

Southern Gulf Islands Service Discussion Document



FINAL – April 2014

Capital Regional District



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1.0 Introduction

At the request of the Capital Regional District (CRD), BC Transit has undertaken this Service Discussion Document to provide an initial exploration of the feasibility, scope and costs of a more formal transit system or public transportation network on Galiano, Mayne, South and North Pender and Saturna Islands. These areas represent the major islands within the Southern Gulf Islands Electoral Area.

On these islands there is already an array of transportation initiatives underway. These include everything from a car stop program on a number of the islands to a new volunteer-driven bus services on Mayne and Saturna, and a privately operated shuttle on Galiano. Some transportation services are also provided by taxis, major employers/resorts and water taxis. The diversity of transportation initiatives on each island has provided an ideal opportunity to test out different models. However, there is concern that it may not be possible to financially sustain some of them over the long term.

The other two key issues behind the desire to look at transit feasibility on the islands are their demographic makeup and long term economic development strategy. There is a much higher proportion of seniors on the Islands than the B.C. average, and the communities would like to improve the ability for those citizens to age in place without having to move elsewhere. Public transportation is also seen as a key economic development tool. There is an interest in strengthening the local economies of the islands, particularly to attract younger people and families as residents. In the summer, transit is seen as a potential means to connect marine visitors to a wider number of shops and services. In the off-peak season, it is also seen as a part of an overall larger strategy to strengthen year-round local economies and reduce dependence on BC Ferries.

Conducted in consultation with the CRD, the Southern Gulf Islands Area Director, and representatives of Galiano, Mayne, South and North Pender and Saturna Islands, this Service Discussion Document provides a high-level summary of the following community aspects:

- Community context, including demographic patterns, community land use and transportation plans as well as any existing economic development strategies.
- Existing transportation options.
- An initial inventory of community assets/resources that could form part of a transportation solution, as well as a preliminary assessment of fleet maintenance capacity.
- Analysis of potential market and service types.
- Potential service options, including ridership estimates, number of vehicles and hours required, and their associated costs.

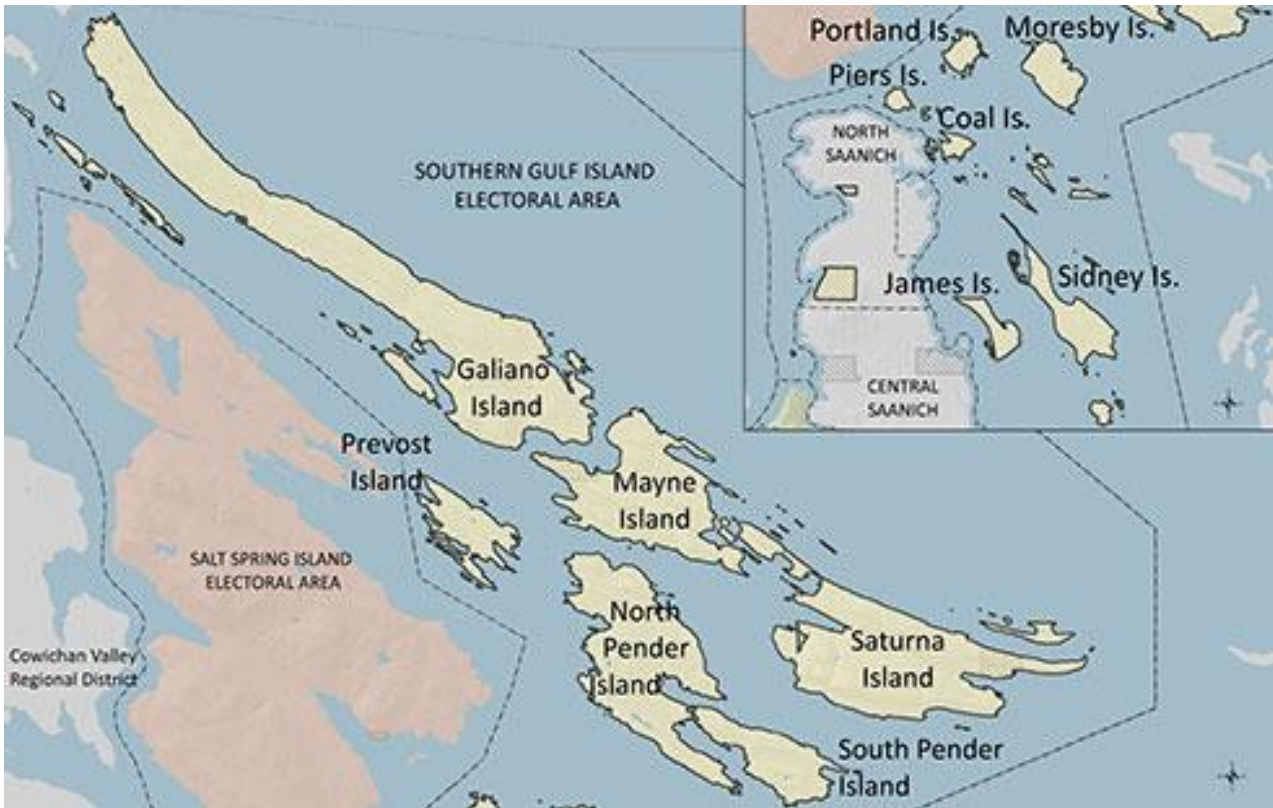
The following sources were used to develop this document and its service options:

- StatsCanada and BC Stats community profiles.
- Community plans and profiles from the Capital Regional District and the Islands Trust
- Community inventory worksheets and maps completed by island resident representatives, as well as other printed and online maps and materials.
- Interviews conducted with island representatives by BC Transit staff
- Review of the draft document and its options at a workshop organized with the Southern Gulf Islands Economic Development Commission, as well as subsequent correspondence with island representatives.

The purpose of the Service Discussion Document is to provide a high-level sense of demand, options and costs for consideration by local decision-makers. At the direction of the CRD, a more detailed implementation plan could then be undertaken to refine options by conducting fieldwork and further public consultation.

2.0 Community Context and Background

2.1 Community Overview and Population



The Southern Gulf Island Electoral Area consists of five large islands, as well as many smaller islands, situated just off the east coast of South Vancouver Island. The largest and most populous islands are Galiano Island, Mayne Island, Saturna Island, and North and South Pender Islands. The estimated total population of the Southern Gulf Islands in 2006 was 5,101 and in 2011 it was 4,868. Of the islands, Pender has the highest year-round population at 2,235, followed by Galiano (1,140), Mayne (1,075) and Saturna (335).

Age Group	Mayne Island			Saturna Island			The Pender Islands			Galiano Island			BC Average														
	2006 #	2006 %	2011 #	2011 %	Change	2006 #	2006 %	2011 #	2011 %	Change	2006 #	2006 %	2011 #	2011 %	Change	2011 #	2011 %	Change									
Children (0-9 years)	45	4%	45	4%	0%	15	4%	15	4%	0%	155	7%	125	6%	-19%	75	6%	65	6%	-13%	438,580	10%	-0.3%				
Youth (10-19 years)	65	6%	55	5%	-15%	5	1%	10	3%	100%	135	6%	140	6%	4%	80	6%	50	4%	-38%	513,945	12%	-1.2%				
Young Adults (20-24 years)	20	2%	15	1%	-25%	5	1%	10	3%	100%	35	2%	50	2%	43%	45	4%	35	3%	-22%	279,825	6%	-0.1%				
Adults (25-64 years)	645	58%	555	52%	-14%	220	62%	190	57%	-14%	1,250	56%	1,220	55%	-2%	755	60%	615	54%	-19%	2,478,985	56%	0.6%				
Younger Seniors (65-74 years)	195	18%	275	26%	41%	80	23%	85	25%	6%	385	17%	450	20%	17%	195	15%	230	20%	18%	371,615	8%	0.8%				
Older Seniors (75+)	140	13%	130	12%	-7%	35	10%	35	10%	0%	260	12%	260	12%	0%	130	10%	145	13%	12%	317,100	7%	0.2%				
Total	1,110		1,075		-3%	355		335		-6%	2,235		2,235		0%	1,260		1,140		-10%	4,400,050		7.0%				
Median Age			61.5					60.6					60.1					59.0						41.9			
% of Population Age 15 or Over			92.8					92.3					92.3					92.2							84.6		

Sources: Statistics Canada, 2011 Census Total Population Results, Designated Places; BC Stats, 2006 Census of Canada Profiles

Based on the data in the preceding table, what follows are some key population and demographic observations:

- Communities in the Southern Gulf Islands are generally experiencing a decline in population from 2006 to 2011, with Galiano having the largest decrease at 10% and Saturna following with a 6% decrease. These decreases are compared to an increase for BC's total population of 7% over the same period.
- The Southern Gulf Islands' population is older than average. In 2011, the median age was 60.3 years on the four main islands, compared to 41.9 years in all of BC. On average, the Southern Gulf Islands have less than half the number of Youth (10-19 years) and Young Adults (20-24 years) than the provincial total. This compares to almost three times more Younger Seniors (65-74 years) than the provincial total.
- The total number of dwellings on the Southern Gulf Islands in this study in 2011 was approximately 4,776, of which 2487 are "permanent" residences and 2,289 are "seasonal." The ratio of permanent to seasonal residences on each island illustrates the impact of summer tourism. North and South Pender had about 1,148 permanent residences plus 731 seasonal residences. Galiano had about 591 permanent residences plus another 634 seasonal residences. Mayne had about 569 permanent residences plus 677 seasonal residences. Saturna had about 179 permanent residences plus 247 seasonal residences.
 - The summer population is also impacted by visitors travelling to resorts, hotels and campgrounds, as well as marine traffic arriving by personal boat.
 - While summer population figures are not available, it is estimated that during that period the population of Galiano and Saturna both increase about 2-3 times, and the population of Mayne, North Pender and South Pender increase about 2 times.
- In 2011, the population density per square kilometer on South Pender it was 22.1, on North Pender it was 39, on Galiano was 18.9, on Mayne is was 47.9, and on Saturna is was 9.4.
 - The population is mostly concentrated on: North and South Pender Islands, in the areas of Magic Lake and Trincomali; Galiano Island, in the areas of Sturdies Bay, "The Corner", and Montague Harbour; Mayne Island, in the areas of Dinner Bay/Spinnaker, Miners Bay, Georgina Point and Bennett Bay; and, Saturna Island around Lyall Harbour.

Other B.C. island communities that have successfully implemented transit options through partnership with BC Transit or Translink are Salt Spring Island with a population of 10,235 and a median age of 53.2 and Bowen Island (operated by Translink) with a population of 3,405 and a median age of 46.6. Texada Island (population 1,053, median age 56.3) is served by the Powell River Regional Transit System one day per week, two trips per day.

BC Transit conducted a Feasibility Study examining transit service for Gabriola Island (population of 4,045 and a median age of 57.3) in 2010, but that community has since decided to implement its own volunteer-driven bus system "GERTIE" separate from the Regional District of Nanaimo's BC Transit system. The Regional District of Nanaimo's recently approved Transit Future Plan looks at introducing public transit service to Gabriola as part of the Medium-Term (5-10 year) service priorities.

The following table looks at BC Transit's current transit systems serving a population of 5,000 people or less.

Transit system	Population	Vehicles	Service Hours	Rides per Hour	Cost per Ride	Trips per Day (Mon-Fri)	Service Description
100 Mile House	3,385	3	1,988	4.0	\$18.94	7 scheduled, Dial-a-ride	These systems are mostly self-contained, with little or no service in surrounding rural areas; may have limited connection to urban centre via Health Connections route.
Ashcroft-Clinton	2,264	2	1,976	1.5	\$46.13	3 scheduled, Dial-a-ride	
Bella Cooola	3,300	2	3,521	5.2	\$13.61	6 scheduled, Dial-a-ride	
Boundary (Grand Forks)	3,985	2	1,606	4.4	\$15.89	Dial-a-ride	
Kaslo	2,700	1	586	2.9	\$36.95	2 scheduled, Dial-a-ride	
Princeton	2,724	2	1,976	3.4	\$19.92	Dial-a-ride	
Clearwater & Area	2,331	3	2,092	3.0	\$23.44	6 scheduled, Dial-a-ride	These systems provide service between multiple small rural communities within their regions, with no or limited connections to urban centres.
Hazelton's Regional	2,158	2	2,553	5.7	\$14.82	5 scheduled, deviations	
Mt. Waddington	6,513	3	4,285	7.1	\$11.65	20 scheduled, limited Dial-a-ride	
Nakusp	1,759	1	1,976	3.1	\$24.09	2 scheduled, Dial-a-ride	
Agassiz - Harrison	5,664	4	5,379	7.3	\$9.55	10 connections, deviations	These systems provide daily connections to neighbouring urban centres as well as some level of local service within the community.
Okanagan - Similkameen	1,647	1	1,690	5.0	\$16.57	4 connections	
Osoyoos	4,845	1	1,454	3.3	\$17.68	2 local/connections, Dial-a-ride	
Nelson - Slokan Valley	2,800	4	5,792	7.2	\$12.59	4 connections	
Pemberton Valley	3,675	2	1,953	13.3	\$8.51	7 local, 4 commuter	
Port Edward	544	1	2,063	16.9	\$6.84	7 connections	

Nearby in Washington State, San Juan Island (population 6,894) and Orcas Island (population 5,387), have transit from May to September only. (Daily service during the summer, Friday – Monday from May to mid-June). This service is operated by a private operator, San Juan Transit Tours / Charters, and appears to be more geared around tourism rather than the local population. (See: <http://www.sanjuantransit.com/index.html>)

2.2 Community Land Use and Plans

- The Southern Gulf Islands are within the Islands Trust. Official Community Plans (OCPs) for North Pender (2007), South Pender (2011), Galiano (1995, with substantial amendments in 2011 and 2012), Mayne (2007), and Saturna (2010) all contain sections that support and encourage the development of alternative forms of transportation to reduce dependence on private motor vehicles.
- There are a few housing developments and plans underway in the region. Galiano Green affordable housing is under development and will have about 20 units. Elder Village, on North Pender near Driftwood Centre, will have between 5 and 10 units for area seniors.
- Roadways are under the jurisdiction of the BC Ministry of Transportation and Infrastructure as part of the 1992 agreement with the Islands Trust Council. OCP's for the islands generally agree that roadways should be safe while minimizing environmental and social impacts as well as maintaining the rural character of the region.
- The CRD is in the process of completing a Regional Transportation Plan which includes the Southern Gulf Islands area.

2.3 Local Economic Development

- The **Southern Gulf Islands Economic Development Commission (SGIEDC)** is currently working towards initiatives that improve the year-round local economies of the islands. Besides strengthening the sustainability of local communities, a key objective of this work is to increase the diversity and number of people living on the islands, particularly among younger people and families who would be better attracted to live there if there was more year-round employment.

The SGIEDC sees two structural needs required to serve as foundations for a revitalized year-round economy:

- Expanded internet capacity to better facilitate residents who could live on the islands year-round but work “virtually” elsewhere, as well as virtual education opportunities.
- Increased connecting transportation on and between islands, particularly transportation that does not require private automobiles and which could potentially reduce reliance on BC Ferries. Recently, SGIEDC members developed a proposal to connect CRD docks distributed around the islands with water taxi services. The image on the following page shows those proposed connections.

The SGIEDC and a consortium of island organizations is sponsoring a survey of residents to be undertaken in April 2014 regarding these and other potential routes among the islands, including possible connections to Sidney. These connections could involve other public docks in addition to the CRD public docks.

SGI EDC Proposed Water Taxi Linkages



As the CRD docks have been historically located on each island for quite some time, in most cases population hubs have grown up nearby and therefore they are for the most part well located from a walkability / transit perspective. While BC Transit does not currently operate any water taxi services, the CRD dock locations have been taken into account when looking at potential transit-based solutions for the communities. The CRD dock location details are shown in the map below.

CRD Dock Locations

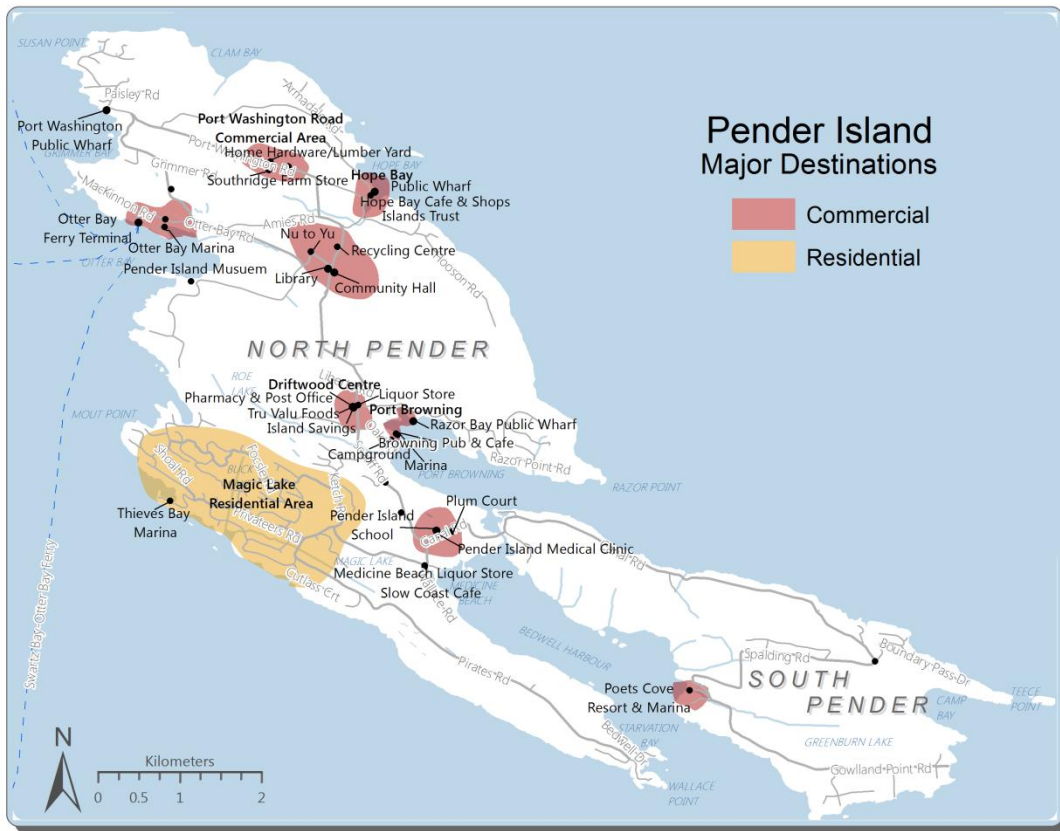


- **Experience the Gulf Islands** is an initiative, by the Southern Gulf Islands Economic Development Commission, that includes the development and expansion of trail and bicycling systems on the islands. The idea is to connect the communities and attract visitors while encouraging alternative forms of transportation, especially those that reduce congestion and greenhouse gas emissions. The Experience the Gulf Islands Initiative and its focus on trail and cycling routes on the islands is being coordinated with the CRD's development of a SGI Pedestrian and Cycling Concept Plan in spring 2014.
- **Educational programs** are a major area of interest for Southern Gulf Island Communities and for the Southern Gulf Islands Economic Development Commission. Educational programs are active with more in the works. Some programs that are currently running are Salish S.E.E. Centre for Peace and Innovation, Galiano Restorative Learning Centre and the Saturna Education and Marine Research Project.

3.0 Key Destinations and Potential Transit Markets

This section outlines major destinations and travel patterns on each of the islands as well as regional travel. An assessment of potential travel markets is also noted.

3.1 North and South Pender Islands



Major Destinations

- Main commercial destinations on North and South Pender are clustered around the **Driftwood Centre** on Bedwell Harbour Road (includes True Value Grocery Store, Pender Island Pharmacy, Sears Catalogue Pickup, Island Savings Credit Union, the Post Office, a Liquor Store, etc.)
 - Other key destinations are clustered along **Port Washington Road** (Home Hardware and Southridge Farm) and at **Hope Bay** (Hope Bay Café, Hope Bay Marina, Hope Bay Studios, Islands Trust, Hope Bay Bible Camp, etc.).
 - The most heavily populated residential area is **Magic Lake**.
 - Other points of interest to note are:
 - The Pender Island Medical Clinic, providing a wide range of health related services and located adjacent to Palm Court Seniors Housing on Canal Road
 - The Browning Pub, Café, Marina and Campground at Port Browning
 - The Pender Island Community Hall, the library, and the Community Church, all at 4418 Bedwell Harbour Road
 - The Pender Corner Store, Medicine Beach Liquor Store and Slow Coast Cafe at Medicine Bay
 - The Otter Bay ferry terminal and the Otter Bay Marina

- Poets Cove Marina and Poets Cove Resort and Spa on the northwest section of South Pender. This is the largest resort on the island. As of March 2014, this resort is closed for the winter and is up for sale.

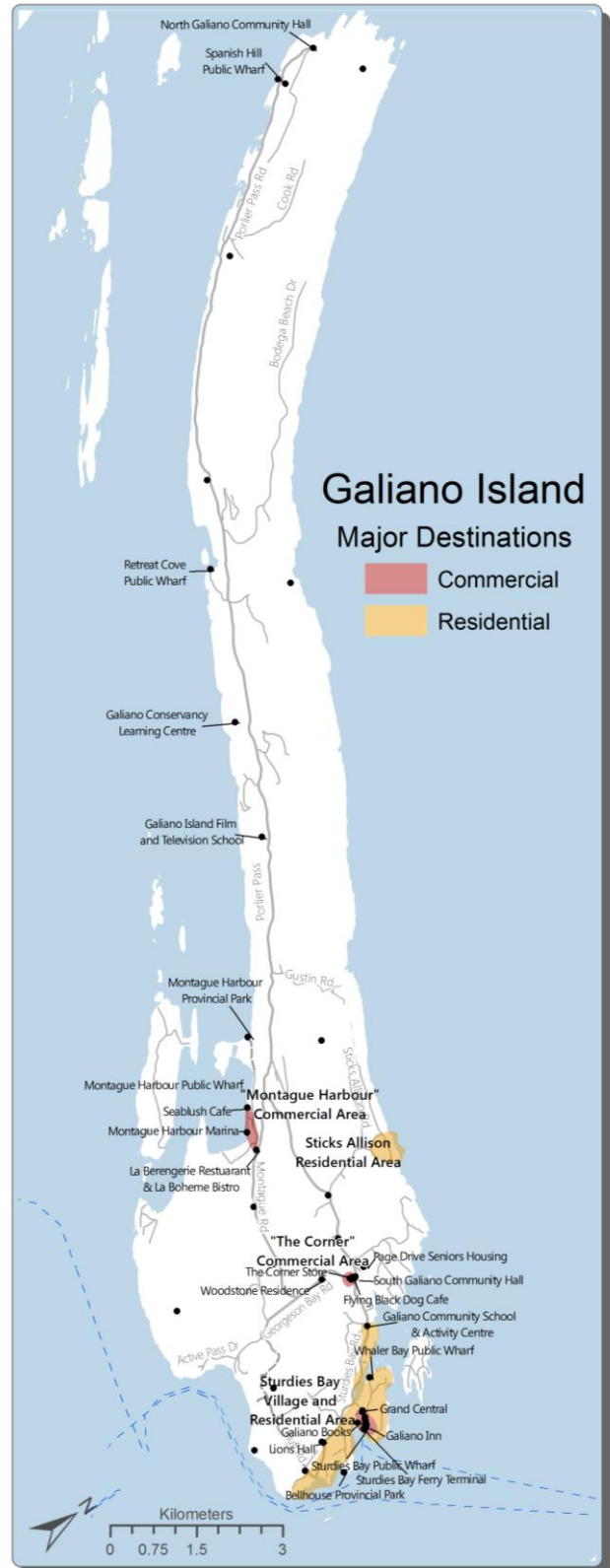
Travel Patterns and Potential Transit Markets

- Most travel takes place on Port Washington, Bedwell Harbour, Canal, and Otter Bay roads.
- A substantial seasonal potential is related to marine traffic and visitors in and around Port Browning, with a pub, café, marina and campground; and, Poets Cove, with a resort, spa and marina.
- Middle and high school students find their own way to the school water taxi which departs from the CRD dock at Port Washington.
- Commuters from this island going to or from Vancouver Island would mainly be on the ferry runs leaving at 7:45am and returning either at 3:10 or 6:45pm Monday to Thursday and 7:10pm Friday. The BC Ferries website highlights that the 11:45am trip is often busy, with overloads.
- Some people also use the CRD docks at Hope Bay (which is close to the intersection of Bedwell Harbour Road and Port Washington Road) and Bedwell Harbour.
- Since in particular Pender Island is so close by water taxi to Sidney, an idea that has emerged recently is whether there may be some ability to connect residential space on Pender with jobs in the industrial areas between Sidney and the Victoria International Airport. One of the major employers in this area—Viking Air—has noted that many of its employees are living for economic reasons in housing in the WestShore area. Average price for a single family home in Langford is \$406,800 and involves a 40 - 60 minute commute by car to the Peninsula. Average price for a single family home on the Gulf Islands is \$327,800 with a commute time of 20 minutes by water taxi from Pender Island, plus travel time at either end.

3.2 Galiano Island

Major Destinations

- Main commercial destinations on Galiano are clustered around the **ferry terminal** (includes the Galiano Inn, Galiano Island Books, Sturdies Bay Bakery, a number of eateries, etc) and the intersection of Sturdies Bay, Porlier Pass and Georgeson Bay roads, known locally as “**The Corner**,” (includes The Corner Store, Daystar Market, Soloman Rose gallery and Coffee Bar, the Hummingbird Pub, the Flying Black Dog Café Food Wagon, the Galiano Trading Company, etc.)
 - Other key destinations are clustered at **Montague Harbour** (La Berengerie Restaurant and La Boheme Bistro, the Sea Blush Café, Montague Marina).
 - The most heavily populated residential areas are around **Sturdies Bay** and Montague Harbour, and along Georgeson Bay, Bluff, and Sturdies Bay roads, along with **Sticks Allison Road**, which has more seasonal residences.
 - Other points of interest to note are:
 - The Galiano Health Clinic and the Lions Hall on Burill Road
 - The South Galiano Community Hall, the Community Library, and the Galiano School and Activity Centre, all on Sturdies Bay Road
 - The Woodstone Residence, a provincial eating disorder clinic that employs 25 people and is on Georgeson Bay Road;
 - Page Drive Seniors Housing at “The Corner”
 - Montague Provincial, Bellhouse, and Bluff Community Parks
 - The Galiano Island Film and Television School, and the Galiano Conservancy Learning Centre on the mid-island;

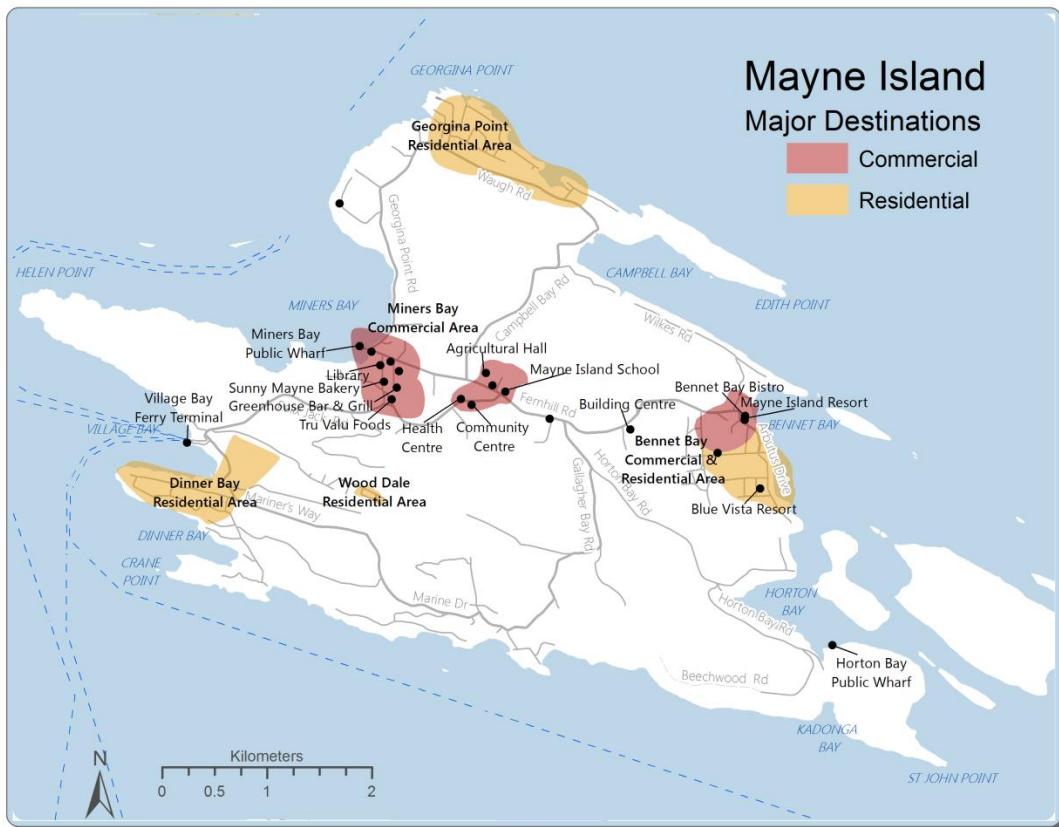


- The North Galiano Hall and the Spanish Hills Dock on the north end of the island.

Travel Patterns and Potential Transit Markets

- Most travel takes place on Sturdies Bay, Porlier Pass, Montague and Georgeson Bay roads.
- A substantial seasonal potential is related to marine traffic and visitors in and around Montague Harbour. Montague Harbour has restaurants, a marina, a gas dock, a provincial park, and sees 80-100 boats per day at peak times.
- Middle and high school students find their own way to the school water taxi which departs from the CRD dock at Sturdies Bay.
- Commuters from this island going to or from Vancouver Island would mainly be on the ferry runs leaving 6:40am (arrive SB at 8:10am) and returning at 4:15pm or 6:30pm Monday to Thursday, and either 3:25pm or 7:15pm on Friday.
- Some people also use the CRD dock at Retreat Cove, from which there is a quick water taxi ride to the Fernwood dock on Salt Spring Island. (Salt Spring Island Transit already serves the Fernwood Dock, connecting it to Ganges on eight or more trips per day (four on the route 5 Fernwood, four on the 6 Salt Spring Connector, plus additional trips in the summer).

3.3 Mayne Island



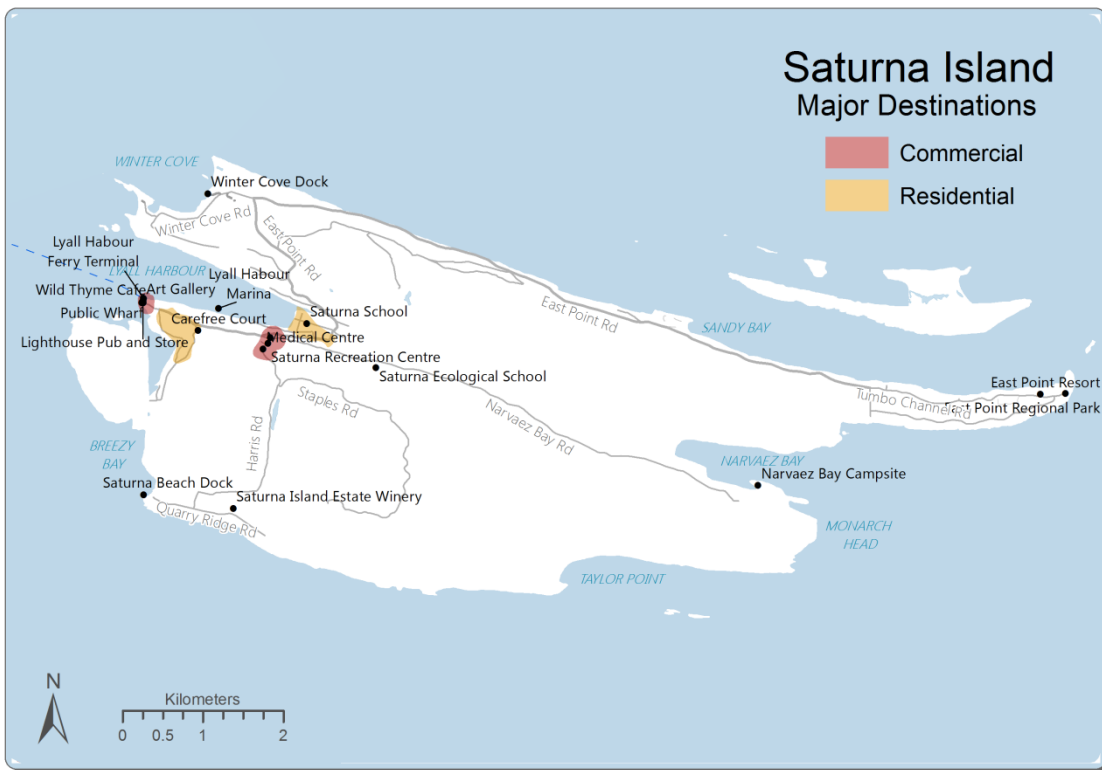
Major Destinations

- Main commercial destinations on Mayne are clustered at **Miners Bay** (includes True Value Foods, Sunny Mayne Bakery, Greenhouse Bar and Grill, Trading Post, etc.)
 - Other key destinations are clustered around **Bennett Bay** (Bennett Bay Bistro, Mayne Island Resort, and Blue Vista Resort).
 - The most heavily populated residential areas are around **Dinner Bay/Spinnaker**, **Miners Bay**, and **Wood Dale** along with **Georgina Point** and **Bennett Bay**, which both have about 50% seasonal residences.
 - Other points of interest to note are:
 - The Health Center, the Community Center, and the Mayne Island School, all in a similar area on Felix Jack Road
 - The Agricultural Hall and the library in Miners Bay
 - The Mayne Island Building Center located on Fernhill Rd.

Travel Patterns and Potential Transit Markets

- Most travel takes place on Village Bay, Fernhill, Georgina Point, and Horton Bay roads.
- A substantial seasonal potential is related to marine traffic and visitors in and around Miners Bay and Horton Bay. Miners Bay has a dock and an array of amenities. Horton Bay, seeing around 37 anchored boats in the summer, is popular for its effective marine shelter.
- Middle and high school students find their own way to the school water taxi which departs from the CRD dock at Miners Bay.
- Commuters from this island going to or from Vancouver Island would mainly be on the ferry runs leaving 7:20am and arriving back on Mayne at 5:00pm Friday or 5:05pm Monday to Thursday.
- Some people, including some trades workers, also use the CRD dock at Horton Bay.

3.4 Saturna Island



Major Destinations

- Main commercial destinations on Saturna are clustered around the **BC Ferries terminal at Lyall Harbour**, including the Lighthouse Pub and Store, Boot Cove Books, Wild Thyme Café and the art gallery.
 - Other key destinations are Saturna Island Family Estate Winery on **Quarry Ridge Road** (tastings and bistro/restaurant) and the Saturna General Store at the intersection of East Point and Narvaez Bay Road.
 - The most heavily populated residential areas are around Lyall Harbour and Winter Cove along with Tumbo Channel Road, which has a higher proportion of seasonal residences.
 - Other points of interest to note are:
 - The Medical Center, the Recreation Center, and Saturna School, all in a similar area in Lyall Harbour
 - The Community Hall at the ferry dock in Lyall Harbour
 - Carefree Court senior's housing at East Point Road and Payne Road.

Travel Patterns and Potential Transit Markets

- Most travel takes place on East Point Road along with some travel on Payne, Harris, Winter Cove, and Tumbo Channel roads.
- East Point includes a Marine Station that is home to a research and education program. A partnership with UVic and Camosun means that students come to work at the Station and stay on Saturna. East Point also offers tourism potential as it is an area where whale watching can take place on land.
- A substantial seasonal potential is related to marine traffic and visitors in and around Lyall Harbour, which has a small marina and anchorage, and Winter Cove, which has a dingy dock and anchorage.
- Middle and high school students, of which there are few, find their own way to the school water taxi, which departs from the CRD dock at Lyall Harbour.
- Commuters from this island going to or from Vancouver Island would mainly be on the ferry runs leaving 6:25am (arriving in Swartz Bay at 8:10) and returning at 2:50 or 7:40pm Monday to Friday.

4.0 Existing Transportation Providers and Assets

Within the study area, a wide array of transportation options and assets are available, including travel options by land and water. This section describes those existing travel options that are available on a region-wide or local basis.

Since a key part of organizing transportation in smaller communities is often related to the ability to bring together and leverage other community assets, each section also describes major community organizations on each island that potentially could be drawn on to help complete the transportation picture.

4.1 Region-Wide Transportation Providers and Community Assets

- **BC Ferries** – BC Ferries provides connections to all of the islands in this study. Overall, the focus of service is on travel to and from Swartz Bay (north of Sidney on Vancouver Island), with more limited travel also possible to Tsawwassen (south of Vancouver on the mainland). Galiano is the one island where residents note a stronger connection to the mainland: ferry travel is more expensive to Tsawwassen from Galiano but it is a shorter trip. The overall weighting of service to Swartz Bay rather than Tsawwassen is projected to potentially grow even further with schedule and service changes under discussion by BC Ferries during the same period this transit report was under development.

The BC Ferries schedule does make travel possible between islands, but this tends to be secondary to the schedules oriented around Swartz Bay and Tsawwassen. This means that the inter-island service is seen as less convenient by residents. Of the islands, Saturna has the most limited ferry service.

BC Ferries Southern Island Routes



The following table shows BC Ferries trips per day between each of the destinations.

BC Ferries - Trips per Day between Locations: Winter (2013/14)

	Galiano Island	Mayne Island	Pender Islands	Saturna Island	Salt Spring Island	Swartz Bay	Tsawwassen
Galiano Island	-----	4	3	1	2	4	2
Mayne Island	3	-----	5	1	2	5	2
Pender Islands	3	3	-----	1	2	7	2
Saturna Island	2	3	3	-----	1	4	2
Salt Spring Island	2	2	2	0	-----	8	2
Swartz Bay	3	6	6	4	8	-----	8
Tsawwassen	2	2	2	2	2	8	-----

BC Ferries - Trips per Day between Locations: Projected Summer (2014)

	Galiano Island	Mayne Island	Pender Islands	Saturna Island	Salt Spring Island	Swartz Bay	Tsawwassen
Galiano Island	-----	4	4	1	2	4	2
Mayne Island	3	-----	5	1	2	5	2
Pender Islands	3	3	-----	1	2	8	1
Saturna Island	2	3	3	-----	0	4	2
Salt Spring Island	2	2	2	0	-----	8	3
Swartz Bay	4	6	6	4	8	-----	14
Tsawwassen	2	2	2	2	3	14	-----

- **School District #64** – The Gulf Islands School District (SD #64) is based on Salt Spring Island and operates several elementary schools, Salt Spring Middle School and Gulf Islands Secondary on Salt Spring Island, as well as one community school on each of the islands in this study: Galiano, Mayne, Pender and Saturna.

The Community Schools on the islands are each listed as offering grades K-12. However, many families and youth elect to travel to middle and secondary school on Salt Spring in order to have access to a broader educational experience (access to shop and arts facilities, etc.) and wider social connections. Travel to Salt Spring schools is provided by SD #64 through contract to water taxis operated by Gulf Islands Water Taxi, which transports on average over 100 students per school day, Monday to Thursday. The water taxi schedule is provided below.

*** REVISED SCHEDULE FOR GANGES HAWK ONLY
EFFECTIVE SEPTEMBER 30, 2013 UNTIL FURTHER NOTICE**

WATER TAXI SCHEDULE 2013 – 2014

District website: <http://sd64.bc.ca/transportation>

THE SCHOLARSHIP Route 1

MORNING RUN

<u>Location</u>	<u>Depart</u>	<u>Location</u>	<u>Arrival</u>
Ganges Harbour	0645	Sturdies Bay	0722
Sturdies Bay	0725	Miners Bay	0735
Miners Bay	0737	Ganges Harbour	0827

AFTERNOON RUN

Ganges Harbour	1630	Sturdies Bay	1720
Sturdies Bay	1722	Miners Bay	1728
Miners Bay	1730	Ganges Harbour	1820

Sturdies Bay = Galiano Island Miners Bay = Mayne Island

THE GRADUATE Route 2

MORNING RUN

<u>Location</u>	<u>Depart</u>	<u>Location</u>	<u>Arrival</u>
Ganges Harbour	0630	Lyll Harbour	0725
Lyll Harbour	0727	Port Washington	0752
Port Washington	0755	Ganges Harbour	0830

AFTERNOON RUN

Ganges Harbour	1630	Port Washington	1710
Port Washington	1712	Lyll Harbour	1732
Lyll Harbour	1733	Ganges Harbour	1835

Lyll Harbour = Saturna Island Port Washington = Pender Island

*** THE GANGES HAWK Route 3**

MORNING RUN

<u>Location</u>	<u>Depart</u>	<u>Location</u>	<u>Arrival</u>
Ganges Harbour	0650	Miners Bay	0720
Miners Bay	0723	Port Washington	0755
Port Washington	0758	Ganges	0830

AFTERNOON RUN

<u>Location</u>	<u>Depart</u>	<u>Location</u>	<u>Arrival</u>
Ganges Harbour	1620-1630	Port Washington	1700
Port Washington	1712	Miners Bay	1725
Miners Bay	1728	Ganges	1815

Miners Bay = Mayne Island Port Washington = Pender Island

Passengers are to be at the dock 5 minutes prior to departure.

Connecting bus service to the Community Schools is provided on Galiano and Pender Islands, however no bus service is available to middle and high school students travelling to the CRD docks. This means that families and students need to coordinate their own travel to the CRD docks Monday to Thursdays (there is no school on Fridays).

- **CRD Dock Network and Water Taxis** – Gulf Islands Water Taxi provides the school services noted above from September to June. While those trips are also in principle open to the general public, in practice the boats are very full with students and there is limited capacity for other passengers. In July and August, Saturday services are provided geared around residents and visitors, as shown in the following table.

GALIANO BOAT Saturdays in July and August from			
Departure times are accurate. Please be on the dock 5 minutes prior to sailing. Students have priority.			
	Departs	Arriving at	Arrives
Ganges Harbour, Salt Spring Island	9:00 a.m.	Sturdies Bay, Galiano	9:50 a.m.
Sturdies Bay, Galiano	9:50 a.m.	Ganges Harbour, Salt Spring	11:00 a.m.
Ganges Harbour, Salt Spring Island	3:00 p.m.	Sturdies Bay, Galiano	4:00 p.m.
Sturdies Bay, Galiano	4:00 p.m.	Ganges Harbour, Salt Spring	4:50 p.m.
MAYNE ISLAND BOAT Saturdays in July and August from :			
Ganges Harbour, Salt Spring Island	9:00 a.m.	Miners Bay, Mayne Isl.	10:00 a.m.
Miners Bay, Mayne Isl.	10:00 a.m.	Ganges Harbour, Salt Spring	11:00 a.m.
Ganges Harbour, Salt Spring Island	3:00 p.m.	Miners Bay, Mayne Isl.	3:50 p.m.
Miners Bay, Mayne Isl.	3:50 p.m.	Ganges Harbour, Salt Spring	4:50 p.m.

- Adjacent BC Transit Services** – The **Victoria Regional Transit System** provides connections at Swartz Bay, offering service every half hour or better between Swartz Bay, Sidney and Downtown Victoria. Within Sidney, the main exchange location is at James White and Fifth, a 600 metre walk from the CRD dock.

A Service Review was recently completed for the Victoria Regional Transit System. One of the areas of feedback heard from the public on the Saanich Peninsula was the need for improved transit connections to the industrial lands and employers located west of Sidney towards the Victoria International Airport. Some Gulf Islands residents have noted that these industrial employers may be a potential source of year round jobs if water taxi service to the Sidney CRD dock was established. The transit link to West Sidney would be a factor in this.

Elsewhere in the vicinity of the Gulf Islands, BC Transit partners with the CRD in the **Salt Spring Island Transit System**. This includes service eight trips per day or more

between Ganges and the Fernwood area where one of Salt Spring Island's CRD docks is located. There is also a provincial dock in Ganges, which is located at 650 metre walk from the main transit exchange outside the Visitor Information Centre.

4.2 Local Transportation Providers and Community Assets

Pender Islands

- **Pender Taxi** – This island-based taxi service has five vehicles ranging from two small 4 to 6 seat hybrid automobiles, to two 10-14 passenger vans and a 21 seat mini bus. It operates from 6:30 am to 1:30 am daily.
- **Car Stops** – A program in which people can wait at designated spots for drivers to voluntarily pick them up.
- **Poets Cove Shuttle** – When the resort was previously in operation, it had a shuttle to transport guests between the resort and the ferry. The resort has also previously used their vehicle to provide pick up and drop off service between staff living in the Magic Lake area and the resort.
- **Volunteer Driver Program** – Volunteers are available to provide rides for on or off island appointments. Rides are arranged by leaving a message with the Community Support Office who assign a volunteer to coordinate the ride. Pender Community Support also coordinates a wide variety of volunteer and community support programs, including Meals on Wheels and a number of other programs oriented around seniors, including Friendly Visitors and Handy Helpers programs.
- **Community Groups:** Other than the Economic Development Commission and the local Chamber of Commerce, some of the organizations on the island that may be a potential source of partnership include Moving Around Pender Alternative Transportation Society (which set up the Car Stops Program), Pender Community Transition and the Pender Islands Health Centre Community Support group.
- **Vehicle Needs:** Diesel fuel and heavy duty maintenance are available from Driftwood Auto located in Driftwood Centre. BC Transit Fleet Standards staff visited the shop and met with owner. The shop has two bays, a hoist and diagnostic equipment and therefore could potentially undertake the required preventative maintenance schedule for a light duty BC Transit vehicle¹. However, the twice per year Commercial Vehicle Inspection (CVI) and any warranty work would need to be completed off island. At present, the shop only has one licensed mechanic, meaning that there may be a backlog of work at times which might delay repairs to transit vehicles if no spare is present. Any options for service on Pender include an estimate for travel off-island for CVI and warranty work.
There are also four electric plug-in stations available on the island.

Galiano Island

- **Galiano Bus Company** – A recently launched seasonal bus service that runs trips between arriving ferries and various locations on the island. The service is privately operated and uses one vehicle. The service endeavours to meet all arriving ferries on scheduled days, but is also bookable by private parties, so

¹ All BC Transit vehicles undertake a prescribed schedule of preventative maintenance based on specified intervals of kilometers driven.

- scheduling will vary. Pricing varies by distance. The schedule varies seasonally with a peak in summer designed to meet all arriving morning and afternoon ferries on Thursday, Friday, Saturday and Sunday.
- **Volunteer Driver Program** – About a half- dozen volunteer drivers transport residents (mostly seniors) to and from medical/dental appointments, both on and off-island.
 - **Hummingbird Inn Pub Bus** – Does summer runs between the Pub and Montague Marina.
 - **Galiano Oceanfront Inn and Spa Shuttle Bus** – Does summer runs between the Inn, Sturdies Bay Village and Montague Marina.
 - **Galiano Oceanfront Inn and Spa Smart Car Fleet** – Four smart cars available for rent.
 - **Galiano Conservancy Association Bus** – A large school bus for transporting students from the ferry to the Conservancy.
 - **Bodega Ridge Resort Minibus** – Shuttles guests between the resort and the ferry.
 - **Galiano Island Film and TV School Bus** – Used for picking up students from the ferry, returning them to the school, and shuttling them around the island to filming locations.
 - **Community Groups:** Other than the Economic Development Commission and the local Chamber of Commerce, some of the organizations on the island that may be a potential source of partnership include the Galiano Lions Club, the Galiano Health Care Society, the Galiano Housing Society and the Galiano Club, which manages the Nature Protection Reserve on the Island.
 - **Vehicle Needs:** Diesel fuel is available from the Galiano Garage. The main vehicle maintenance facility is at Galiano Auto, but the shop owners indicated they would prefer not to work on transit vehicles. BC Transit Fleet Standards staff also spoke with Dave Parent, a certified mechanic on the island. Dave was potentially interested in maintaining transit vehicles but at present his shop lacks the hoist, diagnostic equipment and indoor space required to undertake the preventative maintenance schedule for a BC Transit light duty vehicle. This means that potentially basic repairs could be undertaken on-island but preventative maintenance, Commercial Vehicle Inspections and warranty work would need to be undertaken off island. This situation may change in the future but for now, any service options presented for Galiano include an estimate for travel to an off-island maintenance facility.
 - In terms of vehicle storage, no separate storage facilities for large vehicles were identified but there are two fire halls on the island. The school bus is stored by out parking at the driver's home in the north end.

Mayne Island

- **Pilot Volunteer Community Bus** – The Mayne Island Community Bus is a volunteer bus service that utilizes an ex-handydART shuttle bus to run a set schedule on Thursday, Friday, Saturday and Sunday as well as special trips by request. The volunteer drivers handle operational tasks with a Bluetooth head set. The service is organized and operated by the Mayne Island Community Bus Society. Vehicle costs to date have been covered by the Island, however the Society is seeking funding support to pay its drivers. This service's schedule is available here: http://maynenews.blogspot.ca/p/test_10.html
- **Car Stops** – A program in which people can wait at designated spots for drivers to voluntarily pick them up.
- **Assisted Living Society Volunteer Driver Program** – 12 volunteers that use their own vehicles to help people, seniors mostly, get to and from appointments

- etc. A volunteer coordinator supports the organization across all programs, including coordinating rides.
- **Community Groups:** Other than the Economic Development Commission and the local Chamber of Commerce, some of the organizations on the island that may be a potential source of partnership include the Mayne Island Lions Club and the Agricultural Society.
 - **Vehicle Needs:** Diesel fuel and parts service are available at Active Pass Auto, which is also where the existing Mayne Island bus is stored and has minor repairs done at Island Auto. However, the existing Mayne Island bus has its major maintenance completed off island. Similar to Galiano, this means that potentially basic repairs could be undertaken on-island but preventative maintenance, Commercial Vehicle Inspections and warranty work would need to be undertaken off island and estimates reflect this.

Saturna Island

- **Saturna Shuttle Pilot Project** - In mid-January 2014, the island's Lions Club acquired and began operation of a 20 passenger bus that is equipped with a wheelchair lift. Operated by volunteer drivers, the vision for the bus is to provide scheduled service at peak times--particularly on weekends and at key ferry times--with the ability to provide small deviations as needed to get closer to resident homes. The shuttle is also available to serve evening events at the Lodge and Pub, other major island events like the Lamb Barbecue, and connecting service between boaters at the dingy dock at Winter Cove and other island amenities and trails.
- **Car Stops** – Saturna has had a car stop program for about two years. Lower winter population means that the interval between passing cars can be more sporadic than on other islands, but this program is in place.
- **Saturna Lodge Van** – Used to shuttle guests around. It has sometimes been borrowed by the community in the past.
- **The Saturna Island Family Estate Winery Van** – Sometimes used for visitor pick-ups.
- **Community Groups:** Other than the Economic Development Commission and the local Chamber of Commerce, some of the organizations on the island that may be a potential source of partnership include the Saturna Island Lions Club (which is operating the Shuttle Project), and the Community Club. Saturna Island residents note that while they have a smaller population, there is strong capacity and set of resources on the island to deliver projects, pointing to their two fire halls and new recreation centre as examples of cases where Saturna has been able to manifest amenities beyond what would seem to be the scope of its population.
- **Vehicle Needs:** Diesel fuel is available from the Lighthouse Pub and Store by the ferry dock at Lyall Harbour. The Community Centre has been identified as the storage site for the existing pilot project bus. Vehicles are maintained off island.

Summary of Existing Local Transportation Assets by Island

Island	Bus	Taxi	Private Shuttles	Car Stops	Volunteer Driver Program	Other Transportation Assets	CRD docks
Pender	No	Yes	Yes	Yes	Yes	No	3
Galiano	Yes	No	Yes	No	Yes	Yes	3
Mayne	Yes	No	Yes	Yes	Yes	No	2
Saturna	Yes	No	Yes	Yes	No	No	1

5.0 Conclusions: Potential Markets and Existing Transportation

Based on the population, land use, potential markets and existing transportation assets outlined in the preceding sections, a number of key conclusions emerge:

- There is a wealth of transportation assets already available on the islands. One of the most important steps that could be taken would be to consolidate them, at the very least on an island-by-island basis but ideally on a regional basis for the archipelago. At one end of the spectrum, consolidation would mean centralizing public information on available transportation options, at the other end it would mean coordinating public information and dispatch under a single umbrella organization.
- When looking at existing winter population, the Pender Islands have a population and make up that would potentially be most supportive of a traditional transit model. Its population is at the lower end of where transit becomes viable in other BC communities. However, there is potential for seniors and commuter markets, particularly if there was opportunity for partnership with School District #64 and the new owners of Poet’s Cove Resort.
- Galiano and Mayne Islands have a summer population that just bump over the typical threshold for daily transit service in B.C. In winter, communities of this size elsewhere in the province would normally be on the threshold for service 2-3 days per week.
 - On Galiano in the summer, the corridor between Montague Harbour Provincial Park, commercial services at “The Corner,” and amenities in the Sturdies Bay area would be especially viable for service, particularly given marine traffic to the provincial park and marina.
 - Youth travelling to/from the school water taxi at the CRD dock at Sturdies Bay represent a key potential market for year-round transit.
 - Of all the islands, Galiano has the largest collection of existing privately run transportation alternatives, including a private bus operation.
 - North Galiano is less populated but does offer access to the CRD docks as well as some destinations along the way.
 - On Mayne, the distribution of residents and destinations is a little more scattered, meaning that it would take more resources to provide a similar level of service to that on Galiano. However, it seems to have a larger number of groups and services catering to the needs of seniors than Galiano.

- In terms of both population and its distribution around the island, even in summer Saturna is well below the population threshold for when traditional paratransit typically becomes viable. However, its car stop program and volunteer-driven shuttle bus pilot project does mean that it has the “first order” transportation options that the other islands have. The island also seems to have strong volunteer capacity.
 - While Saturna alone might not have population to sustain what is thought of as typical paratransit, creation of a transportation umbrella group would benefit transportation on the island. For instance, to share network coordination with other islands or access a grant to help offset vehicle operating costs.
- In terms of maintenance capacity on the islands, a detailed review of the maintenance facilities and capabilities will be required to identify the feasibility of maintaining a transit fleet. Main areas for assessment include suitably licensed mechanics, shop capacity and special equipment required for transit specific vehicles (specialized lifting equipment, etc.). There is evidence that the availability of maintenance services can vary and may also shift from year to year as residents move.

If service moves forward, part of implementation planning will need to assess in detail the maintenance capacity at that time and confirm the need to service vehicles off island, service reliability implications, maintenance coordination with a future transit operator and vehicle spare ratio requirements. While an estimate for off-island servicing has been included for each option, the maintenance capacity at time of implementation may impact cost, vehicle type used, service design and overall service viability.

6.0 Service Concepts

The following outlines general types of transit service design concepts. These concepts represent the “box of tools” that can be drawn from when forming the options presented in section 7.0 Service Options.

A number of supplementary service concepts are also included. These supplementary concepts provide examples of services that could be organized and implemented locally should the community wish to pursue other forms of transportation without Capital Regional District or BC Transit involvement.

6.1 Transit Service Design Concepts

Paratransit

Paratransit uses a transit vehicle or vehicles to provide service. It is probably more typical to what people think of as “public transit,” but it has better flexibility to meet the specific needs of smaller towns and more rural settings.

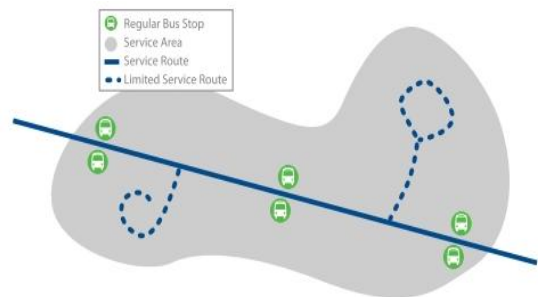
Encompassing a range of service types, paratransit services can include everything from door-to-door, demand responsive services for people with disabilities, to buses serving stops on fixed routes and schedules. It may also include many other mixtures and hybrids of these. In most cases, funding partners would be directly responsible for paratransit vehicle lease, insurance and maintenance costs. Within B.C., paratransit services typically use an accessible transit vehicle provided by BC Transit and are usually operated by contracted private operating companies or local governments contracted to provide that function.

Paratransit service can be divided into two basic types:

- **On-Demand Paratransit** operates only when passengers request service and provides door-to-door service. Dispatchers work to group similar trips together and have a specified number of service hours within each day to allocate trips.
- **Scheduled Paratransit** operates on a fixed schedule on a designated route with trips occurring at a predictable time each day. Trips operate regardless of the number of passengers on them. The service may use bus stops in more populated areas or may use flag stops² in more rural areas.

Between these two basic types are some hybrid options that may be useful to consider:

- **Flexible Transit or Flex-Routed Transit** creates a hybrid between on-demand paratransit and scheduled paratransit by building extra time into scheduled trips. This extra time enables the bus to go off route to provide door-to-door pick up or drop off for people with disabilities who would not otherwise be able to walk to the route.



² A “flag stop” is when passengers wait on the bus route at safe pull off locations—such as group mail box areas—and wave at the approaching driver to stop. To get off the bus, passengers request a stop from their driver.

The benefit to this model is that it provides the predictability of scheduled service for the general population while also being able to provide a higher level of access and care to those who need it. A potential challenge is that it needs careful attention to schedule development and dispatching to work best. It is easier to do well on midday trips rather than mixed with peak-period commuter trips. Transit trips serving the rural areas north and south of Powell River show examples of this style of service done well. (See: http://www.transitbc.com/regions/pow/accessible/family_of_services.cfm#rural)

- On-Demand Service Using Trip Windows** is another hybrid. In this case, trip window times (say 10:00am to 11:00am, 2:00pm to 3:00pm, etc.) are published for transit users rather than a fixed route and schedule. People wanting to use transit—including both people with disabilities and general users—call dispatch and indicate during which trip window they would like to travel. The dispatcher then provides the caller with an estimated pick up and drop off time. The bus provides door-to-door service for all pre-booked passengers during that trip window, shaping its route in the most efficient way. If no one requests service, the trip during that window does not operate and/or the transit vehicle can be allocated elsewhere.



The key benefit of this style of service is that it is the most efficient way of providing service to people with a disability and others in a rural setting. It groups similar trips together and ensures that the bus doesn't travel further than it needs to. The challenge is that it can be harder to mix with commuter needs and can provide less predictability and autonomy for general users. Transit services in two rural electoral areas outside of Comox use this style of service. (See: http://www.transitbc.com/regions/com/schedules/community_bus.cfm).

Taxi Supplement

Taxi Supplement uses a private vehicle owner (normally a taxi operator) to provide transit services. These services may be stand-alone or may augment services provided by other transit vehicles.

In general, Taxi Supplement trips are dispatched to a taxi operator and are operated using the taxi company's private vehicle(s). Passengers using the service pay a standard transit fare (which covers a portion of costs), with the remaining portion paid by local transit funding partners. The cost of service may either be a metered amount (usually the case where taxi-dispatched trips are used to complement regular transit service as needed) or on as a per-trip or per-hour amount (usually the case when scheduled trips are regularly operated by taxi).

Some examples from other locations of existing BC Transit services that are operated through Taxi Supplement include:

- Victoria Regional Transit handyDART Services**, which has the ability to dispatch door-to-door trips for registered people with disabilities to local taxi operators when the regular handyDART vehicles are either over booked or otherwise unavailable. (See: <http://www.transitbc.com/regions/vic/accessible/default.cfm>)

- **Pemberton Paratransit**, where a taxi operator provides seven scheduled round trips per day between Lil'wat First Nation communities and the Village of Pemberton using his private vehicles. (See: <http://www.bctransit.com/regions/pem/?p=2.txt>)
- **Central Fraser Valley Transit**, where taxis are used to provide a shared-ride service within Mission to transport pre-booked passengers to the train station to meet very early West Coast Express trips that occur prior to the start up of regular service on the transit system. (See: <http://www.transitbc.com/regions/cfv/>)

A key benefit of Taxi Supplement service is that funding partners are not directly responsible for funding vehicle leases, insurance, and maintenance. It can also be a more economical way of delivering service since funding partners do not have to pay for driver “down time” between trips.

On the other hand, depending on the operator, Taxi Supplement programs can be harder to monitor and control in terms of customer service and integration within a transit system. The funding partners may have less control over the physical condition of vehicles used and whether or not they are accessible to people using wheelchairs and scooters. Also, at some point enough trips are carried that it is actually more feasible to pay a driver for a number of hours of work.

Over the past few years, some of these challenges has meant that BC Transit has moved away from supporting taxi supplement as broadly as it once did, particularly for the operation of entire small systems. However under the right circumstances there may still be a role for Taxi Supplement to augment more traditional transit services.

6.2 Supplementary Service Concepts

In addition to the concepts presented above, the community may wish to consider supplementary service ideas that could be implemented independently without involvement or funding through the Capital Regional District or BC Transit. These could be used as interim measures until such time as formal transit is implemented or the community may decide that these are preferable over the longer term.

- **Ridesharing** or carpooling refers to cases where people coordinate trips together using a private vehicle owned by one of the participants. Likely a number of informal rideshares have already been organized among the various island commuters. The community could increase the incidence of ridesharing by promoting online tools like the Jack Bell Foundation’s free matching service at <http://www.ride-share.com>.

Easy to use, this tool helps match potential rideshare travelers based on time and location while also protecting user privacy. The benefits to this approach are that it is organized by participants themselves and has no community cost. A drawback is that it is more useful for regular commuters rather than seniors and youth whose travel may vary each day.

- The **Car Stops** programs already operating on Pender, Saturna and Mayne Islands is actually routinely cited by BC Transit in other feasibility studies as an alternative that other communities may wish to emulate. It could be potentially extended to other islands within the Southern Gulf Islands area.

For those not familiar with the program, Car Stops has been operating on the Pender Islands since 2008 (<http://penderislandweb.com/guide/car-stops.htm>). The program has created 29 “car stops” (pull off areas with signage similar to bus stops) around North and

South Pender. The program is administered by the Moving Around Pender Alternative Transportation Society. Somewhat like either a more formal version of hitchhiking or a less formal version of ridesharing, the program enables potential passengers to wait at the stops and wait for automobile drivers to volunteer to pick them up. The program is conducted on a voluntary basis and there is not fee for travel.

The program is governed by a set of guidelines, which appear on signage at each of the car stops:

- Drivers don't have to take the first in line;
- You're not obliged to accept a ride, that's fine.
- You accept a ride at your own risk,
- But the ride is free, so consider it a gift.

A Volunteer Transportation Network is a transportation concept that has worked quite well in the Mt. Waddington Regional District in the Port Hardy / Port McNeil area (http://www.transitbc.com/regions/mtw/accessible/family_of_services.cfm). (Some of the individual Gulf Islands also have volunteer networks but the Mt. Waddington one may be an interesting one to look at since it encompasses a very large region rather than just individual communities). Through the Network anyone who is a resident within the Regional District and does not own or have access to transportation (due to a permanent or temporary disability or socio-economic reasons) may register with or be referred to the program. Trips are booked by calling the North Island Community Services Society who coordinates the service. Volunteer drivers use their own private vehicles to deliver the service. Passengers using the service (or families or referring agencies on their behalf) provide a donation to the Network for each trip.

7.0 Service Options

Based on community form, population, potential markets and existing transportation alternatives, this section presents potential service options for the Southern Gulf Islands for the review of the CRD and local decision makers. A suggested overall network strategy for the area is presented, as well as options for each of the four islands within this study.

Each option provides preliminary estimated annual impacts on costs, revenue and ridership. Options are based on preliminary 2014/15 Annual Operating Agreement budget figures from other BC Transit systems of a similar size and with similar location factors. Actual costs may vary depending on date of implementation and finalization of operating details.

Any option which proposes operation of a BC Transit vehicle uses 2014/15 vehicle lease fee costs for a new light duty or medium duty vehicle. Given existing maintenance capacity on the islands, it is recommended that the vehicles to be considered be high floor vehicles with a rear lift. This vehicle has several stairs at its front entrance but the rear lift ensures that it can carry people using wheelchairs or scooters. High floor vehicles are generally simpler to maintain than their low floor equivalents and are also likely better suited to the road conditions on the Southern Gulf Islands where there are few sidewalks or curbs.

Depending on the model, this type of vehicle typically seats 12-29 passengers and is less than 30 feet in length. The vehicle type assigned to a region may vary depending on service needs and maintenance capacity within a community. The preliminary estimates provided here do not include costs for specialty items (such as certain kinds of vehicle hoists) that may be required depending on the vehicle. It should also be noted that typical BC Transit lead time for purchase of a light duty vehicle for new service is 1 - 1.5 years, which includes capital planning, procurement and manufacturing time as part of larger provincial fleet purchases.

Ridership projections for each option are based on experience of transit serving communities of a similar size and land use pattern elsewhere in B.C. In general, transit serving island communities generates higher ridership than peer systems elsewhere--due mainly to the focusing of commuter trips caused by ferry travel, as well as cultural and demographic factors--and this has been taken into account as part of ridership estimates. However, since ridership affects revenue projections and therefore projected local share of costs, these projections are still on the conservative side.

Sample Fare Structure: Salt Spring Island Transit

Cash Fare	
Adult/Student/Senior	\$2.25
Child 4 or under	No charge
Sheet of 10 Tickets	
Adult/Student/Senior	\$20.25
Day Pass	
Adult/Student/Senior	\$5.00
Monthly Bus Pass	
Adult	\$50.00
Student*/Senior**	\$40.00

*Reduced fare for persons 65 years or older with valid ID.

**Reduced fare for students in full-time attendance to Grade 12 with valid Student ID.

Revenue projections are based on a fare structure identical to that in place for the Salt Spring Island Transit System, shown at left. Any scheduled service would also be eligible for passengers to use BC Bus Passes, an annual pass program for low income seniors and people with a disability. Ultimately, a fare structure would be further discussed with and approved by the CRD should any option move forward to implementation.

Provincial cost-sharing for service outside of Metro Vancouver and the Victoria Regional Transit System is based on legislated formulas, with provincial funding set at 46.69% for conventional service, 66.69% for custom (handyDART) service, and paratransit at a blended rate depending on the proportion of service types and utilization by people with a disability.

For the purposes of cost projections, a blended paratransit cost-sharing formula of 52.69% has been used. This rate is identical to that used for Salt Spring Island Transit. However, the final

cost-sharing rate would be confirmed based on service should an option move forward for implementation.

7.1 Suggested Network Coordination and Evolution

As noted in section 5.0 Conclusions: Potential Markets and Existing Transportation, the population of the individual Gulf Islands is at the low end of when traditional transit becomes viable. Based on the potential market and service levels, public transportation appears to become more feasible as the administrative and dispatch components become consolidated for the larger area.

Consolidating the transportation information and options would also seem to complement the Southern Gulf Islands Economic Development Commission's goal of building local economies and the work already underway by the Experience the Gulf Islands project.

Consolidating transportation options doesn't necessarily mean that it has to be one-size-fits-all across all islands. However, based on what has been heard from community members so far in this project, the Southern Gulf Islands might want to consider something like the following levels along the spectrum of consolidation:

Level 1: Pull Together and Provide More Detail on What You've Got

- There is a wealth of private transportation resources already on the islands. However, not much detail comes up when you type "Getting Around the Gulf Islands" into an internet search engine. When information does come up, the various tourism sites are inconsistent in terms of the on-island transportation information they provide. If all of the transportation-related information was housed on one webpage or domain, then all of the tourism and individual island websites and brochures could link to a single page that could be maintained. This single page or site could also begin to reinforce the message that you don't necessarily have to bring a car onto the islands to enjoy them (and therefore perhaps this idea is already on the radar of the Experience the Gulf Islands project).

Level 2: Make the Grassroots Options More Consistent

- Three of the four island groups in this study had a car stop program and/or a volunteer driver network of some kind. Having these two programs (and potentially something like "carpooltool.ca") on all four islands would give a consistency in the messaging on how to get around on the islands and would offer visitors and residents a sort of "guaranteed minimum" in terms of what they can expect.
- Another reason why a volunteer driver network is key is that a number of the community members who were interviewed for this project talked about drawing on formal and informal community networks in order to pull off transportation for major events, particularly community festivals and weddings.
- Coordinating volunteers and maintaining car stop signage and maps takes time, especially when each island is doing this separately. One way to reduce the drain on volunteer resources would be to consider if there is already an organization that already has paid staff that would be willing to take this on for the four islands in return for a financial contribution or trade of some kind.

Level 3: If/When More Formal Transit is Introduced, Use it to Leverage These Other Items

- In the Mt. Waddington Regional District, the same group that operates the transit system also coordinates their Volunteer Drive Network and many other social programs. A similar approach could be used in the Southern Gulf Islands. For instance, resources put in place to support the introduction of transit on one island, could also then potentially help support or administer the more grassroots or volunteer solutions on the remaining islands.

Level 4: Leverage Transit on One Island to Provide it Elsewhere

- Similar to Phase 3, there are many cases in B.C. where a single operating organization manages and dispatches transit systems in a number of communities. At this far end of the spectrum, an organization on one island would operate transit on multiple islands, or multiple organizations would come under a single umbrella to do the same thing.

The transit proposals presented in the following sections assume either the case of level 3 (in the instance of transit on a single island) or level 4 (in the case of transit on multiple islands) since it is doubtful that BC Transit would partner separately with multiple transit operating companies in such a small service area. Level 3 and 4 also are the point at which they deliver operational efficiencies that make transit more viable.

Based on a preliminary assessment of existing maintenance capacity, the transit proposals shown in the following section include a spare vehicle for each island, as well as an estimate for travel to off island maintenance as needed. BC Transit's Vehicle Asset Management team has confirmed that sharing vehicle spares between islands may be possible, but only if those locations were under one operating company (one National Safety Code number, one insurer's name, etc.).

However, sharing vehicles between islands would impact service reliability due to delays, since deploying a spare bus from one area to the other relies on ferry schedules and is not instantaneous. The spare ratios required depend on overall service hours and kilometres, maintenance facility capacities and service reliability requirements. The fleet requirements will be defined by Asset Management as part of any detailed operational planning that may result from this preliminary report.

The transit proposals presented here are meant to give a high-level sense of service possibilities and costs. Most of the options look at a combination of Summer and Winter services. For the sake of consistency, "Summer" is defined from the last Wednesday of June to Labour Day in September, in line with when the BC Ferries schedules have traditionally changed.

Residents also noted that visitor traffic begins to rise after Easter, ramps up substantially after the Victoria Day weekend in May and then begins falling from Labour Day until the end of September or the Thanksgiving weekend in early October. This "Shoulder" period has not been explicitly included in any of the preliminary service options since its extent depends on the service option chosen, as well as logistics around ferry schedule changes. **Adding additional days of service to ramp up or ramp down shoulder period service levels should be included for consideration as part of any future implementation planning that may arise from this report.**

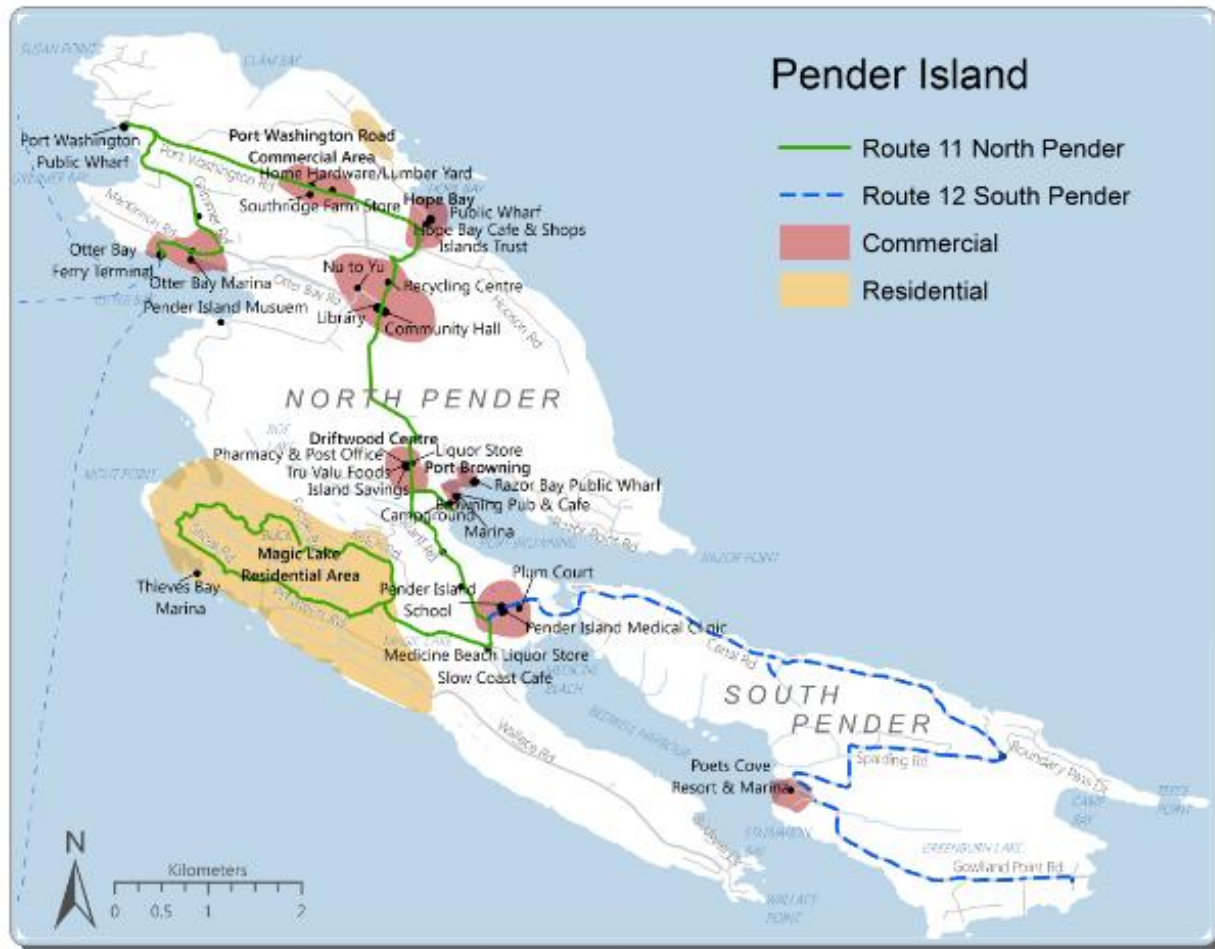
Similarly, some of the proposals look at providing service three days a week. The nature of these days could be Friday, Saturday and Sunday if wishing to meet visitor traffic or spread more evenly on days throughout the week to meet the needs of residents. A number of residents participating in this project to date thought that Wednesday, Friday and Saturday might be the best combination to hit many needs.

The exact days of the week, the length of "Summer" or "Shoulder" periods, and whether three-day per week service should actually be four are all elements that would be refined in collaboration with the communities if transit moved forward to implementation. No option looks at summer alone because under the BC Transit model, it would be too costly to pay a full year's lease on a bus only to use it in summer. While it can sometimes be an option to share full size 40 foot buses between BC Transit's systems in the summer (because school is out elsewhere), that option is not available for smaller buses since ridership stays fairly constant on those vehicles where they are used.

Finally, it should be noted that on each of the islands, community members have already been designing or operating their own bus schedules and routes. The transit options shown in the following sections were developed independently but were then compared with and refined against these existing examples since residents are experts in their own communities.

This Service Discussion Document and the preliminary service options presented in the next section are intended to be part of a conversation. They have been created based on input from the CRD, the Southern Gulf Islands Economic Development Commission, and area residents to-date. If supported by the CRD, further consultation and detailed operational planning would be undertaken with area residents and stakeholders as outlined in Section 8.0.

7.2 Pender Island Service Options



Overview: While Pender Island has the largest winter population, it is somewhat harder to serve with transit since the key areas for service are further apart and the ferry schedule is less focused. The options presented provide an initial sense of potential based on the following resident feedback so far:

- Priority for winter service is for residents travelling off island, with some service also available for residents to access local services.
- One of the biggest potential sources for ridership are students who commute via water taxi to middle and secondary school on Salt Spring using the Port Washington dock Monday – Thursday. Service options take this potential into account but further discussion would be required with School District #64.
- In the past, Poet’s Cove also operated a shuttle to bring staff from the Magic Lake area to the resort. The resort is currently up for sale. Based on ferry times and traditional work start times, it would be hard for a single transit bus to deliver Magic Lake residents to both destinations in a timely manner. However, it may be possible to integrate these depending on actual shift start times.

Service Option 1: Pender Island Limited Winter, Full Summer Service

Description: This option looks at operating a North Island route which would operate year round and a South Island route extension that would offer service in the summer.

- The North Island route would extend from the BC Ferries Terminal in Otter Bay to Port Washington Rd. (near the Port Washington Public Wharf), Bedford Harbour Road, Driftwood Centre, Canal Road to Plum Court and the Medical Clinic and then a loop through the Magic Lake neighbourhood.
- In the **winter**, service would operate three days per week and would meet three ferries per day on those days. Service would be spaced through out the day as much as possible to try to offer access to local amenities as well as ferries.
 - There would be time built into the schedule to deviate off route to pick up or drop off people with disabilities.
- During the **summer**, service would operate 7 days per week, meeting four sailings per day, plus an additional sailing one day per week.
 - Twice per day the route would extend to Poet’s Cove and Gowland Point on South Pender, timed to meet the ferries that work well with resort check in and check out times.

This option focuses on providing a premium level of service in the summer but a winter service more focused on providing basic local access to seniors and other residents. It includes provision for one vehicle spare plus an estimate for travel off-island for the twice per year Commercial Vehicle Inspection plus any warranty work.

Initial High Level Estimate – Additional Annual Impacts			
Option 1: Pender Limited Winter, Full Summer Service			
Service Hours:	1,800	Passenger Revenue:	\$10,700
Annual Ridership:	5,800	Total Cost*:	\$178,300
Vehicles Required:	2	Net Local Share of Costs:	\$100,000
(incl. 1 spare)		Provincial Share of Costs*:	\$67,600
* Costs shown do not include Provincial contribution to Lease fees.			

Service Option 2: Pender Island Winter Commuter, Full Summer Service

Description: This option uses the identical route structure as Option 1. The summer service proposed is also identical.

- The main change to this option is the winter service. In winter, it offers service once per morning and twice per afternoon on every weekday to meet ferry and water taxi times most heavily used by school and work commuters and others travelling to Vancouver Island for the day. In other words, in winter this option offers morning and afternoon service every weekday plus Saturday.
- On two weekdays per week (and on Saturdays) an additional midday trip is added to meet the 11:25am ferry and to try to also provide more frequency in the middle of the day for people accessing local services and appointments.

This option provides an identical level of service to Option 1 in the summer. In the winter it puts more emphasis on the needs of daily commuters than Option 1. Like Option 1, it includes provision for one vehicle spare plus an estimate for travel off-island for the twice per year Commercial Vehicle Inspection plus any warranty work.

Initial High Level Estimate – Additional Annual Impacts			
Option 2: Pender Winter Commuter, Full Summer Service			
Service Hours:	2,520	Passenger Revenue:	\$19,900
Annual Ridership:	10,800	Total Cost*:	\$226,700
Vehicles Required:	2	Net Local Share of Costs:	\$113,700
(incl. 1 spare)		Provincial Share of Costs*:	\$93,100
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

7.3 Galiano Island Service Option

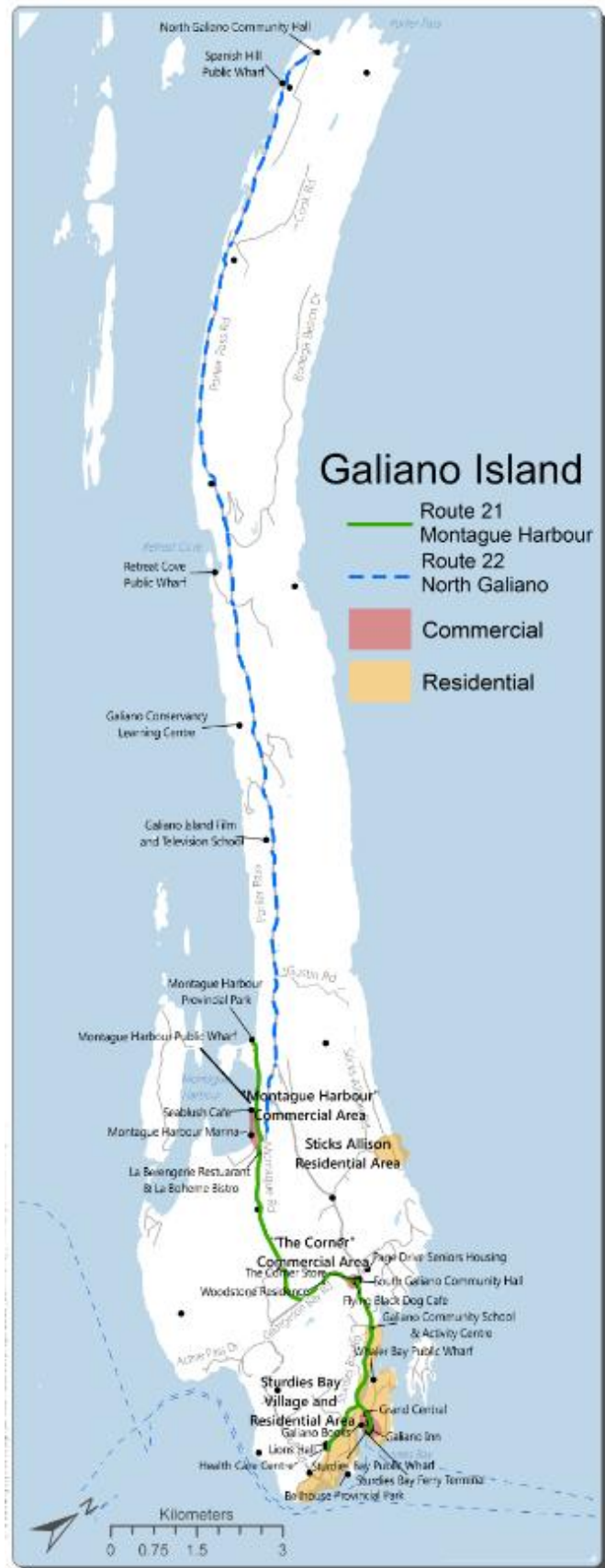
Overview: While Galiano has a smaller winter population, there are several characteristics which make it easier to serve effectively by traditional transit:

- Its density and its key destinations are concentrated along a relatively tight corridor.
- Its ferry schedules are clustered fairly nicely around three periods that would also serve basic local access needs: morning, noon and late afternoon. (Although residents noted that a fourth sailing—which arrives on Galiano between 7:45pm and 8:30pm depending on season and day—is also important for residents travelling off island for the day).
- In the summer, the campground, marina and other accommodations around Montague Harbour would likely be a very good source for passengers.

Service Option 3: Galiano Three days per Week Winter, Full Summer Service

Description: This option looks at operating a Montague Harbour route that would also extend on two trips per day to North Galiano.

- The Montague Harbour route would connect local destinations in Sturdies Bay with the ferry terminal, services at The Corner, and the marina, public wharf, marine moorage and campgrounds and Montague Harbour. Service would be approximately seven trips per day, depending on timing and whether additional extensions to North Galiano are desired.
- The extensions to North Galiano would serve the government dock and community hall, as well as residential areas distributed along Porlier Pass Road.
- It may be also possible to extend service to Sticks



Allison, but this would require more resources than those shown here or less service on the Montague Harbour route. (Typically, new transit services concentrate on the corridors with the most promising ridership first and then expand as service stabilizes and proves to be successful.)

- During the summer, service would operate seven days per week. For the purposes of this option, winter service is costed at three days per week using a similar number of trips.
- As in the Pender example, there could potentially be trip deviations off route for people with a disability.
- This option includes provision for one vehicle spare plus an estimate for travel off-island for all preventative maintenance, Commercial Vehicle Inspections and warranty work.

Initial High Level Estimate – Additional Annual Impacts			
Option 3: Galiano Three days per week winter, full summer service			
Service Hours:	1,490	Passenger Revenue:	\$12,100
Annual Ridership:	6,600	Total Cost*:	\$160,800
Vehicles Required:	2	Net Local Share of Costs:	\$90,300
(incl. 1 spare)*		Provincial Share of Costs*:	\$58,400
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

Service Option 4: Galiano Five days per Week Winter, Full Summer Service

Description: This option is identical to Service Option 3 but adds additional days of service in order to also potentially gain the 15-20 students who are now transported by their families Monday to Thursday to the water taxi operating out of Sturdies Bay. Service here would operate Monday – Thursday plus Saturday in the Winter.

- Summer service is identical to that shown in Option 3.
- Like Option 3, this option includes provision for one vehicle spare plus an estimate for travel off-island for all preventative maintenance, Commercial Vehicle Inspections and warranty work.

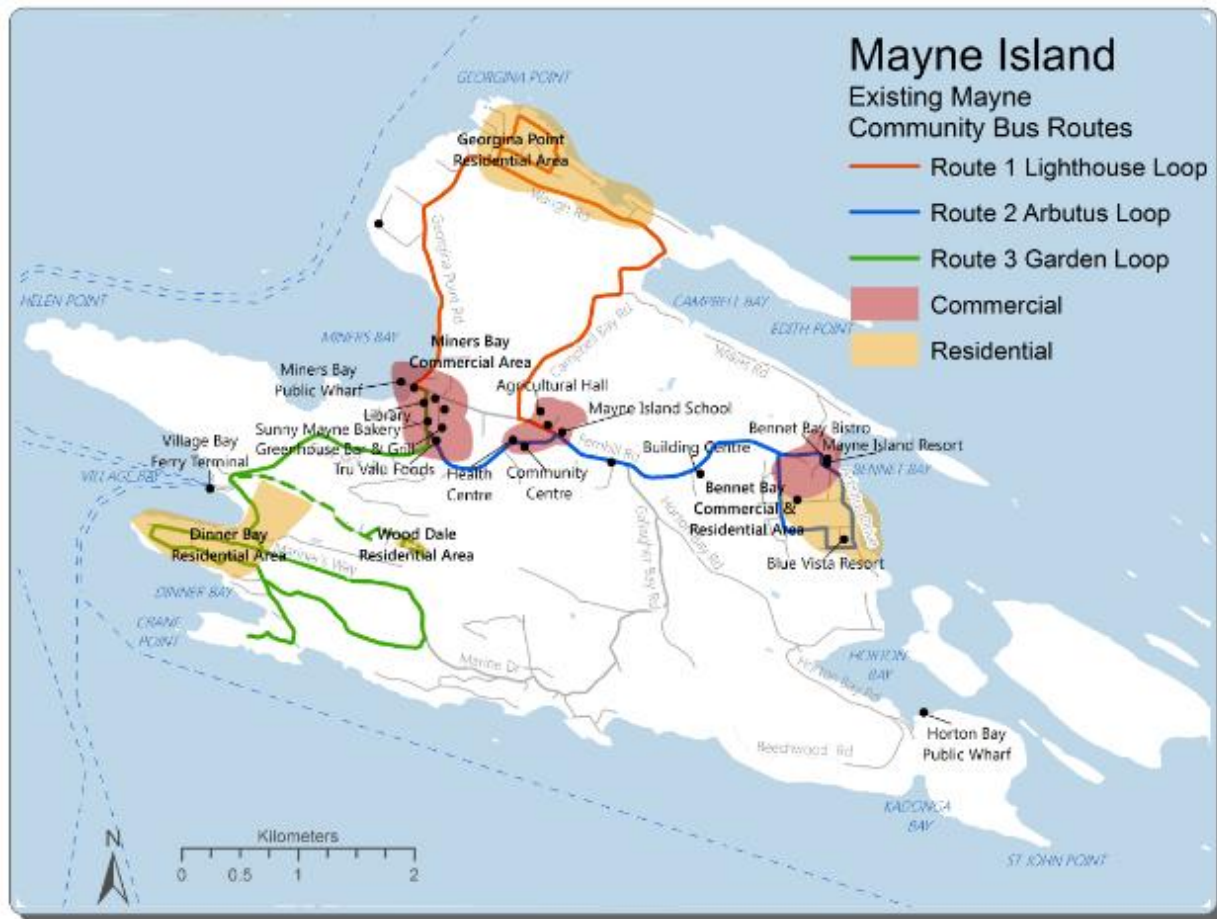
Initial High Level Estimate – Additional Annual Impacts			
Option 4: Galiano Five days per week winter, full summer			
Service Hours:	2,140	Passenger Revenue:	\$21,300
Annual Ridership:	11,600	Total Cost*:	\$206,500
Vehicles Required:	2	Net Local Share of Costs:	\$102,800
(incl. 1 spare)*		Provincial Share of Costs*:	\$82,400
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

Service Option 5: Galiano Five days per Week Winter, Full Summer Service + Evening

Description: This option is identical to Service Option 4 but adds the ability to have taxi supplement available to provide service to the evening ferry trip on one day per week in winter, two days per week in summer.

Initial High Level Estimate – Additional Annual Impacts			
Option 5: Galiano Five days per week winter, full summer + Evening			
Service Hours:	2,290	Passenger Revenue:	\$22,100
Annual Ridership:	12,000	Total Cost*:	\$217,000
Vehicles Required:	2	Net Local Share of Costs:	\$106,900
(incl. 1 spare)*		Provincial Share of Costs*:	\$88,000
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

7.4 Mayne Island Service Options



Overview: While Pender and Galiano have developed in a more or less linear way, Mayne’s development is more dispersed and clustered like a clover. The challenge with this distribution is that it is harder to serve with one transit vehicle and meet ferry connections nicely for all areas: either you need to make one larger circuitous loop that is less direct but which aligns to the ferry or you create more direct routes that give some areas nicely scheduled service while requiring others to arrive early for ferry departures or leave later than other transit routes.

The existing Mayne Island Community Bus service has resolved the issue by choosing to create a series of shorter more direct loops and this route structure seems to work well in terms of effectively serving the key island destinations, as shown in the map above. The current Mayne schedule uses these loops on Thursdays and Fridays but hooks them together into larger loops with different names on Saturdays, Sundays and holiday Mondays.³

The other way that the existing Community Bus resolves Mayne Island’s land use pattern is to use a “by request” drop off service (like the trip windows talked about in section 6.1) for passengers arriving on the midday and late afternoon ferries. This solution means that the bus only needs to go as far as it has to in order to drop off passengers. It also means that the premium level of service--i.e. the area that gets dropped off first--can go to the area which actually has the most passengers on the bus.

³ One possible future suggestion for the Community Bus group might be to consider using consistent route structures and names between service days as consistency helps build transit ease of use and therefore ridership.

The existing Mayne bus focuses on the needs of seniors and has time in the schedule to deviate off route to pick up or drop off passengers through prior arrangement. Since it operates only four days per week, the schedule does not take into account the earliest ferry trips for residents travelling off island for the day.

Service Option 6: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer

Description: This option takes the existing Mayne Island service and estimates what it would cost operated under a typical BC Transit model.

- To provide consistency with the other islands when comparing options, service is shown as three days per week (rather than the existing four) in winter and seven days per week in summer.
- This option includes provision for one vehicle spare plus an estimate for travel off-island for all preventative maintenance, Commercial Vehicle Inspections and warranty work.
- It should be noted that while the Pender and Galiano options are based on requiring a vehicle in the 20-29 seat range (due to the commuter-focussed nature of their service options), the Mayne Island options could potentially use of a smaller 12 seat vehicle.

Initial High Level Estimate – Additional Annual Impacts			
Option 6: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer			
Service Hours:	960	Passenger Revenue:	\$8,500
Annual Ridership:	4,600	Total Cost*:	\$125,700
Vehicles Required:	2	Net Local Share of Costs:	\$77,300
(incl. 1 spare)		Provincial Share of Costs*:	\$39,900
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

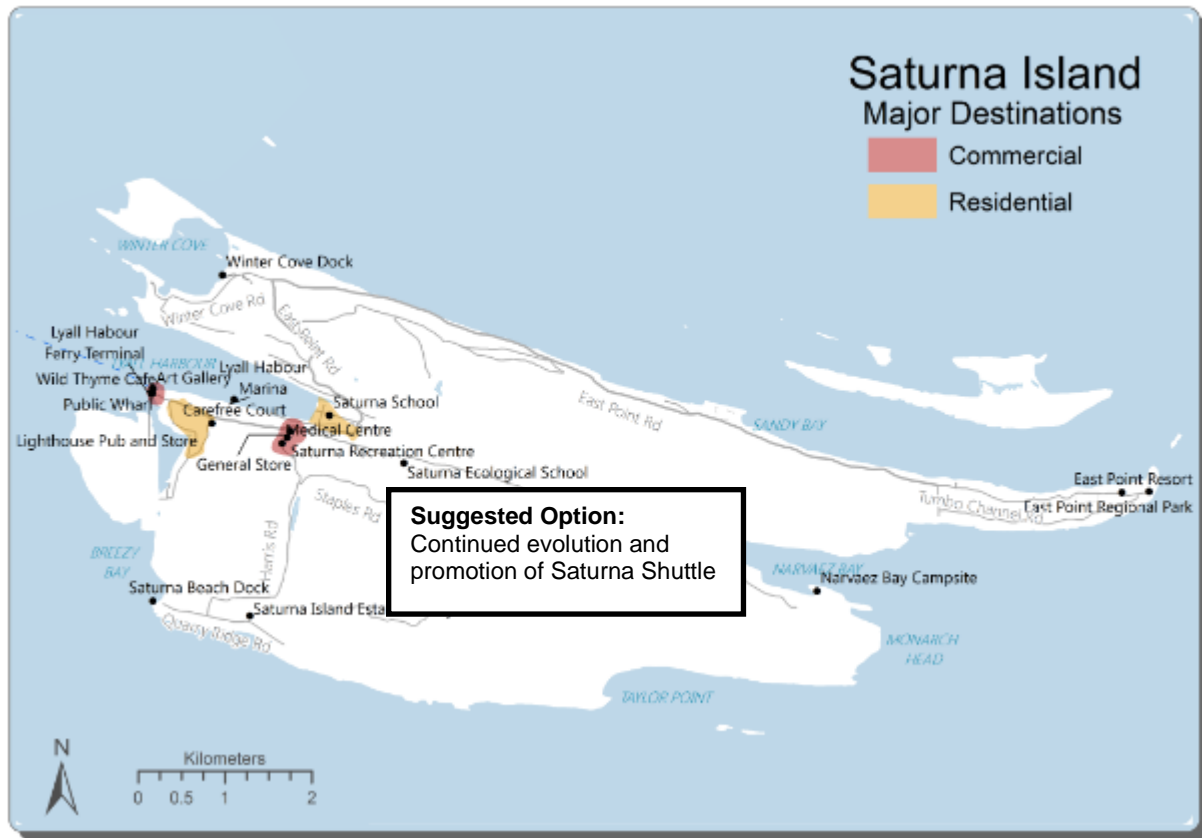
Service Option 7: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer Plus Morning Trip

Description: This option is identical to Option 6 but examines what the costs would be to add service to the first morning ferry on one day per week (such as a Friday) to better enable travel off island for medical appointments and shopping. This option would be operated by trip window, with passengers calling the day before to arrange travel.

- Comments on vehicle size, spare and maintenance estimates shown for Option 6 also apply to this option.

Initial High Level Estimate – Additional Annual Impacts			
Option 7: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer Plus Morning Trip			
Service Hours:	1,030	Passenger Revenue:	\$9,800
Annual Ridership:	5,300	Total Cost*:	\$130,700
Vehicles Required:	2	Net Local Share of Costs:	\$78,400
(incl. 1 spare)		Provincial Share of Costs*:	\$42,500
<i>* Costs shown do not include Provincial contribution to Lease fees.</i>			

7.5 Saturna Island Service Option



Overview: As noted in section 5.0, Saturna is well below the population threshold for when traditional paratransit typically becomes viable. However, the island does seem to have volunteer capacity and resources at a higher level than might be predicted by its population. As mentioned previously, Saturna is now piloting a community shuttle driven by volunteers.

The best first step in terms of continuing to evolve Saturna’s transportation options may be to look at partnering with the other Saturna organizations and the other islands to help focus and promote this service and potentially offset some of the costs for this service. The following option discusses this concept.

Service Option 8: Continued Evolution and Promotion of the Saturna Shuttle

Description: This option is similar to the example from Mt. Waddington, whereby transit investment in some parts of the community can help bolster volunteer options in other more rural areas not served by transit. This option would not be a “BC Transit” paratransit solution, but instead would potentially use a larger Southern Gulf Islands transit partnership to offer support to Saturna’s volunteer-operated shuttle. This support could easily include help with marketing and administrative functions and could also potentially include financial support.

Some of the key destinations (and potential local partners) on the island include East Point, the Saturna Winery and the Saturna Lodge, as well as residential locations and the Winter Cove dock. The pilot shuttle schedule is still evolving and trying out various combinations of service. However, over time the community may find that it is worthwhile to focus the days and times of travel using trip windows to focus volunteer time and energy.

Initial High Level Estimate – Additional Annual Impacts					
Option 8: Continued Evolution & Promotion of Saturna Shuttle					
To be determined. Uses existing island resources, potentially with financial or administrative support of a larger Gulf Islands transportation umbrella organization.					

7.6 Service Options Summary

The following table summarizes the estimated impacts for all service options presented above. All figures are annual and are based on estimates that would require review based on actual date of implementation and confirmed service and operational details.

Southern Gulf Islands Transit Service Options										
Service Option Summary: Preliminary Estimated Additional Annual Impacts*										
Description	Buses**	Additional total kms	Service Hours	Rides	Total Revenue	Total Costs	Net Local Share of Costs	BC Transit Share of Costs	Rides per Hour	Cost per Ride
Service Options										
Option 1: Pender Limited Winter, Full Summer Service	2	56,800	1,800	5,800	\$10,700	\$178,300	\$100,000	\$67,600	3.2	\$22.12
Option 2: Pender Winter Commuter, Full Summer Service	2	79,500	2,520	10,800	\$19,900	\$226,700	\$113,700	\$93,100	4.3	\$16.36
Option 3: Galiano Three days per week winter, full summer service	2	47,000	1,490	6,600	\$12,100	\$160,800	\$90,300	\$58,400	4.4	\$16.79
Option 4: Galiano Five days per week winter, full summer	2	67,500	2,140	11,600	\$21,300	\$206,500	\$102,800	\$82,400	5.4	\$13.49
Option 5: Galiano Five days per week winter, full summer + Evening	2	72,200	2,290	12,000	\$22,100	\$217,000	\$106,900	\$88,000	5.2	\$13.92
Option 6: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer	2	30,300	960	4,600	\$8,500	\$125,700	\$77,300	\$39,900	4.8	\$16.45
Option 7: Mayne Existing Schedule 3 Days per Week Winter, Daily Summer Plus Morning Trip	2	32,500	1,030	5,300	\$9,800	\$130,700	\$78,400	\$42,500	5.1	\$15.23
Option 8: Continued Evolution & Promotion of Saturna Shuttle	To be determined. Uses existing island resources, potentially with financial or administrative support of a larger Gulf Islands transportation umbrella organization.								n/a	n/a

Notes:

* Based on preliminary 2014/15 budgets. Final costs may change based on final budgets and confirmation of final operational details.

** The vehicle requirements include one spare and one in service bus for each island. See note in text below regarding spares. Annual total lease fee costs for a light or medium duty vehicle used in these estimates is based on 2014/15 costs: \$53,000 total, or approximately \$28,000 local share based on 52.69% cost sharing (to be confirmed).

Note that based on a preliminary assessment of existing maintenance capacity, the proposals shown include a spare vehicle for each island, as well as an estimate for travel to off island preventative maintenance as needed. BC Transit's Vehicle Asset Management team has confirmed based on projected service hours and kilometres that sharing vehicle spares between islands may be possible. However, since spare ratios required for this system depend on maintenance facility capacities and service reliability needs, the fleet requirements will be defined by Asset Management as part of any detailed operational planning that may result from this preliminary report.⁴

The local share of lease fees per bus is approximately \$28,000, so this is potentially the amount to be saved per vehicle. However, the total savings depends on how the vehicles are shared and

⁴ See Section 7.1 for further discussion on considerations around maintenance and spare vehicles.

also the costs required to move the bus between islands. For instance, sharing a spare vehicle between Galiano and Mayne could potentially reduce the local share of costs for each by \$14,000 (\$28,000 divided by two), but this would be offset by ferry fare and travel costs for moving the bus between islands for not just breakdowns but also in order to comply with preventative maintenance tasks and inspections that are mandated based on kilometres.

The ability to share spares and potential cost savings are dependent on the overall package of options selected (as well as overall spare and maintenance needs) and would be confirmed through the detailed operational planning that would take place if options move forward to implementation.

7.7 Service Option Conclusions

The service options presented are intended to provide a preliminary high-level sense of the feasibility and scope of transit options on the Southern Gulf Islands. They are intended to be further refined through discussion if options proceed to implementation.

That said, based on the annual impacts presented so far, these services perform right on the cusp of viable transit: 5 rides per hour is on the low side for traditional paratransit that isn't covering long distances and it is typically considered the "break even point" for Greenhouse Gas Emissions (ie the number of passengers required to be carried on a light duty bus in order for it to have comparable emissions to a single occupant automobile.). By comparison, the Salt Spring Island Transit System carries 15.8 rides per hour at a cost of \$5.08 per ride.

However, when comparing the proposed performance levels with other BC Transit systems serving communities of less than 5,000 people (see page 8), the expected performance for transit on the Southern Gulf Islands compares fairly well for its population and ridership would likely grow.

Ultimately community appetite to fund the local portion of costs for service—as well as provincial funding and prioritization for expansion--may make the final call on whether on not implementation of more formal transit is pursued. Maintenance capacity at the time of implementation may also impact what service might look like and whether service is feasible. In either case, the evolution and consolidation of transportation resources outlined in Section 7.1 would be helpful for the community to consider.

8.0 Next Steps and Considerations

This report is provided for review by the Capital Regional District and local area stakeholders. Upon request, BC Transit would be pleased to present this report for further discussion on the options.

BC Transit will await direction from the CRD to pursue potential next steps. There are a number of issues related to next steps and potential implementation that should be highlighted:

- **Jurisdiction** – As the local government partner for any potential transit service in the Southern Gulf Islands, the CRD would need to confirm the process by which the electoral area might enter into a transit function, what the governance structure might look like, and any local taxation implications.
- **CRD support** – As this feasibility study was conducted on behalf of the CRD through that organization's existing transit partnership with BC Transit, this report must be formally received by the Capital Regional District. The Electoral Area Services Committee is the CRD body that would provide a recommendation to the Regional District Board on next steps. Board approval and direction would be required to move forward on any of the cost-shared proposals.
- **Resident support** – While the community inventory sheets and interviews conducted for this Service Discussion Document gathered a substantial amount of information about the communities and their potential for transit, they did not explicitly gather any input on resident appetite to pay for transit through property taxes.

If the CRD Board is supportive of the transit options provided in this report, it would be useful to undertake a public consultation process to gather resident feedback on the plan's service options as well as their appetite to enter into the transit funding function. This consultation could also provide information on the supplementary service concepts presented in section 6.2 (those that don't require BC Transit or CRD participation) and gauge resident support for these concepts on an ongoing or interim basis.

- **Funding** – Under the BC Transit Act, funding for transit systems must be cost shared between BC Transit and the sponsoring local government at a prescribed rate, with passenger revenues used to offset the local share of costs. This funding arrangement means that both parties must come to the table with funding before service can be implemented. For instance, if a local municipality has funding for new transit services but the corresponding provincial share is not available, then service cannot be implemented.

BC Transit receives its funding on an annual basis from the provincial government. This annual funding arrangement means that BC Transit cannot confirm a timeframe for service implementations over the long term. Typically BC Transit receives more expansion requests than available expansion funding and as such BC Transit cannot accommodate all expansion requests. The current economic picture may also constrain the availability of provincial funding for transit over the next few years.

Similarly, any new service would also require provision within the CRD's budgets.

- **Prioritization** – BC Transit uses a number of transit service performance and land use criteria to prioritize available funding for service expansions between transit systems. Therefore, moving ahead on any of the Southern Gulf Island transit services represented

would require both available provincial funding and sufficient ranking against other requests for services within the CRD as well as among other communities.

- **Detailed Implementation Plan** – If a service option or options was approved and funding was confirmed, BC Transit would work with the CRD to create a detailed implementation plan. This plan could include issuing a request for proposals to operate services and would also undertake the detailed operational planning to confirm routes, schedules, maintenance feasibility and capacity, vehicle requirements, costs and—pending its confirmation of overall service viability--implementation timelines.

9.0 Recommendations

It is recommended that the Capital Regional District:

- **Receive this report as information and provide comment.**

BC Transit
April 2014