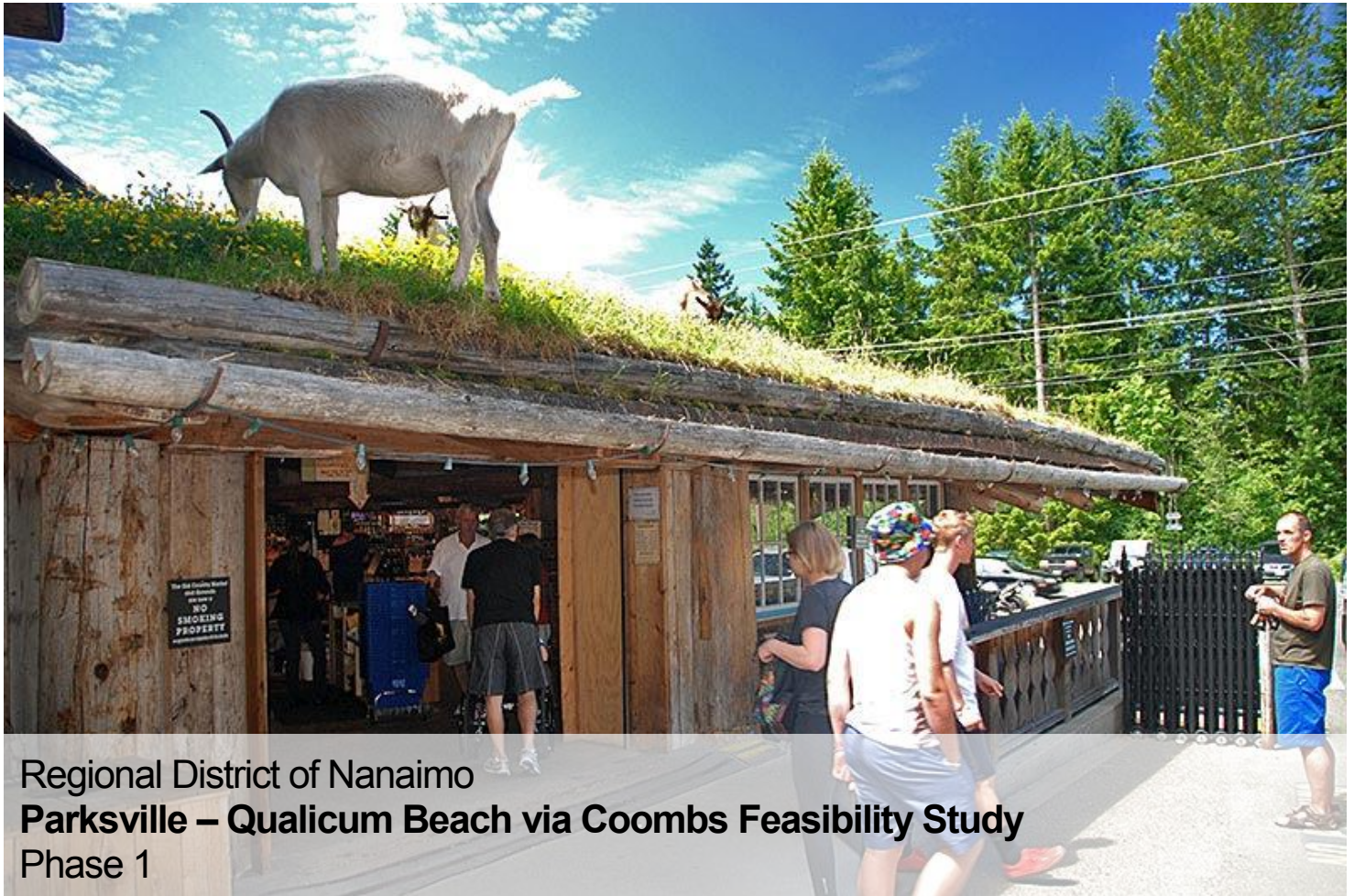
Reviewed by:

- D. Marshall, Manager, Transit Operations
- D. Pearce, Director, Transportation and Emergency Services
- P. Carlyle, Chief Administrative Officer

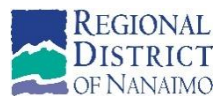
Attachments

1. Area F Feasibility Study, BC Transit 2018

Area F Feasibility Study



Regional District of Nanaimo
Parksville – Qualicum Beach via Coombs Feasibility Study
Phase 1



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1. Introduction

The purpose of this service discussion document is to describe the potential service options and resources required to implement a transit route between Parksville, Coombs and Qualicum Beach thus connecting Area F to transit routes throughout the Regional District of Nanaimo (RDN).

2. Background

In November 2016, the Regional District of Nanaimo Board provided direction to include transit service to Electoral Area F as a medium-long term priority. In 2018, interest was reignited from the City of Parksville and the Town of Qualicum Beach to provide transit service within Electoral Area F, specifically the communities of Coombs and Errington (Figure 1: Study Area).

A phased approach is being undertaken for this Feasibility Study. This Service Discussion Document is the first phase, providing a high-level understanding of ridership demand, transit service options, and resources needed. Phase II of the Feasibility Study will provide detailed costing, infrastructure requirements, public engagement, and local government approval. The Transit Select Committee and the Regional District of Nanaimo Board will be provided with regular updates throughout the project.

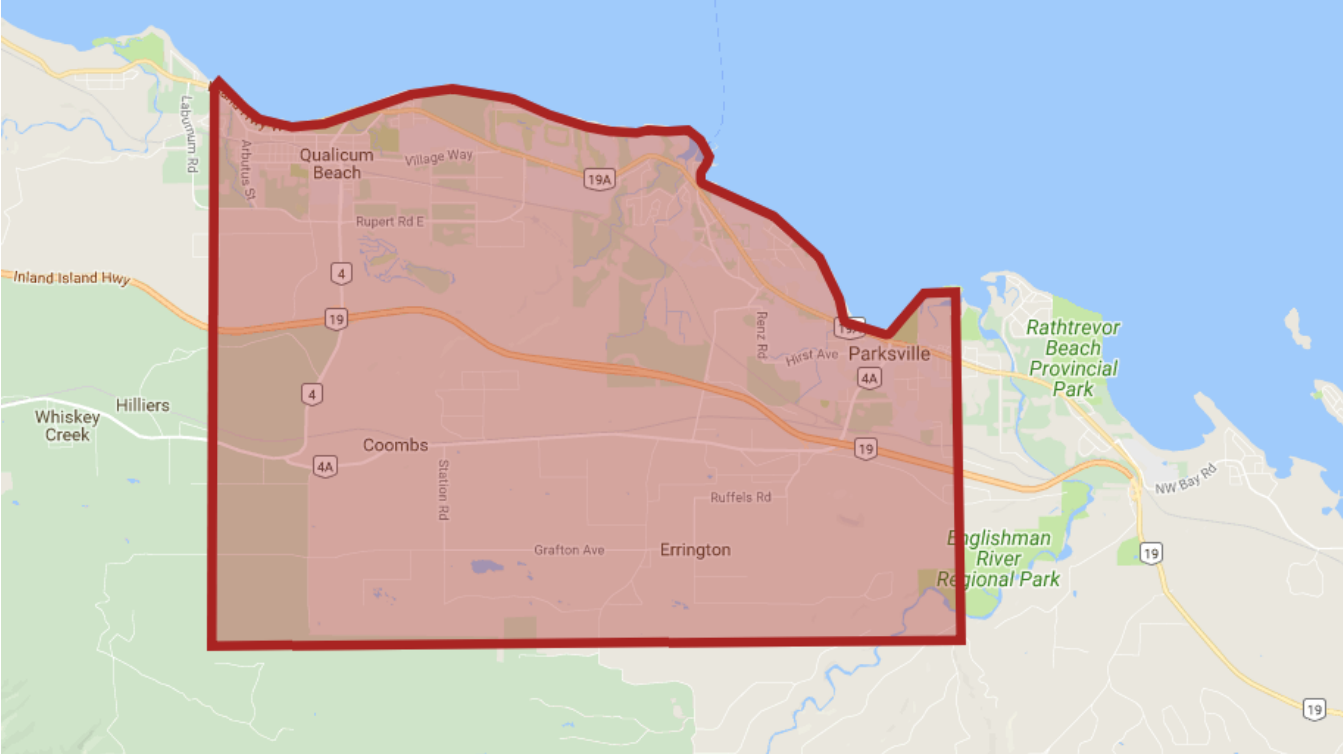


Figure 1: Study Area

3. Objectives

The objectives of the Area F Feasibility Study, as discussed and reviewed with the local partners, are listed below. The objectives serve to define the expected role of transit in the region in terms of service levels and form the basic requirements any proposed transit system

must fulfill in order to be acceptable to the regional district, local municipalities and First Nations communities.

1. Identify the transit market based on demographic data and existing transportation services.
2. Develop service options and outline associated costs. Service options will be consistent with the area's population and land use patterns.

4. Transit Market

Community profiles are useful in determining the size and characteristics of the potential transit markets. Various factors impact transit ridership, including sociodemographic characteristics, individual travel patterns, land use and development patterns, comparable travel times with the private vehicle, parking prices, access to key destinations, transportation network design, existing transportation options, fare prices, and fuel prices.

4.1 Community Overview

Population and Employment Statistics

Electoral Area F, located southwest of Parksville and Qualicum Beach, is comprised of the communities of Coombs, Errington and Hilliers. These communities are connected by Highway 4, a north-south corridor and Highway 4A, an east-west corridor. The community of Coombs has a resident population of 1,500¹ and boasts a bustling market ² that attracts tourists, primarily in the Spring and Summer. Parksville has population of 13,057 and Qualicum Beach has a population of 9,411. These communities also generate tourist activity during the Spring/Summer. Figure 2 below provides population and employment statistics.

¹ Statistics Canada, 2016.

² Coombs Country Market operates March – December, with peak season in the spring and summer.

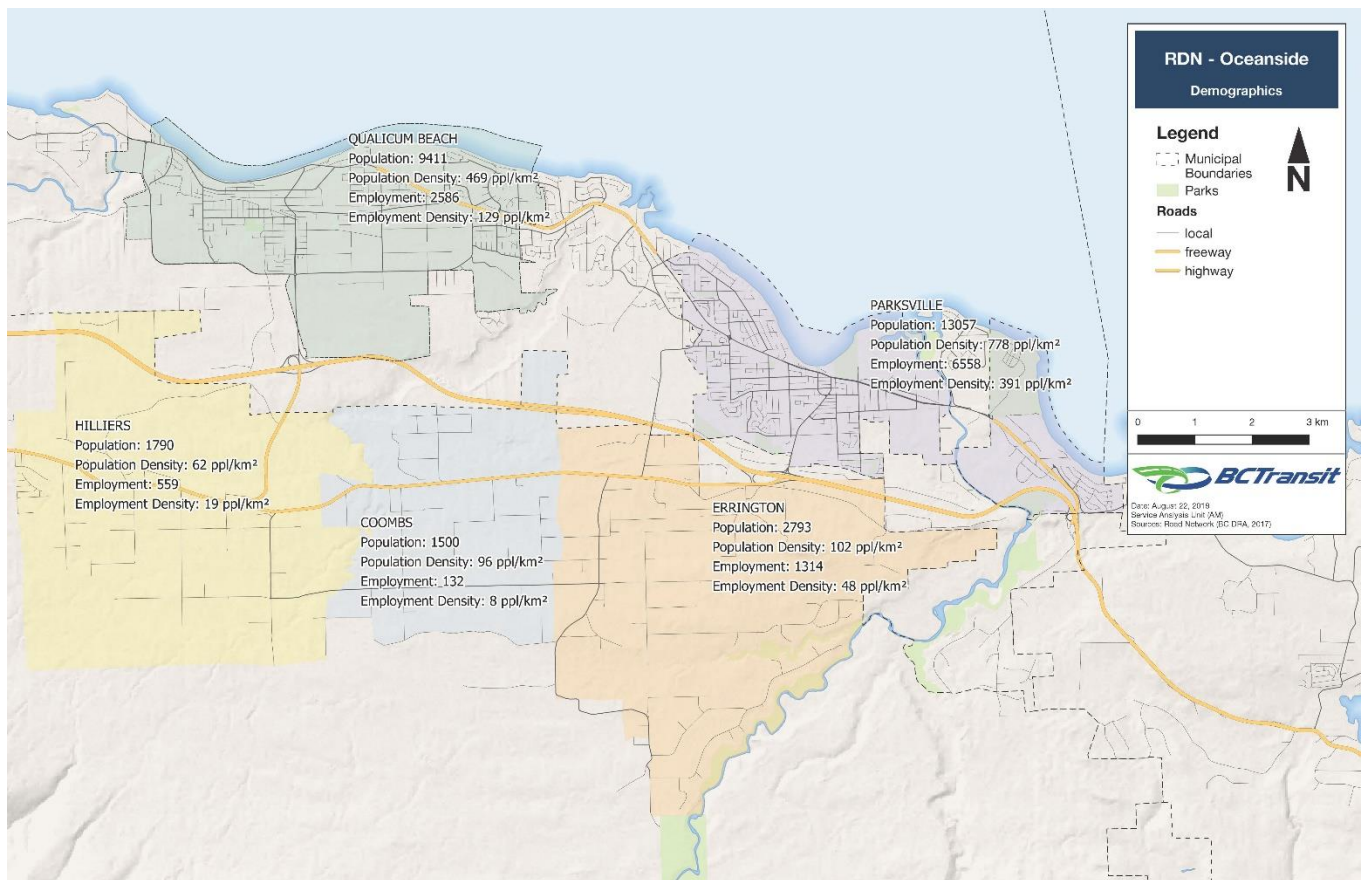


Figure 2: Population Map

Population Distribution of Age

The propensity to use transit varies with age and key changes in age groups can have significant impacts on the future of transit. Specific age groups, such as those under 19 or over 75 are more likely to rely on transit.

The communities of Parksville, Qualicum Beach, Coombs and Errington have a similar age distribution. In these communities, the majority of the population is above the age of 60; 32% of the population is between 60-74 and 22% of the population is above 75. Research indicates that older seniors (75+) make less trips overall compared to other age groups, however tend to be very dependent on transit. They are likely to desire door-to-door service. Recent data suggests that seniors are the fastest growing segment of the population a trend that will be more prominent in areas with an existing high proportion of seniors.

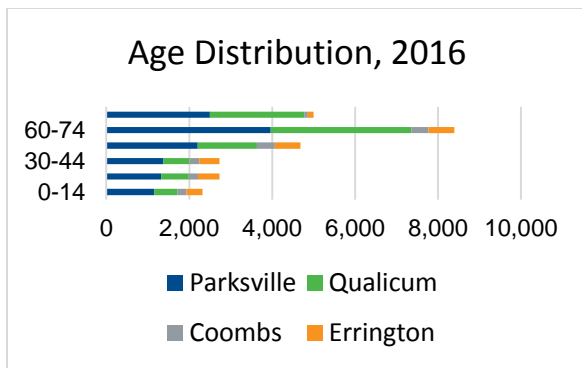


Figure 3: Age Distribution

4.2 Land Use Patterns and Key Destinations

Transit routes that align with population density generate high levels of ridership throughout the entire duration of the trip. Based on evidence across North America, development that is concentrated in nodes but not contiguous generates less overall ridership as the bus will not pick anyone up for the majority of the trip. There are approximately 125 people/km² and 93 jobs/km² on Highway 4, less than the guideline of 1,000 people per square kilometer (see Figure 4: Catchment Area).

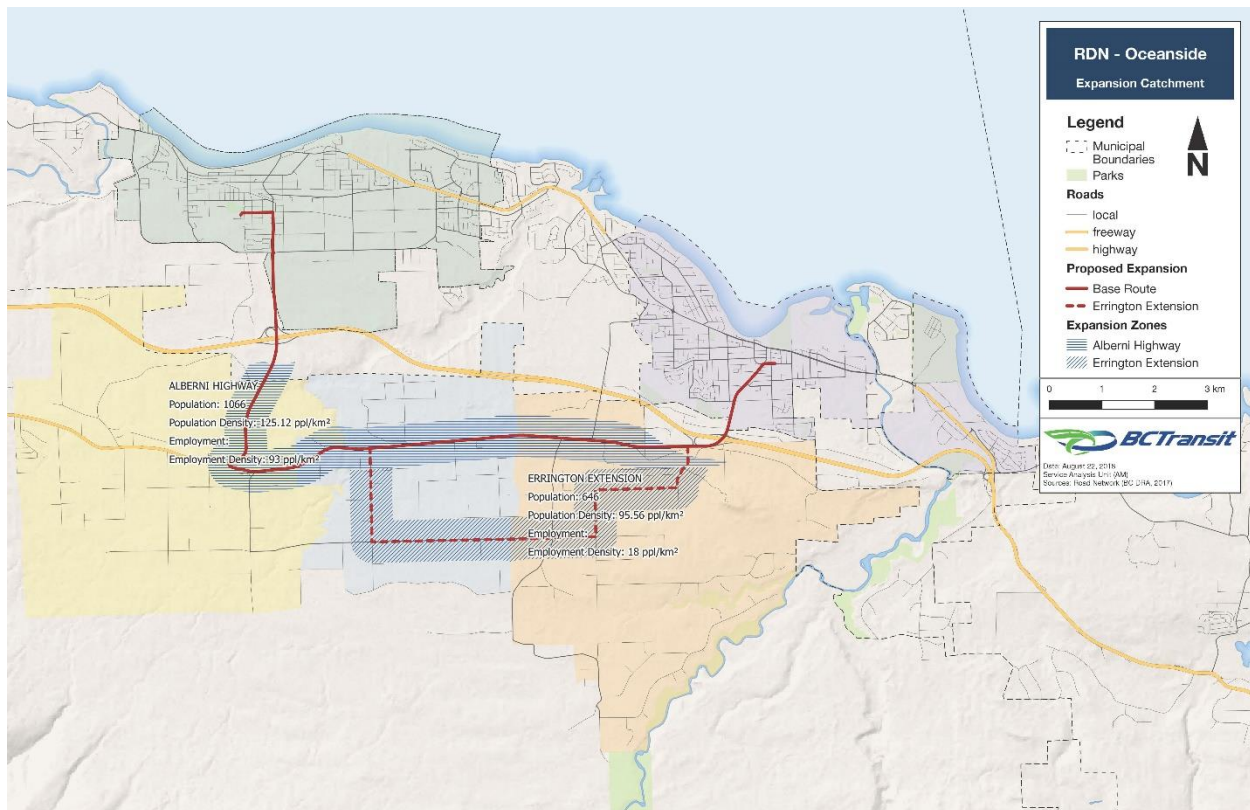


Figure 4: Catchment Area

Key Destinations

This transit line may be an attractive option for tourists in the Region, key destinations along the proposed transit route include the following:

Qualicum Beach:



Figure 5: Qualicum Beach

Oceanside Health Centre: Located in Parksville, provides a variety of health services for residents in this area. New routing between Parkville and Qualicum via Electoral Area F could connect residents to the Health Centre



Figure 6: Oceanside Health Centre

Errington: Residential and farming community, East of Coombs on Highway 4A.

Parksville: Parksville is comprised of a large retirement community and is well-known for its long sandy beaches.

Coombs: Coombs is small community on Highway 4A. The community attracts tourists with the Old Country Market operating March – December from 8:00 am to 8:00 pm. The market features goats living on a roof, Butterfly World, and historic storefronts.

4.3 Estimated Transit Ridership

There are approximately 28,000 people who live in the communities in the Study Area. Based on ridership patterns of similar transit routes such as 99 Deep Bay, ridership is likely to be dispersed throughout the day. In short, customers will use this service for all types of trips rather than for the purpose of commuting to work in peak morning and afternoon hours. Therefore, service options will be developed to meet ridership demand.

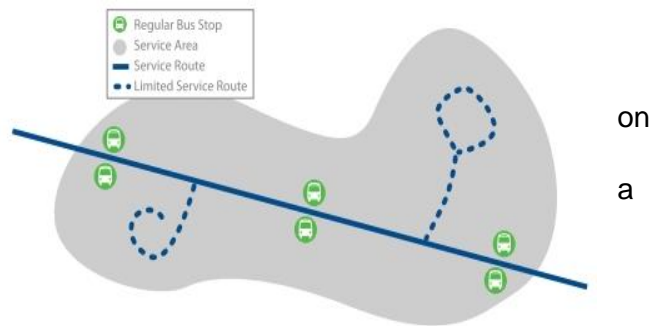
The community population, land use patterns, and low density along Highway 4/4A suggest that this transit line will be relatively low in productivity at an estimated 3 rides per hour, below the target of 20 rides per hour as per the guideline set forth in the Transit Future Plan (2014).³

5. Service Options

Service options are designed to meet the level of ridership demand and needs of customers. The service description of each option identifies the following:

Conventional Transit

Conventional transit operates mainly in urban areas and uses standard sized buses (35 feet long or more) or high capacity buses in dense urban areas. Trips operate fixed routes and follow schedules. **Flexible Transit** or **Flex-Routed Transit** is built on fixed route; however extra time is scheduled into trips. This extra time enables the bus to go off route within 2 kilometres to provide door-to-door pick up and/or drop off.



Given the relative high cost of providing HandyDART service, it is important to ensure that customers are matched with the type of transit service needed. This helps to ensure that limited resources are allocated appropriately and available those that require the service. In order to meet the needs of the ageing demographic, alternative service delivery model, such as Flexible Transit will be considered.

Figure 7: Flex-Routed Transit

The benefit to this flexible transit model is that it provides the predictability of scheduled service for the general population while also being providing a higher level of access.

Definitions

- Service Hours - Estimated number of annual hours that will be utilized based on the time to complete one round-trip and any recovery time.
- Ridership - Estimated annual ridership based on ridership levels on routes in other, similar transit systems.

³ Transit Future Plan (2014) <https://bctransit.com/servlet/documents/1403641050837>

- Vehicle Requirements - Estimated number of vehicles required to operate the service option.
- Estimated Cost - Expected annual cost based on a standardized operating cost per service hour and estimated vehicle costs, off-set by passenger revenue.

Service Options

The two transit service options, as outlined below, seek to provide a minimum level of service to residents between Qualicum Beach, Coombs, Errington, and Parksville. The options provide high level cost estimates, two vehicle type (light-duty and heavy-duty) options, frequency, and span. All trips would operate approximately between 8:00 am and 8:00 pm.

Proposed Transit Line

This route will operate bi-directionally between Parksville and Qualicum, serving Coombs via Highway 4.

Trip Connections

Connections would be available in Parksville and Qualicum Beach. Route 88 services Parksville locally, and Routes 98 & 97 service Qualicum Beach locally. Route 91 provides service to & from Nanaimo, and Route 99 provides service to Deep Bay.

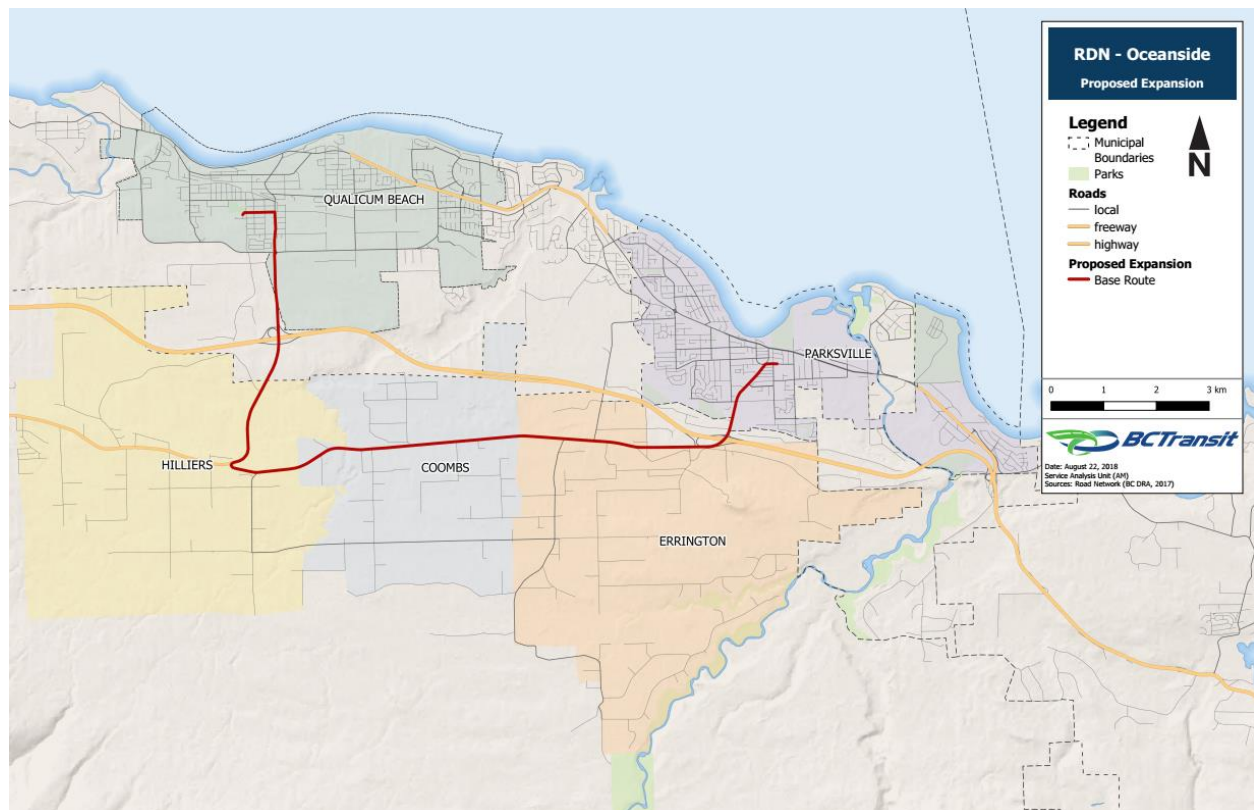


Figure 8: Route Option 1

Service Option 1

Conventional- Monday to Sunday

This option provides transit service Monday through Sunday between Parksville, Coombs (along Highway 4) and Qualicum Beach on a fixed-route.

Service Option 2

Flex-Route Paratransit Service- Monday to Sunday

This option provides service to Parksville, Coombs and Qualicum with on-demand service to Errington. This service option operates using a conventional route and schedule, with time built into the schedule for the bus to deviate from the route up to 2 kilometres (Figure 9: Route Option 2).

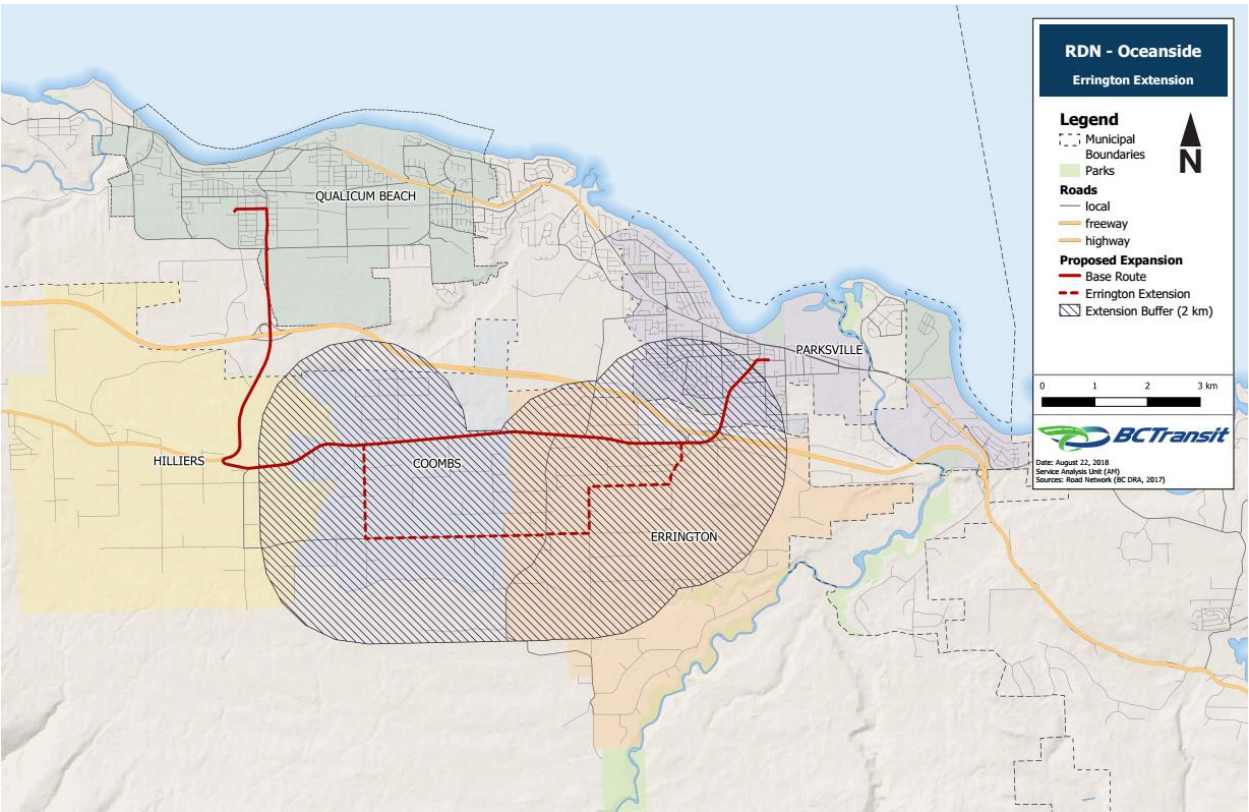


Figure 9: Route Option 2

6. Fleet and Infrastructure Options

Infrastructure Requirements

Facility Capacity Requirements: An evaluation of the capacity requirements at the RDN maintenance and operations facility will need to be conducted to ensure additional buses can be accommodated.

Bus Stops and Pullouts: A more detailed service plan will be developed in Phase II to

determine potential stops and their associated infrastructure requirements, such as pull outs, on Highway 4/4A.

Vehicle Requirements

BC Transit's fleet is shared across the province and lease-fees are standardized by bus classification. Light-duty vehicles, such as the ARBOC are leased at a lower rate than heavy-duty vehicles, such as the CNG New Flyer. Different bus types also have varying environmental impacts: light-duty vehicles produce less GHG emission than heavy-duty vehicles.

Service Options (*Section 7*) were costed with two different types of buses. Given that ridership per trip is expected to be approximately 3-5 trips per ride, coupled with environmental and financial impacts, BC Transit recommends utilizing an ARBOC for this transit service.

CNG New Flyer

The 40' CNG New Flyer bus is used throughout the Regional District of Nanaimo's Transit System. It is a heavy duty bus that can accommodate 36 seated passengers plus standees and 2 wheelchairs.



Figure 10: CNG New Flyer

ARBOC

The ARBOC is a light duty bus that seats 16-20 passengers and from 3-6 wheelchairs. This bus cannot accommodate standees. This bus is commonly used in custom and paratransit systems across the province.



Figure 11: ARBOC

7. Summary of Service Options

The two transit service options, as outlined above, seek to provide a minimum level of service to residents between Qualicum Beach, Parksville, Coombs, and Errington. The options provide high level cost estimates, vehicle requirements and options, frequency, and span.

Service Options	Buses Required		Total Hours	Estimated Ridership	Estimated Total Annual Cost (ARBOC)	Estimated Local Share Cost (ARBOC)	Estimated Annual Cost (CNG New Flyer)	Estimated Local Share Cost (CNG New Flyer)
Option 1: Weekday and weekend service all year	1 bus	1 spare	4,000	6,000	\$447,990	\$272,600	\$448,617	\$273,200
Option 2: Flex-Routed Paratransit	1 bus	1 spare	3,000	3,000	\$354,049	\$222,500	\$354,676	\$223,100

8. Next Steps

It is recommended that the Regional District of Nanaimo receive this report for information to update the working list of RDN Service Improvement Priorities. Upon direction from Regional District of Nanaimo, BC Transit will proceed with Phase II of this Feasibility Study. Phase II will include refinement of service options, more detailed costings, infrastructure requirements, and a cost sharing strategy. Public engagement and stakeholder meetings with surrounding communities will be also be facilitated.