Transit Future Plan

SUNSHINE COAST | January 2014

Sunshine Coast
Regional District

BCTransit

TRANSIT future

BC Transit and the Sunshine Coast Regional District would like to acknowledge the contributions of the many individuals and organizations that supported the development of the Sunshine Coast Transit Future Plan.

Thank you to staff at the Sunshine Coast Regional District, the District of Sechelt, the Town of Gibsons and the Sechelt Indian Government District for sharing their knowledge and connections and distributing information about the engagement events.

Thank you to those who helped organize venues for our Transit Future Bus, including Gibsons Jazz Festival, Trail Bay Centre, Sunnycrest Mall, Canadian Tire, Market Place IGA in Madeira Park, Harmony Hall Seniors Activity Centre, Sechelt Seniors Activity Centre, the Town of Gibsons, Sechelt Night Market, Kona Winds Charter and BC Ferries staff aboard the Queen of Surrey.

Finally, thank you to all who joined us at the Sunshine Coast Transit Future open houses, stakeholder workshops and who took the time to provide feedback throughout the process.

TRANSIT FUTURE PLAN **SUNSHINE COAST**

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Executive Summary

Transit has tremendous potential to contribute to more economically vibrant, livable, and sustainable communities. The need to realize this potential in the Sunshine Coast is increasingly important due to factors such as climate change, an aging demographic, population growth, ferry connections and availability of affordable transportation choices for individuals who do not have access to a private automobile.

In consideration of these issues, the Sunshine Coast Regional District (SCRD) has adopted the regional sustainability plan:

- We Envision
- Sunshine Coast Integrated Transportation Study
- Official Community Plans ("OCP")
- several community action plans

Together these establish a policy framework and guidelines to move towards a more sustainable future. Transit supportive land use and transit oriented development are both important aspects of We Envision, the District of Sechelt OCP, Gibsons Smart Plan OCP and Roberts Creek OCP with a more rural approach to encouraging transit identified in the OCPs of other electoral areas including Egmont/Pender Harbour, Halfmoon Bay, Elphinstone, West Howe Sound, Hillside/ Port Mellon and Twin Creeks.

These planning initiatives have informed the development of the Transit Future Plan, in addition to input from the BC Provincial Transit Plan and BC Transit 2030 Strategic Plan. The Transit Future Plan builds on the OCP transit related policies and the actions identified in the Integrated Transportation Study and includes an implementation strategy for transit investments. It was developed through a participatory planning process involving a stakeholder advisory group and broad community consultation. The Transit Future Plan envisions the Sunshine Coast transit network 25-years from now and describes the services, infrastructure and investments that are needed to achieve that vision.

Vision and Goals

Vision Statement

"Sunshine Coast Transit is an essential component of our sustainable community and a preferred method of travel. It enhances mobility by providing a convenient, reliable and affordable alternative to the car that is aligned with sustainable land use decisions and fully integrated with other transport options."

Goals

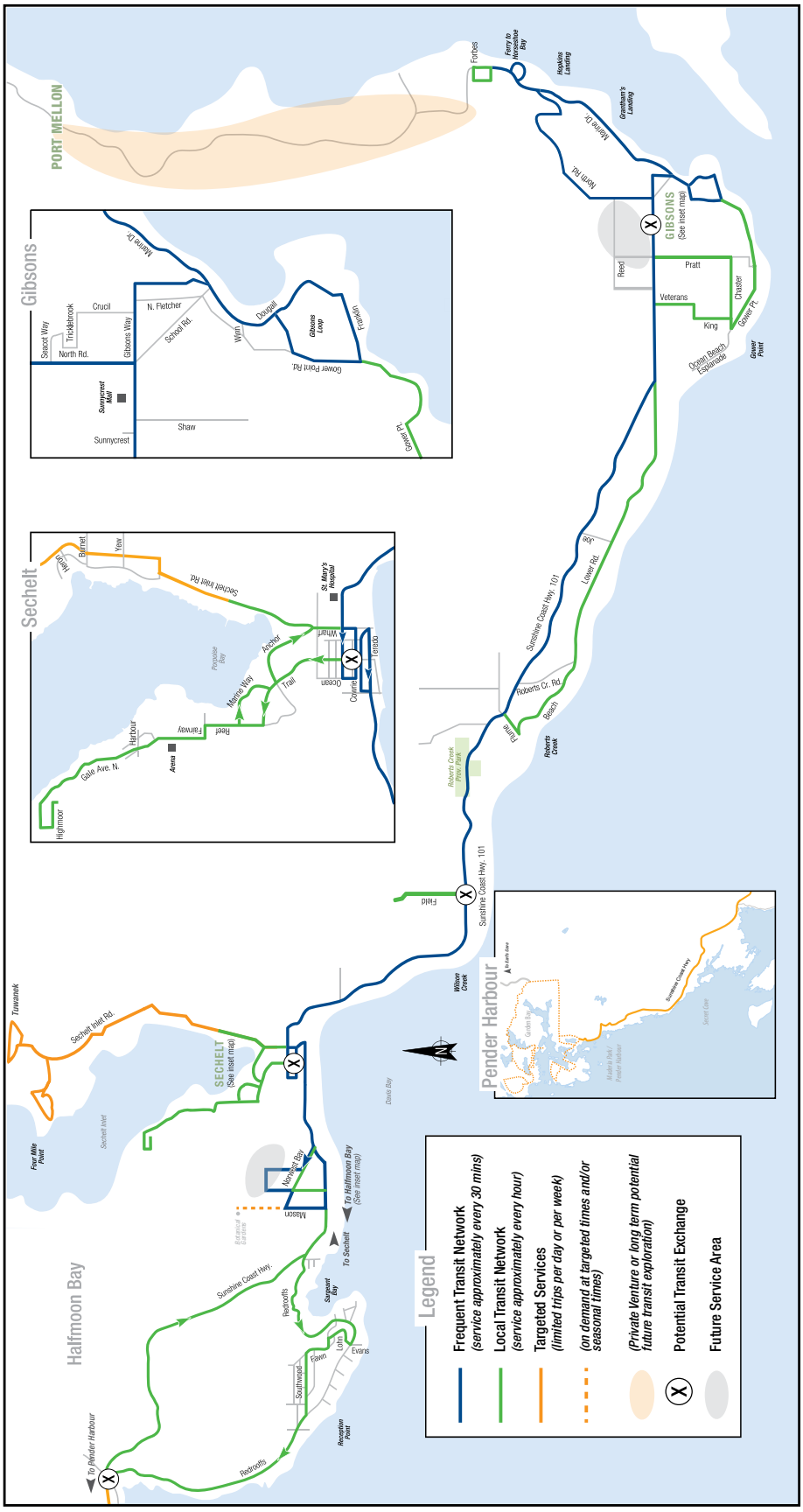
The transit system:

1. Attracts new riders and increases ridership
2. Supports and aligns with sustainable development
3. Is integrated with other modes of transportation
4. Is efficient and cost effective
5. Is safe and accessible
6. Is collaborative and customer focused

Mode Share and Ridership Target

The Transit Future Plan sets a transit mode share target of 5.4 per cent for all trips by 2038, which will require the Sunshine Coast transit ridership to grow from 0.5 to 1.8 million trips per year. This target aligns with the Provincial Transit Plan's transit mode share target for regional centres in British Columbia.

Transit Future Plan Network



The Transit Future Plan Network

Frequent Transit Network (FTN)

The Frequent Transit Network ("FTN") provides medium to high density mixed land use corridors with a convenient, reliable, and frequent (at least every 30 minutes) transit service between 5:30 a.m. and 12:30 a.m. The FTN will carry a large share of the transit system's total ridership, justifying investments in frequent service, a high level of transit stop amenities and service branding.

Local Transit Network (LTN)

The Local Transit Network ("LTN") is designed to connect neighbourhoods to local destinations, to the FTN. Frequency and vehicle type are selected based on demand with a preference for smaller vehicles.

Targeted Services

Targeted services are a collection of transit services that are more focused on the needs of specific customers and include services such as handyDART, seasonal, limited trips and paratransit services.

Implementation Strategy

Establishing the Transit Future Plan network requires prioritizing transit investments and developing an implementation strategy to transform today's network into the future network.

Short-term Implementation Priorities (0-3 years)

Service

- Provide limited service to the Botanical Gardens
- Increase transit coverage to West Sechelt
- Begin to develop the Future Frequent Transit Network (FTN)
  - » Increase frequency between Sechelt, Gibsons and Langdale Ferry Terminal to 30 minute service at peak times
- Develop the Local Transit Network (LTN)
  - » Provide hourly local community bus service with smaller transit vehicles to the eastern Sunshine Coast communities (including Gibsons, Elphinstone and areas of Howe Sound) that feeds into the Frequent Transit Network
- Improve connections between the LTN and FTN in Sechelt
- Provide targeted transit service to Pender Harbour
- Confirm the Custom Transit service area
- Improve custom (handyDART) vehicle accessibility with on-going modernization of the bus fleet to exclusively low floor vehicles

Infrastructure

- Develop an exchange in upper Gibsons
- Develop an exchange in Wilson Creek on, or near, Field Road
- Develop a Park & Ride facility in Sechelt
- Expand hoist services at the operations and maintenance facility
- Continue to improve transit customer facilities:
  - » Conduct an assessment of transit stops to identify and prioritize stops to be upgraded to universal accessibility standards
  - » Ensure that transit stops are spaced along a corridor at appropriate intervals and at suitable locations near pedestrian connections
  - » Invest in on-street customer amenities
  - » Improve customer information

Short-term and Ongoing actions that the SCRD and local authorities could consider to support the realization of the Transit Future Plan Goals:

- Incorporate the Transit Future Plan within updates to local plans and policy
- Support and encourage transit-oriented development and work with BC Transit to explore incentives to attract high density and mixed-use development to areas well served by transit
- Ensure that local and major development proposals and projects support transit and explore the option to acquire transit facilities as part of the development approval process
- Integrate and consider the Transit Future Plan network when developing sustainable transportation infrastructure plans and projects
- Implement travel demand management strategies that encourage shifting automobile trips to transit, such as executing transit priority measures, marketing, restructuring parking fares, and reducing parking availability/requirements in areas well served by transit
- Work with BC Transit to implement Google Transit
- Work with BC Transit in the completion of a fare review prior to the FTN being introduced to consider options for different fares for the FTN and LTN and timed versus two-way transfers
- Improve pedestrian connections between Lower Road and Highway 101 in Roberts Creek
- Provide ongoing investment in quality cycling and pedestrian feeder infrastructure
- Explore car or van-pool services in Port Mellon in support of Howe Sound Pulp and Paper and Hillside Industrial Park commuters
- Explore Alternate Funding Options for funding portions of capital projects for transit

Medium-term Implementation Priorities (4-6yrs)

Service	Infrastructure
• Continue to develop the FTN » Increase frequency between Sechelt, Gibsons and Langdale Ferry Terminal to 30 minute service all day » Increase the frequency to West Sechelt to 30 minute service at peak times • Develop the LTN » Increase the service frequency to Halfmoon Bay Monday to Saturday » Extend service to East Porpoise Bay Road in Sechelt • Provide targeted transit service to Sandy Hook and Tuwanek • Expand custom (handyDART) service over time to meet demand • Expand custom (handyDART) service to evenings, Sundays and Holidays • Implement a travel training program to those individuals who meet the custom (handyDART) eligibility criteria	• Expand the operations and maintenance facility to include an additional bay • Implement Transit Priority Measures on the FTN as required • Develop a Park & Ride facility in Gibsons • Explore the cost benefits of providing a satellite operating facility in Wilson Creek to support local community bus service in the eastern Sunshine Coast communities (including Gibsons, Elphinstone and areas of Howe Sound)

Long-term Implementation Priorities (7yrs +)

Service	Infrastructure
• Continue to develop the FTN » Increase the frequency to West Sechelt to 30 minute service all day » Increase the frequency to Lower Gibsons to 30 minute service all day • Continue to develop the LTN » Increase the service frequency to Halfmoon Bay on Sundays and Holidays » Increase frequency to the Sechelt Arena and Gale Avenue North to hourly service all day » Provide hourly two-way service on Gower Point Road in Lower Gibsons and Elphinstone • Explore targeted transit service to Port Mellon and Hillside Industrial Park	• Implement Transit Priority Measures on the FTN as required

The service change priorities and infrastructure projects identified vary significantly in terms of timelines, complexity, costs and process, meaning that initiatives will not necessarily be completed in a strictly chronological order. Each service change priority will require a more detailed service plan that will finalize route structure, service levels, scheduling, customer information and associated costs and will be presented for approval by the SCRD prior to implementation.

Service Design Standards and Performance Guidelines

As part of the on-going management of the transit network, service design standards and performance guidelines have been developed as tools to facilitate service planning decisions and to measure how well the transit system is progressing towards achieving its goals. Service standards define service levels, the service area and when new service should be introduced to an area.

Performance guidelines measure service effectiveness by defining numerical thresholds and targets for the system and its routes and services. These measures are meant to ensure an acceptable level of service quality to the customer and, along with the Transit Future Plan, guide planning decisions and recommendations of BC Transit and SCRD staff to committee and the SCRD Board.

Over-supply | Efficient and Productive | Overcrowded/pass-ups

Moving Forward

Funding the Plan

Meeting the mode share and ridership targets of this plan will require capital and operating investments in the transit system over the next 25 years. Annual operating costs are based on service hours that are projected to increase from the existing 22,721 hours to approximately 55,601 hours annually. The plan also calls for capital investments that include:

- Expanding the transit fleet from the existing 11 vehicles (2013) to 33 vehicles (2038)
- New transit exchanges at Field Road in Wilson Creek and Upper Gibsons
- Park & Ride facilities in Sechelt and Gibsons
- Exploration of the benefits of a satellite transit operations facility in Wilson Creek
- Improvements to customer amenities at transit stops and transit priority measures as required

Given the level of transit investment anticipated over the coming decades, the way in which transit is funded needs to be reviewed. Today, the transit system in the Sunshine Coast is funded through a combination of provincial funding, local property tax, passenger fares and advertising revenue. With goals to increase service levels significantly over the medium to long term, BC Transit and its funding partners will need to work together to assess additional or alternative funding sources that can support the necessary investment in infrastructure and service expansion.

Keys to Success

To guide the plan from vision to reality will require an on-going dialogue between the Province, BC Transit, the SCRD and local authorities on transportation policy, funding and the linkage between land use and transit planning.

The Transit Future Plan builds upon previous plans (We Envision, the Integrated Transportation Study, OCPs, Neighbourhood / Local Area Plans) and will be used to communicate the vision and direction for transit in the Sunshine Coast. The SCRD has already taken the step of identifying key transit strategies within the Integrated Transportation Study and supportive policies outlined within We Envision and local OCPs. The ongoing success of the plan will also be reliant on its integration into other municipal projects, land use and development decisions, supporting travel demand management measures, transit oriented development and transit friendly land use practices.

Introduction

Why do we need a Transit Future Plan?

Transit has tremendous potential to contribute to more economically vibrant, livable, and sustainable communities. The need to realize this potential in the Sunshine Coast is increasingly important because of factors such as climate change, an aging demographic, population growth and mobility for individuals who do not have access to other modes of travel. BC Transit has initiated the development of a Transit Future Plan for the Sunshine Coast and in other areas of the province to support the creation of more sustainable and livable communities. Transit Future Plans are intended to:

- Focus public investment in transportation (the movement of people and goods)
- Influence and support urban form that supports public transit and active modes of transportation (e.g. walking and cycling)
- Create communities and neighbourhoods where people can live, work and play without complete reliance on automobiles
- Ensure the road network is available for the efficient transportation of people and materials
- Reduce energy consumption and the production of greenhouse gas emissions primarily by reducing the use of single occupancy vehicles
- Provide access to services within the community such as health care, education and business
- Make transit more competitive with private automobile travel

What is a Transit Future Plan

The Transit Future Plan for the Sunshine Coast envisions the transit network 25 years from now and describes the services, infrastructure and investments that are needed to get there. Although it is BC Transit's role to guide the plan from vision to reality, the intended outcomes of the plan cannot be achieved by a single agency but rather through strategic and financial partnerships between local governments, regional partners, the Province of British Columbia and BC Transit.

The plan intends to promote and support planned land use in the region that will facilitate an increase in the use of transit and other sustainable modes of transportation. Municipal, regional and provincial planning agencies are pivotal to the success of the plan through strategic transit oriented development, transit friendly land use practices, travel demand management practices, and the provision of road right-of-way for significant transit priority measures.

Study Area

This plan has been created for the Sunshine Coast Regional District (SCRD). The SCRD is located in British Columbia on the southern mainland coast, across the Georgia Strait from Vancouver Island. It borders the Powell River Regional District to the northwest, the Squamish-Lillooet Regional District to the northeast, and the District of West Vancouver and Metro Vancouver to the southeast (across Howe Sound) as shown in Figure 1.

The SCRD covers an area of 3,780 square kilometres and is comprised of:

Five Electoral Areas:

- Area A: Egmont and Pender Harbour
- Area B: Halfmoon Bay
- Area D: Roberts Creek
- Area E: Elphinstone
- Area F: West Howe Sound

Two incorporated municipalities:

- The District of Sechelt
- The Town of Gibsons

The Sechelt Indian Government District.

The Squamish Nation (land only).

The SCRD has a population of approximately 28,600 people concentrated along the coast with no road access to the rest of the province. The Sunshine Coast is typically accessed via boat or plane, with ferry connections from Horseshoe Bay to Gibsons across Howe Sound and from Earl's Cove to Saltery Bay to connect to Powell River.

Figure 1: Sunshine Coast Regional District

Linkages to Other Plans

The Transit Future Plan is designed to support the sustainable development of the region as expressed through We Envision (the Sunshine Coast sustainability plan), the Integrated Transportation Study and local Official Community Plans. The Future Plan will also contribute to the targets and priorities expressed in the Provincial Transit Plan and BC Transit's Strategic Plan.

Provincial Transit Plan (2008)

The Provincial Transit Plan is British Columbia's $14 billion strategy for expanding fast, reliable and green transit. The plan emphasizes that, from a transportation perspective, the best means of reducing greenhouse gas emissions is to focus on dramatically increasing transit ridership (and thereby reducing single occupancy vehicles), linking transit to active modes of travel (walking and cycling) and having land use decisions, largely made by local government, focus on transit oriented development. The Transit Future Plan sets the framework for accomplishing these substantial goals in the Sunshine Coast. The Provincial Transit Plan sets a number of measurable targets including:

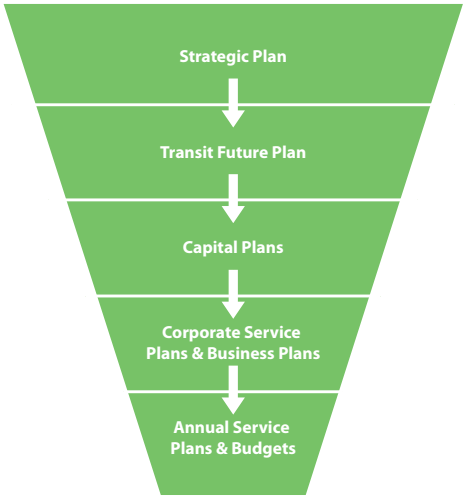
- Reducing greenhouse gas emissions and air contaminants from cars by 4.7 million tonnes by 2020
- Doubling transit ridership in B.C. to over 400 million trips a year by 2020
- Increasing the transit market share in regional centres from three per cent to four per cent by 2020 and five per cent by 2030. For the Sunshine Coast, this would translate into increasing transit ridership from 510,000 to 1.5 million passengers annually by 2030[1]

BC Transit 2030 Strategic Plan (2010)

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

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

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

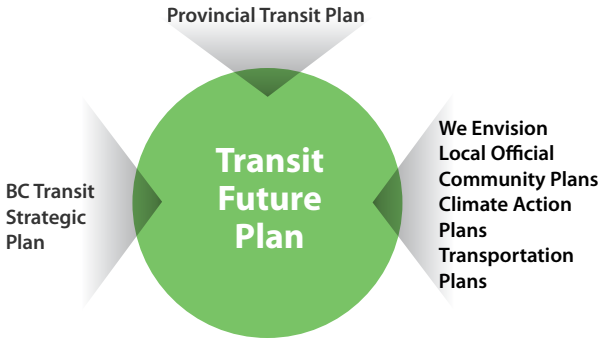


[1]Assuming a total of 30.38 million annual trips made by all residents on the Sunshine Coast, based upon a projected population of 34,803 by 2030 (BC Statistics), 2.9 total trips for all modes of transportation per day for 301 days per year

Linkages to Local Plans

In addition to the Provincial Transit Plan and BC Transit's Strategic Plan, the Transit Future Plan is directly influenced by and aligned with local planning efforts including, but not limited to:

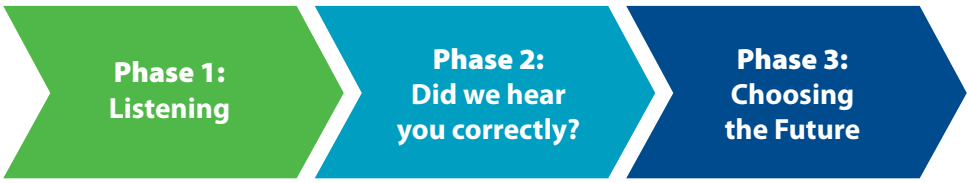
- We Envision: the Sunshine Coast sustainability plan
- Official Community Plans
- Transportation Plans (including the regional Integrated Transportation Study and local transportation plans)
- Area redevelopment plans
- Community plans and programs



Participation

The Transit Future Plan was developed in collaboration with the SCRD; local government partners, including the Town of Gibsons, District of Sechelt and Sechelt Indian Government District; key stakeholders and members of the public to ensure it was designed to meet the diverse needs of the local community.

A Transit Future Plan Working Group was established to help guide the creation of the plan and a Stakeholder Advisory Group ensured key local organizations had the opportunity to participate in the decision making process. Over 1,700 members of the public were engaged in developing the Transit Future Plan through a series of three phases of consultation events held at key milestones in the plan process. Appendix 2 provides the detailed list of organizations who were invited to contribute to the plan.



The three-phased engagement strategy was designed to achieve the following goals:

- Identify and solicit targeted feedback from all major institutions, organizations and other key community groups
- Employ a variety of methods and means to stimulate participants and ensure a wide range of citizens are reached
- Ensure the final result reflects the public's needs and desires by incorporating feedback into the plan

The approach incorporated several strategies from the spectrum of engagement, including:

Inform	Provide information that will keep key stakeholders and the public up to date and assist them in understanding issues, problems, alternatives and/or solutions.
Listen and learn	BC Transit, partners, key stakeholders and the public listen to and learn about each other's views, plans, concerns and expectations.
Consult	An opportunity for stakeholders and the community to provide feedback on the degree to which the current transit system meets the needs of the community and what role they see transit playing in their community moving forward.

Report Back	Report back to stakeholders and the community the project vision, goals and proposed Transit Future Network that were developed using background data and their input. This identifies how public feedback was used to analyze issues and build alternatives and thereby make contributions to the decision making process.
Collaborate	BC Transit, the SCRD and local governing bodies are considered partners in the Transit Future Plan development process, including collaboration on analyzing issues, developing options, identifying preferred solutions and making recommendations.

Transit Future Plan Consultation

The approach to public engagement included the following strategies:

Council & Committee Presentations	Presentations were made to the SCRD and local governing bodies at various stages of the plan process to provide information, receive input and/or approval.
Stakeholder Advisory Group	The role of the group was to provide open, honest and constructive feedback and act as the liaison between each individual participating organization and BC Transit. The group was comprised of over 60 major institutions, community groups, business groups, residential associations, local and regional government, BC Ferries and Ministry of Transportation and Infrastructure (see Appendix 2 for the full stakeholder list).
Transit Future Bus	The Transit Future Bus is a mobile 'open house' used to engage community members in the development of the Sunshine Coast Transit Future Plan. On the bus, participants were able to provide feedback through interactive displays and an online and hard copy transit survey. The bus also featured a kids' zone. The Transit Future Bus was brought to the Sunshine Coast for phase one and two of the public consultation.
School and College Engagement	Schools on the Sunshine Coast were notified when the Transit Future Bus was visiting the coast and several times during the week were set aside for the bus to visit schools. Classes from both Chatelech Secondary School and Elphinstone Secondary School came onboard the bus as part of their lessons and gave feedback.
Project Website	A dedicated web page was established on the Transit Future section of the BC Transit website. This provided information on the Transit Future Plan process, as well as updates on upcoming events, reports, presentations and for providing online surveys to solicit feedback during consultation.
Advertising & Media	A variety of methods were used to advertise the opportunities for public input including press releases, advertisements in local papers, radio adverts, updates on the website and BC Transit Facebook page, posters that were distributed around the community and flyers on the transit buses.

Phase One: Listening Phase

The objective of the 'Listening Phase' was to provide information about transit and the Transit Future Plan process and ask the public for their feedback on how the existing transit system is performing, to what degree it meets or does not meet their needs and what they would like to see for the future of transit over the next 25 years.

This phase included a Stakeholder Advisory Group workshop, a week long Transit Future Bus tour, Langdale Ferry-Horseshoe Bay onboard ferry engagement, online survey, print survey, on-board transit passenger survey, and one-on-one meetings throughout November and December 2012. Events were held at the following locations:

- Marketplace IGA Mall, Pender Harbour
- Trail Bay Centre, Sechelt
- Sechelt Seniors Activity Centre
- Chatelech Secondary School, Sechelt
- Canadian Tire, Davis Bay
- Sunnycrest Mall, Gibsons
- Harmony Hall Senior's Activity Centre, Gibsons
- Langdale-Horseshoe Bay Ferry

Attendees were able to provide feedback directly to BC Transit and SCRD staff on-board the future bus or via an on-board survey and comment board. In total, more than 740 visitors were welcomed at events with 43 attendees at the stakeholder workshop and a total of 600 surveys completed. Survey respondents were primarily adults with a mix of other varied ages and with good representation from communities across the Sunshine Coast.

Phase One Engagement: Quick Facts	
Transit Future Bus participants	670
Ferry Engagement participants	72
Transit Future Bus and ferry comments received	644
Online/Hardcopy survey responses	294
Onboard bus survey responses	306
Stakeholder Advisory Group Workshop Attendees	43
Number of open houses	10

Public Feedback

The major themes of public feedback from the stakeholder advisory workshop, survey and the Transit Future Bus events revealed the following:

Key Theme	Public Suggestions from Phase One
General Feedback	• General satisfaction with the existing transit service, particularly the level of service, courtesy of drivers, safety, comfort and cleanliness of buses, schedule information and value for money • The need for a clearer distinction between the highway express service and the local service on the existing Route 1 (this has since been accommodated by an amendment to the Riders Guide to present the two variations as a separate Route 1 and Route 90 as of October 2013) • Increased frequency on all routes, particularly service between Sechelt, Gibsons and Langdale • Smaller vehicles on community routes including Lower Gibsons, Elphinstone and Roberts Creek on Lower Road • Advanced and flexible payment methods with transfers good for travel on return trips • Improved transit stop amenities • Improved connections, particularly between Routes 2, 3 and 4 with Route 1
Transit & Ferry Service	• Service that can accommodate ferry delays • Earlier service on Saturday to meet the 6:20 a.m. ferry • An appreciation in the schedule of the time required to walk between the bus and ferry • Enhanced bus stop amenities at the ferry terminal • More schedule information available between BC Ferries, Translink and BC Transit • An integrated fare system between BC Ferries, BC Transit and Translink
New / Improved Service Areas	• West Sechelt residential development • North Road, between Gibsons and Langdale (currently limited service) • Increased coverage in areas of Elphinstone and Gibsons • Sandy Hook and Tuwanek, the east side of Sechelt Inlet • Field Road in Wilson Creek to provide service to the SCRD offices • Pender Harbour and Madeira Park – local service within the community, custom (handyDART) service and a connecter to Sechelt • Recently paved Mason Road and Sandpiper Road to Gale Avenue North, serving the Botanical Gardens

Phase Two: Did We Hear You Correctly?

The objective of Phase Two was to provide information about the results of the first phase of engagement, review the draft vision, goals and targets for the transit system, receive feedback on the proposed Transit Future Network and identify priorities for investment. This phase of public consultation included a second stakeholder workshop in March 2013, a week long Transit Future Bus tour in June 2013, as well as online and onsite surveys. Events were held at the following locations:

- Marketplace IGA Mall, Pender Harbour
- Trail Bay Centre, Sechelt
- Sechelt Seniors Activity Centre
- Sechelt Night Market
- Canadian Tire, Davis Bay
- Sunnycrest Mall, Gibsons
- Gibsons Municipal Hall & Public Library
- Gibsons Landing Jazz Festival
- Harmony Hall Senior's Activity Centre, Gibsons
- Langdale-Horseshoe Bay Ferry
- Langdale-Gambier Island and Keats Island Ferry

Information was presented on existing and potential future routes and the approximate operational costs for the new service areas that were identified in the first round of engagement. This was used to provide the basis for an exercise to allow stakeholders and respondents to set priorities for future transit investment. The stakeholder workshop also included a mapping exercise to help design the Transit Future Network, which was then presented to the public for feedback on the Transits Future Bus tour and in the online survey. Information was also provided concerning the development of exchanges and the need for transfers.

In total, more than 900 visitors were welcomed at events with 32 attendees at the stakeholder workshop and a total of 139 surveys completed.

The public were able to ask questions and provide comments as well as vote for their top three existing transit service improvements, their top three priorities for new service areas and their preference between investing in new service areas or improvements to the existing service.

Phase Two Engagement: Quick Facts	
Transit Future Bus participants	652
Ferry Engagement participants	255
Online/Hardcopy survey responses	139
Stakeholder Advisory Group Workshop Attendees	32
Number of open houses	11

Public Feedback

Public feedback provided strong support for the proposed Transit Future Plan network and for the draft Vision, Goals and Targets. Approximately half of the respondents and stakeholders prioritized introducing service to new areas over improvements to the existing service. Stakeholder and public feedback received during the second phase of consultation identified the following priorities for investment in transit in order of support:

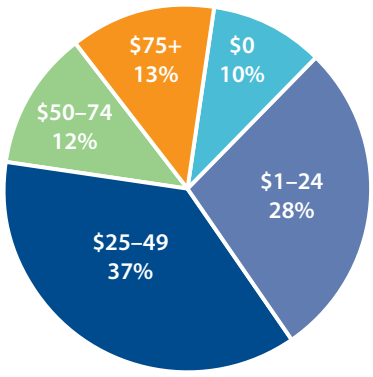
Key Theme	Priorities Identified by the Public in Phase Two (from highest to lowest)
Existing Service	1. Increased frequency between Sechelt, Gibsons and Langdale Ferry Terminal on Highway 101 (Route 90, previously Route 1: Express via Hwy) 2. Increased frequency between Sechelt, Gibsons and Langdale Ferry Terminal via Roberts Creek (Lower Rd), Elphinstone and Lower Gibsons (Route 1: Local) 3. Better Connections from Halfmoon Bay and West Sechelt to Gibsons and Langdale Ferry Terminal 4. Local Community Bus Service with smaller vehicles in Roberts Creek, Elphinstone and Gibsons 5. More direct service between Sechelt, Gibsons and Langdale Ferry Terminal 6. Increased frequency to Halfmoon Bay
New Service Areas	1. Pender Harbour, primarily Madeira Park and Garden Bay 2. Elphinstone and Lower Gibsons 3. Sandy Hook & Tuwanek 4. West Sechelt residential areas currently not served 5. North Road, Port Mellon and Field Road (each received a similar level of support)

There was strong support for transit exchanges recognizing the need to transfer should local community bus service be introduced. However, it should be noted that this support was generally based upon an assumption that service frequency would increase. Feedback included:

Transit Exchange and Transfer Supportive Comments	Transit Exchange and Transfer Unsupportive Concerns
Some routes can become more direct/express	Trips may take longer
Increased mobility for additional areas	Concern about long wait times at exchanges
Will enable smaller buses for local routes – may result in less noise and air pollution	May reduce existing ridership
Efficiency of service will increase	May discourage new riders
May enable the local service to be disconnected from the ferry service, which currently results in disruptions to non-ferry riders when there are ferry delays	Complexity of having to make connections, particularly being able to connect to the ferry when delayed

Majority of survey respondents were willing to support an increase in taxes to implement increased transit service on the Sunshine Coast.

Figure 2: Willingness to Fund the Plan via Annual Property Tax Increases



Phase Three: Choosing The Future

The objective of Phase Three was to provide the public with an opportunity to review and comment on the full Draft Transit Future Plan. This phase commenced in September 2013 with council and committee presentations and one-on-one meetings with SCRD Directors, the District of Sechelt and the Town of Gibsons on the Draft Implementation Strategy. The one-on-one meetings provided the opportunity to discuss more detailed scheduling information and identify any issues specific to each area based on the service priorities outlined in the Draft Implementation Strategy. The issues identified at this stage included:

1. Roberts Creek and Elphinstone – concern regarding the number of trips that would connect to and from Sechelt within a reasonable time frame given the need to transfer between Route 1 and Route 90
2. Gibsons Landing – a desire for increased frequency of service in the short term
3. Marine Drive – a desire for increased frequency in the short term
4. A desire to serve northern sections of Mason Road and serve Sechelt as a loop route (combining the existing Route 2: West Sechelt and Route 3: Arena)
5. A desire to serve Port Mellon Highway users in addition to a mill employee service

A workshop was held on October 8, 2013 for SCRD Board directors, Town of Gibsons Council and District of Sechelt Council with a representative also from the Progress Plan. This workshop provided more detailed information about the existing transit system, the proposed Service Change Options in the Draft Implementation Strategy (including costs) and alternative options and changes for addressing the identified concerns outlined above. The key objective of the workshop was to discuss and agree on changes to the Draft Implementation Strategy based upon SCRD and Council feedback to enable revisions to the Draft Transit Future Plan for final public input. Feedback from this workshop was used to refine the Draft Implementation Strategy prior to completing the Draft Transit Future Plan. A summary of the changes was presented for agreement by the SCRD Board at the Corporate and Administrative Services Committee on October 24, 2013.

The draft plan was released for public input at the end of November 2013. It was available online and in hard copy at several key locations throughout the Sunshine Coast with summary leaflets and feedback forms. Open houses were held in Sechelt and Gibsons to provide the public with an opportunity to speak with an SCRD or BC Transit representative about the plan and contact email and phone numbers were provided for the public to ask questions or provide comments. There were approximately 50 attendees at the open houses and the feedback received was generally very supportive of the plan, its priorities and timeline. It should be noted that most people were concerned mainly with the service provided in their neighbourhood rather than on the system in general or from a regional perspective. However, some specific feedback, including comments from the public, the Accessibility Advisory Committee and the BC Cycling Coalition presented an opportunity to strengthen sections of the report.


Transit Future Plan
Future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Setting the Scene

Topography, climate, population growth, demographic characteristics, land use and settlement patterns are important factors in planning a successful transit network. They help to identify key destination and origin points for existing and future transit service, help characterize the transit market and level of demand, and assist in projecting operational and maintenance costs. The subsequent sections identify existing and future trends for the Sunshine Coast as a region and the individual communities within its boundaries.

Topography

The Sunshine Coast is a coastal area that is comprised of the Coast Mountain range, resulting in steep, rugged terrain and a series of fjords. As a result, no road connections have been constructed between the Sunshine Coast and the rest of B.C. and access is restricted to water and air travel. The ferry service at Langdale and Earl's Cove carry automobiles and also provide a passenger walk on service. The dependency on ferry service can be a key driver for transit ridership.

Many areas of the Sunshine Coast feature steep topography, which impacts the ability of residents to access community amenities by walking and biking. This can increase their desire to use either an automobile or transit. This topography also features ravines in several populated areas of the coast, which limits the ability to connect sections of the road network. This can impact the ability of transit to efficiently serve populated areas.

Climate

The Sunshine Coast is located in a temperate climatic region with summer temperatures ranging from 15 to 20 degrees Celsius and winter temperatures of 4 to15 degrees Celsius. Precipitation days are on average 20 per cent of the summer and 60 per cent of the winter with little snow but occasional icy roads. This climate is generally beneficial for transit with limited impacts to service from poor weather conditions and less maintenance associated with salted roads that are more common in colder climates.

Population and Demographics

Population Distribution by Area

The SCRD has a population of approximately 28,600 people (2011 Census). The majority of the population is concentrated along the coastline, particularly in the District of Sechelt and Town of Gibsons, which, when combined, comprise almost half of the region's population. The remaining population is generally evenly split between the five electoral areas with slightly less residing in the Sechelt Indian Government District.

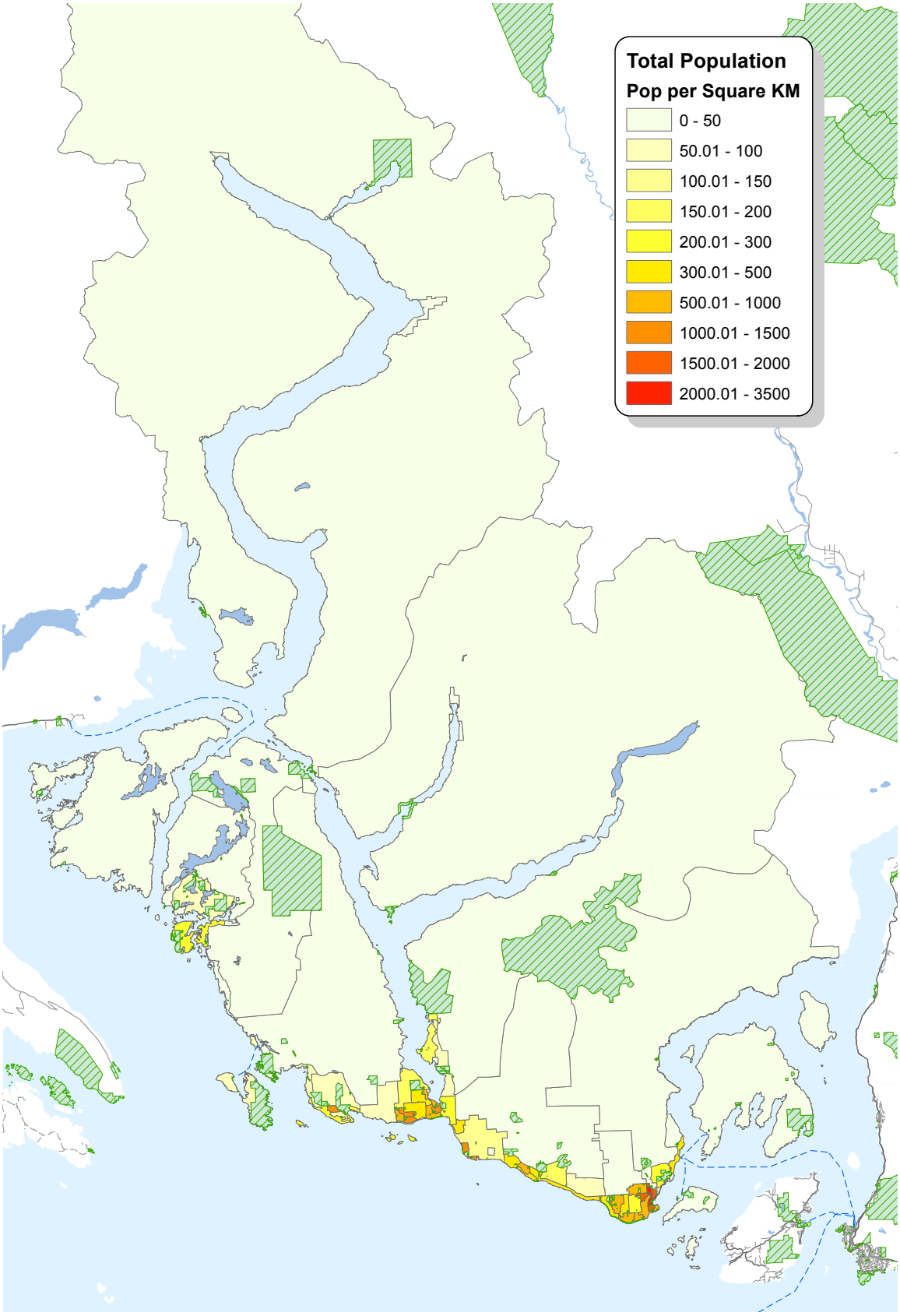
Table 1: 2011 Sunshine Coast Population, by jurisdiction

Area	Population	Percentage of Population	Density per km^2
District of Sechelt	9,291	32.5%	238.2
Town of Gibsons	4,437	15.5%	1,033.4
Sechelt Indian Government District	797	2.8%	73.8
Electoral Area A: Pender Harbour / Egmont / Madeira Park	2,678	9.4%	1.4
Electoral Area B: Halfmoon Bay	2,675	9.3%	2.1
Electoral Area D: Roberts Creek	3,244	11.3%	22.6
Electoral Area E: Elphinstone	3,482	12.2%	161.2
Electoral Area F: West Howe Sound	2,015	7%	5.3
Total	**28,619**	**100%**	**7.6**

Population density indicates where residents are concentrated and is an important determinant of potential transit ridership. The highest population density is located in the Town of Gibsons, followed by the District of Sechelt, and Area E: Elphinstone (Table 1). Much lower densities are experienced in other Electoral Areas. However Figure 3 indicates pockets of more dense population (greater than 1,000 population per square km) in West Sechelt, downtown Sechelt, Davis Bay, the main centre of Roberts Creek and the main hub of Halfmoon Bay near the Elementary School. The majority of the northern portion of the region has little to no population.

Electoral Area F: West Howe Sound includes Gambier Island and Keats Island, which are only accessible by passenger ferry. Gambier Island has approximately 200 full time residents. This population increases to approximately 1,000 in the summer months due to visitors in the region. Keats Island has only approximately 80 full time residents and generally they obtain basic amenities in Gibsons. Albeit some island residents keep a car, often located in Langdale, many rely on other forms of transportation once on the mainland, including walking, biking, transit, taxi, ride-share and hitch-hiking.

Figure 3: Sunshine Coast Regional District Population Density

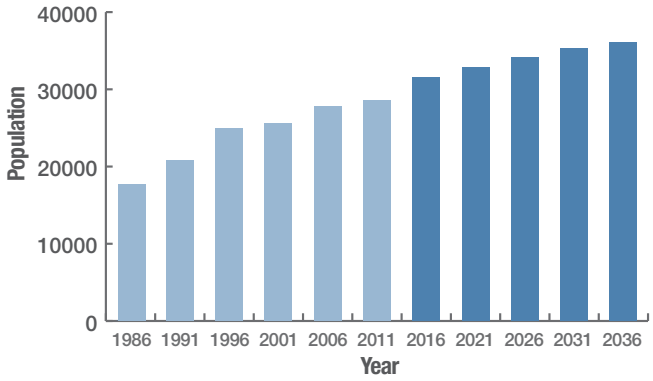


Historical and Projected Populations

Sunshine Coast

The Sunshine Coast's population increased by 38 per cent over the last 20 years; from 20,785 in 1991 to 28,619 in 2011, similar to the province overall (36 per cent). The region's population is projected to increase in the future, although at a slower rate (23 per cent) than in the past 20 years.[2] This would result in a population of approximately 36,900 by 2038 over the 25 year life of the Transit Future Plan (Figure 4).

Figure 4: Sunshine Coast Historical and Projected Population



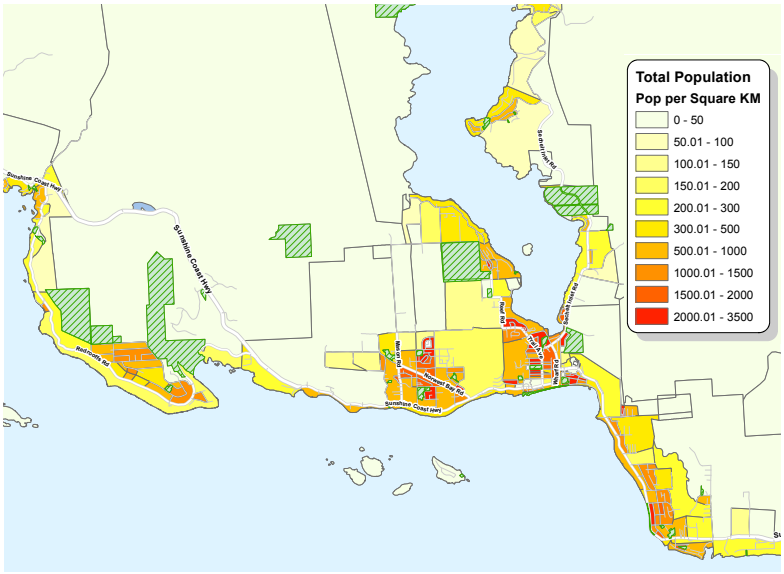
Local Communities

Local Official Community Plan population projections exceed this expected growth rate, anticipating an increase of approximately 12,500 people over the next 25 years as opposed to 8,300 as outlined in the provincial projections. However, they provide a good indication of the areas where growth is expected to occur and support transit ridership. This will primarily be within Sechelt, Gibsons and Roberts Creek, which include policies to provide a more compact approach to residential development and then also within Area A: Pender Harbour, Egmont and Madeira Park, which indicates a less compact, lower density approach to development.

SECHELT

The District of Sechelt is the largest community on the Sunshine Coast, with a population of 9,291 (2011), representing 32 per cent of the region. It has experienced substantial growth of 93 per cent over the last 20 years, from 4,814 in 1991 to 9,291 in 2011[3]. The District of Sechelt Official Community Plan (2010) outlines a 2 per cent annual population growth in the future, projecting a population increase to 13,970 by 2031. This is significantly higher than the projected regional population increase of 23 per cent over the next 20 years. Sechelt is one of the most densely populated areas of the coast with an average density of 238 people per square kilometre. However, there are pockets of population density that reach between 2,000-3,500 people per square kilometre in the Downtown, West Sechelt, and Davis Bay (Figure 5). This indicates transit supportive levels of density.

Figure 5: Population Density Sechelt and Halfmoon Bay



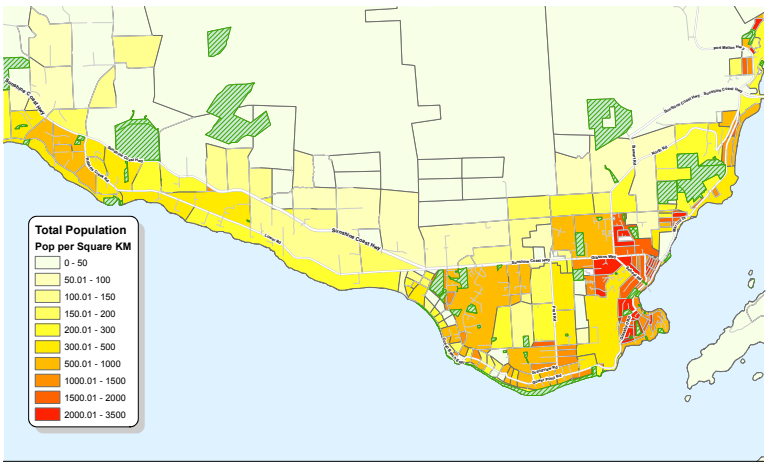
[2] *BC Stats Population Projections*
[3] *Statistics Canada*

GIBSONS

The Town of Gibsons is the second largest community on the Sunshine Coast with a population of 4,437 (2011), representing 16 per cent of the region. It has experienced a population growth of 41 per cent over the past 20 years; from 3,138 in 1991 to 4,437 by 2011.

The Town of Gibsons Official Community Plan, 2005, indicates a median growth projection of 7,242 by 2026, a population increase of 63 per cent. The Town of Gibsons historical population growth is comparable to the regional historical projections; however, the projected population is more significant.

Figure 6: Population Density Gibsons, Roberts Creek, Elphinstone and Howe Sound



Gibsons is the most densely populated area of the Sunshine Coast with an average density of 1,033 people per square kilometre and considerable sections between upper and Lower Gibson reaching a transit supportive density of between 2,000-3,500 people per square kilometre (Figure 6).

ELECTORAL AREAS

Area B: Halfmoon Bay was the fastest growing rural electoral area in the SCRD in recent years and saw a growth rate of 4.6 per cent between 2006 and 2011, with an increase in the population from 2,558 to 2,675 (2011 census). The OCP (2013) anticipates a reduced growth rate in the future in line with provincial projections and strives to maintain the rural community character of Halfmoon Bay. Given the size of Area B, it has an extremely low population density of 2 people per square kilometre. However, the main community centre near the Elementary School by Sargeant Bay Provincial Park reaches densities of 1,000-1,500 people per square kilometre (Figure 5).

Area A: Egmont and Pender Harbour experienced a 2.1 per cent growth rate between 2006 and 2011, growing to a population of 2,678. However, the Egmont and Pender Harbour Official Community Plan (2009) indicates that a quarter of the land parcels are seasonal dwellings. Further, the population density is significantly lower than the rest of the Sunshine Coast with an average of 1.4 people per square kilometre and only reaching a maximum of approximately 500 people per square kilometre in the most densely populated locations. The OCP outlines that new density designations outside of resource lands allow for a doubling of the existing number of parcels, a supply expected to accommodate a doubling of the local population over the next 25 years. However, the location of these parcels is such that the expected density will remain low and these low densities are less transit supportive.

Several areas of the Sunshine Coast have seen a decline in their population in recent years. Area D: Roberts Creek saw a decline of 1.9 per cent between 2006 and 2011. However, the Roberts Creek Official Community Plan (review 2011) presents a potential build out of 2,259 units based upon a conservative estimate,

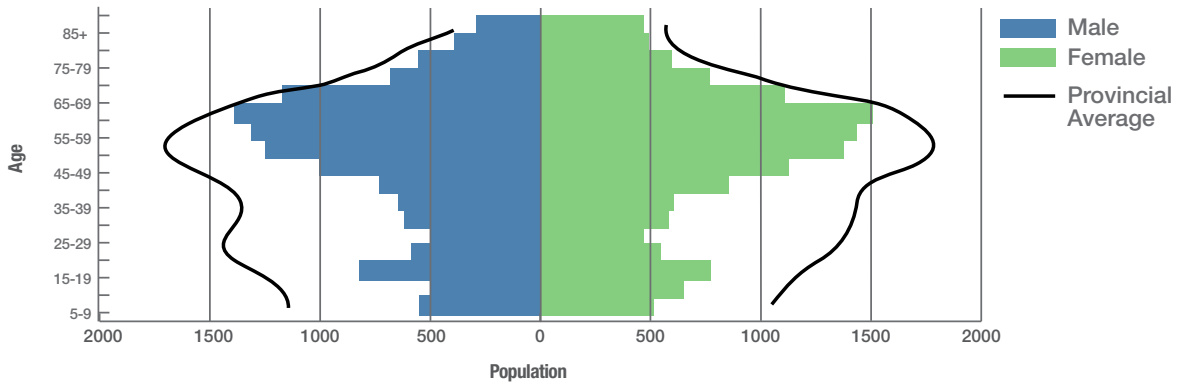
which indicates a 41 per cent population increase of an additional 2,263 residents within the plan timeframe. The location of this future development is such that approximately 80 per cent will be located within 400m of the existing transit system. Although overall Area D has a population density of 22 people per square kilometre, the main community hub reaches population densities of between 500-1,000 people per square kilometre, which is generally quite transit supportive. However, the residential development of Roberts Creek has developed in a linear fashion, split along both Highway 101 and Lower Road with a lack of road and trail connections between the two and key destination points at each end (Sechelt to the West and Gibsons to the East). This development pattern and location presents a constraint on the transit system design as both roadways must be serviced in order to meet the transit needs of all Roberts Creek residents and this presents the potential for duplication of service on the remaining stretch between Lower Road and Sechelt or Lower Road and Gibsons.

Area E: Elphinstone saw a decline in population of 2 per cent between 2006 and 2011 from 3,552 to 3,482. However, population density for Area E overall is 161 people per square kilometre and this reaches between 1,000-1,500 people per square kilometre for large areas near the coast off Gower Point Road and Grandview Road and near Ocean View Drive. Area F: West Howe Sound also saw a population decrease of 9.8 per cent between 2006 and 2011 from a population of 2,235 to 2,015. Area F has generally low population density with 5.3 people per square kilometre overall and small pockets of higher density reaching between 1,500-3,500 people per square kilometre on Central Avenue and Elphinstone Avenue off Marine Drive, and in Langdale Heights.

Population Distribution by Age

In general, the Sunshine Coast follows the provincial trend with majority of the population in the 45-69 years range and a large number of seniors. However, the population in the Sunshine Coast is generally older than the provincial average. In 2011, 24 per cent of the population was aged 65+, compared to the provincial average of 16 per cent and the median age was 51.6, compared with the provincial average of 41.0. Therefore, the area is expected to have a significant increase in seniors in the near future as the population of baby-boomers reach retirement.

Figure 7: Sunshine Coast Population Pyramid



Examining the current and future age distribution in the Sunshine Coast can help to predict future transit ridership trends. Two age groups form key transit markets:

- **Students & young adults (aged 15-24)** – this group tends to be very mobile and make a lot of trips. However, youth often do not have access to automobiles or are too young to drive and are more reliant on transit, walking, cycling and carpooling. Encouraging youth to use transit can contribute to continued transit use into adulthood. Growth in the Sunshine Coast population of students and young adults is not anticipated in the short or medium term. They are projected to account for approximately 9-10 per cent of the total population.
- **Seniors (65+)** – The growth in the senior's population will significantly change the age demographic of the community and may influence transit ridership.
  - » **Younger seniors (aged 65-79)** – approximately 19 per cent of the total Sunshine Coast population is aged 65-79. This is anticipated to grow to 25 per cent over the next ten years but then decline back to approximately 20 per cent by 2038. This age group is much less likely to use transit than older seniors as they often still retain use of a private automobile.
  - » **Older seniors (aged 80 & over)** – This group has a high rate of transit use. While older seniors don't make as many trips overall compared with other age groups, they tend to be very dependent on transit, particularly as health issues may restrict the ability to retain a driver's license. A high proportion of this group has mobility difficulties and so has a high demand for the door-to-door custom service also known as handyDART. Older seniors (80+) currently make up 7 per cent of the Sunshine Coast population compared with 4 per cent province wide. The older seniors' population is also projected to grow significantly to 9 per cent over the next ten years and 14 per cent by 2038. This may have a significant impact on the demand for custom transit (handyDART) in the medium and long term.

Employment

In the last twenty years, the Sunshine Coast has shifted from forestry and fishing as major industries to a more diversified local economy. All major resource-based occupations declined between 1991 and 2000 and the private sector is now primarily composed of small businesses, with majority having limited or no employees. There is a high reliance on non-employment income such as investment gains, corporate pensions and old age security, with a significant proportion of the labour force needing to travel out of the region by boat or plane for employment. However, construction experienced significant growth between 2001 and 2006 and is anticipated to be the major economic growth sector over the next 10 years along with real estate and professional and technical services[4].

The region had 14,325 residents in the labor force in 2011 and a 7.3 per cent unemployment rate[5]. The largest employer in the region is the Howe Sound Pulp and Paper Mill in Port Mellon, approximately 17 km north of Gibsons, which

[4] *We Envision, 2012, available at www.onecoast.ca*
[5] *2011 census*

currently employs approximately 500 people. Another key area of the economy is tourism, accounting for 8 per cent of the total labour force, 16 per cent of the basic labour force and 6 per cent of the total community income, with a total visitor expenditure value of $58.6million in 2001[6]. Many tourists are attracted to the area due to the tranquil setting with access to nature, water activities and local artists and the ability to easily access the coast via the Horseshoe Bay ferry.

These regional characteristics indicate a commuter transit market and tourist transit market linked with the ferry service from Langdale Ferry Terminal to Horseshoe Bay as well as a potential commuter transit market between Gibsons and Port Mellon.

Population + Demographic Challenges

Increasing aging population

With the region's demographics shifting towards an older population, this may drive an increase in demand for transit, particularly for door-to-door custom service (handyDART) in the medium and long term. The other traditionally strong transit user age group (15-24) is not anticipated to grow; with the remaining population growth occurring in adults aged 25-44. If ridership is to increase, transit will need to compete with the private automobile and improvements in all aspects of service (including frequency, customer information and bus stop amenities) will be required to attract new riders.

Serving a highly dispersed population

The considerable distances between the various communities within the Sunshine Coast make it challenging to create a successful and cost-efficient transit service to cover all electoral areas. Population density is concentrated primarily in Gibsons, Sechelt and Elphinstone with pockets of density in Roberts Creek and Halfmoon Bay. However, the low density development and dispersed nature of other communities will make it challenging to expand transit service into new areas whilst remaining efficient and cost effective, particularly as they will need to connect to these key hubs for amenities and the ferry service to Horseshoe Bay.

Connections to employment

Given the aging population, high reliance on non-employment income and shift from a resource based economy, a significant proportion of the working labour force travels out of the region by boat or plane for employment. This will drive a need for good transit service to the Langdale Ferry Terminal for travel on to Horseshoe Bay. The Pulp and Paper Mill is the largest employer in the Sunshine Coast but is based in Port Mellon, 17 km north of the nearest community core at Gibsons. This may drive the need for commuter transit service, the challenge being to provide this in a cost effective manner given the distance and rural nature of the connection.

[6] *SCORE: available at http://score.scrd.bc.ca/Tourism/revenue.htm*

Land Use

There is a mutually supportive relationship between transit and land use. Transit supportive land use is critical for the success and efficiency of the transit system. In turn, transit service, particularly rapid transit or other high quality, frequent transit service, can help to attract and support higher density, mixed-use development. Together, this transit oriented, compact development helps to create liveable, vibrant and sustainable communities that, by their design, allow people to drive less and walk, cycle and take transit more. Therefore, land use and transportation need to be planned and implemented in a coordinated way. Transit supportive land use typically includes the following features:

- **Mixed use development** – where a residential or office building will integrate active uses such as restaurants, community facilities or shops at ground floor level. This can help to support more efficient transit service by creating activity at different times of day. It can also lead to more balanced travel flows throughout the day by encouraging travel in both directions, with residents leaving in the morning for work and workers or shoppers arriving for employment or leisure. In addition, people who live or work in a mixed-use area are more likely to use transit since they don't need their cars to run errands during lunch or after work. These factors all support transit ridership.
- **Residential Density** – medium and higher density development is critical to supporting transit as a greater number of potential transit users can be located within walking distance of a transit stop or station. This increases the transit customer base and leads to increased ridership. For instance, a transit stop in an area with a density of 10 persons per hectare (large lot or low density single family development) would have 500 potential customers within a 400 m walking distance, while a transit stop in an area with a density of 100 persons per hectare (a mix of low and medium-rise apartments) would have 5,000 potential customers within walking distance.
- **Non-residential density** – similarly, employment and other non-residential destinations can be much more efficiently served by transit when they are concentrated.
- **Nodes and Corridors** – in order to support transit, it is not necessary to have uniformly high densities throughout the community or region; nodes and corridors of medium and higher density are very effective since they concentrate a large proportion of the population and the non-residential activities and amenities into areas that are within walking distance of transit.
- **Connectivity** – a well-connected network of streets and pathways is valuable to enable transit to be accessible and direct, which attracts riders as it reduces travel time and also increases the cost effectiveness and efficiency of service.
- **Walkability** – Transit users begin and end their trips as pedestrians, so pedestrian friendly community design will also make transit more attractive. This could include well designed sidewalks and pedestrian areas, with a mix of attractive materials, landscaping and lighting and human-scale development that ensures buildings are located close to the sidewalk rather than behind a sea of car parking.

Regional Sustainability and Transportation Plans

Regional policy plans related to sustainability, land use and transportation will outline the SCRD's and municipalities' intent to plan, design and approve transit oriented development and transit supportive land use and initiatives. They will also help to identify areas of future growth and development that will indicate where future transit service improvements will be required.

WE ENVISION ONE COAST: TOGETHER IN NATURE, CULTURE AND COMMUNITY, 2012

We Envision is the regional sustainability plan developed by the SCRD and provides a vision and specific actions to improve resident quality of life for a more sustainable future. Broad transportation goals include increasing active travel mode share to 10 per cent and reducing greenhouse gas emissions per vehicle km travelled by 50 per cent by 2020. Specific to transit, the document outlines a target for doubling transit ridership by 2020, which would result in approximately 950,000 annual rides. In order to achieve the targets, We Envision proposes a number of actions:

- Support expansion of transit services - increase frequency of service and size of service area
- Install shelters and lights at all transit stops in high-density areas and commercial centres
- Build Park & Rides in key locations, as identified in the Integrated Transportation Study
- Implement a community-based social marketing and branding program to increase transit ridership among youth and seniors.

> *"To improve transit services, more riders are needed along transit corridors or new arrangements supporting short routes and smaller transit vehicles. Land use that supports higher densities along these corridors and in strategic growth areas will allow transit providers to increase service frequency"* - We Envision

Specifically, We Envision recognizes the critical need for transit supportive land use and development, aiming to reduce transportation-related emissions by increasing development density, promoting innovative alternative transit strategies, integrating transit with active travel modes and increasing infrastructure in support of varied travel options.

SUNSHINE COAST INTEGRATED TRANSPORTATION STUDY, 2011

The *Integrated Transportation Study* emphasizes the need to establish alternatives to single occupant vehicle (SOV) trips, which currently comprise 89 per cent of trips on the Sunshine Coast. It is built around three guiding principles:

1. Address regional issues
2. Promote the need for short-term, implementable and cost effective recommendations
3. Recognize the current dual role of Highway 101 as both a regional through highway and a local community road

The study recognizes that the Sunshine Coast is experiencing rapid growth resulting in an increasing demand for transportation services and placing pressure on the natural environment. As most of the future growth will occur

in the District of Sechelt, Electoral Area A: Pender Harbour and the Town of Gibsons, this will generate substantial additional traffic pressure on Highway 101, linking these areas to the Langdale Ferry Terminal. Rural areas have dispersed lower densities, making it difficult for residents to access transit, or for transit service to become viable.

The study also recognized the reliance on private vehicles and ferries, which is typical of rural areas where residents in smaller development pockets must travel to larger development areas for basic necessities and amenities. For the Sunshine Coast this is further compounded by the fact that the main transportation corridor is stretched over very low density sections, with few pedestrian facilities along the highway which limits the opportunity for an effective transit system. With limited funding for transportation infrastructure and different priorities for each jurisdiction, this often results in a conflict of interests on transportation and transit issues. For instance, the study addressed the desire for a future bypass of Highway 101, which would facilitate regional travel but could disadvantage local businesses, economic activity and communities that are highway dependent.

Integrated Transportation Study: Key Transit Findings and Recommendations:

- Integrate regional land-use and transportation: examine opportunities to guide future development towards higher densities to support transit service provision
- Increase the frequency of service between Sechelt and Langdale to 30 minutes
- Provide more local community feeder services
- Integrate bus and ferry services and establish a consistent, real-time communication channel between BC Ferries and BC Transit to better communicate with customers
- Improve the bus shelter facilities in the region, possibly through the installation of solar lighting at shelters
- Identify other forms of revenue generation including advertising at shelters.
- Identify suitable Park & Ride locations
- Conduct a community Transit Needs Assessment Survey

The study explored the integration of ferry and transit service, particularly given regular ferry delays and the impact this has on transit schedules and reliability. It identified that currently 70 per cent of transit rides are internal trips within the region and 30 per cent are ferry related and the Route 1 (now Route 90 and Route 1) is strongly linked to the ferry schedule and therefore impacted by delays. In order to grow internal (local) ridership, it recommended that a reliable and more frequent service is required between Sechelt and Langdale. The option to "disconnect" the Route 1 service from the ferry schedule was not supported, in favour of a 30 minute minimum frequency from Sechelt to Langdale, which will enable the "disconnection" as a late ferry's passengers will then have a reasonable wait time for the next bus versus the current wait of up to 1-hour. A key element in the design of the routes serving the Langdale Ferry is to provide a fast service to other points along the Highway 101 corridor specifically for those passengers making longer trips.

COMMUNITY PLAN….IN PROGRESS, DUE 2015

The *Community Plan….in Progress* is a working document to address the priority issues that affect the economic well-being of women along the Sunshine Coast. Planning began in 2012 and identified a number of key issues related to transit, primarily that there is infrequent service and limited service in some areas, which contributes to isolation, especially in fall and winter. It is often hard to access bus stops and there is a need for better access for people with disabilities and for mothers with children.

Local Land Use and Community Plans

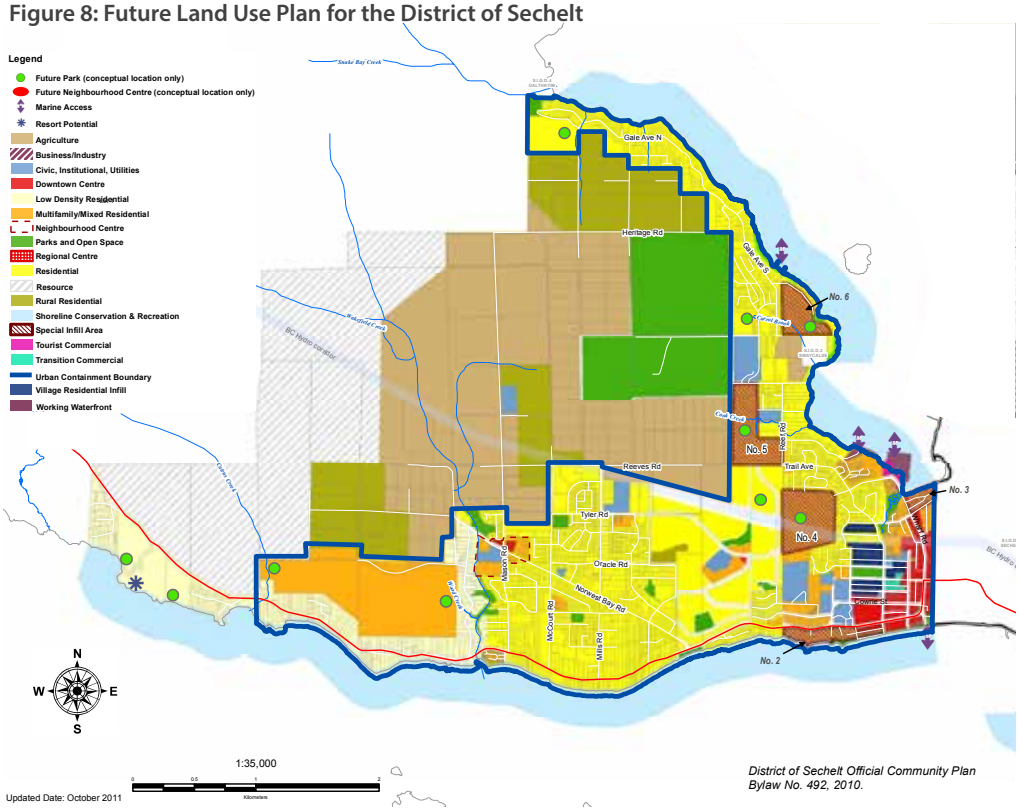
DISTRICT OF SECHELT, OFFICIAL COMMUNITY PLAN (OCP), 2010

The District of Sechelt's OCP describes the vision for the community as well as outlining the objectives and policies related to land use; the environment; economic development; transportation and community services. It was informed by the Sechelt Transportation Master Plan (2009), which identified issues and policies to guide transportation investment.

The OCP supports a reduction in the dependency on vehicles, with more walking, cycling and transit use. Through its implementation, the District of Sechelt will facilitate a full range of safe and accessible transportation modes that are cost effective and efficient and that link neighborhoods with more sidewalks, bicycle routes and transit. However, it recognizes that in rural and lower density areas transit is infrequent and will require increased density before becoming viable for a new route.

The plan identifies an Urban Containment Boundary (UCB), which is intended to define the limits of urbanization and the areas where full municipal services will be extended over time. Future land use for the district shows higher density and residential development concentrated in the downtown core, West Sechelt and on lands west of Sechelt Inlet along Gale Avenue North (Figure 8), with a regional centre at Field Road in Davis Bay and with some pockets of low density development in Davis Bay, Sandy Hook and Tuwanek. Policies are provided to support the development of new multi-family uses and seniors housing near transit.

Figure 8: Future Land Use Plan for the District of Sechelt



District of Sechelt Official Community Plan Bylaw No. 492, 2010.

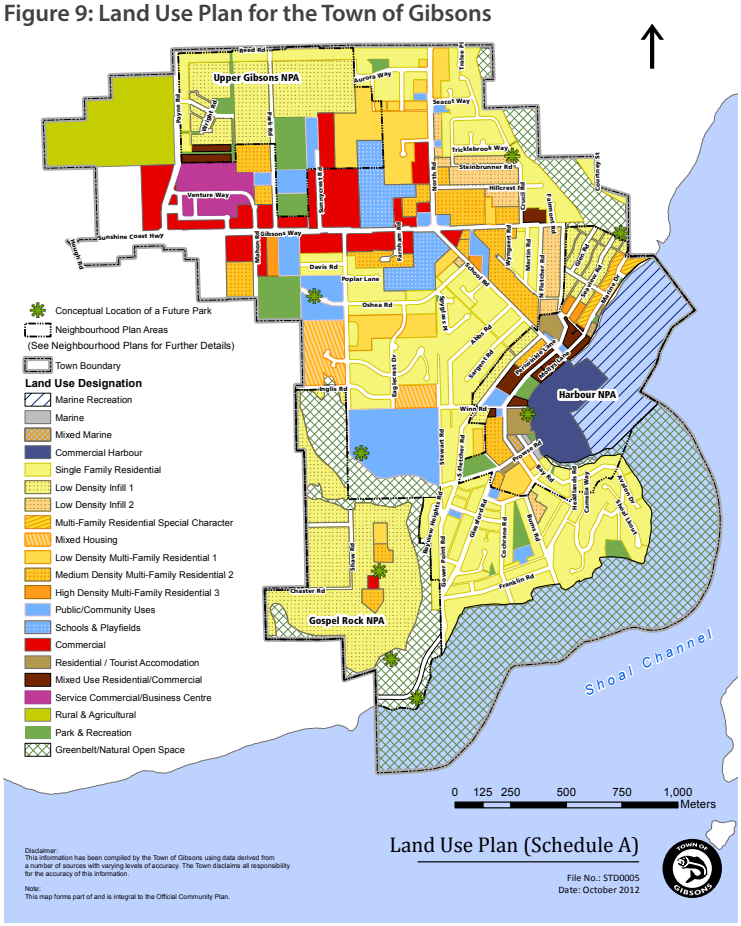
GIBSONS SMART PLAN, OFFICIAL COMMUNITY PLAN (OCP), 2013

The Town of Gibsons OCP includes goals to:

- Emphasize multi-modal transportation (implemented through land use and revised road standards)
- Support developments that reduce dependence on automobile travel
- Work toward a complete community with local employment and housing opportunities
- Encourage shuttle bus service
- Create future development nodes adjacent to transit corridors

A main component of the plan is to increase local employment and business opportunities and provide for higher density housing and pedestrian oriented commercial areas. Strategies are proposed to decrease the community's dependency on the private automobile by improving public transit, creating comprehensive bike routes, improving passenger ferry services and Park & Ride facilities.

Figure 9: Land Use Plan for the Town of Gibsons



Future land use for Gibsons shows commercial and higher density residential development located in the key node in Upper Gibsons and along the Gibsons Way corridor complemented by medium density multi-family and mixed housing. In addition, the commercial harbor is located at Gibsons Landing with mixed-use residential and commercial development.

The OCP indicates two Neighbourhood Plan Areas, where more detailed design concepts will be provided for Upper Gibsons and Gospel Rock. The design concept for Gospel Rock has been completed and presents a focus on cluster development with protection of the local environmentally sensitive areas. These areas restrict the ability to connect roadways and therefore limit the through flow of transit. However, proposed trails will assist in walkability and encourage transit use, whilst minimizing environmental degradation.

The plan encourages a tram or shuttle bus as an appropriate transit service to connect Upper Gibsons and the Lower Gibsons waterfront. The Town of Gibsons introduced a trial shuttle in summer 2013, independent of BC Transit service. This offered service every half hour from lower to upper Gibsons and key community destinations on Fridays, Saturdays and Sundays. The trial service generated approximately 2.8 rides per trip over the three month trial period, which was anticipated to grow with greater communication. Overall, the plan presents detailed policy and land use that is greatly supportive of transit service.

GIBSONS AGE FRIENDLY COMMUNITY ACTION PLAN, 2012

The *Gibsons Age Friendly Community Action* Plan seeks to accommodate the aging population in the areas of housing, transportation, outdoor spaces and buildings, civic participation and employment, respect and social inclusion, communication and information, social participation and community support, and health services. Transit is identified as an important topic and a number of specific issues are identified:

- Transit is tailored to ferry schedules and there is limited service within communities to allow residents to access employment, recreation, and services such as the library, Health Clinic, Recreation Centre, Coastal Health and the SCRD offices
- Transit is limited in the evenings, and many have a desire for a community shuttle
- Transit is unable to accommodate helpers or care givers on handyDART system;
- Bus stops have limited passenger amenities such as lighting, benches, safe access
- Many bus stops have unsafe/poor pedestrian crossings making them difficult to access and there is often no safe access to cross Highway 101

This indicates areas of focus for the Transit Future Plan. However, it also identifies a need to better communicate some of the existing BC Transit services as there is existing evening service at approximately hourly frequency within Gibsons until 12:00 a.m. In addition, either an *Attendant* (a person who must assist a registered handyDART client to make a trip) may ride the handyDART free of charge or a *Companion* can accompany the handyDART client and pay a custom transit fare if there is space available.

UNINCORPORATED COMMUNITIES

Table 2 identifies the relevant transit and land use policies from the OCPs prepared by the SCRD for the unincorporated communities in the region.

Table 2: Summary of Electoral Area Official Community Plans

Document	Summary of Key Directions related to Transit
Egmont / Pender Harbour, OCP, 2009	• Encourage the development of a local transit system to serve the neighbourhoods within the Plan Area
Halfmoon Bay, OCP Rural by Nature, 2013	• Future transportation decisions will be based around all travel modes – vehicles, transit, cycling, and walking • Encourage road layouts and pedestrian links which facilitate a multi-modal transportation system primarily serving the community south of Hwy 101 where settlement is focused • Road layouts and pedestrian links will facilitate access to the major road network and public transit • Consider options for a community bus as part of the Sunshine Coast Transit System to provide more convenient and frequent transit services • Developments will be encouraged in locations that can be serviced by public transit
Elphinstone OCP, 2007	• Encourage subdivision road layouts and trail linkages that reduce vehicle travel and provide access to transit • Dedicate and construct roads and trails to facilitate access to transit routes within 400 meters of as many residential lots as possible
Hillside/Port Mellon OCP, 2006	• Encourage the provision of transit service to the regional employment opportunities to be developed in the Plan Area
Roberts Creek OCP, 2012	• Encourage various modes of transportation - including cycling, walking and public transit - to reduce fossil fuel dependency and enhance movement within and between communities • Provide for public transit and encourage road layouts and pedestrian links that facilitate transit use • Alterations to the road network should take into account the potential for public transit or improvements to existing transit • Potential subdividers and developers should be required to plan rural road layouts and pedestrian links that facilitate access to public transit services • Park & Ride facilities should be encouraged • Work with the community, developers, the Province and BC Transit to expand transit that includes greater frequency, specialized services such as handyDART, increased bike storage at bus stops, bus shelters, expansion of service to properties north of the Highway and smaller community buses
Twin Creeks OCP, 2005	• Continue to request the Ministry of Transportation make upgrades to the Port Mellon Highway a priority
West Howe Sound OCP, 2011	• Encourage subdivisions that include road layouts and trail linkages that can reduce the need for private automobile transportation and facilitate access to public transit • Encourage neighborhood bus service throughout the OCP area • The Regional District should consider options for a community neighborhoods bus as part of the Sunshine Coast Transit System that can provide more convenient transit service throughout the OCP area

Transportation

A safe, accessible and efficient transportation system is critical to the health and vitality of a community. People need the ability to move around the region to access employment and services, whether by walking, cycling, driving, taking transit, or using mobility aids. Furthermore, the economy depends on the efficient movement of goods to, from, and within the region.

Ferry and air travel are the only readily available travel options to access the Sunshine Coast, whereas roads, public transit, walking and cycling facilities are available within the region and the Gambier-Keats ferry connects the region to the two main islands. The interconnectivity between the external travel options and the local options strongly influences resident travel behavior and is one of the defining features of the Sunshine Coast. Transit service should be fully integrated with other modes of transit supportive travel such as walking and cycling, in order to maximize ridership and efficiently move people within the region.

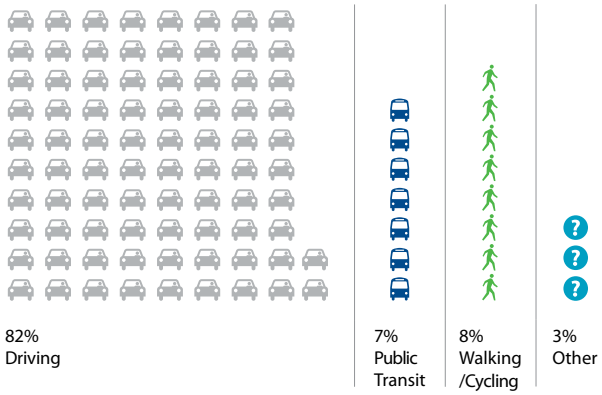
Travel Mode Share

Travel Mode Share for the Sunshine coast is heavily dependent on vehicle use as seen in Figure 10.

However, since 2006, the number of commuter trips taken by driving has decreased by 3 per cent. There has been a mode shift in this time, with commuter trips taken by walking and cycling increasing from 7 to 9 per cent and by public transit from 6 to 7 per cent.

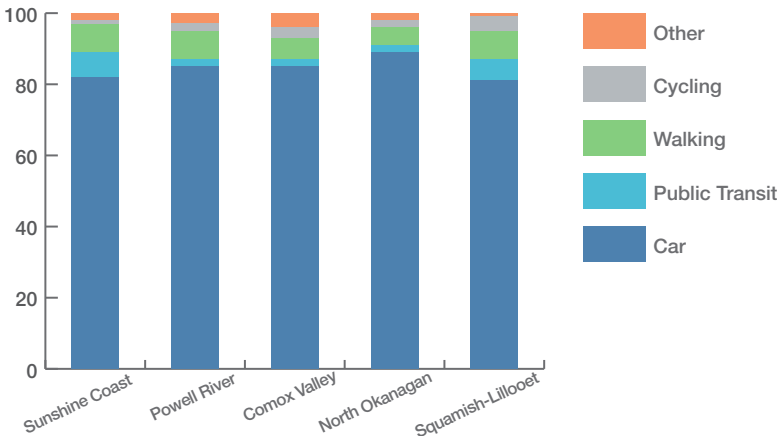
This mode share to employment is similar to other comparable B.C. regional communities as shown in Figure 11. However, in comparison to Powell River, Comox Valley, North Okanagan, and Squamish-Lillooet, the Sunshine Coast has higher transit use. This shows a positive trend in ridership, competitive with peer communities in B.C. When considering all trips made, not just those taken to employment, approximately 2 per cent of all trips are taken by transit on the Sunshine Coast.

Figure 10: Sunshine Coast Travel to Employment Mode Share



Source: Statistics Canada – 2011 Census

Figure 11: Mode Share for Sunshine Coast and Peer Districts



Movement

ORIGINS

Travel originates at an individual's home or at access points within the region (i.e. ferries, airports). The main resident population on the Sunshine Coast is concentrated in Sechelt (32.5 per cent) and Gibsons (15.5 per cent), followed by Electoral Area E: Elphinstone (12.2 per cent) and Electoral Area D: Roberts Creek (11.3 per cent). Access by ferry is accommodated at the Langdale Ferry Terminal approximately 5.2km east of Gibsons and the Earls Cove Ferry Terminal in the northwest portion of Electoral Area A. The Sunshine Coast can also be accessed by air through the Sechelt-Gibsons BC Aerodrome Facility Airport and float plane marinas in Sechelt and Madeira Park.

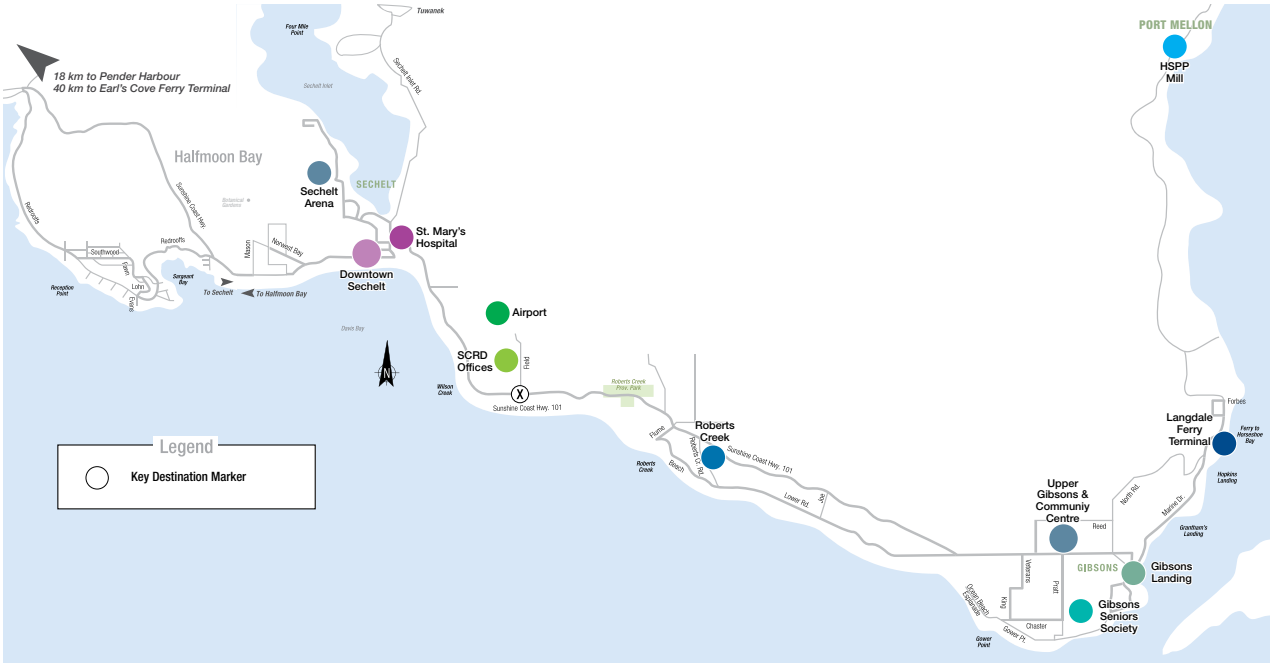
DESTINATIONS

Travel destinations are the locations of employment, shopping, services, or recreation that residents access most commonly. The majority of employment and shopping/services are concentrated in Sechelt and Gibsons. An estimated 20 per cent of regional employment is tied to resources, suggesting that a large segment of the population relies on private vehicles for work and/or commute to rural areas not currently served by transit. The most common regional destinations are outlined in Figure 12 and include:

- **Downtown Sechelt** – the focal point of the community, providing shopping, restaurants, cultural, education, government and recreational destinations
- **St Mary's Hospital** – a 38-bed facility located in Sechelt that also serves the other communities of the Sunshine Coast
- **Sechelt Arena** – located in Sechelt, northwest of downtown, the arena offers a variety of fitness, social, and arts programs including a full NHL sized ice-rink
- **Wilson Creek** – a small hub on Highway 101 and Field Road with a number of commercial units, the SCRD Administration Office and the Sunshine Coast Airport
- **Roberts Creek Centre** – a small collection of stores and services that represents the hub of the Roberts Creek Community
- **Upper Gibsons** – centered on Gibsons Way, is the major commercial centre serving both the Gibsons community and surrounding area with medical facilities, community and recreation facilities
- **Gibsons Landing** – a waterfront marina with cafes, shops, library and government facilities that surround wharf activities. This area is dependent on tourism, which peaks in summer months
- **Langdale Ferry Terminal** – located approximately 5km northeast of Gibsons this is the primary transportation route in and out of the Sunshine Coast, with at least eight daily sailings to/from West Vancouver and approximately 1.27 million passengers annually
- **Earls Cove Ferry Terminal** – located on Jervis Inlet, provides BC Ferry service to Saltery Bay, which allow passengers access to Powell River and beyond, serving considerably less passengers annually than the Langdale-Horseshoe Bay ferry (0.17 million passengers annually)

- **Howe Sound Pulp + Paper Mill** – located approximately 10 km north of Gibsons in Port Mellon and is the largest employer on the Sunshine Coast, with approximately 500 employees

Figure 12: Map of Key Destinations in the Sunshine Coast



Road Network

Communities on the Sunshine Coast are generally dispersed over a distance of 80km along the coastline and connected by Highway 101, which travels from the Langdale Ferry Terminal, west through the Town of Gibsons and the District of Sechelt, passing Halfmoon Bay and Pender Harbour to Earls Cove. Driving time between Earls Cove and the Langdale Ferry Terminal is approximately 1 hour and 12 minutes. Howe Sound Pulp and Paper mill is located approximately 12 km north of Langdale in Port Mellon. While Highway 101 passes through the Town of Gibsons, a partial bypass diverts a significant amount of ferry traffic away from the tourist waterfront areas before linking to Highway 101 again.

Highway 101 meets the needs of two different types of users. For the region, it serves as the ferry-to-ferry corridor (for those by-passing neighbourhoods to access other communities) and meets commuter needs; locally, it provides access to residential properties, shopping, recreation and other amenities. Highway 101 is the only road classified as a highway and is under Ministry of Transportation and Infrastructure (MoTI) jurisdiction. The internal road network in unincorporated, Electoral Areas is under MoTI jurisdiction and roads within Gibsons and Sechelt are under the jurisdiction of the local municipality who plan, design, and maintain these routes. The organization with roadway jurisdiction is generally responsible for providing bus stop infrastructure within the road right-of-way.

Vehicle traffic on Highway 101 occurs in "pulses", based on ferry arrivals at the Langdale Ferry Terminal. Volumes increase by up to 200 per cent for

approximately 15 minutes after a ferry has arrived or is departing from Langdale Ferry Terminal. The "pulse" causes moderate traffic delays on Highway 101 until vehicles disperse throughout the road network as they move west. Traffic issues are exacerbated by a high frequency of driveway access on Highway 101. A similar situation occurs at Earls Cove, however these ferries carry much fewer vehicles, and since there are no major population hubs close to Earls Cove, the impact of these ferry arrivals and departures is much less evident as traffic dissipates and spreads out over the distance travelled to the District of Sechelt.

Given the location of residential development along Highway 101, transit stops are located at regular intervals, often in rural, unlit areas. This presents transit passengers with the need to wait at unlit stops in the evenings and cross the highway at locations without pedestrian crossings or street lights where safety may be a concern. A ferry-to-ferry bypass is in consideration for all or part of the route in the long term. However, several issues have been identified that question both the benefit and viability of a by-pass including the potential impact on the local economy, avoiding residential and agricultural properties, topography constraints, crown land, property acquisition and funding sources. In addition the bypass could be seen as a catalyst for additional vehicle traffic which is inconsistent with the We Envision plan that seeks to reduce auto dependency. As such, the Transit Future Plan focuses on the existing road network, with flexibility for change in the future should a by-pass be implemented.

Ferry Service

The BC Ferries service is a defining element of regional travel as they are responsible for the majority of trips in and out of the Sunshine Coast. The service is essential to many residents and non-residents for personal travel, work, and access to health specialists who are located in the lower mainland. The Sunshine Coast is served by three ferry routes that provide access to West Vancouver, Powell River, and Keats and Gambier Islands.

FERRY SCHEDULES

- **Langdale – Horseshoe Bay** is a BC Ferries service operating from the Langdale Ferry Terminal, approximately 5 km east of Gibsons, with service to Horseshoe Bay in West Vancouver. Daily vehicle and passenger service for the 40 minute crossing is offered at regular frequencies with capacity for approximately 360 vehicles. There are currently between 8 and 11 sailings per day, operating between 6:20 a.m. and 10:45 p.m. depending on the time of year and day of week. Changes in ferry schedules are significant in terms of trip times and occur as often as five times each year (i.e. summer, winter, spring, fall and holidays), making it difficult to create a consistent transit schedule that facilitates passenger transfer onto connecting ferries. Therefore, the transit schedule has to change regularly to align with ferry schedules. Generally, ferry frequency is highest during summer months due to the influx of tourists.
- **Gambier Island – Keats Island** is a passenger-only service that operates between the Langdale Ferry Terminal and Keats and Gambier Islands. The service is scheduled to align with the Langdale-Horseshoe Bay ferry schedule in order to accommodate travel onwards to West Vancouver. Between ferry sailings, only some trips to Gambier and Keats Island connect to the transit service. There are, on average, 11 to 13 trips daily from 7:10 a.m. to 6:40 p.m. Total sailing time between all islands is 40 minutes.
- **Earls Cove – Saltery Bay** is a BC Ferries service offered in the northwest part of the region, in Electoral Area A. The vehicle and passenger service connects the Sunshine Coast with Powell River and surrounding areas. There are currently 8 sailings per day with service between 6:30 a.m. and 11:25 p.m. depending on the time of year. There are regular schedule changes throughout the year, however, within a season, the daily schedule is constant. The sailing time is 60 minutes.

For travel between the Sunshine Coast and West Vancouver, the cost of a passenger fare and two transit fares is approximately one-third the cost of driving (adult passenger fare is $14.55 and the vehicle fare is $49.05). As such, transit presents a much more affordable option to connect between the Sunshine Coast and the Lower Mainland. However the cost of only $2.25 per day to park at the Langdale Ferry Terminal makes it more difficult for transit to be competitive with the automobile. Passenger and vehicles fares are approximately 2 per cent less on the Earls Cove – Saltery Bay route.

FERRY RIDERSHIP

The most frequently used ferry route is from Horseshoe Bay to Langdale. There are, on average, 1.25 million passengers per year with an average of 175 vehicles per trip, 410 passengers per trip and 85 foot passengers per trip (from 2012/13 data outlined in Table 3). This presents a significant market for transit users. Transit service at Horseshoe Bay is provided by TransLink and operated by West Vancouver Transit with frequent service between Horseshoe Bay and downtown Vancouver on Route 250 (20-30 minute frequency) and an express Route 257. This ensures a continuation of transit services between the Sunshine Coast and onwards to Vancouver.

In comparison, the Earls Cove to Saltery Bay ferry service has significantly less passengers (only 13 per cent of the Horseshoe Bay-Langdale service) with an average of 0.16 million passengers per year and an average of 30 vehicles and 56 total passengers per trip. There is no existing transit service to Earls Cove and an infrequent transit connection, on-demand, from Saltery Bay onwards to Powell River.

The Gambier-Keats-Langdale ferry has on average 47,000 foot passengers per year with an average of 12 passengers per trip. As there is no vehicle service on this ferry and it shares the same terminal as the Horseshoe Bay-Langdale ferry, these passengers represent a key addition to the potential transit market. Public transit is not available on Gambier and Keats Islands.

Table 3: Summary of Ferry Ridership

	Total Trips per Year	Total Vehicles	Average Vehicles per Trip	Total Foot Passengers	Average Foot Passengers/Trip	Total Passengers	Average Total Passengers per Trip
Horseshoe Bay to Langdale	3,059	536,203	175	261,112	85	1,252,951	410
Earls Cove to Saltery Bay	2,871	84,598	30			161,839	56
Gambier-Keats-Langdale	4,117			46,964	11.5	46,964	11.5

DELAYS

The Sunshine Coast transit service is scheduled to facilitate transfers to and from the Langdale-Horseshoe Bay ferry. Generally, buses on the Route 1 or Route 90 arrive 20 minutes in advance of scheduled sailings and depart 15 minutes after scheduled ferry arrivals to give passengers ample transfer time. Ferry delays have a significant impact on the effectiveness and reliability of this transit route. In Fiscal 2012, approximately 12 per cent of ferry trips were delayed more than ten minutes. The 40 minute travel time between Horseshoe Bay and Langdale does not vary through the year. Delays are most frequent in summer months when ferry ridership is highest. Although BC Ferries provides extra dwell time at the terminals to account for higher seasonal demand, the ability to maintain reliable service suffers during those periods.

Sunshine Coast transit vehicles can delay their departure by up to ten minutes on the Route 1 – Local service to accommodate passengers on delayed ferries. This is done on the Route 1 – Local by serving Langdale Heights and then returning to the Langdale Ferry Terminal whilst waiting for the delayed ferry. The Route 90 – Express has to wait at the terminal for late ferries. There is a limited ability for the transit service to delay longer than approximately 10 minutes given the impact on passengers waiting for the bus along the route. Currently between 20 to 30 per cent of transit trips on the Sunshine Coast are ferry related, which means delaying transit service to accommodate ferry delays can create subsequent impacts for the remaining 70 – 80 per cent of passengers. Passengers that miss their transit connection at Langdale Ferry terminal due to ferry delays will typically need to wait up to an hour before the next bus arrives.

BC Ferries is in the process of developing the Langdale Ferry Terminal Master Plan. This 20-year long range plan will ensure better asset management; enable projects to be implemented in a cost effective, organized and efficient way; assist in coordinated and predictable capital planning; ensure affordability and incorporate improvement plans into Official Community Plans. There are several actions identified within the plan that will improve the integration with transit service. These relate to transit stop locations and bays, traffic flow, customer facilities and, primarily, an overhead walkway that will allow simultaneous pedestrian and vehicle unloading. Currently, pedestrians enter and exit the ferry from the vehicle ramp, which, alongside an increase in the number of foot passengers in summer months, can result in ferry delays. It is hoped that the implementation of terminal upgrades and infrastructure identified in the Master Plan will help to improve the ferry schedule reliability and thereby assist in improving the reliability of transit service in the future.

Coach Service

The Malaspina Express Bus operates between Powell River and the Vancouver International Airport (YVR) via the Langdale – Horseshoe Bay Ferry, with stops at the Kleindale Petro-Canada, Sechelt Depot and Gibsons Recreation Centre. Service is offered on a fixed schedule year-round, with one round-trip offered each day. A round-trip fare between Powell River and YVR is $79, and between Earls Cove and the Langdale Ferry Terminal is $35.

Walking & Cycling

The Sunshine Coast has approximately 100 km of trails, including 18 km of sidewalks, approximately 3 km of separated paved bicycle/walking paths and 35 beach access trails. The Trail Network Plan was established in 2007 and outlines the neighborhood connector trails, multi-use pathways and paved bicycle paths on or beside roadways required to increase mobility on the coast. The safety of on-road bike paths and walkways has been raised as a concern by the public and finding solutions is difficult in many locations since there is no road right of way for separated paths. Integration of transit with walking and cycling, including supportive infrastructure such as bike lockers and bus bike racks, will facilitate movement in the region and an increase in transit ridership.

Air Travel

Passenger air travel is accommodated at Sechelt-Gibsons Airport, located in Wilson Creek. Commercial operators include Airspan Helicopters, Fly! Air Taxi/ Training/Tours and Blackcomb Helicopters. The airport is looking to expand for commercial operations with plans to create an airpark and industrial park. The timeline for expansion will be dependent upon funding. In addition, Tofino Air and Harbour Air provide float plane service from Porpoise Bay in Sechelt, going to Nanaimo Harbour, YVR Terminal and Vancouver Harbour. Kenmore Air provides float plane service to the coast from Kenmore Lake Washington or Seattle-Tacoma International Airport. Charter and private air travel is another means of accessing the Sunshine Coast. Significantly less passengers arrive on the Sunshine Coast via air rather than via ferry with approximately 50 passengers (Fly!) to 560 passengers (Tofino Air) per month. This results in a smaller potential transit market.

Ride Share & Car Pooling

The Jack Bell Ride-Share program (https://online.ride-share.com/en/my) is a ride matching service operating throughout B.C. There is currently one service operating on the Sunshine Coast between Roberts Creek and Downtown Vancouver with a single bus accommodating seven passengers. A previous route operating between the Town of Gibsons and North Vancouver was discontinued due to low interest and ridership. The Coast Rider (http://coastride.net/index.html) is an online ride matching service offered in the District of Sechelt. For safety and security those who want rides and those drivers who may provide rides are registered with their community association. Drivers show a visor card with their photo and pick up riders at designated "Cospots" in Sechelt Village, East Porpoise Bay and Sandy Hook.

Land Use & Transportation Challenges

Strengthening the link between land use and transportation planning

Continuing to solidify the link between transportation and land use planning will be essential to ensure development is transit-oriented and aligns with the vision and direction outlined in We Envision, the Integrated Transportation Study and Official Community Plans.

Servicing areas of low population density

Providing transit to rural areas with lower density can be difficult without decreasing the efficiency and cost effectiveness of the entire transit system. If land use and neighbourhood design do not generate adequate demand, transit may not be viable in some locations.

Linear nature of regional development

The considerable distances between the various communities in the Sunshine Coast and the dual nature of Highway 101 (serving both local and commuter purposes) make it challenging to create a successful and cost-efficient transit service in the region. The linear nature of development in the lower coast, particularly in Roberts Creek, will make the design of community transit feeder service more difficult.

Aligning local priorities in a regional system

The transit service is most effective and efficient if designed as a regional system that crosses each municipality and electoral area. The success of the system will be dependent upon a collaborative approach to service design, and will be challenged if local priorities do not align with the regional vision.

Coordination of ferry and transit schedules

Transit service is coordinated with ferry service, which provides a significant boost to transit ridership. However, annual ferry schedule changes and regular delays impact the reliability of transit service. Accommodating these delays in a cost-effective manner will be challenging.

Transit Today

Existing transit system performance and the degree to which it meets or does not meet the needs of the region must be understood in order to develop the future network. This section examines the existing conventional and custom (handyDART) transit services, outlining challenges and opportunities to support the development of an efficient and effective future system.

Conventional Transit System

History

The Sunshine Coast's conventional transit system began in 1989. The system has expanded significantly over the past 20 years from 4,500 to 19,432 annual service hours and from one route and 9 trips on weekdays to 4 routes and 62 trips per weekday with service every day of the year (Table 4). Service levels have more than quadrupled in this time, resulting in over half a million rides per year.

Table 4: Summary of Conventional Transit System History

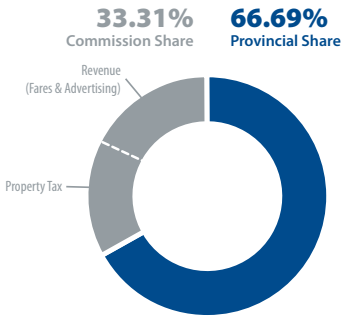
Year	Service
1992	• 1 route, 9 trips per weekday between Sechelt, Gibsons and Langdale Ferry Terminal, including Roberts Creek, Elphinstone, Gower Point Rd. & Lower Gibsons. Limited service to Halfmoon Bay • Operates 5:00 a.m. to 7:00 p.m., no Sunday/Holiday service • One-way fare is $1.00 to $1.25 based on fare boundaries
1995	• System is simplified by showing it as 4 routes • 28 trips per weekday. Service Sundays & Holidays. Route 1 hours extended to 11:00 p.m. • Fares increase; up to $1.75 for some routes
2000	• Service increases to 35 trips per weekday • Fare boundary zones were removed, standard $1.50 fare
2005	• Service increased to 56 trips per weekday, extended hours to midnight • West Sechelt Route is added and Bonniebrook/Gower Point route is removed • One-way fare increases to $2.00
2010	• Service increased to 60 trips per weekday, extended hours to midnight • One-way fare increases to $2.25

Service Description

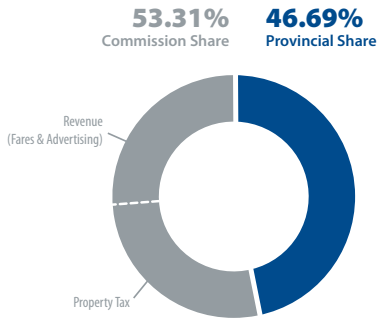
The existing transit system has relatively high levels of service and covers the key destination points and main residential developments on the Sunshine Coast (see Figure 13). Bus routes on the western service areas are largely structured in a radial system designed to have bus routes meet at a central location in downtown Sechelt, with some timed transfers between routes to facilitate convenient transfers onwards to Gibsons and Langdale Ferry Terminal. The western services are generally operated using a single small bus so that connections with the large buses operating between Langdale and Sechelt can be a challenge. Bus routes on the eastern section of the coast are linear in nature due to the spread of development and road network.

Funding for the transit system is cost shared between the SCRD and BC Transit. Decisions on fares, routes and service levels are made by the SCRD based on information and planning provided by BC Transit. Transit service is operated by the SCRD. The Sunshine Coast conventional transit system consists of five routes, as shown in Figure 13:

- **Route 90: Langdale Ferry/Sechelt Express** provides service between Sechelt and Langdale Ferry Terminal along Highway 101. From Gibsons to Langdale Ferry Terminal service is provided via Gibsons Way and Marine Drive with two trips per day routing via North Road. Travel time on this route is between 36 and 41 minutes one-way.
- **Route 1: Langdale Ferry/Sechelt Local** provides service between Sechelt and Langdale Ferry Terminal on local roads; travelling through Roberts Creek on Lower Road; Elphinstone via King Road, Chaster Road and Pratt Road; Lower Gibsons loop and serving Langdale Heights following Langdale Ferry Terminal. Travel time on this route is between 52 and 61 minutes one way.
- **Route 2: West Sechelt** begins at Trail Bay Mall in Sechelt and routes west along Highway 101, continuing on Norwest Bay Road, south on Mason Road, and then east on Highway 101 returning to downtown Sechelt. This route takes 14 minutes for a return trip. There are some trips in the morning that begin service on Mason Road and in the evening that end service on Mason Road as they travel to or from the maintenance facility.
- **Route 3: Sechelt Arena** begins at Trail Bay Mall in Sechelt and runs north on Trail Avenue towards Sechelt Arena, then continues on Gale Avenue North ending at Highmoor Road to return via Gale Avenue North, Marine Way, Anchor Road and Wharf Avenue to downtown Sechelt. This route takes 23 minutes per return trip.
- **Route 4: Halfmoon Bay** begins at Trail Bay Mall in Sechelt and routes West on Highway 101, turning on Redrooffs Road to serve the main Halfmoon Bay community via Evans Road, Lohn Road, Fawn Road, and Southwood Road, continuing on Redroofs Road and returning to downtown Sechelt via Highway 101. The route takes 41 minutes per return trip. Additional service is provided to Secret Cove in the summer. Some trips have been routed via Norwest Bay Road and Mason Road in order to provide service to those areas of West Sechelt at key times of the day.



Custom Transit (handyDART)

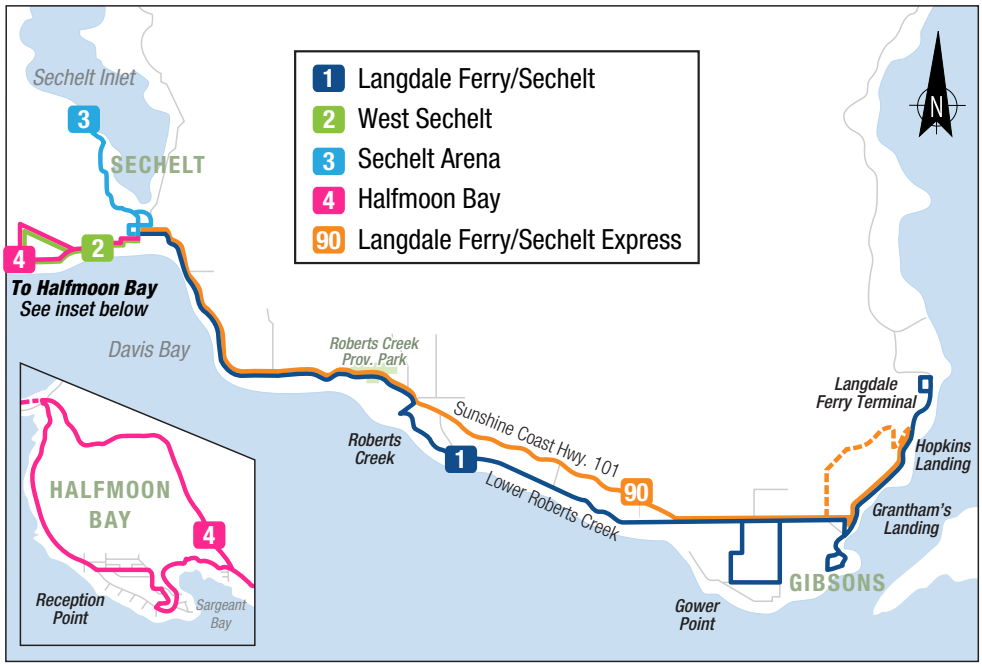


Conventional Transit

Pender Harbour Trial Service

The existing transit service does not extend beyond Halfmoon Bay and Secret Cove and therefore does not serve Electoral Area A. However, transit service was trialed by the SCRD from September 2010 to August 2011 between Pender Harbor and Sechelt, with stops at John Henry's, the Petro-Canada station, Pender Harbor Community Hall, Earl's Cove Ferry Terminal, and the Egmont Heritage Centre. The service was discontinued because of low ridership generating an average of 8 rides per day, which equates to approximately 1 ride per hour. Community feedback indicated the service may have been more successful as a local, paratransit style service focusing on Madeira Park and Garden Bay, enabling door-to-door service for those with limited mobility and then providing limited connections to Sechelt.

Figure 13: Existing Sunshine Coast Conventional Transit Routes, 2013



Prior to October 2013, the Route 1 and Route 90 were combined and known as the Route 1 but with two main different route variations; the express which ran via Highway 101 and is now Route 90 and the local which routed via Lower Road in Roberts Creek, Elphinstone and lower Gibsons loop, which is now the Route 1. As such, prior to October 2013, both the express route and local route were shown in the Riders Guide in the same colour and included in the same schedule table with a variety of trip notes to identify which trips routed via the highway and which trips routed via the local roads. This was often confusing for riders, particularly those who were visiting the Sunshine Coast and were less familiar with the transit system. Feedback from the public engagement events identified this issue and need for clarity in the Riders Guide.

EXISTING SERVICE FREQUENCIES AND HOURS OF SERVICE

Given the integration of ferry and transit service, the transit schedule changes approximately four times each year to align with ferry schedule changes (the May and September schedules are generally the same). Two of these changes are full Riders Guides featuring route maps and detailed schedules with information on pass programs, accessibility, fares and transit tips. In addition, there are two Rider's Bulletins for short periods of seasonal change, which feature just schedules and fare information with a link to the website and phone line:

- October to May: Full Riders Guide
- May to June: Rider's Bulletin
- June to September: Full Riders Guide
- September to October: Rider's Bulletin

The average hours of service for the conventional system, as taken between October and May, are show in Table 5. Route 1 is the most frequent with 65 trips on weekdays, in comparison to Route 4 which has the least number of trips (42) on weekdays. Service is less frequent on weekends and holidays.

Table 5: Summary of Hours of Service (October 2013)

Route		Monday – Thursday		Friday		Saturday		Sunday & Holidays	
		Total Trips	Start/End	Trips	Start/End	Total Trips	Start/End	Trips	Start/End
90: Langdale Ferry/ Sechelt Express	EB*	12	5:25am/ 11:22pm	12	5:25am/ 11:22pm	9	8:40am/ 11:25pm	9	8:40am/ 11:25pm
	WB*	13	5:58am/ 10:49pm	13	5:58am/ 10:49pm	8	9:30am/ 10:46pm	8	9:30am/ 10:46pm
1: Langdale Ferry / Sechelt Local	EB*	13	5:05am/ 10:07pm	13	5:05am/ 10:07pm	7	7:10am/ 10:03pm	7	7:10am/ 10:03pm
	WB*	12	6:02am/ 12:20am	12	6:02am/ 12:20am	8	8:09am/ 12:21am	8	8:09am/ 12:21am
2 – West Sechelt		19	4:58am/ 12:27am	18	4:58am/ 12:27am	11	7:03am/ 12:28am	10	7:03am/ 12:28am
3 – Sechelt Arena		9	7:09am/ 6:43pm	10	7:09am/ 9:08pm	10	9:00am/ 8:28pm	7	9:00am/ 4:48pm
4 – Halfmoon Bay		8	6:30am/ 7:52pm	10	6:30am/ 11:12pm	8	9:25am/ 11:12pm	4	9:25am/ 4:04pm

** EB = East Bound WB = West Bound*

System Performance

Between 2012/13 the Sunshine Coasts conventional transit system accumulated 500,305 annual passenger trips, an increase of 16 per cent over the past seven years (Figure 14). Ridership for the Sunshine Coast peaked in 2011/12 with a total of 510,412 rides per year.

Data was collected in 2012 and 2013 on ridership by route, prior to the Route 1 being split into the Route 1 and Route 90. At this time, nearly 80 per cent of ridership was on Route 1 between Sechelt and Langdale, with approximately 28 rides per hour (Figure 15 and Table 6).

Figure 14: Sunshine Coast Historic Transit Ridership

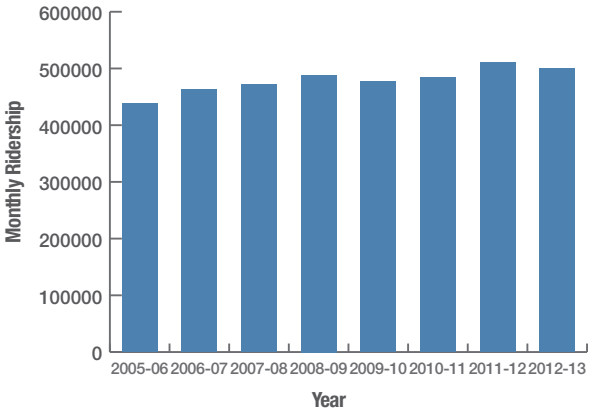
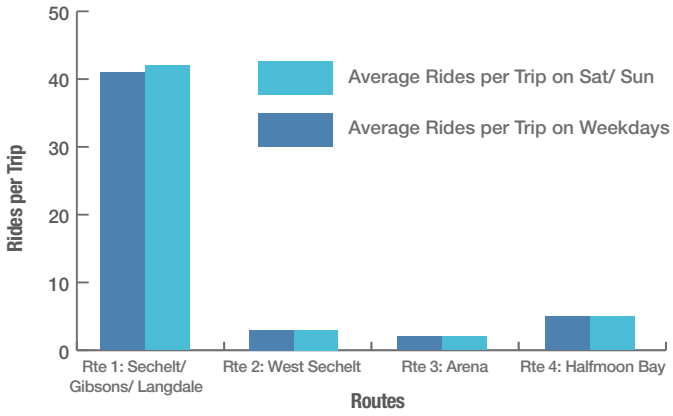


Figure 15: Average Rides per Trip for Transit Routes



This high ridership is likely due to the location of key destination points and most densely populated communities on this route, including the commercial, health and recreation amenities and population based in Sechelt and Gibsons, the Langdale Ferry Terminal and the densely populated areas located in Davis Bay, Elphinstone and Roberts Creek. The population located within 400 m of Route 1 (the generally accepted walking distance to transit) is 13,000; more than triple the next highest population of 4,420 within 400 m of Route 4. Routes 2, 3 and 4 have lower ridership. This is potentially due to the lower number of population served, the lower population density and less frequency service.

Table 6: Conventional Transit Ridership

Route	Ridership %	Population within 400m	Rides per Revenue Hour*	Route Distance (km)	Return Trip Time (min)
1: Langdale Ferry / Gibsons-Sechelt	78%	13,000	28	70	104
2: West Sechelt	6%	2,760	22	8	14
3: Sechelt Arena	9%	2,230	31	13	23
4: Halfmoon Bay	8%	4,420	18	33	41

**Based upon*

Bus stop activity provides an indication of the most popular origin and destination points for each transit route. Figures 16 to 19 indicate that the main transit destination points in the region are downtown Sechelt, upper Gibsons, Langdale Ferry Terminal and Lower Road in Roberts Creek. Bus stop information presented in Figures 16 to 19 was based solely upon ride count data collected in Fall 2012 in comparison to the ridership information presented in Table 6, which is a combination of this same ride count data and supplemented by revenue and fare information collected throughout 2012 and 2013.

Figure 16: Route 1 Langdale Ferry/Sechelt Ridership by Stop

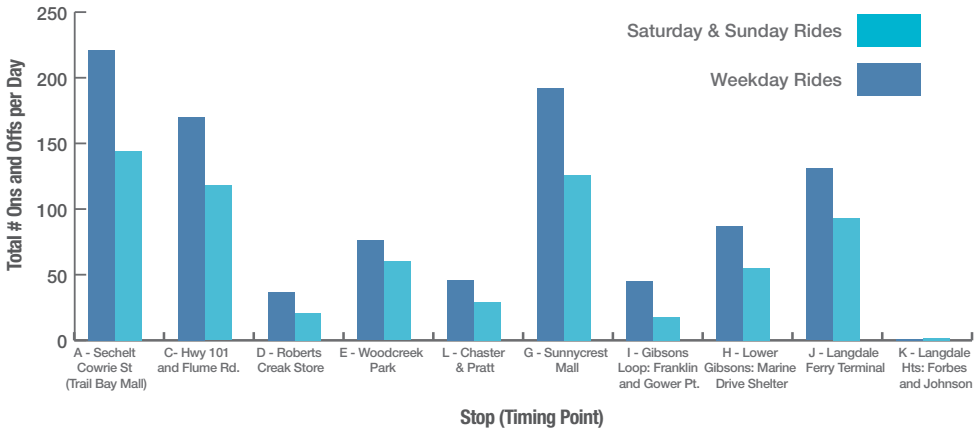


Figure 17: Route 2 West Sechelt Ridership by Stop

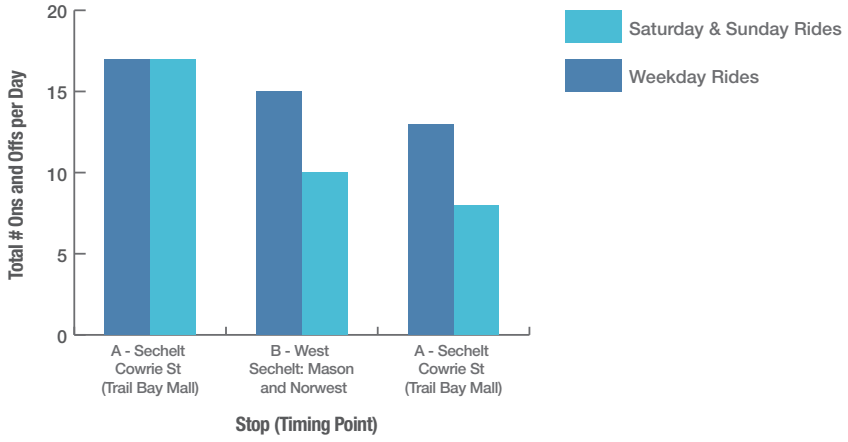


Figure 18: Route 3 Arena Ridership by Stop

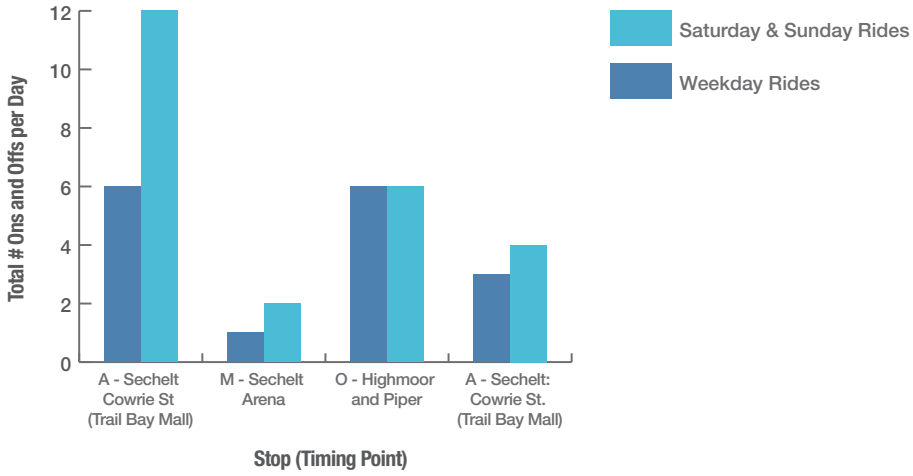
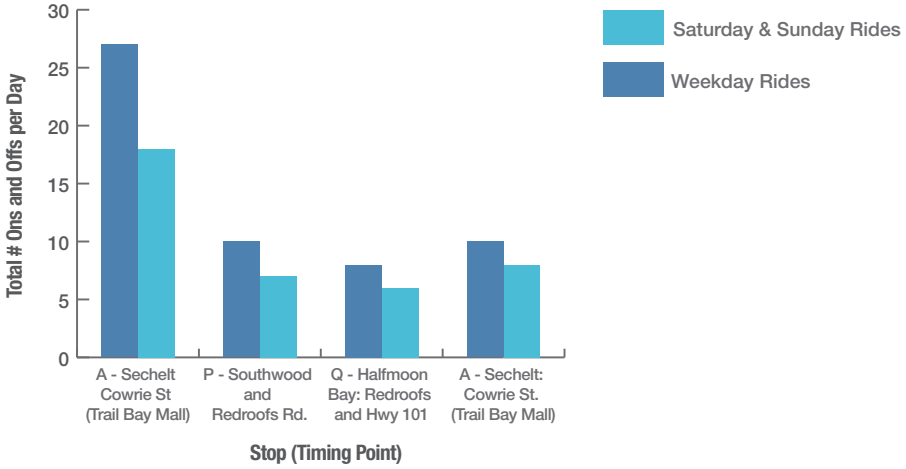


Figure 19: Route 4 Halfmoon Bay Ridership by Stop



Benchmarking

BC Transit categorizes conventional transit systems into three tiers. The criteria used to determine which tier a system is allocated to include, but are not limited to, service area population, annual service hours and ridership. However, in general, Tier 1 systems cover a service area population of greater than 50,000, Tier 2 systems cover a service area population of 25,000-50,000 and Tier 3 systems cover a service area population of less than 25,000.

Table 7: Summary of Conventional System Performance

Annual Ridership	500,305
Conventional Service Hours	19,432
Rides per Hour	25.7
Total Cost per Hour	$102.78
Total Cost per Ride	$3.99

Although the Sunshine Coast Conventional Transit System is classed as a Tier 3 system due to its relatively small population and annual revenue hours it has one of the highest productivities among the BC Transit systems and across Canada.

Conventional system performance measures for the Sunshine Coast were compared to other communities of similar size in British Columbia for 2012/13 as outlined in Table 8. Below is a summary of key points:

- Total ridership was 500,305 in 2012/13, which is 33 per cent higher than average ridership among peer communities
- Rides per hour was 25.7, which is 13 per cent higher than average ridership among peer communities but approximately the same for the average of all BC Transit systems (Tiers 1-3)
- The Sunshine Coast system offers 19,432 service hours per year which is 14 per cent more than the average service hours in peer communities (17,055 service hours)
- Total revenue was $724,156 which is 60 per cent higher than the average for peer communities
- Cost per hour is $102.78, which is 9 per cent lower than the average of all BC Transit systems

Table 8: Summary of Conventional System Performance in Peer Communities 2012/13

System	BC Transit Tier	Approx. Service Area Population	Annual Service Hours	# Fixed Routes	Annual Ridership	Revenue	Rides per Hour	Cost per Ride	Total Cost/ Hour	Adult Cash Fare
Sunshine Coast, B.C.	3	20,600	19,432	5	500,305	$724,156	25.7	3.99	102.78	$2.25
Campbell River, B.C.	2	30,900	22,060	9	604,141	$652,580	27.3	3.71	101.08	$2.00
Comox Valley, B.C.	2	45,700	26,907	12	544,172	$609,547	20.1	5.05	101.42	$1.75
Cowichan Valley, B.C.	2	38,500	26,331	13	362,508	$473,688	13.8	7.48	102.94	$2.00
Nelson, B.C.	3	14,000	10,391	4	240,041	$300,565	22.6	5.35	120.94	$2.00-$2.50
Powell River, B.C.	3	13,900	11,336	6	215,969	$263,787	19.0	5.64	107.25	$2.00-$2.50
Prince Rupert, B.C.	3	13,600	9,559	6	329,587	$385,025	33.3	3.43	114.23	$1.75
Squamish, B.C.	3	16,200	10,420	3	216,120	$213,143	20.7	7	144.93	$1.75
Average for all B.C. conventional transit systems (Tiers 1-3)							**25.9**	**4.34**	**112.51**	

Sunshine Coast Travel Survey

A travel survey was distributed online and in-print as part of the transit future plan Phase One engagement to assess current resident travel characteristics. A total of 601 surveys were received representing 2% of the SCRD population. The following summarizes key outcomes of the survey:

- Approximately 68% of respondents indicated they are avid transit users, while 32% indicated they use transit less than once a month
- The top three reasons respondents indicated they use transit are to get to social/recreational activities, access employment, and for shopping/errands
- Non-transit users indicated that service is infrequent, inconvenient, and does not serve the areas they live as reasons why they do not use transit

Custom Transit

Service Description

Custom transit was first offered in 1982, seven years before conventional service began. The Sunshine Coast Custom Transit System consists of handyDART service, which is provided by small transit vehicles. HandyDART provides door-to-door transit service for people who are unable to use the conventional system. Potential customers must be registered to travel by handyDART and registration is free. To determine eligibility, handyDART considers limitations in mobility/agility, cognitive abilities, medical conditions, and sensory abilities. The objective of custom service is to provide eligible customers with access to their community and is not focused on ridership growth. The service is operated by the SCRD.

There are two types of custom service: regular subscription trips and one-time trips. Subscription trips are often for transport to adult day programs or to medical-related appointments. In contrast, one-time trips are often personal in nature. For one-time trips, customers must reserve on a first come first served basis at least 24 hours in advance. Where there are conflicts that prevent the system from being able to accommodate all trips, trips are prioritized which can lead to a client having to adjust or cancel a low priority trip.

Customers using wheelchairs or scooters, registered handyDART customers, or CNIB (Canadian National Institute for the Blind) pass holders may travel with an attendant. Attendants are able to travel free but must board and exit at the same time as the customer who requires assistance. Companions are also able to travel with handyDART passengers depending upon availability and are charged a handyDART fare. A one-way HandyDART fare is $2.25 and ten tickets are $20, both consistent with conventional system fares. The custom handyDART service is offered from 8:00 a.m. to 4:30 p.m. on weekdays (8.5hrs) and 10:00 a.m. to 4:00 p.m. on Saturday (6hrs). No service is offered on Sundays and holidays.

BC Transit also offers a Taxi Supplement Program, which enables the handyDART dispatcher to dispatch some handyDART trips to taxi when the handyDART vehicle is full or is otherwise unable to perform a trip. Passengers on trips dispatched to taxi still pay the same handyDART fare and, like the overall handyDART system, these trips may be shared. This service has not been provided on the Sunshine Coast due to the cost.

Service Area

The Americans with Disabilities Act (ADA) has made enormous advances in custom (handyDART) and paratransit services and uses service area parameters defined in terms of a 1.5 kilometer buffer around the existing fixed-route system. This makes the link between door-to-door and fixed routing while accommodating the unique needs of those who require handyDART transportation.

The handyDART service area for the Sunshine Coast is generally based up a 1.5 kilometre boundary around the existing conventional system as shown in Figure 20. The yellow circles represent residential addresses of handyDART

registrants that are 1.5 kilometers from the existing fixed routes highlighted in orange. The red circles represent residential/door-to-door pick-up addresses that are 1.5 kilometers or farther beyond the existing fixed routes. There are currently a limited number of handyDART registrants that are outside the 1.5 kilometre boundary who were registered prior to the concept of this boundary being introduced and who continue to receive handyDART service. Should the boundary be formalized and approved, these registrants would be 'grandfathered' into the boundary and continue to receive service. The municipal boundaries and major roads are also represented.

Figure 20: Sunshine Coast Custom Transit Service Area

Registration

BC Transit is currently reviewing custom transit registration in partnership with local governments. A pilot project is being completed in two regions where BC Transit provides custom transit services. This pilot project will incorporate an in-person component to the custom transit registration process to more closely align with industry standards and best practices. This revised process incorporates information about the family of accessible transit services available in each community and is intended to match each applicant with the transit service (or combination thereof) that best suits their individual needs and abilities. Based on the pilot's outcomes, the intent of this project is to develop a new approach which will be fine-tuned and implemented across the province in all of BC Transit's applicable custom transit and paratransit systems.

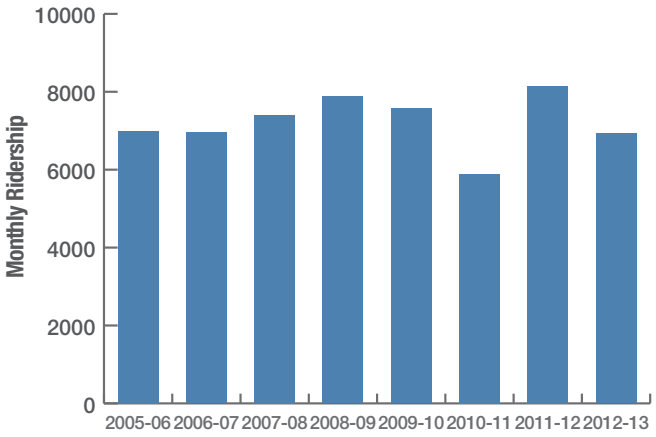
Travel Patterns and Destinations

A large percentage of custom transit clients go to medical appointments, including treatments at the hospital. Aside from medical appointments, other common destinations are for banking and shopping in Gibsons and Sechelt, community and recreation centres, seniors' centres, hair appointments, restaurants and coffee shops.

Ridership and Customer Profile

In 2012/13, there were 171 regular custom transit users and a total of 6,931 handyDART rides. Of these, 25 per cent of handyDART riders were in wheelchairs, 65 per cent were ambulatory and the remaining 10 per cent were either attendants or companions. All trips in this time period were served by handyDART with no use of Taxi Supplement and a total of 42 unmet trips, which represents less than 1 per cent of service. As such, the level of custom (handyDART) service correlates well with the demand and results in limited unmet trips.

Figure 21: Historic Custom System Ridership

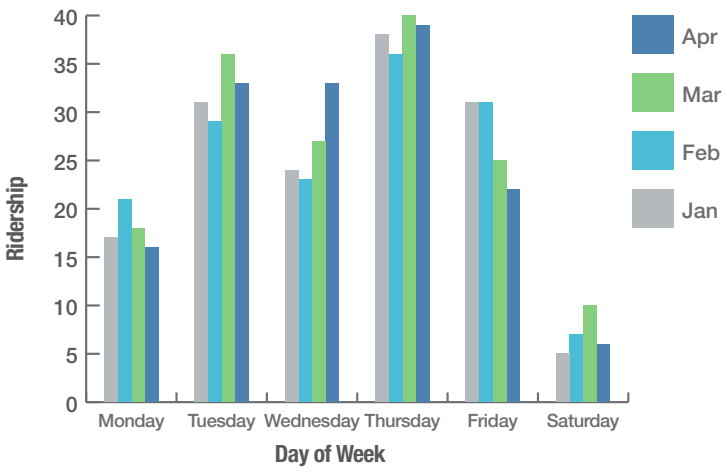


System Performance

Custom passenger trips totaled 6,931 rides in 2012/13, a decrease of 17 per cent from 2011/12. Ridership has increased steadily from 2005 to 2012 with an increase of 16 per cent, with noticeable decreases in 2010/11 and 2012/13. See Figure 21.

Average ridership is currently 25 rides per day. Ridership is highest on Thursday, averaging 38 rides per day. Saturday ridership is lowest and averages 7 rides per day (Figure 22).

Figure 22: Ridership by Day of Week, Jan-April 2013



Benchmarking

Albeit the Sunshine Coast performs considerably well in comparison to similar communities for conventional service, it generally performs lower for custom service. Table 9 provides a summary of custom system performance in comparison to peer communities in British Columbia for 2012/13. Below is a summary of key points:

- Total number of annual rides was 6,930, which is 62 per cent lower than the average for peer communities
- There are a total of 2.1 rides per hour, which is 20 per cent less than the average for tier 3 communities
- The custom system offers 3,289 service hours per year which is 15 per cent less than the average service hours in peer communities (3,786 service hours)
- The cost per ride is 60 per cent higher and the cost per hour is 30 per cent higher than the average for Tier 3 communities

Albeit the Sunshine Coast custom (handyDART) service hours are generally lower than those of its peer communities, it meets the existing demand with limited unmet trips. As the average population age increases, demand for this service is likely to increase and an increase in service hours at this time will make it more comparable with peer communities.

Table 9: Summary of Custom System Performance in Peer Communities 2012/13

	BC Transit Tier	Approx. Service Area Population	Annual Service Revenue Hours	Passenger Trips	Revenue	Rides/ Hour	Cost/ Ride	Total Cost/ Hour	Adult Cash Fare
Sunshine Coast	3	20,600	3,289	6,931	$14,009	2.1	$45.58	$96.05	$2.25
Campbell River	2	30,900	5,481	22,980	$23,068	3.7	$19.75	$79.91	$2.00
Cowichan Valley	2	38,500	6,458	14,271	$30,332	2.1	$32.58	$69.61	$2.00
Prince Rupert	3	13,600	1,740	6,872	$7,251	3.6	$16.17	$62.50	$1.75
Squamish	3	16,200	1,960	5,111	$8,407	2.6	$52.07	$135.48	$1.75
Average for all BC Transit Tier 3 custom systems						**2.6**	**27.87**	**74.11**	

Transit Infrastructure

The attractiveness of transit is based not only on transit service, but on the customer amenities that are provided at transit stops, exchanges and Park & Rides. Customer facilities at key stops should be universally accessible, include some form of weather protection (such as bus shelters), as well as benches, trash cans, bike racks and lighting to increase security at night.

Bus Stops

The Sunshine Coast system includes a total of 207 bus stops, almost half of which are located between Sechelt, Gibsons and Langdale (Table 10). Approximately 25 per cent of all bus stops are accessible and all bus stops on Routes 2, 3 and 4 are inaccessible. Transit shelters are provided at 20 per cent of all bus stops and are concentrated on Routes 1 and 2.

Table 10: Summary of Bus Stop Conditions

Route	No. Stops	Wheelchair Accessible	Transit Shelter
1 & 90 – Langdale Ferry / Sechelt Local and Express	107	52 (49%)	40 (37%)
2 – West Sechelt	14	0 (0%)	2 (14%)
3 – Sechelt Arena	34	0 (0%)	0 (0%)
4 – Halfmoon Bay	52	0 (0%)	0 (0%)
Total	**207**	**52 (25%)**	**42 (20%)**

Many transit stops, particularly on the Route 1 and Route 90 are located in rural areas either on Highway 101 or local roads. Lighting at all rural stop locations has implications for the environment, both through energy use and associated Green House Gas emissions and light pollution impacts. As such, most rural transit stops do not feature lighting. Transit riders are encouraged to wear reflective clothing, carry reflective pass holders, or use a hand held flashing

reflector to alert the transit driver that they are waiting at the bus stop at night. Some of the more popular rural bus stops also feature a fixed light that passengers can press when they see the bus approaching for them to alert the bus driver. However, the rural nature of many transit stops on the Sunshine Coast does result in the perception of safety at night being commonly raised as an area for improvement.

The Gibsons Age Friendly Community Action Plan notes that bus stops have few amenities, which limits transit's appeal as a viable alternative to automobile travel and is especially problematic for seniors and physically-challenged residents. We Envision suggests that the Regional District will work to install bus stop amenities and lighting at all transit stops in commercial centres and high-density areas, which will help to address some of the challenges identified in the Plan.

Exchanges

Transit exchanges facilitate transfers between bus routes and are typically located within the activity centres of the community. They also provide opportunity for vehicles to layover, and for operators to take a break. They can vary in scale from a series of on-street bus stops in close proximity to a dedicated off-street exchange with an island of bus shelters housing many vehicles at once. All five routes converge on Cowrie Street in the District of Sechelt by Trail Bay Mall and this location serves as an on-street transit exchange.

Park & Rides

Park & Rides provide a facility for transit riders without service in their community to drive their vehicle to a location where they can park and access transit. Park & Rides are valuable in rural areas where transit service is not viable. An informal Park & Ride already exists on Trail Avenue and Cowrie Street near Sechelt Fire Station. This is generally used by commuters travelling onwards via van and carpool to Port Mellon.

Operations & Maintenance Facility

The Sunshine Coast Transit System has a combined conventional and custom transit operations and maintenance facility located in the District of Sechelt, on Mason Road north of West Sechelt Elementary School. The facility consists of:

- One wash bay
- Three bays with one low floor hoist, which accommodate large heavy duty vehicles
- One 4 post which accommodates smaller light duty vehicles

The transit fleet consists of a total of 11 vehicles; 7 heavy duty vehicles and 4 smaller light duty vehicles. The facilities are shared with the SCRD fire department. The facility also houses the transit administration office, the maintenance office and the manager's office. All conventional transit routes begin service on Mason Road or at Trail Bay Mall in Sechelt, approximately 4.3 km from the operations facility.

Transit Challenges

Increasing frequency of service while remaining cost effective

The main priority for service improvements identified from public engagement was an increase in frequency, particularly on Route 90 and Route 1. This will address the current constraints associated with ferry delays and can significantly positively impact the growth of transit ridership. However, given the length of service day and considerable distance travelled on this route, this will require significant resources to implement.

Developing feeder community routes in a linear system

The provision of more direct, targeted routes can enable transit to become more competitive with the automobile and therefore attract new riders. However, due to the linear nature of development along the coast, population is split in Roberts Creek between Hwy 101 and Lower Rd. along a lengthy stretch of the coast. This makes it challenging to design shorter community routes that feed a more direct, frequent service between Sechelt, Gibsons and Langdale without duplicating parts of the service or requiring some passengers to transfer. The linear and rural nature of development will also impact service design and cost effectiveness for any future service within Electoral Area A: Pender Harbour.

Doubling transit mode share

To meet the target outlined in We Envision of doubling transit ridership to 950,000 rides per year by 2020 requires significant investment in the transit network supported by transit-supportive land use planning and Travel Demand Management policies.

Increasing Ridership while increasing service coverage to more rural areas

Public engagement feedback showed a desire for extended coverage to more rural populations. This will impact the overall efficiency of service and require considerable investment with less revenue return due to lower ridership on these routes. Maintaining efficiency and meeting the Transit Future Plan vision and goals will be a significant challenge when providing service to these areas. Prioritizing between the need and desire for improvements to the existing service and service to new areas will also be challenging.

Improving customer facilities

Only 25 per cent of bus stops are wheelchair accessible and 20 per cent feature a bus shelter. Additional amenities will require significant resources but these improvements will make transit a more attractive transportation choice and support an increase in ridership.

Limited custom transit service availability

Albeit handyDART transit service hours are relatively low for the community and transit system size, demand is expected to increase considerably in the medium and long term given the projected aging population. This will require an increase in resources. Enhanced communication of handyDART service in combination with training on the conventional system where required may be valuable for maximizing the number of passengers able to use the conventional system whilst increasing the custom service efficiency.

Population distribution impacts on custom transit efficiency

The long distance between the two key population hubs on the Sunshine Coast is a challenge to providing an efficient handyDART service. As demand for handyDART increases, an approach to scheduling that increases the number of rides per trip and focusses on coordinating regional trips between activity centres may benefit the service efficiency.

Vision, Goals and Targets

Vision Statement

"Sunshine Coast Transit is an essential component of our sustainable community and a preferred method of travel. It enhances mobility by providing a convenient, reliable and affordable alternative to the car that is aligned with sustainable land use decisions and fully integrated with other transport options."

The development of the transit vision statement, goals and targets was a collaborative effort, which included input from the community, stakeholders, local government partners and BC Transit. The vision builds upon the direction of We Envision; the sustainability call to action for the Sunshine Coast. It reflects an ambition to provide a transit system that reduces the community's environmental impact by offering an attractive alternative to the private automobile. It focuses not only on increased ridership but also on the need to integrate with other modes of transportation, whilst emphasizing the dependency of efficient and cost-effective transit service on sustainable land use and development decisions.

To assist in achieving this vision, six project goals have been created.

Project Goals

The transit system:

1. Attracts new riders and increases ridership
2. Supports and aligns with sustainable development
3. Is integrated with other modes of transportation
4. Is efficient and cost effective
5. Is safe and accessible
6. Is collaborative and customer focused

Project Goals

Goal 1: Attract New Riders and Increase Ridership

How do we do that?

Frequent, Convenient and Reliable	• Increase service frequency, particularly on frequent transit network corridors to a level where, ultimately, passengers are able to use transit without consulting a timetable • Increase frequency to the Langdale Ferry Terminal to a level that minimizes the transit system requirement to wait for ferry delays • Improve connections between routes • Monitor schedule adherence
Fast and Direct	• Design direct transit routes and express routes to key destinations • Provide transit priority measures such as queue jumpers, bus only lanes and traffic signal priority as required • Ensure bus stops are spaced at appropriate distances to balance customer accessibility and efficient operations
Easy to Use	• Design easy to follow routes • Have consistent headways (times between buses) whenever possible • Ensure accessible and easy to understand route, fare and schedule information, through tools such as: a web-based trip planner, real-time information at the stop level and way finding information at transit exchanges and transfer points • Introduce convenient and technologically advanced payment options
Improved Image	• Actively work to change the perception of transit through education, creative marketing campaigns and the delivery of a quality transit service • Agencies with a vested interest in sustainable community outcomes should lead by example through the implementation of travel demand management (TDM) measures
Comfortable	• Provide adequate weather protection and lighting at transit exchanges, bus stops in high-density areas and stops in commercial centres • Ensure the inside of the bus is kept at a comfortable temperature throughout the year • Ensure buses and transit facilities are clean
Affordable	• Ensure affordable fare options and programs, making transit a viable transportation choice for residents of all levels of income

Goal 2: Support and Align with Sustainable Development

How do we do that?

Transit Supportive Land Use and Development	• Support transit-oriented design principles that increase density around key community centres and corridors and manage parking to incentivize the use of more sustainable methods of transportation • Focus transit investments on corridors with transit supportive land uses (e.g. between neighbourhood centres, other prominent destination points and densely developed residential areas) • Design a long-term transit network that will enable regional and local governments to focus medium and higher density mixed use development adjacent to the transit network • Locate and design transit exchanges to create a vibrant mixed-use hub of activity, which supports local business and maximizes connectivity • Support the creation of pedestrian-oriented design • Provide support and transit input to the SCRD and local authorities in the review of development applications and in the creation of land use plans and policy
Local economy	• Design the transit network to provide connections between neighbourhood centres, commercial, business and industrial districts, activity centres and downtowns • Develop the necessary transit service and infrastructure to attract and facilitate new and diverse business
Environmental Sustainability	• Develop service performance standards and targets that require rides per trip to exceed the minimum required to ensure GHG emissions are less than those should riders drive a single occupancy vehicle (approximately 5 rides per hour) • Consider transit vehicle technologies that will reduce environmental impact and help achieve regional and provincial GHG reduction targets • Design and upgrade transit facilities that minimize environmental impact in construction and operation

Goal 3: Integrate with other Modes of Transportation

How do we do that?

Active Modes of Transportation	• Facilitate significant growth of Active Transportation by integrating the transit network with facilities, services and operations providing capacity for combined mobility of transit with cycling, walking (over 450 metres) and driving, or any combination of these • Increase investment in quality cycling feeder infrastructure and integrate the transit network with regional and local cycling and pedestrian networks • Support combined mobility marketing which may include marketing campaigns, advertising, programs (e.g. Bike to Work, Bike and Business and Streetwise courses), events (e.g. Bus and Bike) and website information • Provide sufficient secure bicycle storage at appropriate stops and exchanges • Explore the ability to increase bicycle capacity on transit vehicles • Explore public bike share systems as a feeder to transit
Multi-Modal Corridors	• Maximize the use of existing key transportation corridors (e.g. Hwy 101) as multi-modal facilities; integrating safe pedestrian sidewalks and separated bike lanes as well as bus priority measures and exchange facilities along those corridors • Encourage and create high quality and safe pedestrian and cycling links to transit exchanges
Connectivity	• Connect outlying areas with limited or low levels of transit service to the transit network by integrating Park & Ride facilities as part of the network

Goal 4: Deliver Efficient and Cost Effective Service

How do we do that?

Financial Sustainability	• Prioritize new service proposals according to a number of service performance indicators (e.g. rides per service hour, cost per passenger trip, cost recovery etc.) • Focus the majority of investment on corridors with transit-supportive land use • Ensure the Sunshine Coast Transit System maintains a high cost-recovery ratio • Improve fare options for passengers and encourage the use of prepaid fares targeted at key transit markets
Transit Service Matched to Demand	• Match service levels to demand by creating a transit network with distinct layers of service, which utilizes smaller transit vehicles where appropriate • Support and compliment forms of independently operated transportation better suited to non-urbanized areas • Minimize transit service duplication along corridors

Goal 5: Deliver Safe and Accessible Service

How do we do that?

Safe and Secure Environment at Transit Facilities	• Create well-lit passenger transit facilities • Where possible, locate passenger transit facilities in areas of high activity (passive surveillance) • Where feasible, ensure that pedestrian and cycling linkages to transit facilities are well lit and utilize CPTED (Crime Prevention Through Environmental Design) principles
Safe and Secure Environment on Transit Vehicles	• Continue training transit operators to handle unsafe situations that may arise on board the bus or at passenger transit facilities • Clearly outline passenger behaviour expectations on board • Provide priority seating on board transit vehicles
Universally Accessible	• Maintain a bus fleet that is 100 per cent wheelchair accessible • Invest in technology to make transit vehicles more accessible, such as audible stop announcements on vehicles and at stops • Build transit infrastructure that is universally accessible • Provide customer information in formats for people with hearing and visual impairments to make the transit system easier to use • Give priority to snow clearing along transit routes, transit stops and adjacent sidewalks • Ensure bus stops are spaced at appropriate distances to balance customer accessibility and efficient operations
Custom Transit	• Improve accessible services and increase availability of handyDART to meet future increase in demand in line with an aging population • Refine eligibility criteria to better match applicants' needs to the most appropriate transit service • Refine the Custom Service Area boundary to reflect future network changes on the conventional system • Increase integration with conventional transit • Consider new service types to ease future demand for custom transit (e.g. demand responsive service)
Access to Passenger Training and Education	• Provide training programs for potential transit customers to enable them to access the conventional transit system (e.g. ambassador programs for seniors)

Goal 6: Be Collaborative and Customer Focused

How do we do that?

Transit Stakeholders	• Collaborate with transit partners and stakeholders on a regular basis for the continued improvement of service • Monitor customer satisfaction and respond to feedback • Collaborate with BC Ferries to integrate and align service, increasing reliability and passenger confidence
Transit Operators as Customer Service Agents	• Operators are friendly and contribute to a positive customer experience and in turn are respected by riders • Drivers are knowledgeable about the system • Prioritize excellent customer service skills during hiring process for operators and front line staff
Flexibility	• Be flexible to customer needs in terms of service type and feedback

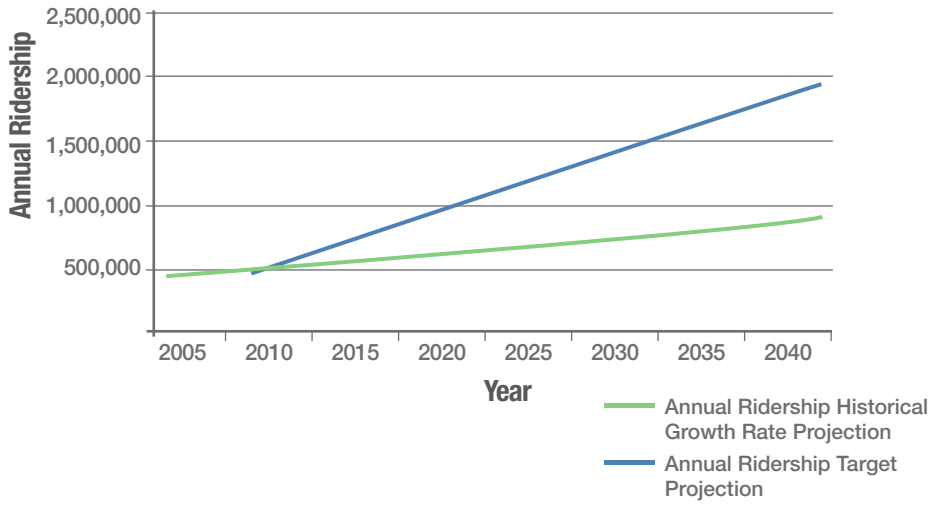
Targets

Targets are a critical component of the Transit Future Plan as they are an effective way to measure progress towards achieving the vision and goals and to monitor plan implementation. The Transit Future Plan is designed to chart the course for transit investments that will help to achieve the community's transit goals. We Envision, adopted in principle by the Sunshine Coast Regional District in 2011, sets a target to double transit ridership from 484,000 in 2010 to 968,000 by 2020, in line with the Provincial Transit Plan. A **25-year target of 1,800,000 rides per year by 2038** has been set for the Transit Future Plan, assuming continued growth beyond the We Envision 2020 target.

The existing transit mode share for all annual trips on the Sunshine Coast is estimated at 2.0 per cent, assuming 2.9 trips per person per day. If future population and ridership targets are realized, assuming a population forecast of 36,900 people, the Sunshine Coast would have a **25-year transit mode share of 5.4 per cent by 2038**. This target is consistent with the Provincial Transit Plan mode share targets of three per cent in the near term, four per cent by 2020 and five per cent by 2030 for regional centres in British Columbia.

If transit ridership continued to grow in line with the historical growth rate, there would be an annual ridership of 860,000 by 2038. This would equate to a 2.6 per cent transit mode share for all trips by 2038. This demonstrates that the Transit Future Plan targets of 1,800,000 rides and 5.4 per cent transit mode share by 2038 are ambitious and will require considerable strategic action in order to be achieved. Achieving the target is dependent on a number of factors such as transit-supportive land use and development, population growth and demographics, efficient transit system growth and investment.

Figure 23: Sunshine Coast Transit Future Plan Ridership Target and Historical Growth



Ridership	1,800,000 rides per year by 2038 (Baseline: 484,000 rides per year in 2010)
Mode Share	5.4 per cent of all trips are made by transit by 2038 (Baseline: 2.0 per cent of all trips are made by transit in 2011)

The Network

To achieve the vision and goals of the Transit Future Plan and the 5.4 per cent transit mode share target, the transit network must meet the future transportation needs of the Sunshine Coast and be competitive with automobile travel. As such, it should support We Envision, align with local Official Community Plans and incorporate the findings of the Integrated Transportation Study.

Service Layers

The Transit Future Plan network includes three distinct layers of transit service to better match transit service to demand. The network is designed to be more competitive with automobile travel by improving the directness, reliability and frequency of the transit system. The network focuses on services between neighbourhoods and community centres, connecting these centres and to the key transportation hub at the Langdale Ferry Terminal. The Transit Future Plan may require more customers to transfer from one route to another to complete their journey, with the trade-off that service will be more frequent and overall travel will be more direct.

Frequent Transit Network (FTN)

The Frequent Transit Network (FTN) provides medium- to high-density mixed land use corridors with a convenient, reliable and frequent (30 minutes or better between 7:00 a.m. and 10:00 p.m.) transit service on weekdays. The goal of the FTN is to allow customers to spontaneously travel without having to consult a transit schedule. The FTN will carry the majority of the transit system's total ridership, and for this reason it justifies capital investments such as a high level of transit stop amenities, service branding, right-of-way improvements and transit priority measures.

Local Transit Network (LTN)

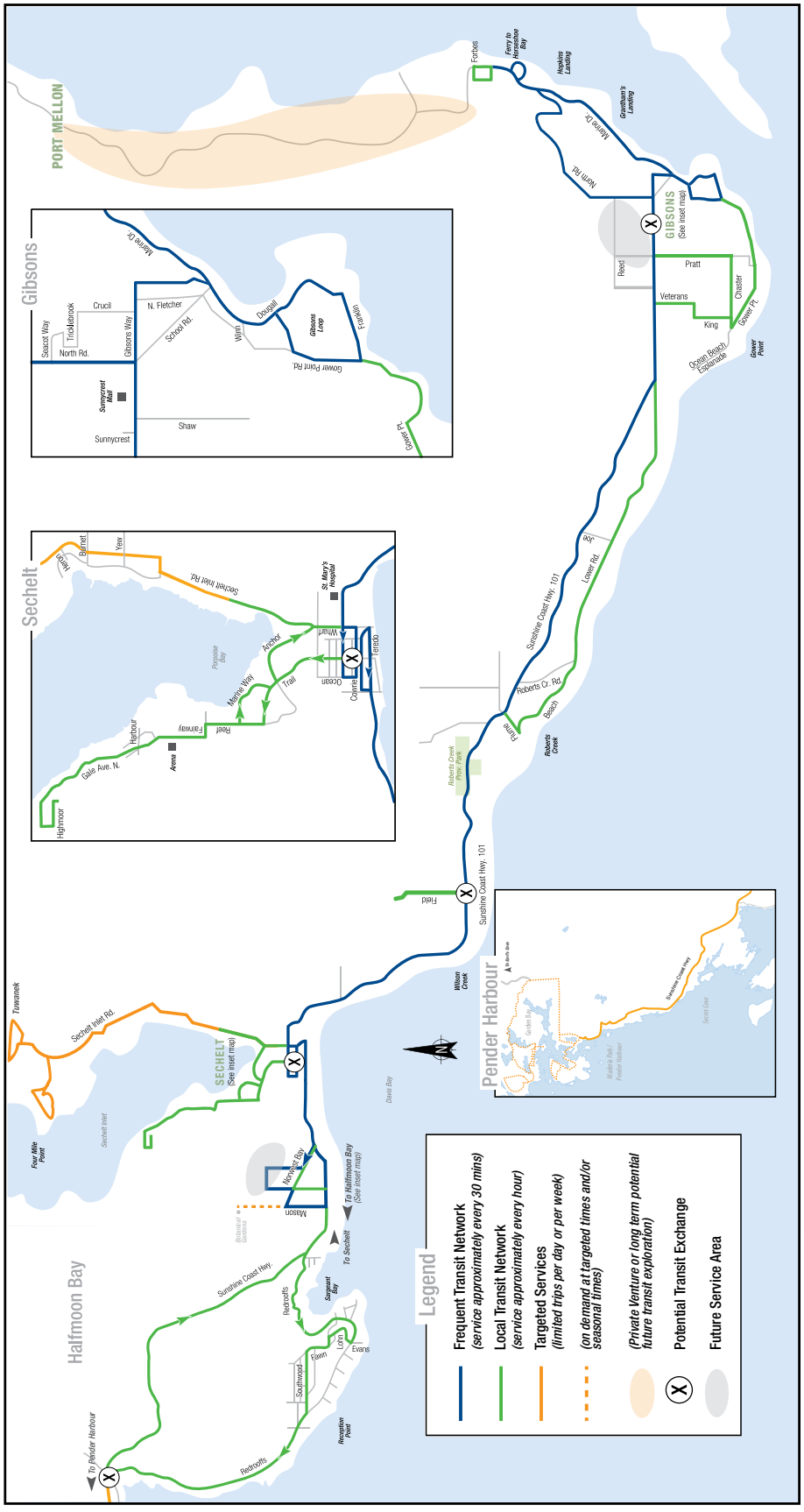
The Local Transit Network (LTN) is designed to connect neighbourhoods to local destinations and to the FTN. LTN services allow customers to plan a trip to work, school, the local shopping area or the Langdale Ferry Terminal by transit. Frequency and vehicle types are selected based on demand. In most cases, smaller transit vehicles can be utilized to better match customer demand and operating conditions on local roads.

Targeted Services

Targeted services are a collection of transit services that do not fit into the frequent or local transit network definition and are more focused on the needs of specific customers. These services include:

- Custom/handyDART: door-to-door services for customers unable to use the conventional service
- Express: a direct, limited-stop, route between destinations
- Paratransit: A range of services designed to effectively serve rural and low-density areas (more information provided in Appendix 3)
  - » Flex-route transit follows a fixed route and schedule, but buses deviate from fixed routes on request
  - » Dial-a-bus, where routes are variable but schedules are fixed
  - » Demand-responsive transit, where routes and schedules are variable and transit operates in response to requests for service
  - » Vanpools, a group of up to 15 commuters travelling to the same destination and the same time each day where one of the passengers is also the operator of the service
- Where conventional transit services do operate in rural and low-density areas, they generally provide infrequent service, limited hours of service and limited coverage

Transit Future Plan Network



Benefits of the Transit Future Plan Network

Attracts New Riders & Increases Ridership (Goal 1)

- Increased frequency on the FTN will reduce the wait time for transit at Langdale Ferry Terminal when there are ferry delays and will allow people to use the transit system more spontaneously and for more types of trips
- Increased frequency on the LTN will encourage an increase in ridership by making transit more convenient and improving the ability to connect to other areas of the region
- Fewer transit route variations on the existing Route 1 will make the transit system easier to use
- The FTN will provide the capacity to move high volumes of people by transit on a more direct route, thereby reducing the number of single-occupancy vehicles on the road

Supports & Aligns with Sustainable Development (Goal 2)

- The FTN can help shape and support land uses that lend themselves to an increase in the use of transit and active modes of transportation (e.g. increased densities and mixed-use development)
- Utilizing different transit vehicles with varying capacities to better match demand can reduce costs and GHG emissions
- The use of new, greener transit vehicle technologies will further reduce environmental impacts

Integrated (Goal 3)

- Integration of the transit network with active modes of transportation will increase the catchment of transit services and provide opportunities to further reduce the number of single-occupancy vehicles on the road
- New Park & Ride facilities will provide customers with more choice in accessing transit in rural areas

Efficient & Cost Effective (Goal 4)

- Transit priority measures and shorter transit routes will improve on-time performance
- Focusing LTN service on local destinations and local transit hubs will create a more efficient and direct transit network
- Increasing Targeted Transit Service to cover new areas of the Sunshine Coast may decrease the efficiency and cost-effectiveness of the overall transit system, but will increase the mobility of residents living in rural areas

Safe & Accessible (Goal 5)

- Expanded handyDART service hours will serve an aging population and provide custom riders with greater flexibility and mobility
- Improved access to the conventional transit system through accessible vehicles and bus stops will allow some riders to transition from handyDART to conventional transit

Resources

To meet the mode share and ridership targets set out in the Transit Future Plan requires significant investments in transit operating and capital resources. This section of the plan outlines the estimated 25-year service hour, vehicle and infrastructure requirements.

Service Hours and Vehicles

Future Service Hours

Future service hours were forecasted for 2038 for each Service Priority described in the Implementation Strategy. These are summarized in Table 11 and Figure 24.

Service hours for each route were calculated by estimating the cycle time. The cycle time is the length of time it takes for a transit vehicle to complete one round trip, including the recovery time (additional time at the end of the trip to ensure the next trip starts on time). Cycle times were calculated by measuring the length of the route in kilometers and estimating the average trip speed (km/ average trip time). The total number of service hours for each route was then calculated by multiplying the number of trips throughout the day by the cycle time. Travel speeds were based on current trip speeds.

Custom service hour projections were based on historical trends matched with past and future demographic trends. The Transit Future Plan projects that service hours for the conventional and custom transit fleet will more than double over the next 25 years, from 22,721 in fiscal 2012/13 to 55,601 by 2038. This would provide an estimated increase in ridership from 507,236 to 1,143,736 rides per year.

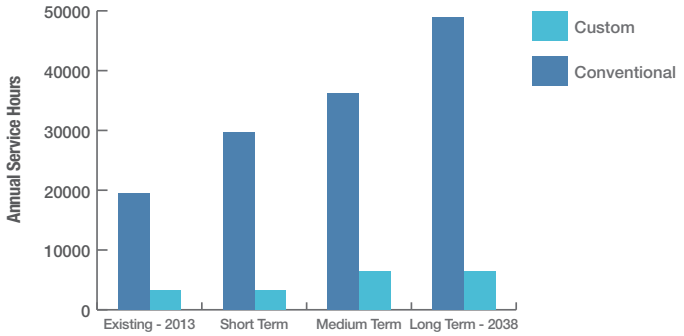
Table 11: Existing and projected annual service hours – conventional and custom transit

	Conventional Service Hours	Custom Service Hours	Total Service Hours	Total Ridership
2012/13	19,432	3,289	22,721	507,236
Projected 2038	49,112	6,489	55,601	1,143,736

In practice, ridership takes time to grow when new service is introduced and the first year of service is expected to generate approximately 60 per cent of the long term anticipated ridership. The ridership projections outlined in Table 11 are based upon the existing system and the total ridership anticipated to be achieved several years after the service has been introduced and had time for ridership to grow.

These go a considerable way to achieving the ridership and mode share targets outlined in the Vision section. Albeit they do not reach the target of 1,800,000 rides by 2038, it should be noted that these ridership projections are based upon assumptions using rides per hour estimated from the existing transit system. They do not account for an increase in choice riders, which is likely to occur as the frequency of service increases and the route restructure improves ease of use. As such, the service priorities combined with the ongoing improvement initiatives identified in the implementation section below are anticipated to contribute considerably to the Transit Future Plan ridership and mode share targets for the Sunshine Coast.

Figure 24: Projected Annual Service Hours and Historical Growth



Future Fleet Requirements

The forecasted fleet requirements were calculated by determining the number of vehicles required to operate each of the service priorities at peak times in addition to the number of kilometres travelled on the specific routes annually. Vehicle spare ratios were also considered in calculating the vehicle totals. The Sunshine Coast fleet is estimated to increase from the existing 11 conventional and custom vehicles to 33 conventional and custom vehicles by 2038 as outlined in Table 12 and Figure 26. BC Transit's general guidelines are that an additional vehicle is required for every 2,500 hours of service with a maximum of 75,000 km annually per heavy duty vehicle and 65,000 km annually per light duty vehicle.

Figure 25: Projected Additional Fleet Requirements

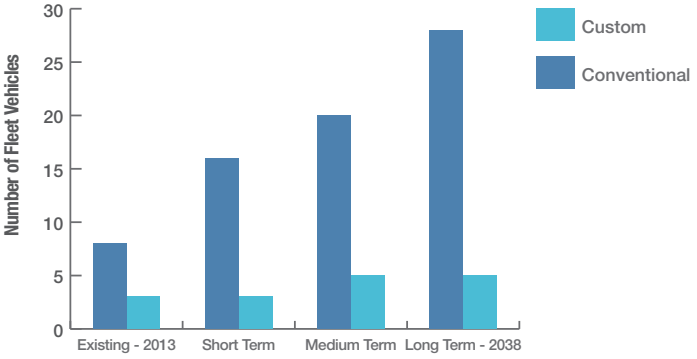


Table 12: Existing and projected fleet requirements – conventional and custom

	Conventional Fleet	Custom Fleet	Total Fleet
2012/13	7 x heavy duty vehicles 1 x light duty vehicle	3 x light duty vehicles	7 x heavy duty vehicles 4 x light duty vehicles
Projected 2038	10 x heavy duty vehicles 10 x medium duty vehicles 8 x light duty vehicles	5 x light duty vehicles	10 x heavy duty vehicles 10 x medium duty vehicles 13 x light duty vehicles

Transit Infrastructure Requirements

Implementing the Transit Future Network requires investments in transit infrastructure such as transit exchanges, Park & Rides, transit stops, transit priority measures and the potential for a satellite transit operations and maintenance facility.

Customer Facilities

The attractiveness of transit is based not only on transit services, but on customer facilities that are provided, such as at transit stops, exchanges, terminals and Park & Rides. New and expanded customer facilities will support the implementation of the plan and improve the customer experience, access to the system and the ability to accommodate an expanded transit fleet.

EXCHANGES

One consideration when moving to local community bus service integrated with a regional service is the need for a transfer point (transit exchange). This is a connection point where passengers who wish to travel from a local route onto a connecting route to another destination would transfer to and from buses. This style of service and connection point could potentially:

- Make transit on key corridors more direct (e.g. Sechelt to Gibsons)
- Allow the use of smaller buses on local routes
- Allow more areas to be covered
- Enable transfers to happen at suitable locations close to community centres with appropriate facilities (e.g. bus shelters)
- Allow different local and express fare options to be explored
- Also be integrated with a Park & Ride or Park & Carpool space

Transit exchanges are typically located within the activity centres of the community, such as the downtown, village centres and shopping malls, to reinforce the relationship with land use patterns. If properly planned and designed, transit exchanges can become effective multi-modal exchanges and pedestrian-oriented sites. Transit exchanges can vary in scale from a series of on-street bus stops in close proximity, to a dedicated off-street exchange with an island of bus shelters housing many vehicles at once. The resources and costs associated with an exchange also vary considerably, generally being lower for an on-street exchange and increasing considerably if the exchange is located in a dedicated off-street facility and as the scale expands. However, all transfer locations should provide weather protection, seating, transit route and schedule information, lighting and potential additional amenities such as bicycle parking.

The Plan requires a total of four transfer locations, ideally developed as on-street transit exchanges as identified in Table 14. An on-street exchange already exists at Cowrie Street in Sechelt and facilitates the transfer of passengers between Routes 90, 1, 2, 3 and 4. The plan recommends additional transit exchanges at Upper Gibsons, Wilson Creek by Field Road and Halfmoon Bay near the general store. The exact location of the additional exchanges would be determined through a planning study to identify and evaluate potential options and the associated costs. However, it is anticipated that an on-street exchange would be

preferable in each location in order to minimize costs. In particular, the Wilson Creek and Halfmoon Bay exchanges will only have two route connections at each exchange with minimal numbers of transferring passengers and, therefore, are likely to require less infrastructure investment. Therefore, the Halfmoon Bay exchange has not been included as a separate item in the priority plan.

PASSENGER AMENITIES

Passenger amenities at transit stops can also have a significant impact on attracting new users as well as improving the satisfaction of existing riders. The Transit Future Plan process revealed a strong desire from the community for improved transit stop amenities across the entire system. In particular, improved weather protection, lighting, additional seating and customer information were highlighted as highly valued amenities. Table 13 indicates the amenities that should be considered at exchanges, higher activity transit stops and lower activity transit stops. These link to the facilities standards outlined in the Service Design Standards section.

Table 13: Passenger Amenities for Facility Type

Facility	Attributes
Exchanges	Premium transit shelters Level door boarding Off-board fare payment Real time schedule information Bike storage Customer wayfinding information (such as directional signage) Universally accessible Pedestrian oriented lighting
Major stops with enhanced amenities (includes existing Community Centre transit stops)	Premium transit shelters Level door boarding Real time schedule information Pedestrian oriented lighting Bike storage Customer wayfinding information (such as directional signage) Universally accessible
High activity transit stops	Transit shelters Bike storage Quality customer information (such as transit schedule and map information) Universally accessible
Lower activity transit stops	Universally accessible Bench

PARK & RIDES

Transit in rural areas is often not convenient with less frequent service and long walking distances to bus stops, as population densities cannot support higher quality transit. Park & Rides can increase the catchment of the transit network by providing an opportunity for those living beyond the transit service area to connect into the transit network. The Transit Future Plan identifies two Park & Ride facilities (Table 14) to provide customers living in rural areas direct access to the transit system. In order to minimize costs, opportunities for shared-use parking lots should be explored prior to investing in purpose-built Park & Ride facilities.

Table 14: Future Transit Exchange and Park & Ride Requirements

Location	Type	Capacity
Cowrie Street, Sechelt	Exchange	4 bus pullouts
Upper Gibsons	Exchange	4 bus pullouts
Field Road, Wilson Creek	Exchange	2 bus pullouts
Halfmoon Bay General Store	Exchange	2 bus pullouts
Sechelt – Raven's Cry Theatre	Park & Ride	15-25 parking stalls
Gibsons – Upper Gibsons Transit Exchange	Park & Ride	15-25 parking stalls

CYCLING & PEDESTRIAN INFRASTRUCTURE

Combined mobility trips involve transit and cycling or transit and walking. From a cycling perspective, transit can form part of touring cycling trips as well as acting as a back-up option for everyday cycling trips. For cyclotouring, the option for taking transit for part of trips is important to appeal to a wider spectrum of people, including those who are not committed cyclists, and to bring the benefits of cyclotouring to the local economy. For people who wish to cycle for transportation or for other trip purposes, the capacity of using transit for part of any trip is a growth promoter for cycling as an Active Transportation mode.

The decision to switch to transit during any trip may be driven by considerations ranging from personal preferences to environmental influencers, including trip time factors such as weather, darkness setting in, mechanical breakdown of a bicycles, shopping enroute, choosing to cycle one-way cycling and coming back on transit and others. With the knowledge that a nearby transit option is available, more people can choose cycling as a transportation option.

Focus areas include cycling between end destinations and transit stops; transitioning from streets to transit vehicles at transit stops; parking of bicycles at transit stops for short term to longer term periods; and provisions on transit vehicles for bicycle carrying capacities and parking, either on the exterior or on-board. Therefore, ongoing investment in quality cycling and pedestrian feeder infrastructure, in addition to the amenities provided at bus stops outlined above, will help grow transit ridership with cycling being a more viable feeder mode of bringing passengers to the transit system.

Transit Operations and Maintenance Facility

The Sunshine Coast Transit System has one operations and maintenance facility located on Mason Road in the northwest area of Sechelt. The facility consists of:

- One wash bay
- Three service bays with one low floor hoist, which accommodate heavy duty vehicles
- One 4 post which accommodates light duty vehicles

The facilities are shared with the SCRD fire department. The facility also houses the transit administration office, the maintenance office, the manager's office a diesel fueling station, a storage area and parking. With a considerable increase in the fleet numbers it is anticipated that investment in the operations and maintenance facility will be required and would include an additional 4 post with capacity for heavy duty vehicles in the short term and an additional service bay required in the medium term. These additions should address the long term fleet projections.

With the introduction of the frequent network on Route 90 and local community bus service in Roberts Creek, Elphinstone and Lower Gibsons, buses for the community service in these areas may now be required to deadhead between Mason Road and Field Road or Gibsons. This is time when the vehicle may not be in service but is required to travel and results in operational costs associated with mileage and driver's time. This additional deadhead time could reduce the efficiency of the transit system. One approach to maintain service efficiency would be to explore the potential for a 'satellite' facility located near Gibsons. A study should be initiated in the near future to determine the feasibility and benefits of such a facility, including additional costs, savings and potential locations.

Transit Priority Measures

"Transit priority measures" is a term used to refer to a variety of strategies designed to give transit vehicles and their passengers priority over general vehicle traffic. Transit priority elements can be:

- Regulatory, such as "Yield to the Bus" regulations and signage
- Operational, such as retiming traffic signals to respect the large number of passengers on transit vehicles compared to private vehicles
- Physical, such as exclusive transit ways, intersection queue-jumper lanes, bus bulges and transit signal priority measures

BC Transit and the SCRD should explore opportunities along the future FTN corridors for implementation of priority measures in order to reduce delays to bus services where delays and congestion exist today, or where they are anticipated to exist in the future. These transit priority measures will improve transit service, often at the expense of vehicle traffic. Although many of these measures can negatively impact private vehicles, they reflect the value of transit to the SCRD and represent a high quality service. This prioritization can attract choice riders and support long-term transit use. Albeit there is generally a low level of traffic congestion on the Sunshine Coast, areas of focus for transit priority measures include the Langdale Ferry Terminal exit and Gibsons Way in upper Gibsons.

Implementation Strategy

The implementation strategy outlines how transit investments will be staged and prioritized over the life of the plan in order to meet transit mode share and ridership targets. The implementation strategy identifies short, medium and long-term network priorities, as well as quick wins and on-going improvement initiatives.

The prioritization of transit investments was based on the needs and challenges identified throughout the planning process and the feedback received from the public, governing bodies, SCRD and local municipal staff and the stakeholder advisory group through community consultation. The implementation strategy forms the basis for the Three-Year Expansion Plans, which are used to direct investment and confirm budget requirements in the short term. Service standards and route performance guidelines are identified and will be used to measure the performance of new services over time to ensure they are effective and align with the transit goals and to provide evidence based service planning recommendations to the SCRD.

Network Priorities (Conventional Service)

The Network Priorities section of the plan identifies the key priorities for establishing the Transit Future Plan network, with the highest level of detail provided on the short-term initiatives. As the plan is updated over time, more detail will be provided on medium and long term initiatives. Service changes and infrastructure projects identified in this section vary significantly in terms of timelines, complexity, costs and process, meaning that initiatives will not necessarily be completed in a strictly chronological order. The priorities are not scheduled on a year-by-year basis as the implementation of the Transit Future Plan is dependent on a number of factors that may change annually including:

- The availability of funding from local government, the provincial government and the federal government
- Community growth factors (e.g. community development, shifts in demographic factors)
- Phasing of major projects (e.g. new transit exchanges)
- Operational and capacity demands of the system
- Opportunities for value-added partnerships that may arise (e.g. road improvement projects by local government)

Each transit improvement will require a more detailed service plan that will finalize route structure, service levels, scheduling, customer information and associated

costs. As outlined previously, transit ridership takes time to grow when new service is first introduced. As such, detailed service plans will use only 60 per cent of the anticipated ridership to estimate revenue generated by the new service for the purposes of costing. However, as time progresses ridership will be expected to grow to 100 per cent of the original estimation. The focus of this transit future plan is to identify service changes that meet the plan Vision and Goals and to achieve long term ridership and mode share targets. Therefore, for the purposes of understanding how far the proposed service changes meet this vision and targets, the estimated annual rides for each service priority in Table 16 are based upon 100 per cent of the total rides expected once ridership has had time to grow.

The details provided for each service priority in this Transit Future Plan are at a high level only and there will be flexibility to amend routing and service hours prior to implementation, particularly should transit oriented development occur that was not identified as part of the transit future plan process. All service expansions will be subject to SCRD budget approval prior to implementation.

This section is split into Quick Wins, Short Term Implementation Priorities, Medium Term Implementation Priorities and Long Term Implementation Priorities. Each includes a description of the various service change options or packages of options proposed and the service hours and vehicle estimates associated with each. BC Transit's general guidelines are that an additional vehicle is required for every 2,500 hours of service with a maximum of 75,000 km annually per heavy duty vehicle and 65,000 km annually per light duty vehicle. Annual lease fee costs as of 2013 for a Light Duty Vehicle are $50,400, for a Medium Duty Vehicle are $52,100 and for a Heavy Duty Vehicle are $73,200.

Table 15 provides a summary of the resources required over the short, medium and long term to fulfill all network service change priorities and Table 16 provides a summary of each service change and the approximate transit budget implications of each.

Table 15: Existing and Projected Resource Requirements over the lifetime of the Transit Future Plan

Time	Conventional Service Hours	Custom Service Hours	Total Additional Service Hours	Total Fleet Vehicles
Existing 2012/13	19,432 hrs.	3,289 hrs.	22,721 hrs.	7 x heavy duty 0 x medium duty 4 x light duty
Quick Wins	480 hrs.	0 hrs.	480 hrs.	0 vehicles
Short Term (1-3yrs)	9,910 hrs.	0 hrs.	9,910 hrs.	1 x heavy duty 6 x medium duty 1 x light duty
Medium Term (4-6yrs)	6,520 hrs.	3,200 hrs.	9,720 hrs.	2 x heavy duty 0 x medium duty 4 x light duty
Long Term (7yrs+) Projected 2038	12,770 hrs.	0 hrs.	12,770 hrs.	0 x heavy duty 4 x medium duty 4 x light duty
TOTAL	**49,112 hrs.**	**6,489 hrs.**	**55,601 hrs.**	**10 x heavy duty** **10 x medium duty** **13 x light duty**

Table 16: Summary of Sunshine Coast Transit Future Service Priorities

Service Improvement	Vehicles	Annual Service Hours	Estimated Rides/Hr*	Estimated Long Term Additional Annual Rides**	Approx. Increase in Transit Budget (to nearest 5%)***
Quick Wins					
Quick Win 1: West Sechelt Coverage	0	340	18	6,800	0%
Quick Win 2: Limited Service to Botanical Gardens	0	140	2	300	0%
Short Term (1–3yrs)					
Service Priority 1: Increase frequency from Sechelt to Langdale and provide Community Feeder Bus Service	1 x heavy 6 x medium	8,870	28	248,400	40%
Service Priority 2: Improve Connections	0	0	0	300	0%
Service Priority 3: Serve Chatelech School	0	200	22	4,400	0%
Service Priority 4: Introduce service to Pender Harbour	1 x light	840	6	5,000	5%
Medium Term (4–6yrs)					
Service Priority 5: 30min Frequency from Sechelt to Langdale at all times	2 x heavy	3,100	28	86,800	10%
Service Priority 6: Increased Frequency to serve Halfmoon Bay on hourly frequency Monday - Saturday	1 x light	2,100	18	37,800	10%
Service Priority 7: Increased Frequency to West Sechelt with 30min service at Peak times	1 x light	820	22	18,000	5%
Service Priority 8: Serve East Porpoise Bay Road		330	18	5,900	0%
Service Priority 9: Serve Sandy Hook & Tuwanek		170	6	1,000	0%
Custom Service	2 x light	3,200	3	10,000	10%
Long Term (7yrs+)					
Service Priority 10: 30 minute Frequency to West Sechelt every day at all times	1 x light	1,480	22	32,600	5%
Service Priority 11: Introduce hourly service to Gower Point Rd.	2 x medium	3,650	10	36,500	15%
Service Priority 12: 30 minute frequency to Lower Gibsons	2 x medium	3,870	18	69,700	15%
Service Priority 13: Increase frequency to Halfmoon Bay on Sundays and Holidays	0	410	18	7,400	0%
Service Priority 14: Increase frequency to the Arena	1 x light	800	18	14,400	5%
Service Priority 11: Explore Service to Port Mellon	2 x light	2,560	20	51,200	10%

**Assumptions are on a Service Priority basis and use an average of the existing route ridership or ridership for similar service in other B.C. communities where new service is being introduced.*

***Ridership takes time to increase following the introduction of service changes. Therefore ridership estimations are for the long term and ridership and associated revenue is expected to be considerably lower in the first years of implementation.*

****Budget increase estimations are based upon SCRD 2013 total transit budget using an average cost per hour with adjustments for light versus heavy duty vehicles and the degree of service changes. These budget implications are high level estimations and will be subject to change over time and with detailed development of the service priority.*

Quick Wins

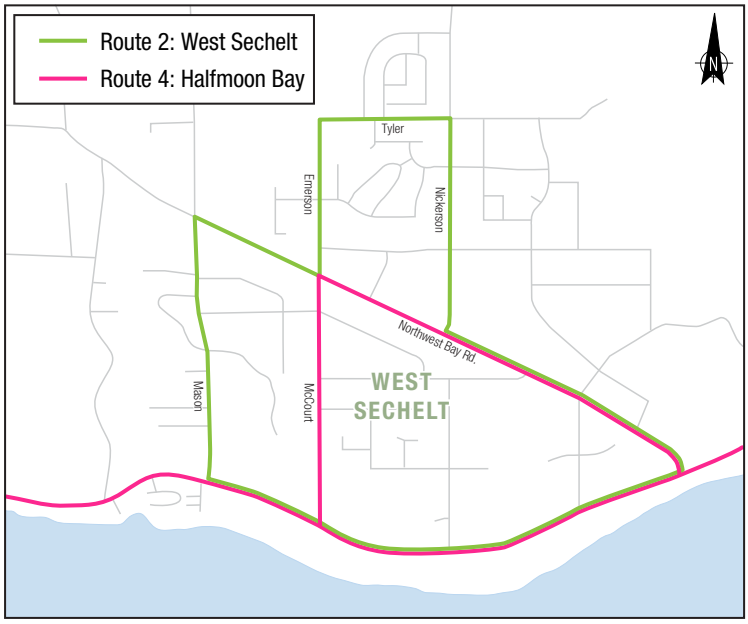
Quick wins are service changes that achieve considerable benefit in terms of contributing to the transit network vision and goals and meeting community needs at minimal cost and with little disruption to the existing system.

QUICK WIN 1: INCREASE TRANSIT COVERAGE TO WEST SECHELT

West Sechelt was identified as one of the areas of highest population density on the Sunshine Coast with approximately 2,000-3,500 people per square kilometre. Currently transit service is provided along Norwest Bay Road. However, there is a considerable area of recent and ongoing development due north of this transit service.

The first quick win entails realigning the existing Route 2: West Sechelt and Route 4: Halfmoon Bay to more comprehensively serve West Sechelt as shown in Figure 24. The route realignment would require an additional 2 minutes per trip on Route 2 and an additional 3 minutes per trip on Route 4 and would extend service into a relatively densely populated area of West Sechelt.

Figure 24: Route 2 and Route 4 re-alignment in West Sechelt



It is estimated that over 3,000 residents are located within 400m of the new route sections, which would equate to 1,230 people per km of additional transit route. This compares to the current system average of 213 people per km of route. Therefore, this option would aim to increase the efficiency of the transit system by enabling Routes 2 and 4 to serve a considerable number of additional potential passengers for limited additional resources. This option was identified as a key priority in stakeholder workshops, public survey responses and feedback from the community association. It also helps to address Goals 1, 2 and 4 by attracting new riders, supporting and aligning with sustainable development and presenting an efficient and cost effective service option.

QUICK WIN 2: LIMITED SERVICE TO THE BOTANICAL GARDENS

The Sunshine Coast Botanical Gardens is located on Mason Road in Sechelt, opposite the transit operations facility. The Gardens currently host approximately 2,000 visitors annually, with peak numbers between April and October and a reliance on volunteers for its year round operation. This would represent a small transit market due to the relatively low numbers, limited surrounding density and population base and the function of the property (visitors may often chose to travel to Botanical Gardens with an automobile in order to carry plants that are purchased). However, its location opposite

the transit operations facility presents a key opportunity for increasing the productivity of service, particularly given visitor numbers are expected to increase and some volunteers have found it difficult to access the Gardens.

Therefore, Quick Win 2 will introduce limited service with approximately 4 one-way trips Monday to Saturday in the short term to the Botanical Gardens. Trips would be provided by buses leaving and returning to the transit yard on Mason Road as they come into and out of service. This would require 8 minutes per one-way trip, which equates to 140 annual revenue hours and approximately 300 rides per year. Albeit these hours are not currently included in the Annual Operating Agreement between BC Transit and the SCRD, the SCRD pays for the operating service hours for the drivers to start at or return to the operations maintenance facility. Therefore, the provision of these trips would not result in an increased cost to the SCRD.

Table 17 provides a summary of the quick win resource requirements and the estimated additional long term ridership resulting from their implementation.

Table 17: Quick Win Resource Requirements and resulting Ridership

Service Improvement	Additional Resources		Estimated Long Term Additional Annual Rides
	Vehicles	Annual Service Hours	
Quick Win 1: Increase Transit Coverage to West Sechelt	0	340 hours	6,800*
Quick Win 2: Limited Service to the Botanical Gardens	0	140	300**

** Based upon an estimated 20 rides per hour as per the average of existing Route 2 (22 rides per hour) and Route 4 (18 rides per hour)*

*** Based upon an estimated 2 rides per hour*

Short Term Implementation Priorities (1-3yrs)

The service changes outlined for the short term are those designed to address the key priorities identified through public engagement and that significantly contribute to achieving the Transit Future vision, goals, targets and network. They are designed to reflect the principal transit issues and primary wishes of the Sunshine Coast community; In particular, the desire to restructure the existing Route 1 and Route 90 to provide a more frequent and direct express service along the key corridor between Sechelt, Gibsons and the Langdale Ferry Terminal and to provide separate local community routes with smaller vehicles for West Howe Sound, Gibsons Landing, Elphinstone and Roberts Creek.

These changes will result in a full restructure of the eastern section of the Sunshine Coast transit system between Sechelt, Gibsons and Langdale. As such, a period of re-adjustment by transit passengers to new routes, schedules and, for some, transfers, will be required. However, this restructure will go a considerable way in addressing the primary concerns and desires of existing passengers and attracting new riders.

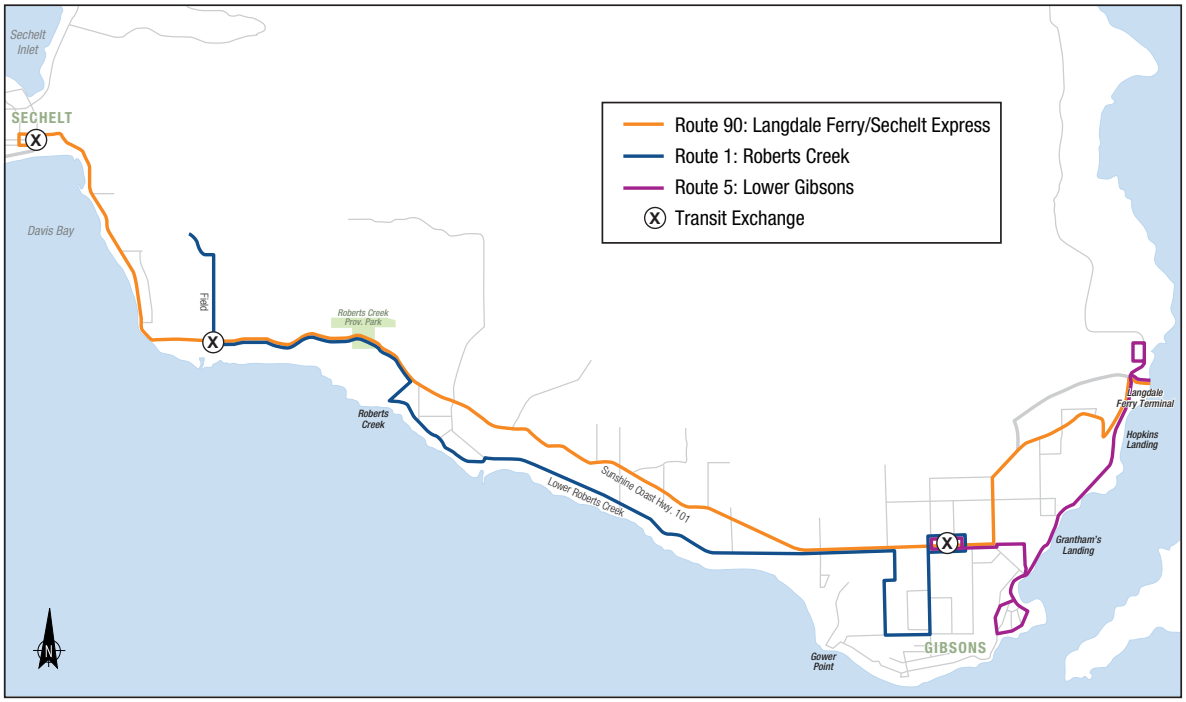
The aim is to pursue these short term service priorities within the next three years. As such, these priorities would be included in the 3 Year Expansion Plan and budget commencing 2014/15. Any infrastructure investments required to support the short term service changes are also outlined in this section.

SERVICE PRIORITY 1: INCREASE FREQUENCY BETWEEN SECHELT, GIBSONS AND LANGDALE FERRY TERMINAL AND PROVIDE LOCAL COMMUNITY FEEDER SERVICE

The primary improvements identified by stakeholders and community members in the transit engagement related to increasing frequency between Sechelt, Gibsons and the Langdale Ferry Terminal along Highway 101 and providing local community transit service with smaller vehicles and, ultimately, increased frequency. The most suitable and efficient approach to addressing these community needs is to provide a Frequent Transit Network (FTN) on Highway 101 on Route 90 and restructure the existing Route 1 to provide separate local community routes that would feed into the FTN. Once sufficient service hours are funded, the Route 90 could operate at 30 minute frequency and be scheduled to meet ferry arrival and departure times at the Langdale Ferry Terminal.

Route 1 would be shortened to start at either the Sechelt-Gibsons airport or the Sunshine Coast Regional District Offices on Field Road, serving Roberts Creek and Elphinstone and would terminate at a new exchange in upper Gibsons. A new route would be introduced that starts and ends at the new exchange in Upper Gibsons and provides service to lower Gibsons, Langdale Ferry Terminal and Langdale Heights (Route 5). The route structure will be finalized prior to implementation once the location of the new exchange in upper Gibsons is confirmed. However, key community destinations should be served in upper Gibsons by a combination of the Route 1 and new Route 5. Route 90 would now route to Langdale Ferry Terminal from Gibsons via North Road for most trips, with the Route 5 providing service using a smaller transit vehicle on Marine Drive that is more suited to the level of demand and road structure in this area. The new routes are outlined in Figure 25.

Figure 25: New Route Structure for the existing Route 1 and Route 90 and Community Service



There are many benefits to implementing this service.

- An increased frequency between Sechelt, Gibsons and Langdale on Highway 101 and reduced travel time that will make transit more competitive with the automobile, supporting an increase in transit ridership
- Reduced wait time at Langdale Ferry Terminal when there are ferry delays and passengers miss the scheduled connection
- Increased transit service for Gambier and Keats Island residents and visitors due to an increase in the number of trips to and from the Langdale Ferry Terminal that align with the Gambier and Keats Island ferry schedule
- Local community routes that would be served with medium duty, smaller vehicles, reducing the impact on local roads and residential neighbourhoods, reducing vehicle lease fee costs and ensuring more suitably sized vehicles for local service levels
- Increased frequency and number of trips serving Roberts Creek, Elphinstone and Lower Gibsons
- Consistent hourly service could now be provided for all service to Roberts Creek, Elphinstone and Lower Gibsons
- 'Clock-face headway' could now be introduced for much of the Sunshine Coast schedule. Clock-face headway is when the transit service operates at regular and evenly spaced time intervals. This enables riders to remember trip times more easily and may have a positive impact on ridership
- Increased service would be provided to North Road, which currently receives only 2 trips per day. Approximately 1,680 additional residents are located within 400m of the area to be served on North Road. This equates to approximately 323 people per km of additional transit route in comparison to the existing system average of 213 people per km of route. This could increase the efficiency of the transit system by enabling Route 90 to serve a considerable number of additional potential passengers
- Transit service would be introduced to the residential development, SCRD Administration Offices and Sechelt-Gibsons Airport on Field Road; locations identified in public engagement feedback for new transit service

Given the significant resources required to achieve 30 minute frequency on the Route 90 in the short term, Service Priority 1 proposes providing hourly service on Route 90 for part of the day with 30 minute frequency at peak times of the day only. Additional resources would then be provided in the medium term to increase frequency on Route 90 to 30 minute service at all times of the day (see Service Priority 5). Route 1 and Route 5 would be provided hourly service in the short term as part of Service Priority 1. Each route would continue to have service on weekdays from approximately 5:30 a.m. to 11:30 p.m. and Saturdays from 8:00 a.m. to 11:30 p.m. with reduced service on Sundays and holidays.

The new Route 1: Roberts Creek and new Route 5: Lower Gibsons would be interlined (will use the same bus) when both are on hourly service. This means that the bus that provides service to Route 1 would continue on as Route 5 at the new exchange in upper Gibsons. Therefore, passengers from Elphinstone and Lower Road in Roberts Creek who wish to travel to and from the Langdale Ferry

Terminal or Lower Gibsons could remain on the bus at the Gibsons Exchange and that bus would automatically become a Route 5 to continue on to Lower Gibsons and Langdale Ferry Terminal. No transfer would be required.

However, those passengers that wish to travel to and from Sechelt would need to change between a Route 1 and Route 90 bus at the Wilson Creek Exchange near Field Road. Transit exchanges would be designed to be located at or near community activity centres with weather protection, seating, transit route and schedule information, lighting, bicycle parking and other necessary amenities. The new routes would be scheduled to try and minimize waits at exchanges and enable connections on key trips at suitable times of day.

The number of trips that connect between the Route 1: Roberts Creek and Route 90: Langdale Ferry/Sechelt Express would be the same as the current number of trips on the existing Route 1 that go all the way to and from Sechelt (12 trips on weekdays and 7 trips on Saturdays, Sundays and Holidays). Passengers travelling between Sechelt and Roberts Creek would have a transfer time of approximately 5-10 minutes on these trips to connect between the Route 1 and Route 90. In addition, there will be 6 supplementary trips added to the new Route 1: Roberts Creek on weekdays and 8 supplementary trips added on Saturdays, Sundays and holidays in order to increase service frequency to every hour. These supplementary trips only would have a longer wait time to connect to and from Sechelt (between 30-45 minutes). Therefore, these trips could still enable transfers should passengers wish to spend the wait time shopping at the commercial areas in Wilson Creek.

The number of trips that connect between the new Route 1: Roberts Creek and Route 90: Sechelt/Langdale Express to enable passengers to travel onwards to and return from Sechelt will be evenly spread throughout the day. Connecting trips should be reflective of the existing Route 1: Sechelt/Langdale local trips with the additional Route 1 trips added at times around these to increase the frequency to hourly service.

Once service frequency is increased on Route 90 to 30 minute service at all times of day, every trip on the new Route 1: Roberts Creek would connect to and from Sechelt on the Route 90 with between 5 and 10 minutes transfer time (this is outlined in medium term Service Priority 5).

Albeit Route 90 would now route to Langdale Ferry Terminal from Gibsons via North Road for most trips, an alternative route variation would be provided for limited trips during the day via Gibsons Landing and Marine Drive in the short and medium term. This would result in an increased frequency of service to Gibsons Landing and Marine Drive in the short and medium term until Route 5 is increased to 30 minute frequency in the long term (see Service Priority 12). It should be noted that large heavy duty vehicles would provide the service for these limited trips in the short term. Once service on Route 5 is increased to 30 minute frequency in the long term (Service Priority 12) there would be no need for the Route 90 route variation along Marine Drive. Therefore, in the long term, all trips on Route 90 would route via North Road.

Service Priority 1 would require 8,870 additional annual service hours. In total, 8 heavy duty vehicles would be required to serve Route 90 and 6 medium duty

vehicles to serve Route 1: Roberts Creek and Route 5: Lower Gibsons. There are 7 heavy duty vehicles providing the current service, which would result in Service Priority 1 requiring an additional 1 heavy duty vehicle and 6 medium duty vehicles to provide the service.

SERVICE PRIORITY 2: IMPROVE CONNECTIONS

Feedback from public engagement identified the need to improve the transit connections from West Sechelt to the Arena and from Halfmoon Bay and West Sechelt to Gibsons and Langdale. As service frequency to West Sechelt and Halfmoon Bay increases in the medium and long term, this will improve connections, enabling passengers to connect with the Route 1 and Route 90 to Gibsons and Langdale more often and with less wait time. However, in the short term the transit schedule should be reviewed with the implementation of Service Priority 1 in order to improve connections at key times of day for passengers from West Sechelt and Halfmoon Bay.

SERVICE PRIORITY 3: AMEND ROUTING TO SERVE CHATELECH SCHOOL

Chatelech School, located on Cowrie Street in Sechelt, is not currently served by transit and requires students and teachers to walk approximately 850m to and from the downtown Sechelt exchange for transit service. Recent residential development on Cowrie Street has resulted in an extension of Cowrie Street towards West Sechelt and it is anticipated that Cowrie Street will connect to West Sechelt in the short term. This presents an opportunity to amend Route 2 to serve West Sechelt via Cowrie Street rather than Highway 101, serving Chatelech School and additional residents in the new development. This service priority may require some limited additional resources, dependent upon final road alignment. However, these are expected to be minimal and may amount to approximately 1 or 2 additional minutes per trip. These resources would be confirmed prior to implementation once road alignment is finalized.

Land use and development in Sechelt should be monitored in the short and medium term and service priorities amended if further opportunities arise to increase transit service to densely populated areas.

SERVICE PRIORITY 4: PROVIDE SERVICE TO PENDER HARBOUR

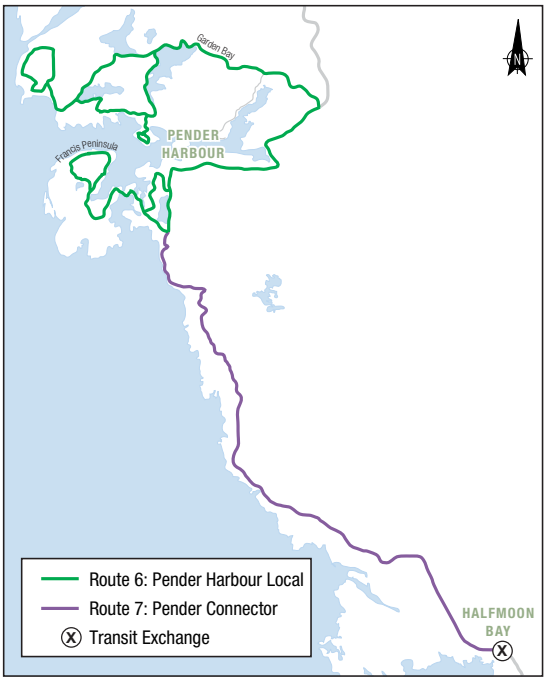
Service Priority 4 includes the provision of a local flex-route service in Pender Harbour (Route 6) with a separate connector service between Pender Harbour and Halfmoon Bay (Route 7), enabling passengers to connect to Route 4 to continue on to Sechelt (Figure 26). There was significant feedback from public engagement indicating this as a key priority for service and highlighting the need for a local route in addition to the connector to the existing transit service at Halfmoon Bay and Sechelt. Albeit a trip that routed all the way to Sechelt was explored, a shorter trip that connected at Halfmoon Bay was considered more appropriate given the additional time and resources required to travel the additional distance to Sechelt.

Route 6 would provide local service with approximately four trips per day following a fixed route and fixed schedule covering Madeira Park and Garden Bay. The schedule would be flexible to allow buses to deviate from the route

to pick up or drop off passengers at nearby locations (see Appendix 3 for a more detailed overview of paratransit options and flexible service). This would assist those passengers with mobility issues who cannot access the transit route from their homes. Passengers requiring door-to-door service would be required to call in advance. Route 7 would provide two return trips between Madeira Park and Halfmoon Bay as an extension of Route 6. Service Priority 4 would require an additional light duty vehicle and 840 annual service hours. The vehicle would ideally be stored at a satellite operations facility located in Pender Harbour.

It is estimated that approximately 3,800 additional residents are included within 400m walking distance of the new Route 7. However, given the rural nature of development in this area and the significant distance and lack of development between Halfmoon Bay and Madeira Park this would equate to only approximately 40-47 people per km of transit route. This compares to the current system average of 213 people per km of route.

Figure 26: Proposed Route Structure to Serve Pender Harbour



Therefore, the primary purpose of this service would be to increase access and mobility for residents of Pender Harbour who are unable to drive or are currently without a vehicle, connecting them to both local amenities and also to other services further down the coast (medical, shops, transportation etc.). As such this priority would support the Transit Future Plan Goal 5 in that it would increase accessibility. However, given the low density and lack of transit oriented style development in this area, ridership is anticipated to be low and implementing this priority could negatively impact the efficiency of the transit system and the ability to achieve Goals 2 and 4 that relate to support for sustainable development and efficient and effective service. Given this, it is proposed that this service would operate on a limited number of days per week (the resources identified in Table 18 are based upon an assumed 2 days of service per week).

INFRASTRUCTURE 1: GIBSONS EXCHANGE

Changes to Route 1 and the new Route 5 will present the opportunity to serve more community amenities in Upper Gibsons such as the Gibsons and Area Community Centre and the medical clinic on Payne Road. A transit exchange, preferably located on-street and near either the commercial development and medical clinic on Payne Road or near Sunnycrest Mall and the community centre will enable passengers to transfer from the Route 1 and Route 5 onto the Route 90. A study should be initiated immediately to determine the most suitable location, detailed infrastructure requirements, timeline and associated costs and, based upon this location, the final route structure for Route 1 and 5.

INFRASTRUCTURE 2: FIELD ROAD EXCHANGE

Changes to Route 1 will now require passengers from Elphinstone and Lower Road in Roberts Creek who wish to travel to and from Sechelt to transfer from

one route to another at Wilson Creek near Field Road. This will require a transit exchange, preferably located on-street and near Highway 101 in close proximity to the shopping amenities in this area. A study should be initiated immediately by BC Transit in collaboration with the SCRD to determine the most suitable location, detailed infrastructure requirements, timeline and associated costs.

INFRASTRUCTURE 3: SECHELT PARK & RIDE

With the introduction of the frequent network on Route 90 between Sechelt, Gibsons and Langdale Ferry Terminal, the ability to park the car and ride transit at Sechelt will be valuable to attract new transit passengers and increase ridership. A suitable location has been identified as the overflow car park area at the Ravens Cry Theatre. The availability of this space and agreement for its use should be determined in the immediate future and alternatives explored and secured should this site be unsuitable. An informal park & ride already exists on Trail Avenue and Cowrie Street near Sechelt Fire Station. This is generally used by commuters travelling onwards via van and carpool to Port Mellon.

Table 18 provides a summary of the short term priority resource requirements and the estimated additional ridership resulting from their implementation.

Table 18: Short Term Priority Resource Requirements and resulting Ridership

Service Improvement	Additional Resources		Estimated Long Term Additional Annual Rides
	Vehicles	Annual Service Hours	
Service Priority 1: Increase frequency between Sechelt and Langdale and local Community Bus	1 x heavy duty 6 x medium duty	8,870 hours	248,400*
Service Priority 2: Improve Connections	0	0	300**
Service Priority 3: Serve Chatelech School	0	200	4,400***
Service Priority 4: Pender Harbour Service	1 x light duty	840 hours	5,000+
Infrastructure 1: Gibsons Exchange	Capital costs: to be determined		
Infrastructure 2: Field Rd Exchange	Capital costs: to be determined		
Infrastructure 3: Sechelt Park & Ride	Capital costs: to be determined		

**Based upon an estimated 28 rides per hour taken from the existing Route 1 average.*

***Assumes an additional 1 ride per weekday*

****Based upon an estimated 22 rides per hour taken from the existing Route 2 average*

+Based upon an estimated 6 rides per hour

Medium Term Implementation Priorities (4-6yrs)

The service changes outlined for the medium term are those designed to complete the implementation of additional key priorities identified through public engagement. The aim is to pursue these options within the next four to six years. Any infrastructure investments required to support the medium term service changes are also outlined in this section.

SERVICE PRIORITY 5: 30 MINUTE FREQUENCY BETWEEN SECHELT, GIBSONS AND LANGDALE AT ALL TIMES

This service priority would increase the frequency of Route 90 so that it provides 30 minute frequency at all times of day for the entire service span, including weekends and holidays. The service would be more reliable by effectively eliminating the need to wait for any late ferries. This would ensure better connections for all trips between Route 1 and Route 90 heading to or from Sechelt, ensuring passengers wishing to travel to Sechelt from Elphinstone and Roberts Creek or returning to these destinations from Sechelt can connect at the Field Road exchange for all trips with a transfer time of approximately 5 to 10 minutes. In addition, this increase in frequency will mean that this route would now also provide service to the Gambier and Keats Island ferry and would result in significantly less wait time when ferries are delayed.

Further, this route is the only route that provides service past St Mary's hospital. The increased frequency would enable passengers to access St Mary's hospital more easily for appointment times and would support transfers from Routes 2, 3 and 4 at the Sechelt exchange for passengers wishing to get to St Mary's hospital and travel beyond to Gibsons and Langdale from Halfmoon Bay, Pender Harbour and other areas of Sechelt. Service Priority 5 would require 3,100 additional annual service hours and an additional 2 heavy duty vehicles.

SERVICE PRIORITY 6: INCREASE FREQUENCY TO HALFMOON BAY TO HOURLY SERVICE ON WEEKDAYS AND SATURDAYS

Route 4: Halfmoon Bay currently has service approximately every two hours with a total of 8 trips per day and four on Sundays and holidays. The Transit Future Network proposes that this remain as a local transit network but should increase in frequency to support ridership and future population growth in this area and in response to the public engagement feedback. Service Priority 6 would increase the frequency on Route 4 to hourly service between Monday and Saturday. This would require 2,100 additional annual service hours and an additional light duty vehicle.

SERVICE PRIORITY 7: INCREASE FREQUENCY TO WEST SECHELT TO HOURLY SERVICE WITH 30 MINUTE SERVICE AT PEAK TIMES

Route 2: West Sechelt currently has service approximately every hour to two hours with a total of 17 trips per week day, 12 trips on Saturdays and 10 trips on Sundays and holidays. The Transit Future Network proposes that this would become a Frequent Transit Network due to the existing population density and expected future development. Service Priority 7 would increase the frequency

on Route 2 to hourly service between Monday and Saturday with service every half hour at peak times of the day. This would require approximately 740 additional annual service hours and an additional light duty vehicle (which could make use of the vehicle provided as part of Service Priority 6).

Demand for additional service to the Sunshine Coast Botanical Gardens should be reviewed in the medium term to determine if additional trips are required above those provided in Quick Win 1. Service Priority 7 would also include a review of demand through engagement with the Botanical Gardens and any associated requirement for additional service, potentially as targeted on-demand trips and/or supplementary seasonal service.

SERVICE PRIORITY 8: PROVIDE SERVICE TO EAST PORPOISE BAY ROAD

There is currently no transit service along East Porpoise Bay Road encompassing the Shishalh First Nations residential development. Service Priority 8 would extend the existing Route 3: Arena to include East Porpoise Bay Road, providing service to residential development in the area and potentially also the new industrial site on Sechelt Inlet Crescent. This would add an additional 6 minutes per trip and would require approximately 330 additional annual service hours.

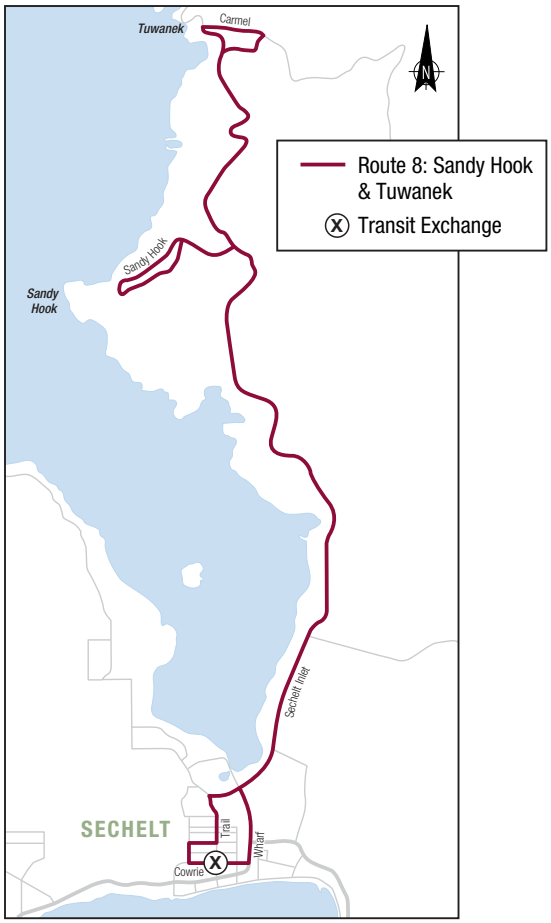
SERVICE PRIORITY 9: PROVIDE SERVICE TO SANDY HOOK & TUWANEK

There is currently no transit service to Sandy Hook & Tuwanek and this was identified as an area of future transit service in the public engagement exercise. Service Priority 9 would introduce scheduled service to Sandy Hook and Tuwanek on two days per week with two return trips per day as outlined in Figure 27.

The route would provide a 43 minute return trip and it is estimated that approximately 2,420 residents would be located within 400m walking distance of the proposed route. However, given the rural nature of development in this area, this would equate to only approximately 95 people per km of additional transit route. This compares to the current system average of 213 people per km of route.

Therefore, this service priority would increase mobility and access to amenities for residents of Sandy Hook and Tuwanek who are unable to drive or are currently without a vehicle. As such this priority would support the Transit Future Plan Goal 5 in that it would increase accessibility. However, given the low density and lack of transit oriented style development in this area, this route is expected to have low ridership and implementing this priority could negatively impact the efficiency of the transit system including the ability to achieve Goals 2 and 4. Given this, service is limited to two days per week and two return trips per day, which would provide a community service to improve access and connectivity to this area of the Sunshine Coast.

Figure 27: Service to Sandy Hook & Tuwanek



Service Priority 9 would require 150 additional annual service hours and an additional light duty vehicle (which could make use of the vehicle provided to deliver Service Priority 6).

INFRASTRUCTURE 4: GIBSONS PARK & RIDE

With the introduction of the FTN on Route 90 between Sechelt, Gibsons and Langdale Ferry Terminal, the ability for residents living in rural areas on the eastern part of the Sunshine Coast to Park & Ride at Gibsons to travel to Sechelt will be valuable to attract new transit passengers and increase ridership. This facility would also be a valuable resource for employees of Howe Sound Pulp and Paper (HSPP) at Port Mellon who may wish to car pool to and from work.

The most suitable location for a park & ride facility would be integrated with the new Gibsons Transit Exchange. However, two potential locations have been identified at either the new Transit Exchange expected to be located near Sunnycrest Mall or the Gibsons Pool. The availability of land and agreement for its use should be determined in the immediate future as part of the study identifying the Gibsons Transit Exchange location.

INFRASTRUCTURE 5: SATELLITE OPERATING FACILITY

The existing transit operations and maintenance facility is located on Mason Road in Sechelt. Currently, all routes have a terminal in Sechelt, which maintains an efficient service with respect to buses travelling out of service only a short distance from Mason Road to Cowrie Street to commence service. With the introduction of the local community bus service in Roberts Creek, Elphinstone and Gibsons Landing, buses will now be required to deadhead between Mason Road and Field Road or Gibsons. This is time when the vehicle is not in service but is required to travel and results in additional operational costs associated with mileage and driver's time. This additional deadhead time could reduce the efficiency of the transit system.

One approach to reduce this impact and maintain service efficiency would be to explore the option of developing a 'satellite' facility located near Field Road or Gibsons. A study should be initiated in the near future to determine the feasibility of a satellite facility and the associated costs and benefits to determine if this would be suitable.

Table 19 provides a summary of the medium term priority resource requirements and the estimated additional ridership resulting from their implementation.

Table 19: Medium Term Priority Resource Requirements and resulting Ridership

Service Improvement	Additional Resources		Estimated Long Term Additional Annual Rides
	Vehicles	Annual Service Hours	
Service Priority 5: Increase frequency to 30min service between Sechelt and Langdale at all times	2 x heavy duty	3,100 hours	86,800*
Service Priority 6: Increase frequency to Halfmoon Bay to hourly service on weekdays and Saturdays	1 x light duty	2,100 hours	37,800**
Service Priority 7: Increase frequency to 30 minute service at peak times to West Sechelt	1 x light duty	820 hours	18,000***
Service Priority 8: Serve East Porpoise Bay Road		330 hours	5,900+
Service Priority 9: Serve Sandy Hook & Tuwanek		170 hours	1,000++
Infrastructure 4: Gibsons Park & Ride	Capital costs: to be determined		
Infrastructure 5: Satellite Operating Facility	Capital costs: to be determined		

**Based upon an estimated 28 rides per hour taken from the existing Route 1 average.*

***Based upon an estimated 18 rides per hour from the existing Route 4*

****Based upon an estimated 22 rides per hour from the existing Route 2*

+Based upon an estimated 18 rides per hour (a reduction of the existing Route 3)

++Based upon an estimated 6 rides per hour

Long Term Implementation Priorities (7yrs+)

The service changes outlined for the long term are those changes that will complete the transit future network either by layering on increased frequency to the existing routes or by implementing the final new areas identified for service. Any infrastructure investments required to support the long term service changes are also outlined in this section.

SERVICE PRIORITY 10: 30 MINUTE FREQUENCY TO WEST SECHELT ALL DAY

This service priority would increase the frequency of Route 2 to West Sechelt so that it provides approximately 30 minute frequency at all times of day for the entire service span, including weekends and holidays. At this point, Route 2 should also be re-assessed to consider route re-alignment to provide coverage to the future expected development in West Sechelt. The additional annual service hours are estimated based upon the existing route so it should be noted that any additional service area coverage would require additional service hours to complete. Service Priority 10 would require 1,480 additional annual service hours and an additional light duty vehicle.

SERVICE PRIORITY 11: INTRODUCE HOURLY SERVICE ON GOWER POINT ROAD

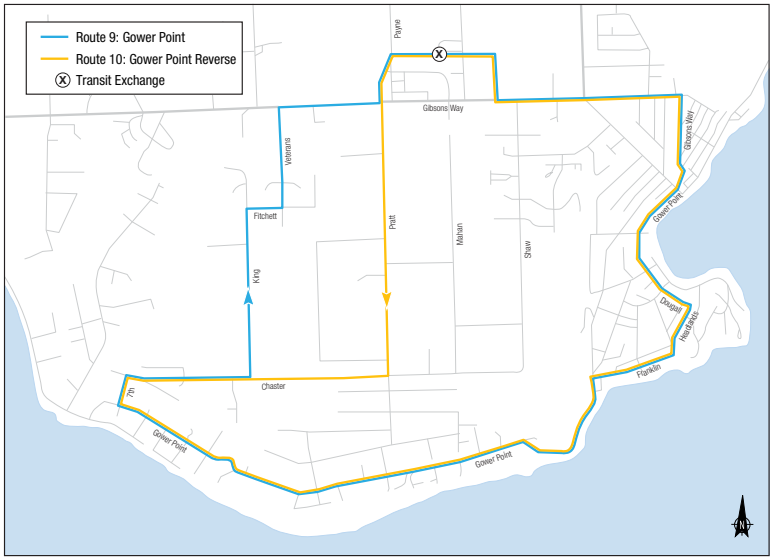
This priority would provide two-way, hourly service to Lower Gibsons, Gower Point Road and Elphinstone with the introduction of two new Routes 9 and 10 as outlined in Figure 30.

Service would be provided between approximately 8 a.m. and 6 p.m. on weekdays and between 9 a.m. and 5 p.m. on weekends and holidays. This area was highlighted in the public engagement exercise as a location where residents find

it difficult to access the existing system. It is estimated that approximately 1,670 additional residents are located within 400m walking distance of the section of Route 6 and 7 not currently served by the existing transit system (i.e. the section along Gower Point Road).

Albeit the development in this area is still generally rural in nature, it has more density than many other areas identified for future service with approximately 194 people per additional km served by transit. This compares to the existing system average of 213 people per km of route.

Figure 30: Service to Gower Point Road



At this point, Routes 5, 9 and 10 should also be re-assessed to consider route re-alignment to provide coverage to the future expected development in upper Gibsons near Reed Road as outlined in the Gibsons Official Community Plan. Service Priority 11 would require 3,650 additional annual service hours and 2 additional medium or light duty vehicles. Vehicle type would be determined nearer the time.

SERVICE PRIORITY 12: 30 MINUTE FREQUENCY TO LOWER GIBSONS

This service priority would increase the frequency of Route 5 to Lower Gibsons so that it provides approximately 30 minute service at all times of day for the entire service span, including weekends and holidays. This would complete the FTN as outlined in the Transit Future Network. Service Priority 12 would require approximately 3,870 additional annual service hours and two additional medium duty vehicles.

SERVICE PRIORITY 13: INCREASE FREQUENCY TO HOURLY SERVICE TO HALFMOON BAY ON SUNDAYS AND HOLIDAYS

This service priority would increase the frequency of Route 4 to Halfmoon Bay so that it provides approximately hourly service between 9am and 9pm on weekends and holidays. This would provide an additional 8 trips on Sundays and holidays. Service Priority 13 would require approximately 410 additional annual service hours and would use the spare capacity from the existing light duty transit vehicles introduced for service priorities in the medium term.

SERVICE PRIORITY 14: INCREASE FREQUENCY TO SECHELT ARENA

This service priority would increase the frequency of Route 3 to the Arena and Gale Avenue North in Sechelt, including the new extension to Porpoise Bay Road introduced in the medium term so that it provides approximately hourly service for the entire service span, including weekends and holidays. This would complete the LTN as outlined in the Transit Future Network. Service Priority 13 would require approximately 800 additional annual service hours and one additional light duty vehicle.

SERVICE PRIORITY 15: EXPLORE TRANSIT SERVICE TO PORT MELLON

This service priority would provide transit service to Port Mellon primarily to serve employees of Howe Sound Pulp and Paper (HSPP) and Hillside Industrial Park. There are currently three 12 hour rotating shifts 7 days per week at HSPP starting at 6 a.m., 6:30 a.m. and 7 a.m. and finishing at 6 p.m., 6:30 p.m. and 7 p.m. with approximately 400 employees in total over all shifts and additional employees at the industrial park.

Service Priority 14 would provide service from Gibsons Exchange to the HSPP mill at Port Mellon, also serving the industrial park with 6 return trips per day, 365 days per year. The trip time would be approximately 75 minute per return trip, which would include a 10-15 minute wait at HSPP for passengers to disembark in time for shift start and to board following shift end. A more comprehensive estimate of transit demand should be established nearer the time of implementation. This should include updated information relating to key destination points and employee start times in order to determine the suitability of providing this service, the need for additional midday trips for non-employee service and the vehicle type required. However, based upon the current information, Service Priority 11 would require approximately 2,540 additional annual service hours and two additional light duty vehicles.

Table 20 provides a summary of the long term priority resource requirements and the estimated additional ridership resulting from their implementation.

Table 20: Long Term Priority Resource Requirements and resulting Ridership

Service Improvement	Additional Resources		Estimated Long Term Additional Annual Rides
	Vehicles	Annual Service Hours	
Service Priority 10: 30 minute frequency to West Sechelt	1 x light duty	1,480 hours	32,600*
Service Priority 11: Introduce Service to Gower Point Road	2 x medium or light duty	3,650 hours	36,500**
Service Priority 12: 30 minute frequency to Lower Gibsons	2 x medium duty	3,870 hours	69,700***
Service Priority 13: Increase frequency to Halfmoon Bay on Sundays and Holidays	0	410 hours	7,400***
Service Priority 14: Increase frequency to the Arena	1 x light duty	800 hours	14,400***
Service Priority 15: Explore Service to Port Mellon	2 x light duty	2,560 hours	51,200+

** Based upon an estimated 22 rides per hour from the existing Route 2*

*** Based upon an estimated 10 rides per hour*

**** Based upon an estimated 18 rides per hour*

+ Based upon an estimated 20 rides per hour (assuming 10 passengers each way)

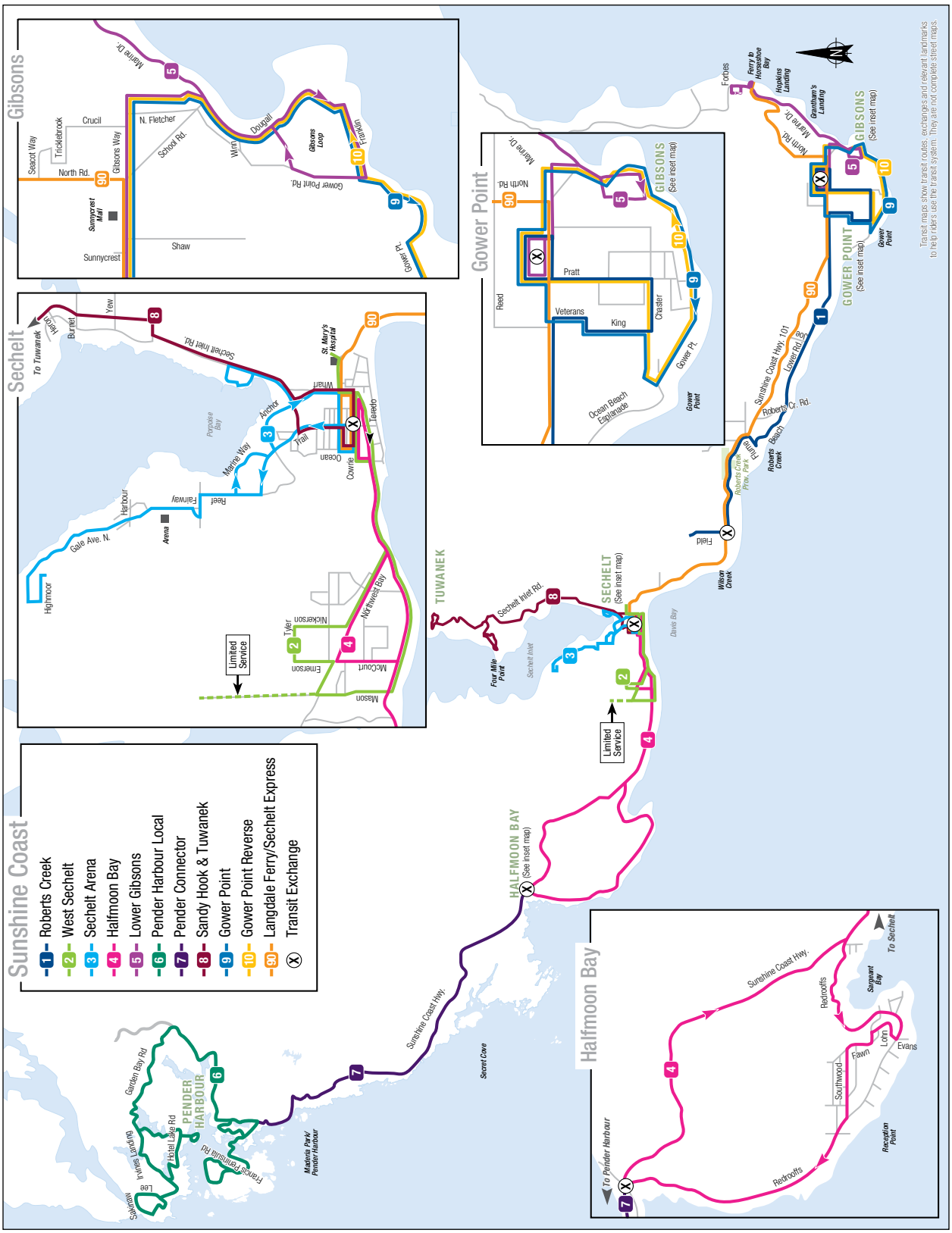


Figure 31: Summary of all Future Transit Routes completed by the Long Term

Custom Transit Service and Transit Accessibility

Improvements to custom transit services will complement the fully accessible conventional service to make the transit system more accessible for people of all ages and abilities. This will be of particular importance over the medium term for the Sunshine Coast given the expected increase in an aging population that may have less capacity to walk to transit stops or travel independently. The plan forecasts that a fleet of 5 buses and 6,489 service hours will be needed to operate custom transit services by 2038. A series of service improvements to enhance accessibility and custom transit are outlined below in order to:

- Align the hours of operation and service area with the conventional system
- Increase service availability to accommodate an anticipated future increase in custom transit users and to allow customers to plan medical appointments, shopping and casual trips throughout the entire service day

Table 21: Custom Transit Service Improvements

Service Improvement	Timeframe
Confirm custom transit service area BC Transit has recommended a service area definition that draws from the Americans with Disabilities Act (ADA) – legislation. The ADA legislation has defined service area parameters of a 1.5 kilometer distance from the existing conventional fixed-route system in each community. This is currently the geographic definition in place to guide the planning of custom service in the Sunshine Coast as shown in Figure 20. It will be important for the SCRD to confirm the custom transit service area in order to ensure that custom services are focussed on serving the largest number of individuals in need. Given the paratransit door-to-door nature of Service Priority 3: Pender Harbour, it is considered that this would serve as custom transit for this area of the Sunshine Coast.	Short-term
Improve handyDART vehicle accessibility by changing bus type Some vehicles currently used for handyDART service in the Sunshine Coast are not low-floor accessible, and instead use a lift for clients with wheelchairs or other mobility aids. Low floor vehicles are generally faster and easier to load for passengers with mobility aids, and they are more accessible for clients who are ambulatory, but who may have difficulty climbing the stairs into the vehicle. New and replacement vehicles will be low floor buses such as the ARBOC vehicles recently implemented. These are light duty transit vehicles (26' long, 96" wide) with a low floor and a single passenger entrance door that allows for wheelchair access. The bus has space for 20 seated passengers or 3 wheelchairs and 12 seated passengers.	Short-term
Continue to improve productivity of custom service Given the distance between Gibsons and Sechelt (St. Mary's Hospital) try to accommodate demand by scheduling regional trips at specific times to improve productivity.	Short-term
Implement a travel training program A program should be developed to provide travel training to assist individuals who meet the handyDART eligibility criteria in learning to use conventional and handyDART transit systems. The travel training program would be based on handyDART referrals and outreach to seniors and people with a disability. In Kelowna, 95 per cent of training participants are riding conventional transit following their training.	Medium-term

Service Improvement	Timeframe
Improve custom registration process BC Transit is currently reviewing custom transit registration in partnership with local governments. A pilot project is being completed in two regions where BC Transit provides custom transit services. This pilot project will incorporate an in-person component to the custom transit registration process to more closely align with industry standards and best practices. Based on the pilot's outcomes, the intent of this project is to develop a new approach which will be fine-tuned and implemented across the province in all of BC Transit's applicable custom transit and paratransit systems. It is likely that this will be ready for implementation in the Sunshine Coast in the medium term.	Medium-term
Continue to expand service over time to meet demand Improve handyDART availability over time to match the expected increase in demand due to an aging population. It is anticipated that doubling service hours over the medium to long term and providing two additional handyDART vehicles for service would enable an increase in service on weekdays, some evening service and service for two vehicles on Sundays and holidays. This would include an additional 3,200 service hours over the medium and long term. This is anticipated to serve an approximately 10,000 additional rides.	Medium- to Long-term

Ongoing Improvement Initiatives

The following initiatives are aspects of the Transit Future Plan that require continuous effort throughout the life of the plan. For this reason, they do not fit within the Network Priorities section of this Implementation Strategy.

Fare review

A fare review should be conducted prior to implementing Service Priority 1 and restructuring the existing Route 1 to local community feeder routes. This should consider options and the associated implications of the following:

- Different fares for the Frequent Transit Network and Local Transit Network
- Timed versus two-way transfers

Make transit more accessible

The Sunshine Coast Transit System strives to be accessible to all. With the mobility requirements of an aging population there will be an increasing need for more accessible transit solutions. Accessibility should be improved over time by:

- Reviewing bus stop distances in the short term and installing additional stops as required, particularly related to gradient and destination points where passengers may benefit from shorter walking distances between stops (e.g. seniors activity centres) as well as consideration of the network of trails in rural areas (e.g. in Roberts Creek)
- Making investments in handyDART vehicles and service hours as required in the medium and long-term to meet the anticipated increase in demand
- Investigating the handyDART eligibility criteria to ensure handyDART service is available to those who are unable to use the conventional transit system unassisted
- Upgrading key bus stops to be universally accessible
- Improving fleet access for mobility aids and strollers

- Upgrading existing and new transit infrastructure to meet BC Transit's Infrastructure Design Guidelines
- Improving written and online material for those with visual impairments
- Implementing audible stop announcements on transit vehicles at major stops
- Improving accessibility for cyclists to use the transit system and exploring the future potential for more than two bikes to be used on transit vehicles

Match vehicle type to local demand

Establishing the Future Transit Network will result in the need for new or changed Local Transit Network routes. Some of these Local Transit Network routes may present opportunities to utilize smaller vehicle types that can increase efficiencies and reduce capital costs.

An example of a medium duty vehicle type is the Vicinity, a 27.5 foot, low-floor bus with a ramp at the front door and kneeling capabilities. It seats 23 passengers with room for 16 standees and is compact and narrow, making it suitable for use on residential streets. Opportunities to use smaller vehicle types, where demand does not require a conventional-sized vehicle, should be pursued to reduce transit operating costs and greenhouse gas emissions. Candidate locations for these medium duty vehicles would be the future Route 1: Roberts Creek, Route 5: Lower Gibsons, Route 6: Gower Point and Route 7: Gower Point Reverse.

Improve customer information

The improvement of customer information helps to assist existing customers to navigate the transit system and makes it easier for new customers to access the transit system for the first time. The community and stakeholder engagement process revealed strong demand and support for the following customer information improvements:

- Google Transit – a public transit route planner available via Google maps
- Route and timetable information at bus stops and BC Ferries Langdale Ferry Terminal and Horseshoe Bay terminal with the ability to purchase tickets for transit services at both locations
- Complete transit system maps and clocks at transit exchanges
- Real-time notifications of delayed or cancelled transit services
- On-board stop announcements or electronic signs for key destinations
- Improved printed and online information

Improve transit facilities

Continued improvement and maintenance of transit facilities and on-street customer amenities are important for the continued operation and future growth of the transit system. Some improvements that were identified during community and stakeholder engagement were:

- The provision of weather protection at transit stops and future exchanges
- The provision of seating at transit stops and future exchanges
- The provision of lighting at key transit stops and future exchanges

Improve cycling and pedestrian infrastructure

Ongoing investment in quality cycling and pedestrian feeder infrastructure, in addition to the amenities provided at bus stops, will help grow transit ridership with cycling being a more viable feeder mode bringing passengers to the transit system. Improvements include:

- Integrate the transit network with facilities, services and operations providing capacity for combined mobility of transit with cycling and walking

- Increase investment in quality cycling feeder infrastructure and integrate the transit network with regional and local cycling and pedestrian networks
- Support combined mobility marketing which may include marketing campaigns, advertising, programs (e.g. Bike to Work, Bike and Business and Streetwise courses), events (e.g. Bus and Bike) and website information
- Provide sufficient secure bicycle storage at appropriate stops and exchanges
- Explore public bike share systems as a feeder to transit

Implement transit priority measures

To ensure the continued success of transit corridors with high ridership, investments in transit priority measures (e.g., transit lanes, queue-jumper lanes and signal priority for transit vehicles, etc.) may be required.

Endeavours to investigate and implement transit priority measures will be done jointly between the SCRD and BC Transit. Transit priority investigations will take into consideration the timing of local road projects, regional priorities, passenger demand on each corridor, major congestion points, average transit speeds and resulting traffic impacts. Particular attention should be given to the investigation and implementation of transit priority measures on the Future Transit Network corridors.

Explore Car or Van-pool services to Port Mellon

A vanpool is a group of up to 15 commuters who travel to the same destination at the same time each day. The group travels in a van provided by a transit agency or other organization, and each person in the group (sometimes with the exception of the driver) pays a monthly fare calculated based on the distance travelled and the costs of operating the van. Vanpools applicable conditions include:

- Longer-distance trips of at least 25 km and 30 minutes travel time each way
- Regular commute trips such as work and post-secondary school
- Trips that are made at the same time each day
- Trips to destinations with a large number of persons, such as downtowns, hospitals, post-secondary institutions, and business parks

Jack Bell Rideshare is an example of a vanpool program that operates throughout the province. Vanpools use eight-passenger minivans purchased by Jack Bell Rideshare and operated by a designated vanpool driver. All passengers except the driver pay a monthly fare calculated to recover capital and operating costs. Seven persons is the minimum number required to start a vanpool, although a vanpool can be started with only six persons if the group is prepared to pay for the empty seat until a seventh person can be found. It should be noted that BC Transit no longer provides funding for vanpool programs.

As an alternative to formal van-pool, ridesharing or carpooling refers to cases where people coordinate trips together using a private vehicle owned by one of the participants. It is likely that a number of informal rideshares are already organized by Howe Sound Pulp and Paper employees at Port Mellon. It is understood that although a formal van-pool used to operate for Port Mellon employees, this may no longer be in effect.

Service Priority 11 outlines transit service to Port Mellon to be considered in the long term. However, given the current employee base and likely travel patterns to Port Mellon for employees shift times at Howe Sound Pulp and Paper, the implementation of a more formal van-pool service in the short term would be valuable. The benefit to this approach is 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 non-commuters (i.e. seniors, youth) whose travel time may vary by day.

Service Monitoring

Service Design Standards and Performance Guidelines

As part of the ongoing management of the transit network, service standards and route performance guidelines have been developed as tools that can be used to help make service planning decisions and measure how well the transit system is progressing towards achieving its vision, goals and targets.

- **Service standards** define service levels, the service area and when new service should be introduced to an area.
- **Performance guidelines** measure service effectiveness and monitor how well the transit system is progressing to achieving the vision of the Transit Future Plan.

These measures are meant to ensure an acceptable level of service quality to the customer, and along with the Transit Future Plan, guide planning decisions and recommendations to the SCRD. The performance guidelines will be monitored and will inform the Annual Performance Summary (APS) reports presented to the SCRD on an annual basis. Over time, the APSs will provide a quick reference library from which to develop trend analysis, performance comparison year to year as well as to provide a benchmark for financial efficiency and ridership.

Service standards and route performance guidelines should be re-examined and renewed periodically (every 5-10 years depending on community size), since standards and performance guidelines are evolutionary and should grow with the system and development of the community and its changing needs.

Service Design Standards

What they are and what they define: Service standards define minimum levels of transit service desired to meet community needs. They are specific to a particular transit system and the communities it serves. Service standards usually define features such as:

- Service span (the hours and days of service when it operates)
- Frequency of routes or groups of routes
- Walking distance to bus stops
- Level of accessibility
- How new service will be triggered for additional areas of service (subdivision density, population, etc.)

Why they matter: The key benefit of service standards are that they guide local governments and BC Transit staff in determining and managing community expectations regarding the level of transit service to be provided. They also inform decisions regarding system design such as whether to provide new service or increase or decrease existing service.

Sunshine Coast Transit System Standards

NETWORK DESIGN PRINCIPLES

- Transit service should be focused on major activity centres and residential areas within the urban areas
- Transit Routes should be kept as direct and frequent as possible to be competitive with the automobile
- Ensure that transit routes connect residents to their local neighborhood centre and that transit trips between neighborhood centres can be made with no more than one transfer
- Transit service should connect to other transportation systems to allow passengers to conveniently connect to other modes, including cycling and pedestrian networks, ferry passengers services and custom transit services
- Transit service should be operated on the arterial and collector road network and have limited operations on the local road network. Future arterial and collectors roads should be designed to accommodate transit stops and transit priority measures
- Transit service coverage – Transit routes and bus stops should be within:
  - 400 m walking distance of 90 per cent of the residences
  - 250 m of all future medium and high-density residential developments
  - 250-300 m for stops on a route with greater than 10 per cent grade
  - 150 m walking distance of all designated senior's residences and major institutional facilities

EASE OF USE PRINCIPLES

- To make the transit system easy to understand and use for all passengers, routes should be direct and straightforward, and service frequencies and schedules should be consistent on each route and during each time period, where possible.
- Customer information should be designed to be straightforward with simple route and schedule information. BC Transit will work with the SCRD to develop a comprehensive branding package in the future, specific issues to be addressed include:
  - Information and branding for the Frequent Transit Network, including naming convention, logo/identifier, visual identity and style guide for additional livery (vehicle colour schemes or logos), print and electronic channels
  - Identity and numbering for the Local Transit Network and special services. Current livery will remain
  - Strategies for route identification e.g. name/number that align with the layers of service
- Persons with mobility and cognitive disabilities should be provided with a range of transit options, including handyDART service, taxi programs, and fully accessible conventional transit vehicles and bus-stop infrastructure.

TYPES OF TRANSIT SERVICE

Table 22 describes a hierarchy of transit services that will support implementation of the long- term transit strategy and satisfy various market segments, including the regular transit rider and potential users.

Table 22: Sunshine Coast Types of Transit Service

Type	Service Description	Existing (Bus Route #)	Short-term (Bus Route #)	Medium to Long-term (Bus Route #)
Frequent Transit	Frequent routes that operate at a 15-30 minute frequency over a select span of service. Routes general operate on arterial roads and serve corridors with mixed land use and provide connections between urban centres	None	90	90
Local Transit	These routes generally serve less densely populated areas with a focus on connections to local centres and more frequent transit routes	90, 1, 2, 3, 4	1, 2, 3, 4, 5	1, 2, 3, 4, 5, 9, 10
Targeted Transit	Targeted routes are created to provide service to specific areas such as major employers, or for limited, on-demand service or seasonal service	4 (summer service to Secret Cove)	6, 7	6, 7, 8, 11
Custom Transit	Demand responsive service for people with disabilities who cannot use the regular accessible conventional transit system some or all of the time	HandyDART	HandyDART	HandyDART

SPAN OF SERVICE

Span of service defines the operating hours for each service type, as described in Table 23. In general most routes operate from 5:30 a.m. to 11:00 p.m. on weekdays with more limited service on weekends. This service span is relatively long for the size of community and transit system; this is due to the BC Ferry service between Horseshoe Bay and Langdale Terminal, which generally commences at 6:20 a.m. and finishes between 10:00 p.m. and 11:15 p.m. depending upon season. Span of service extension shall be considered when the first and last hour of service has productivity greater than the average productivity on the route.

Table 23: Sunshine Coast Span of Service

Type	Period	Existing	Short-term	Medium to Long-term
Frequent Transit	Weekday	N/A	5:30am to 12:30am	5:30am to 12:30am
	Saturday	N/A	7:30am to 12:00am	7:30am to 12:00am
	Sunday & Holidays	N/A	7:30am to 12:00am	7:30am to 12:00am
Local Transit	Weekday	Varies depending on service. Max span: 5:00am to 12:30am	Varies depending on service. Max span: 5:30am to 12:00am	Varies depending on service. Max span: 5:30am to 12:00am
	Saturday	Varies depending on service. Max span: 7:00am to 12:30am	Varies depending on service. Max span: 7:00am to 12:00am	Varies depending on service. Max span: 7:00am to 12:00am
	Sunday & Holidays	Varies depending on service. Max span: 7:00am to 12:30am	Varies depending on service. Max span: 7:00am to 12:00am	Varies depending on service. Max span: 7:00am to 12:00am
Targeted Transit	Weekday	Varies depending on service	Varies depending on service	Varies depending on service
	Saturday	Varies depending on service	Varies depending on service	Varies depending on service
	Sunday	Varies depending on service	Varies depending on service	Varies depending on service
Custom Transit	Weekday	8:00am to 4:00pm	8:00am to 4:00pm	8:00am to 8:00pm
	Saturday	10:00am to 4:00pm	10:00am to 4:00pm	10:00am to 6:00pm
	Sunday	None	None	10:00am to 4:00pm

SERVICE FREQUENCY

Level of service defines the minimum frequency at which a route operates, subject to meeting the performance standards. Investments to increase service levels will be considered to strategically develop the network or when route performance indicates the route is performing 25 per cent above the target for the routes class. See Table 24.

Table 24: Transit System Standard – Service Frequency

Type	Period	Existing Regular Service (Peak Service)	Short-term Regular Service (Peak Service)	Medium to Long-term Regular Service (Peak Service)
Frequent Transit	Weekday	N/A	60 min (30min)	Varies depending on service. Max frequency: 20 - 30 min
	Saturday	N/A	60 min (30 min)	Varies depending on service. Max frequency: 20 - 30 min
	Sunday	N/A	60 min (30 min)	Varies depending on service. Max frequency: 20 - 30 min
Local Transit	Weekday	Varies depending on service. Generally 60 min – 120 min	60 min (60 min)	60 min (60 min)
	Saturday	Varies depending on service. Generally 60 min – 120 min	60 min (60 min)	60 min (60 min)
	Sunday	Varies depending on service. Generally 60 min – 120 min	60 min (60 min)	60 min (60 min)
Targeted Transit	Weekday	N/A	Varies depending on service	Varies depending on service
	Saturday	N/A	Varies depending on service	Varies depending on service
	Sunday	N/A	Varies depending on service	Varies depending on service
Custom Transit	Weekday	N/A	N/A	N/A
	Saturday	N/A	N/A	N/A
	Sunday	N/A	N/A	N/A

VEHICLE TYPE

Vehicle Type by Service Layer

Vehicle type is driven by passenger loads during the peak hour of the relevant operating period. On routes where bus capacity is exceeded, consideration should be given to operating buses with additional capacity or service with increased frequency. On routes where a small bus would accommodate passenger loads at peak time consideration should be given to operating a smaller bus and maintaining existing frequency. A typical approach is to allow standing passengers during peak periods but to provide sufficient capacity

for seated passengers during the off-peak hours. Table 25 describes the vehicle types associated with the Transit Future layers of service, while Table 26 describes the attributes associated with each.

Table 25: Vehicle Type by Service Layer

Type	Period	Existing Regular Service (Peak Service)	Medium to Long-term Regular Service (Peak Service)
Frequent Transit	N/A	Heavy Duty Vehicles	Heavy Duty Vehicles
Local Transit	Heavy Duty Vehicles with limited use of Light Duty Vehicles	Medium Duty Vehicles and Light Duty Vehicles	Medium Duty Vehicles and Light Duty Vehicles
Targeted Transit	Light Duty Vehicles	Light Duty Vehicles	Light Duty Vehicles
Custom Transit	Light Duty Vehicles	Light Duty Vehicles	Light Duty Vehicles

Table 26: Vehicle Type Attributes

High Capacity	Heavy Duty	Medium Duty	Light Duty
			
Low Floor/Accessible Minimum of 2 wheelchair positions 35 or more seats, 95 passengers with standees Double Deck or Articulated 13 / 20 year lifespan 40 feet or greater in length 2,500 maximum annual operating hours 75,000 maximum annual kms Midlife upgrade	Low Floor/Accessible Minimum of 2 wheelchair positions 13 – 15 year lifespan 30 or more seats, 70 passengers with standees 35 feet or greater in length 2,500 maximum annual operating hours 75,000 maximum annual kms	Low Floor/Accessible Minimum of 1 wheelchair position 8 – 10 year lifespan Fewer than 25 seats, 40 passengers with standees Less than 35 feet in length 2,500 maximum annual operating hours 75,000 maximum annual kms No midlife extension	Low Floor/Accessible Capable of having more than 2 wheelchair positions 5 year lifespan Up to 20 seats, No standees Less than 35 feet in length 2,000 maximum annual operating hours 60,000 maximum annual kms (300,000 km life) No midlife or life extension

TRANSIT FACILITIES

Design principles for transit facilities should conform to the BC Transit Infrastructure and Design Guidelines, as well as the federal guidelines for transportation and transit infrastructure.

Transit Stops

Transit stops and facilities for waiting passengers should include a hard surface landing/waiting area and be universally accessible. They should also include on-street passenger facilities such as benches, shelters, lighting, waste receptacles, and route/schedule information. Priority should be given for snow clearing at transit stops and the pedestrian connections to them.

Direct pedestrian connections should be provided to bus stops via sidewalks, pathways and crosswalks, with curb ramps and barrier-free access. Bus stops should be located on the far side of crosswalks, or at least 10 m in advance of a crosswalk. Buses may stop in the traffic lane (with a bus bulge where on-street parking is provided), at curbside out of the traffic lane, or in a dedicated bus bay. Adequate sight distances should be achieved for motorists approaching the bus stop as well as transit passengers crossing the road from the bus stop.

Passenger amenities at transit stops can enhance the quality of service for customers and can also have a significant impact on attracting new users. Table 27 describes what transit stop amenities should be associated with each type of service.

Table 27: Transit Service Type and Associated Stop Amenities

Service	Short-term	Medium-term	Long-term
Frequent Transit	• Universally accessible • Bench	• Transit Shelter • Universally accessible • Bench	• Premium Transit Shelters at key locations • Transit shelters • Real time schedule information at key locations • Bike storage • Quality customer information (such as transit schedule and map information) • Customer wayfinding information at key locations (such as directional signage) • Universally accessible • Park & Ride facilities
Local Transit	• Universally accessible • Bench	• Universally accessible • Bench	• Transit Shelter • Universally accessible • Bench • May include Park & Ride facilities in rural areas
Targeted Transit	• Universally accessible • Bench	• Universally accessible • Bench	• Transit Shelter • Universally accessible • Bench
Custom Transit	• Not required	• Not required	• Not required

Stop Intervals

Transit stops should be spaced along a corridor at an appropriate interval, in urban areas this is typically between 300m - 400m. Transit stops that are spaced too close together lead to slower transit trips and higher transit stop maintenance costs and stops that are too far apart limit passenger access to the system. Outside the urbanized area, bus stops should be limited to major destinations, points of interest, pedestrian access points and residential concentrations. Spacing of stops should be limited on select type of service. Table 28 provides the appropriate standard for each service type.

Table 28: Service Type and Appropriate Stop Intervals

Service	Stop Interval
Frequent Transit	Frequent stops along a corridor, 300 – 500m apart.
Local Transit	Frequent stops along a corridor, 300 – 500m apart. Gradient > 10 %, 250 – 300m apart.
Targeted Transit	Varies depending on service
Custom Transit	Not applicable

Transit Exchanges and Park & Rides

Transit exchanges are typically located within the activity centres of the community, such as downtown, village centres, and shopping malls, in order to reinforce the relationship with land use patterns. If properly planned and designed, transit exchanges can become effective multi-modal exchanges and pedestrian-oriented sites. Transit exchanges should provide weather protection, seating, transit route and schedule information, lighting, bicycle parking and other amenities as shown in the passenger amenities section below.

Park & Rides should be located in suburban and semi-rural areas to provide residents who live in areas with no transit service or poor transit service an access point to higher quality transit services. Below are the basic functional requirements for transit exchanges and Park & Ride facilities:

Site requirements:

- Sites with no significant safety concerns, which provide for direct and safe pedestrian access and which minimize the interaction between buses and general traffic on adjacent roads
- Sites that can be accessed safely and efficiently, avoiding traffic congestion and queuing
- Sites that provide high visibility to pedestrians, motorists and others, minimizing personal safety concerns for transit passengers using the terminals in evenings and at other off-peak times
- The sites must be located to minimize additional routing and costs

Physical requirements:

- All platforms should accommodate standard 12m buses, including heavy duty buses in the future
- Buses must be able to arrive and depart from platforms independently
- Passenger facilities should include:
  - » Passenger amenities, including weather protection, seating, illumination, and bicycle storage
  - » Accessibility to all areas of the terminal for persons with disabilities
  - » Wayfinding signage and information
- Transit terminals should also incorporate operator washrooms
- In addition, Park & Ride sites should include parking for automobiles, bicycles and bus stops for transit access

TRANSIT PRIORITY MEASURES

Transit Priority measures should be provided on the FTN network to improve travel time and reliability as required. These measures include, signal timing optimization, transit signal priority, regulatory signage such as yield to buses, and measures related to roadway design such as queue jumper lanes and transit only lanes as outlined in Table 29 and 30.

Table 29: Transit Priority Measures

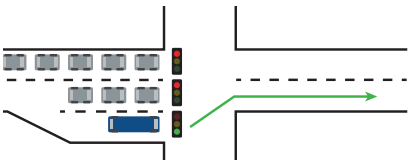
Signal Priority Measures		• Transit is given signal priority along the corridor at the majority of intersections
Lane Priority Measures		• Bus only lanes for part or all of the route corridor, or bus queue-jumper lanes at key areas of congestion
		• Queue-jumper lanes at key areas of congestion

Table 30: Transit Service Type and Transit Priority Measures

Service	Priority	Existing	Short-term	Medium-term	Long-term
Frequent Transit	Signal	None	Not required	Signal timing is optimized to benefit transit	Transit is given signal priority at key delay points
	Lane	None	Not required	Not required	Only if part of the FTN
Local Transit	Signal	None	Not required	Not required	Only if part of the FTN
	Lane	None	Not required	Not required	Only if part of the FTN
Targeted Transit	Signal	None	Not required	Not required	Only if part of the FTN
	Lane	None	Not required	Not required	Only if part of the FTN
Custom Transit	None	None	Not required	Not required	Not required

INTRODUCING NEW SERVICE

The following guidelines have been identified to determine when it may be feasible to introduce transit service into new residential, industrial, commercial and recreational developments. The following conditions should be met:

- Minimum density of 10 residents per hectare (1,000 residents per square kilometre) or 10 jobs per hectare (1,000 jobs per square kilometre) measured over a minimum developed area of 10 hectares (i.e. suburban development of single family homes)
- Road and pedestrian access that provides for safe access and efficient operation of transit service

Performance Guidelines

What they are and what they define: Performance guidelines define numerical thresholds and targets for a particular system and its routes and services.

Why they matter: Working in tandem with service standards, performance guidelines are a tool that can be used to evaluate existing services, identify trends in performance and, based on this evidence, determine how service and supporting features (fares, marketing, facilities, etc.) should be changed to improve the effectiveness and efficiency of the system.

For a service to be efficient and productive, a balance should be achieved between oversupply and overcrowding (under servicing). A number of measures can establish this equilibrium such as:

- Implement transit priority
- Change service span
- Alter frequency
- Change bus stop spacing
- Reduce/increase coverage
- Bus route changes
- Targeted marking/corridor branding
- Fleet type allocation

When system performance falls below or above the set guideline, recommendations to the SCRD will focus on those tools above that maximize efficiency.

MEASURES

Performance measures have been chosen that evaluate the effectiveness of service planning investments on a system and route level for conventional service.

System Level

The measures used for the system guidelines are:

- **Average rides per service hour** – Measures the total volume of ridership as compared to the supply of transit service
- **Cost per ride** – Measures the average cost to provide service per passenger trip
- **Cost recovery** – Measures the financial performance of the transit system usually expressed in terms of total operating revenue/total operating expenses
- **Rides per capita** – Measures the ratio between transit trips and the population of the service area

Route Level

The measures used for the route level guidelines are:

- **Average rides per service hour** – Measures the total volume of ridership as compared to the supply of transit service
- **Average rides per trip** – Measures the total number of people that board a vehicle on a specific trip specific trip and route

Route level performance guidelines have been classified into three categories (frequent transit, local transit and targeted transit) to acknowledge different performance expectations based on a route's objective.

PERFORMANCE TARGETS

Table 31 and 32 outline the performance targets set for the conventional system at a system and route level. As well as monitoring existing performance against these guidelines, historical trends will also be monitored to determine if the

system or routes are becoming more or less efficient over time. Significant variance (+/ – 25 per cent) from the target will place a route on an action list for further investigation and will require more detailed analysis. Routes that fall below the 25 per cent variance will be candidates for corrective action and routes that fall above the 25 per cent variance will be candidates for service improvement. BC Transit will report on an annual basis how the system and routes are performing and this will help guide planning decisions.

System Level

The purpose of monitoring system wide performance is to identify trends in system performance and compare the performance of the transit system with other peer transit systems. These measures are designed to monitor the Sunshine Coast transit system as a whole and guide service planning. This can be particularly useful when identifying system wide impacts of major investments in the transit network such as development of the Frequent Transit Network.

Table 31: System Level Performance Guidelines

System	Existing Baseline 2012/13	Measure
Boardings per service hour	26	25
Cost per ride	$3.65	$3.70
Cost recovery	39.8%	40%
Rides per capita	24	30

Route Level

Analysis on a route-by-route basis gives a detailed indication of how individual components of the transit system are performing. A route-by-route analysis allows observations of the impact of service changes and investments made in the past and identifies future opportunities for strategic investment or reinvestment.

Table 32: Route Level Performance Guidelines

System	Boardings per Trip		Boardings per Service Hour	
	Existing Baseline 2012/13	Measure	Existing Baseline 2012/13	Measure
Frequent Transit	49 (Routes 90 & 1)	25	28 (Routes 90 & 1)	30
Local Transit	10 (Routes 2, 3 & 4)	12	24 (Routes 2, 3 & 4)	25
Targeted Transit	N/A	8	N/A	10

Moving Forward

Funding the Plan

To meet the mode share and ridership targets of the Transit Future Plan, capital and operating investments in the transit system will be required over the next 25 years. Annual operating costs are based on service hours that are projected to increase from the existing 22,721 hours to approximately 55,601 hours. The plan also calls for capital investments that include:

- Expanding the transit fleet from the existing 11 vehicles to 33 vehicles
- New transit exchanges at Field Road in Wilson Creek and Upper Gibsons
- Park & Ride facilities in Sechelt and Gibsons
- Exploration of the benefits of a satellite transit operations facility in Wilson Creek
- Improvements to customer amenities at transit stops and transit priority measures as required

Given the increase in transit investment expected over the coming decades, the way in which transit is and will be funded needs to be reviewed. BC Transit and its funding partners will need to work together to achieve stable and predictable funding sources beyond the existing mechanisms.

The Sunshine Coast Transit System is funded through a combination of provincial funding, local property taxes, passenger fares and advertising revenue. BC Transit's budgets are confirmed on a year-by-year basis making it difficult to plan for future growth. Local-share funding is also confirmed annually and is heavily dependent on property tax. A limitation on future funding is the ability to continuously raise taxes to help fund the cost of transit projects and operations.

As a part of BC Transit's 25-year Strategic Plan, one of the priorities is to "develop stable and predictable revenue sources." The proposed actions for this are to:

Develop stable revenue sources

- Assess various approaches to developing stable, secure provincial investment in transit
- Work to identify and implement new revenue sources
- Assess various approaches to developing stable, secure local investment in transit
- Initiate a revenue committee to manage fare revenue strategies in partnership with local authorities

Increase predictability of revenue sources

- Examine and implement improvements for conveying transit system budget information to local governments, such as the provision of multi-year budgets aligned to municipal calendar years
- Continue to confirm the Provincial Government's BC Bus Pass program pricing (an annual pass program for lower income seniors and people with disabilities)

Implement new partnerships and revenue opportunities

- Seek to revise legislation, policies and procedures to encourage profitable commercial use of BC Transit's assets and resources for reinvestment to future transit service objectives
- Explore opportunities to offset BC Transit costs by leveraging BC Transit expertise and scope with other organizations (for example, synergies with other local transportation providers, BC Transit fleet procurement expertise or bulk fuel contracts)
- Continue to support local governments in efforts to offset costs by identifying and creating local transit funding partnerships with other agencies

Alternate Local Funding Options

BC Transit has heard from local government that continuously increasing property taxes to fund the local share of transit projects and operations, particularly for major capital investments, is a challenge. Reducing the local share funded through property taxes might be achievable through alternate funding sources. While transit is funded by a range of approaches around the world, the BC Transit Act provides two funding avenues to local government partners; property tax and fuel tax. In addition, the BC Transit Act does not restrict local governments from establishing a capital reserve. The SCRD currently funds their portion of transit through property tax, supplemented by fare revenue. However, more information on fuel tax and capital reserve is provided below for further consideration.

Local Fuel Tax

A tax on fuel could be collected at the pump at all gas stations in the SCRD to help fund transit in the area. A transit tax is levied on fuel in Greater Victoria and Vancouver to help fund transit services in these regions. The BC Transit Act allows local government to seek funding from a motor fuel tax to support funding and development of local transit systems. The implementation of a fuel tax requires the cooperation of the Province and requesting the Province to amend the Motor Fuel Tax Act to create a dedicated fuel tax to be applied in the region under the BC Transit Act.

Capital Reserve

A portion of property taxes could be put aside each year to build a capital reserve to cover the local government share of cost for future transit infrastructure investments. The BC Transit Act does not restrict local governments from establishing a capital reserve.

BC Transit is also interested in developing concepts for alternative funding methods with local partners and the provincial government. However, these options may require legislative change and/or provincial government approval and may be less desirable in smaller communities with lower transit mode share. Information is provided on these additional funding options below:

Vehicle Levy

An annual vehicle levy could be collected when vehicle insurance is renewed. This is not permitted under the existing *BC Transit Act* and legislative change would be required to implement a vehicle levy.

Parking Tax

A parking tax could be introduced to offset transit costs. This acts as an incentive to decrease parking demand, which in turn can make transit more attractive. Under existing *BC Transit Act* a parking tax is not permitted and would require legislative change to implement.

Community Pass

Each household could receive an annual transit pass paid for as part of their property taxes. The cost of this pass could be approximately half the cost of an annual transit pass.

Budget Development Process

The Implementation Strategy section establishes milestones over the next 25 years which strategically guide the system from today to the Transit Future Vision. Supporting annual plans and three year service budget and initiative letters will provide the operational and budget details necessary to implement service changes.

Once the Transit Future Plan is approved it will act as a source of initiatives that drive BC Transit's operational and capital expansion process. This in turn guides budget development for BC Transit and the SCRD, as well as BC Transit's provincial budget submission.

Since provincial funding for transit is confirmed on an annual basis, implementation of any option requiring expansion is dependent on BC Transit's fiscal year budget, normally confirmed in mid-February each year. Implementation of specific service options and packages is also dependent on allocation of available provincial transit expansion funding between transit systems as determined through BC Transit's Transit Improvement Program (TIP).

Once local government has approved a service option or combination of options for implementation – and local and provincial funding has been approved, if required – an Implementation Agreement Memorandum of Understanding (MOU) will be developed for signature by all required parties including BC Transit. This MOU outlines the service changes to be developed for implementation and the roles and timeline for implementation. Once signed, changes to scope may change timelines. Detailed costing will be confirmed throughout implementation.

Keys to Success

To guide the plan from vision to reality will require an on-going dialogue between the Province, BC Transit, the SCRD and local authorities on transportation policy, funding and the linkage between land use and transit planning.

The Transit Future Plan builds upon previous plans (We Envision, the Integrated Transportation Study, OCPs, Neighbourhood / Local Area Plans) and will be used to communicate the vision and direction for transit in the Sunshine Coast. The SCRD has already taken the step of identifying key transit strategies within the Integrated Transportation Study and supportive policies outlined within We Envision and local OCPs. Other steps required for the success of the plan include integrating the transit strategy into other municipal projects, land use and development decisions, supporting travel demand management measures, transit oriented development and transit friendly land use practices.

BC Transit will work with the SCRD and other local partners to begin to take steps to guide the Transit Future Plan from vision to reality. These efforts will only be successful if done in partnership, with continuous dialog between these partners to ensure strong links between:

- Land use planning and transit planning
- Provincial and regional transportation and transit planning
- Transportation policy and funding availability

How will BC Transit use this plan?

- As a tool to communicate the vision for transit to partners, stakeholders and the public
- To help identify where and in what order key transit investments will occur
- To strategically move projects through the capital planning process
- To inform the three-year service planning process
- To work with partners on integrating transit plans and investments with other major infrastructure plans and projects
- To respond to planning and development referrals

What actions can the SCRD and local authorities consider to support realization of the Transit Future Plan Vision and Goals?

- Incorporate the Transit Future Plan within updates to local plans and policy
- Support and encourage transit-oriented development and work with BC Transit to explore incentives to attract high density and mixed-use development to areas well served by transit
- Ensure that local and major development proposals and projects support transit:
  - » Consider amending local bylaws to include transit stop improvements and infrastructure as part of required works and services
  - » Review development proposals to ensure they support the Transit Future Plan

- Integrate and consider the Transit Future Plan network when developing sustainable transportation infrastructure plans and projects
  - » For example, a pedestrian and cycling infrastructure project on a transit corridor could improve access to transit by providing or improving sidewalks
  - » Incorporate transit priority measures with an intersection upgrade project
- Explore Alternative Funding Options for funding portions of capital projects for transit:
  - » A mechanism/tool for funding capital portions and improvements to transit amenities include Phased Development Agreements as per Local Government Act (LGA) Section 905.1 Phased Development Agreements or Section 904 Zoning amenities and affordable housing of LGA
- Implement travel demand management strategies that encourage shifting automobile trips to transit, such as implementing transit priority measures, marketing, restructuring parking fares, and reducing parking availability/ requirements in areas well served by transit
- Work with BC Transit to implement Google Transit
- Work with BC Transit in the completion of a fare review prior to the FTN being introduced to consider options for different fares for the FTN and LTN and timed versus two-way transfers
- Improve pedestrian connections between Lower Road and Highway 101 in Roberts Creek
- Provide ongoing investment in quality cycling and pedestrian feeder infrastructure
- Explore car or van-pool services to Port Mellon to support commuters to Howe Sound Pulp and Paper and Hillside Industrial Park

Appendices

Appendix 1: Glossary of Terms

Accessible Transit	Transit service utilizing vehicles that can be accessed by persons using a wheelchair or other mobility device.
Ambulatory	Individuals who are capable of walking.
Annual Operating Agreement (AOA)	A three party agreement between the local government, BC Transit and the operating company which allows for the delivery of the transit service, defines total costs and defines the responsibilities of each party.
Arterial	A high-capacity urban road. The primary function of an arterial road is to deliver traffic from collector roads to freeways.
Attendant	A person who must assist a registered handyDART client to make a handyDART trip. The origin and destination must be the same as the registered client. Attendants ride free of charge. Also see Escort.
Bus bulges	A bus bulge is a section of sidewalk that extends from the curb of a parking lane to the edge of a through traffic lane to creates space for pedestrians to walk and for passengers to wait for a bus. The bulge can also provide additional space for bus passenger amenities such as shelters, benches and landscaping.
Captive Rider	A transit rider who does not have immediate access to private transportation or due to some other circumstances must use public transit.
Choice Rider	A transit passenger who has other modes of travel available for a particular trip (especially access to a private vehicle) and has chosen to use public transit.
Conventional Transit	A transit service using regularly scheduled, "fixed route" vehicles (operating according to published route maps and timetables).
Corridors	A transportation corridor is a generally linear tract of land that contains lines of transportation like highways, railroads, or canals
Cost Recovery	A measure of the financial performance of the transit system usually expressed in terms of total operating revenue/total operating expenses.
Cycle time	The length of time it takes for a transit vehicle to complete one round trip, including the recovery time.
Custom Transit	A door-to-door transit service for those persons whose physical disability prevents them from being able to use a conventional transit service.
Deadhead	The movement of a transit vehicle that is not in revenue service.
handyDART	The BC Transit custom transit program (***handy D***ial-***A***-***R***ide ***T***ransportation).
Greenhouse Gas Emissions	Greenhouse gas emissions refer to the anthropogenic (human-made) emissions of four gases: carbon dioxide, methane, nitrous oxide, and ozone, which are attributed to global warming and climate change.

High Occupancy Vehicle (HOV)	Vehicles carrying at least two people (i.e. a driver plus at least one passenger) in any of the following passenger vehicles: cars, minivans, motorcycles, pickup trucks, taxis, and limousines.
Level door boarding	Level door boarding is achieved through: either low floor buses or higher boarding platforms which increase the speed of passenger boardings and enhances accessibility.
Modal share	Modal share is a transportation term which describes the percentage of travelers using a particular type of transportation such as walking, cycling, transit or automobile.
Off-board fare payment	Refers to paying for fare before boarding and can include "barrier-controlled," where passengers pass through a gate, turnstile, or checkpoint upon entering the station where their ticket is verified or fare is deducted, or "proof-of-payment," where passengers pay at a kiosk and collect a paper ticket which is then checked on board the vehicle by an inspector. Off-board fare payment can greatly reduce trip travel time.
Paratransit	A general name for a class of transportation service offering a more flexible and personalized service than conventional fixed-route transit but not including private, exclusive use systems such as private car, exclusive ride taxi or chartered bus. Includes systems such as a dial-a-bus, shared-ride taxi and subscription bus services.
Park & Ride	Car Parks with connections to public transportation that allow riders to leave their vehicles and transfer to transit for the remainder of the journey.
Passenger Productivity	A measure of rides per revenue hour of service.
Population Served	That portion of the population within the transit service area that is within walking distance to a transit route. The usual measure of walking distance is 400 metres.
Revenue Hours	The total number of scheduled hours that a transit vehicle is being operated and is available for passenger service.
Revenue Kilometres	The movement of a transit vehicle a distance of one kilometre in a regular passenger service.
Revenue Passenger	A transit rider associated with one fare payment to use the transit service.
Ridership	The number of passengers using a particular form of public transportation.
Right of Way	A right-of-way is a right to make a way over a piece of land, usually to and from another piece of land. A right of way is a type of easement granted or reserved over the land for transportation purposes.
Single Occupancy Vehicle (SOV)	A privately operated vehicle whose only occupant is the driver.
Taxi Saver	A program providing subsidized taxi rides to eligible registered handyDART users. Registered users may purchase taxi coupons at 50 per cent of the face value. There is a limit to the amount of taxi coupons which can be purchased each month. Registrants call participating taxi companies to arrange rides.

Taxi Supplement	A service where a privately owned taxi is dispatched through the transit operator for custom transit service when the regular handyDART service is not available.
Transit Exchange	A place where passengers switch between transit routes or transportation modes. Exchanges do not act as a source or sink for traffic in the network, but only collect and redirect the traffic among local exchanges.
Transit Hub	A place where passengers and cargo are exchanged between vehicles or between transport modes.
Transit Supportive Land Use	Land use types defined by density, diversity and design regulations best suited to support transit infrastructure. Usually refers to compact, mixed-use land that has a high level of employment and high residential densities.
Transit Terminal	A terminal is a major transit hub served by several bus routes.
Transit Oriented Development (TOD)	Development that is generally mixed-use residential and commercial, is designed to maximize access to public transport, and often incorporates features to encourage transit ridership. A TOD neighbourhood typically has a center with a transit station or stop surrounded by relatively high-density development and progressively lower-density development spreading outward from the center. TODs generally are located within a radius 400m from a transit stop.
Transit Priority	A variety of physical and operational improvements designed to give transit vehicles and their passengers priority over general vehicle traffic.
Transit Service Agreement (TSA)	A three year agreement between BC Transit and the local government partner which sets the sharing of responsibilities for the operation of a conventional, custom and/or paratransit service.
Transit Service Area	Established under the terms of the TSA and designated by the BC Transit Board as an area in which the transit service operates and which the local government can levy a property tax to cover their portion of the operating deficit.
Travel Demand Management	The application of strategies and policies to reduce or redistribute travel demand (specifically that of single-occupancy vehicles).
Universal Accessibility	Universal access is the goal of enabling all citizens to reach every destination served by their public street and pathway system regardless of their demographic or ability level.
U-Pass	A mandatory and universal transit pass for post-secondary students that all students pay for through student fees. Students typically approve the pass by referendum.
Wayfinding	Wayfinding encompasses all of the ways in which people orient themselves in physical space and navigate from place to place.

Appendix 2: Stakeholder Advisory Group

Table A1 provides a list of stakeholders who were engaged as part of the Stakeholder Advisory Group for the Transit Future Plan process.

Table A1: Stakeholder Advisory Group

Governing Bodies	
Sunshine Coast Regional District (SCRD) Staff	Town of Gibsons Staff
SCRD Directors	Sechelt Indian Government District (SIGD) Staff
District of Sechelt Council	SIGD Council
District of Sechelt Staff	Squamish Nation Staff
Town of Gibsons Council	
Ferries & Transportation	
BC Ferries	Pender Harbour Transportation Committee
Malaspina Coach Lines	Southern Sunshine Coast Ferry Advisory Committee
Ministry of Transportation	
Community Associations	
Davis Bay / Wilson Creek Community Association	Roberts Creek Community Association
East Porpoise Bay Ratepayers Association	Sandy Hook Community Association
Elphinstone Electors Association	Sechelt Village Community Association
G8 Sechelt Community Association Forum	Sunshine Heights Owners & Residents Association (SHORA)
Gambier Island Community Association	Tuwanek Ratepayers Association
Gambier Island Local Trust Committee	West Howe Sound Community Association
Halfmoon Bay Citizens Association	West Porpoise Bay Community Association
Halfmoon Bay Official Community Plan group	West Sechelt Community Association
Island Trust	Williamson's Landing Community Association
Community Groups	
British Columbia Cycling Coalition	Sunshine Coast Clean Air Society
Coast Cultural Alliance	Sunshine Coast Community Foundation
Coast Garibaldi Community Health Services Society (CGCHSS)	Sunshine Coast Community Service and Resource Centre
District of Sechelt Accessibility Advisory Committee	Sunshine Coast Community Services Society (SCCSS)
Gibsons & District Public Library	Sunshine Coast Cycling Club
Gibsons Senior Society	Sunshine Coast Seniors Citizens (SCSC)
Sechelt Public Library	Sunshine Coast Transportation Choices (TraC)
Sechelt Seniors Activity Centre	Vancouver Coastal Health
Sunshine Coast Association for Community Living (SCACL)	VOICE on the Coast

Business	
Best Coast Initiatives	Sechelt & District Chamber of Commerce
Community Futures Development Corporation	Sechelt Downtown Business Association
Gibsons Alliance of Business and Community	Sunshine Coast bed & Breakfast Cottage Owners Association
Gibsons Chamber of Commerce	Sunshine Coast Employment Services Centre
Gibsons Landing Business Association	Sunshine Coast Tourism
Howe Sound Pulp and Paper	Sunshine Coast Youth Outreach (SYCO)
Pender Harbour and Egmont Chamber of Commerce	
School & Education	
School District No. 46	Capilano University Sunshine Coast campus
Sechelt School Bus	
Additional Stakeholders for Phase 1 & 2 Transit Future Bus Location Organization	
Canadian Tire (Davis Bay)	Sunnycrest Mall (Gibsons)
Extra Foods (Sechelt)	Sunshine Coast Jazz and Entertainment Society
Kona Winds Charters	Trail Bay Centre (Sechelt)
Seaside Centre (Sechelt)	Roberts Creek Earth Day Coordinator

Appendix 3: Examples of Paratransit Service

There is a wide range of transit services operating in rural and low-density areas across North America. These range from conventional transit services using larger buses on fixed routes and schedules to flexible, demand-responsive services using smaller vehicles which operate within defined areas rather than on specific routes. Five key types of rural transit service include:

- Conventional transit with buses operating on fixed routes and fixed schedules
- Flex-route transit where buses deviate from fixed routes on request
- Dial-a-bus, where routes are variable but schedules are fixed
- Demand-responsive transit, where routes and schedules are variable
- Vanpools, where one of the passengers is also the operator of the service

Table A2 indicates how the first four types of service differ based on fixed and variable routes and schedules.

Table A2: Range of Transit Service

		Route	
		Fixed	**Variable**
Schedule	**Fixed**	• Conventional	• Flex-Route • Dial-A-Bus
	Variable		• Demand-Responsive

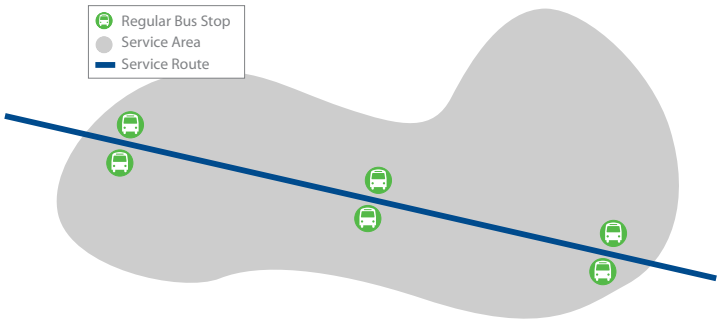
Paratransit offers the potential to reduce costs and/or improve quality of service. However, these benefits can only be achieved if paratransit is used in conditions for which it is suited. Implementing a paratransit service in the wrong conditions would not only fail to achieve these benefits, it might actually result in higher costs and a poorer quality of service.

Before implementing paratransit service or replacing conventional service with paratransit service, detailed planning and market analysis should be undertaken to determine potential ridership, costs and other aspects of the service, to ensure that paratransit service is appropriate.

Conventional Transit

Conventional transit is the most common form of transit service. Buses operate on established routes at scheduled times, stopping at designated bus stops. Figure A1 illustrates an idealized conventional service. The Sunshine Coast Route 1: Langdale Ferry/Sechelt Local is an example of a conventional service.

Figure A1: Conventional Transit



Conventional transit services are best suited to higher-density areas with popular origins and destinations concentrated along main arteries. In these conditions, conventional service can attract sufficient ridership to support reasonably

frequent service throughout the day, in evenings and on weekends. On the other hand, in many rural and lower-density areas, conventional service cannot attract sufficient ridership to be financially viable.

Where conventional transit services do operate in rural and low-density areas, they are characterized by the following limitations:

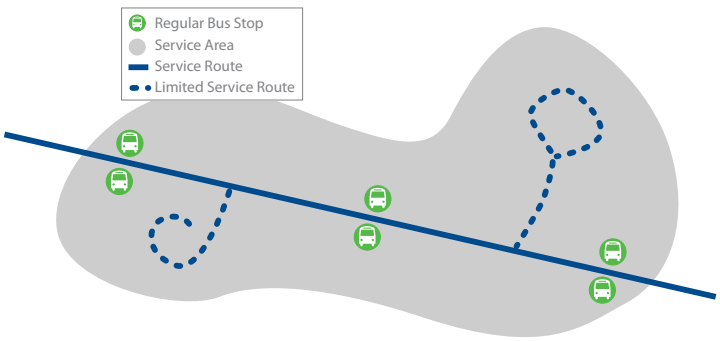
- **Infrequent service.** A limited number of trips per day and the lengthy time between trips means that in many cases, passengers must travel earlier or later than their desired times. For example, this might mean arriving at work 45 minutes early or waiting two hours after a medical appointment for the trip home
- **Limited hours of service.** This may mean that passengers cannot return home in the evening or cannot make trips on the weekend. For example, a teenager using the service to travel to a job after school may not be able to use transit to return home in the evening, and service may not be available on Sunday
- **Limited coverage.** A conventional transit service on a fixed route can only cover a small part of a large rural or low-density area. Many residents will be beyond a reasonable walking distance to a bus stop, which for most people is 400 m or about a 5-minute walk

One example of a "non-conventional" feature of Conventional Service would be a route where passengers may flag down buses at points along the route where the bus can safely pull off the road.

Flex-Route Transit

Like conventional services, flex-route buses follow a fixed route and fixed schedule. The difference is that buses can deviate from the route to pick up or drop off passengers at nearby locations, such as a house, child care center or employment site, for example. After completing the pickup or drop off, the bus returns to the bus route at the location where it deviated. Figure A2 illustrates an idealized flex-route service.

Figure A2: Flex-Route Transit



For the majority of users who do not require a deviation from the route, a flex-route service is no different than conventional transit. They board and alight at designated bus stops along the route, at scheduled times. For those who do require a route deviation, the only disadvantage of flex-route service is the need to call in advance to request a trip. Typically, customers are required to call at least one hour in advance.

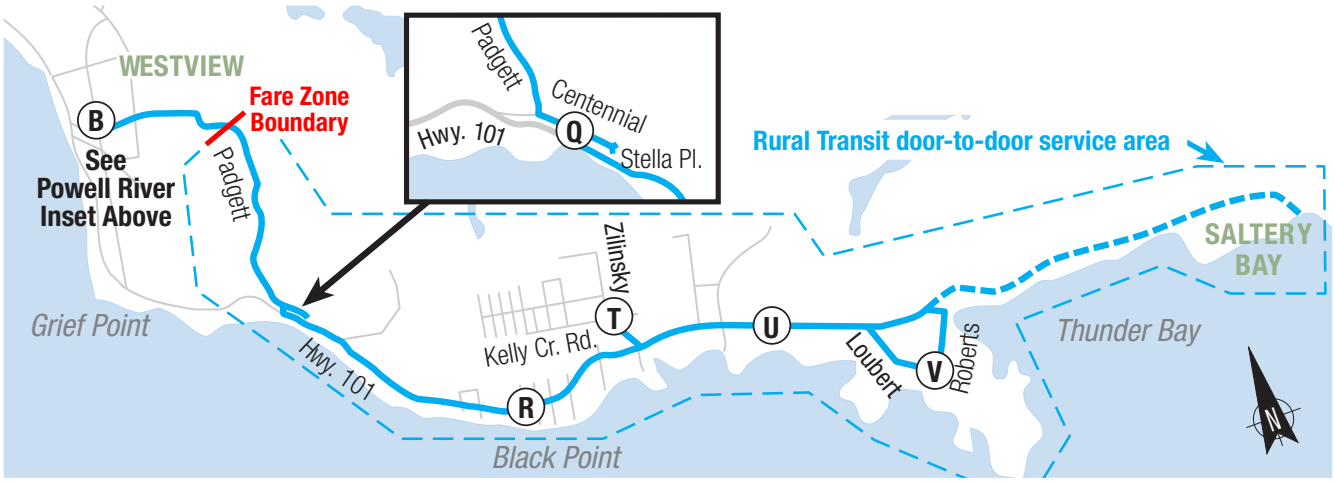
A flex-route service is scheduled with extra time in the schedule to accommodate route deviations. To ensure that buses remain on schedule, transit operators may:

- Limit the distance from the route or the area within which the bus will deviate. Typical limits are 1 km to 2 km
- Limit the number of deviations on any given trip
- Limit short deviations (up to 400 m) to persons with physical disabilities

For the transit operator, the option of deviating from the route introduces the need for a dispatcher to respond to trip requests, and the need to manage trip requests to avoid impacting schedule reliability. However, because the number of deviations is small, this is usually not an onerous requirement.

An example of a flex-route service is Route 12: Stillwater-Regional in Powell River. The route follows Highway 101 from the downtown commercial area along the waterfront where much of the population is located. The flex-route bus will deviate to Saltery Bay on some trips, as illustrated in Figure A3, which can mean a deviation of over 8 km from the designated route. The schedule incorporates additional time for each round trip or run to allow sufficient time for route deviations.

Figure A3: Powell River Route 12 Service Area



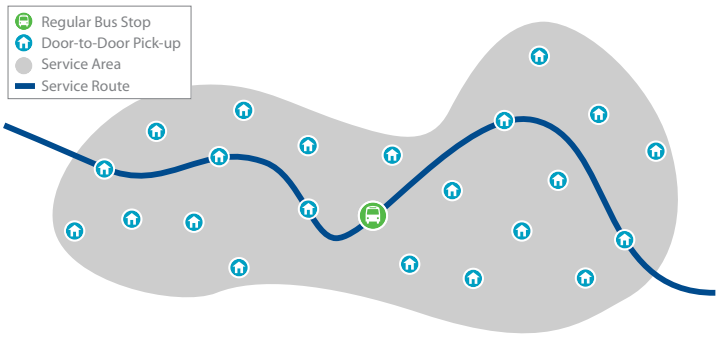
Flex-route applicable conditions:

- Moderate ridership in a corridor linking major destinations and conventional transit
- Low ridership in areas beyond a reasonable walking distance of the corridor that cannot be economically served with conventional transit
- 90 per cent or more trips to/from bus stops — at most 1 to 2 route deviations per hour

Dial-A-Bus

Dial-a-Bus services also follow a fixed schedule, but buses do not follow a fixed route. Instead, drivers determine their own route as needed to pick up and drop off passengers who have requested service in advance. Buses may also stop at specific designated bus stops at scheduled times without the need for any advance requests for service. These bus stops are typically located at popular destinations such as shopping centres, community centres and downtown locations. Figure A4 illustrates an idealized Dial-a-Bus service.

Figure A4: Dial-A-Bus



Some Dial-a-Bus services provide "door-to-door" service, while others pick up and drop off passengers at "request stops." Door-to-door service means passengers are picked up and dropped off at the curb in front of their home or destination. Drivers may assist passengers with physical disabilities to or from the bus. Request stops are designated bus stops located throughout an area; when a passenger requests a pick up, he or she walks to the nearest request stop to meet the bus. Returning passengers are dropped off at the request stop nearest their destination.

Dial-a-Bus services operate on a fixed schedule, which means that travel times are limited to specific time periods during which a bus is scheduled to operate in the area. For example, a Dial-a-Bus service might be scheduled to operate in a specific area at three times during the day, from 8:00 a.m. to 9:00 a.m., noon to 1:00 p.m. and 4:00 to 5:00 p.m.

An example of dial-a-bus is the service provided in Kimberley. The service operates from Monday to Friday from 8:00 a.m. to 4:30 p.m. and the first hour of service is funded by the School District and dedicated to special school service. Dial-a-Bus service is provided door-to-door within the Kimberley and Marysville area, with connections to conventional transit services to Cranbrook. Passengers must request trips at least 24 hours and up to seven days in advance.

Dial-a-bus route applicable conditions:

- Areas served by conventional transit during peak times
- Evenings, weekends and holidays
- 5 to 20 trips/hour per bus

Demand-Responsive Transit

Unlike conventional, flex-route and dial-a-bus services which operate at fixed times, demand-response transit services operate only in response to requests for service. Service is provided only when and where it is requested. If no service is requested at a particular time or in a particular area, no service is provided. This avoids the undesirable scenario of a bus repeatedly driving through a neighbourhood with no-one on board, which is unfortunately a common sight in many rural and low-density areas across North America.

There are many key features of demand-responsive services.

- **Flexible schedule.** With a demand-responsive service, a customer calls in advance to request transportation from one location to another at a specific time. If there are already enough requests for that time that additional requests cannot be served, the customer is asked to travel at an earlier or later time.
- **Advance booking.** Typically, customers are asked to call at least one hour or one day in advance to request a trip. Last-minute requests can often be accommodated if the driver does not have too many other trip requests to serve. Persons who make regular trips to the same destination at the same time can pre-book "subscription trips," and only need to call when they wish to cancel a trip.
- **Flexible routes.** Vehicles providing demand-response service do not follow a fixed route. Instead, drivers are free to choose the best route between requested pickup and drop off locations. This means that after a passenger boards the bus, the driver might stop one or more times to pick up and drop off other passengers before dropping off the first passenger.
- **Door-to-door service.** Demand-responsive services are typically "door-to-door," which means passengers are picked up and dropped off at the curb in front of their home or destination. Drivers may assist passengers with physical disabilities to or from the bus.
- **Smaller vehicles.** Depending on ridership levels, demand-response services can be provided with small buses, vans, taxis or other automobiles. Vehicles are generally accessible for persons who use wheelchairs and with other physical disabilities.

The most common type of demand-responsive service is the specialized services provided for persons with disabilities known as handyDART and this service is provided on the Sunshine Coast. Eligibility to use demand-responsive services is typically limited to persons with a documented physical or cognitive disability that prevents them from using conventional transit services.

Demand-Responsive transit applicable conditions:

- Areas with low ridership throughout the day
- Areas served by conventional transit during peak times
- Evenings, weekends and holidays only, or all day
- Up to 7 trips/hour in one area

Vanpools

A vanpool is a group of up to 15 commuters who travel to the same destination at the same time each day. The group travels in a van provided by a transit agency or other organization, and each person in the group (sometimes with the exception of the driver) pays a monthly fare calculated based on the distance travelled and the costs of operating the van. A vanpool rider continues to pay the monthly fare when on vacation, although some vanpools maintain a list of occasional riders who will fill and pay for the empty seat.

Vanpools applicable conditions:

- Longer-distance trips of at least 25 km and 30 minutes travel time each way
- Regular commute trips such as work and post-secondary school
- Trips that are made at the same time each day
- Trips to destinations with a large number of persons, such as downtowns, hospitals, post-secondary institutions and business parks

An example of a vanpool program is Jack Bell Rideshare, which operates vanpools in the Lower Mainland and on Vancouver Island between the Cowichan Valley and Victoria. Vanpools use eight-passenger minivans purchased by Jack Bell Rideshare and operated by a designated vanpool driver. All passengers except the driver pay a monthly fare calculated to recover capital and operating costs. Seven persons is the minimum number required to start a vanpool, although a vanpool can be started with only six persons if the group is prepared to pay for the empty seat until a seventh person can be found. The Jack Bell Rideshare program is offered province-wide.

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BC Transit would like to thank all those who were involved in the creation of this plan

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