







# Transit Future Plan

CHILLIWACK AREA | May 2012





### Acknowledgements

This plan was made possible by participation from provincial and local government, key stakeholders and the public. BC Transit would like to thank staff from:

Fraser Valley Regional District

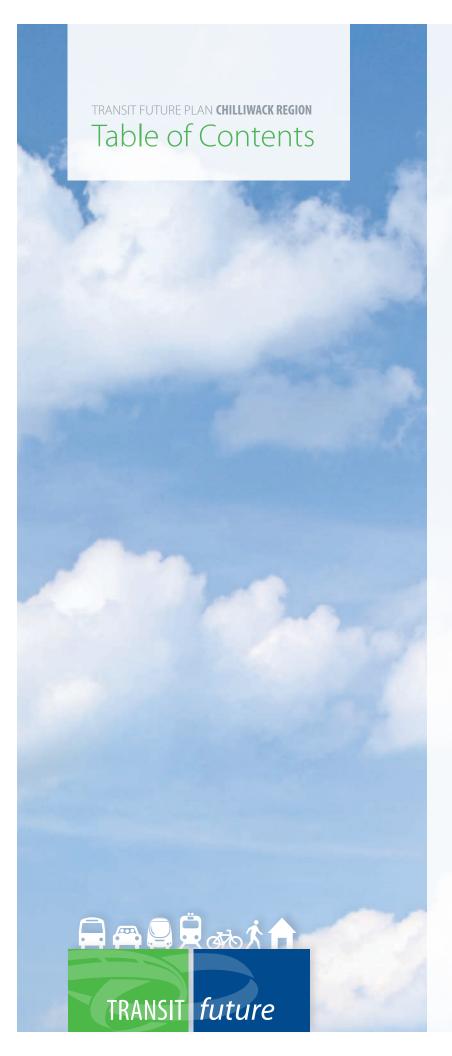
City of Chilliwack

District of Hope

District of Kent

Village of Harrison Hot Springs

Finally, thank you to the over 600 members of the public, riders and non-riders alike, who contributed to the plan's development by attending open houses, taking surveys, or submitting written or verbal comment.



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# **Executive Summary**

High-quality transit service is a foundational component of managing growth and fostering sustainability within communities. Greater provision of transit service increases the range of transportation options available to the travelling public. The transit market potential within the Chilliwack Area, which includes Chilliwack, Agassiz, Harrison, Hope and the Fraser Valley Regional District areas adjacent to Chilliwack, is increasingly important to address climate change, to accommodate population and employment growth, to manage traffic and to support an aging demographic.

This plan has been created for the Chilliwack Area, which is located in the eastern portion of the Fraser Valley, focusing on Chilliwack, Kent, Harrison Hot Springs and Hope. These communities are connected by three major highways: Highway 1, which runs south of the Fraser River, Highway 7, which runs along the north side of the Fraser and Highway 9 which links Harrison in the north to Highway 1 in the south. The transit services provided in this area of the Region include local services in Chilliwack and a regional service connecting Harrison, Agassiz (Kent community centre) and Chilliwack. Today, there are no transit services to Hope.

The population for the Chilliwack Area is forecast to increase from 107,400<sup>1</sup> in 2011 to 162,500 by 2036. The number of registered vehicles will continue to increase with population; increasing the annual number of kilometers travelled

and the level of air pollutants and greenhouse gases emitted. To help build a sustainable future in the Chilliwack Area, this plan has been designed to increase transit's mode share from one to two per cent by 2036, which means an increase from 491,000 annual rides today, to 1.9 million annual rides in 2036.

The Transit Future Plan envisions the Chilliwack Area's transit network 25 years from now and describes the services, infrastructure and investments that will be required to get there.

<sup>1</sup> Fraser Valley Regional District estimates from 2011 Census

### Goals

The Transit Future Plan is designed to achieve five goals:

#### 1. Transit is efficient and cost effective

Transit is designed to optimize the use of resources and provide better value to the residents and businesses, resulting in improved value of transit investments and increased productivity.

# 2. Transit service is designed to complement and support the diverse land use patterns and community types

The Chilliwack Area contains communities that range in size from a few hundred to over 90,000 residents. Serving this diverse array of communities, from urban centres to rural communities requires tailored transit service that is appropriately sized.

# 3. Transit service is reliable, safe, convenient, and integrated with other transportation modes

The Chilliwack Area Transit Future Plan places a strong emphasis on the customer. This goal focuses on the best practices that make transit attractive and convenient to customers. Transit is fast and direct, safe, convenient, accessible, modern and attractive. Transit is integrated with the transportation network, especially pedestrian and cycling networks.

# 4. Improve the image and marketing of transit through excellent customer service and communication

Transit relies on its operators, marketing, customer information, and fare products for its public image. To improve the image of transit, operators are excellent customer service agents. Customer information is widely available

and accessible and fare products are diverse and easily attainable.

# 5. Service contributes to environmental sustainability

Transit contributes to the reduction of greenhouse gases, promotes healthy living, and encourages and supports more walkable and compact land use patterns.

The Transit Future plan target for transit mode share is two per cent, or approximately double the current mode share for transit. This target translates to approximately 1.9 million riders annually.



### The Transit Future Network

The Transit Future network is comprised of three layers of transit service that together create a comprehensive transit network that meets the needs of Chilliwack and the surrounding area over the next 25 years.

### Frequent Transit Network (FTN)

Frequent Transit service provides medium to high density land use corridors with a convenient, reliable, and frequent transit service all day long (15 minutes or better, 15 hours a day, 7 days a week). The FTN will carry the largest share of the transit system's ridership. This justifies capital investments such as transit priority, right-of-way improvements, a high level of transit stop amenities, and corridor branding.

#### **Local Transit Network (LTN)**

The LTN is designed to connect neighbourhoods to local destinations and to the FTN. Frequency and vehicle type are selected based on demand.

### **Targeted Services**

Targeted transit services are a collection of transit services that include handyDART, regional, express, and para-transit services.

In 2036, service in the Chilliwack Area will include FTN and LTN routes within the City of Chilliwack. Regional services will also connect communities in the Chilliwack Area and Chilliwack and Abbotsford. Inter-regional service will connect Metro Vancouver with Abbotsford and Mission. Custom transit service is also an integral part of future service provision recognizing the average age of the population is projected to increase over the next 25 years.

Establishing the Transit Future network requires prioritizing transit investments and developing an implementation strategy to transform today's network into the future network. The implementation strategy for the Chilliwack Area has three horizons: near-term, short-term, and medium to long-term.



### **Near-term Improvements**

The near-term service improvements are planned for implementation in summer of 2012 and are focused in the Chilliwack urban area. The near-term improvements are based on a new route structure that removes most existing routes and replaces them with new, more direct and frequent routes.

### Implementation of the Yale-Vedder Line

• Establish a network spine with 20 minute frequency along Yale-Vedder, which will directly connect downtown, Sardis, and South Chilliwack

### **Realignment of Local Routes**

 Provide direct connections from neighbourhoods to the spine with three new routes that operate at 30 or 60 minute frequencies

### **Short-term Improvements**

► Chilliwack local service

### **Improved Sunday Service**

- Extend Sunday service hours to 9 a.m. to 8 p.m. on Routes 1 4
- Increase the frequency of Route 1-Vedder to 30 minutes on Sundays

### **Holiday Service**

• Introduce transit service with the same service hours and frequencies as Sunday service on public holidays

#### **Improved Local Service Frequency**

- Increase Route 1 frequency to 15 minutes during weekdays and Saturdays
- Increase Route 2 frequency to 30 minutes on weekdays and Saturdays
- Increase Route 4 service to 30 minutes during peak periods on weekdays

### Custom transit improvements to span of service

- Extend custom transit service hours to 6:30 a.m. to 6:30 p.m. from Monday to Friday, 9 a.m. to 6:30 p.m. on Saturdays, and 9:30 a.m. to 6 p.m. on Sundays
- Add an additional custom transit vehicle to provide more service during peak periods

### Review of Downtown Chilliwack's Transit Exchange

- Consider the location, capacity, and amenities for a transit exchange that will serve Chilliwack over the next 25 years
- ► Regional Service

### Establish the Abbotsford-Chilliwack Express (ACE)

 Provide Highway Express service on Highway 1 between Abbotsford and Chilliwack

### Increased Service between Chilliwack - Agassiz-Harrison

- Provide hourly service between 9 a.m. and 3 p.m.
- Provide Sunday service year round
- · Expand evening service as demand warrants

### Feasibility study for service to Hope

• Complete a feasibility study to determine the most appropriate type, level of service, timing and costs to connect Hope with the rest of the Fraser Valley.

### **Medium to Long-term Priorities**

► Chilliwack local service

#### **Extend the Evans Line**

- Realign the Evans route to provide direct service from South Sumas to downtown via Stream
- Provide 20 minute frequency on this route

#### **Restructure Local Service**

- Provide access to key destinations and connect directly to both north-south routes (Vedder and Evans)
- Increase frequency to 30 minutes or better in peak periods

### **Expanding Custom Service**

- Extend custom transit service hours to match conventional transit service hours
- Add additional custom transit vehicles to allow spontaneous travel during peak periods

### **Enhancing Service to Cultus Lake**

- Consider year round service
- Consider adding trips in peak periods
- Consider extending the service day

### **Enhancing Service to Yarrow and Greendale**

- Schedule more trips during the weekdays
- Schedule additional trips on weekends if there is an increase in demand

#### **Increasing Transit Service Levels**

- As demand warrants, increase service levels on the Vedder and Evans Routes until they reach the service hours and frequency identified for the FTN
- As demand warrants, increase service levels on local routes until they reach the service spans and frequencies identified for the LTN
- Regional Service

#### Increase service on the Abbotsford-Chilliwack Express (ACE)

 As ridership warrants, increase service on Highway 1 between Abbotsford and Chilliwack to 15 minute frequency during peak times and 30 minute frequency during off peak periods

### Increased Service between Chilliwack - Agassiz-Harrison

• Provide evening service every night of the week

### Introduce transit service to Hope

• Based on the results of the feasibility study conducted, implement a regional service connecting Hope to Chilliwack.

### Feasibility study for Hwy 7 service between Kent and Mission

 Complete a feasibility study to determine the most appropriate type, level of service, timing and costs to provide service along Hwy 7 between Kent and Mission.

### **Moving Forward**

### **Funding the Plan**

To meet the mode share and ridership targets identified for the Chilliwack Area will require significant capital and operating investments in the transit system over the next 25 years. Conventional transit annual service hours are expected to increase from 21,000 hours to 86,000 hours. The plan also calls for capital investments, which include:

- Expanding the transit fleet from 9 36 vehicles
- New transit exchange in the City of Chilliwack
- Improvements to customer amenities at transit stops

This level of investment in transit will require stable revenue sources, increased predictability of funding, and implementing new partnerships and revenue opportunities.

### Implementing the Plan

The Implementation Strategy directs short-term to long-term investment in the Chilliwack Area and informs the three-year service planning process. This process aims to provide a closer link to local government budgeting processes in order to ensure that funding availability is better aligned with local needs and provincial funding. This is accomplished by providing three-year base budgets, and proposed service expansion cost estimates by year.

### **Keys to Success**

BC Transit has begun to take steps to guide the Transit Future Plan from a vision to a reality. These efforts will only be successful if done in partnership with all local governments in the Fraser Valley, the Regional District, the Ministry of Transportation and Infrastructure, and the community. A continuous and open dialogue is required to ensure strong links between land use and transit planning, provincial and regional transportation planning and transit, and transportation policy and funding availability.

# Introduction

### Why do we need a Transit Future Plan?

High-quality transit service is a foundational component of managing growth and fostering sustainability within communities. Greater provision of transit service increases the range of transportation options available to the travelling public. Realizing the transit market potential within the Chilliwack Area is increasingly important to address climate change, to accommodate population and employment growth, to manage traffic and to support an aging demographic.

The population for the Chilliwack Area is forecast to increase from 107,400<sup>1</sup> in 2011 to 162,500 by 2036. The number of registered vehicles will continue to increase with population; increasing the annual number of kilometres travelled and the level of air pollutants and greenhouse gases emitted. The mode share for transit is now one per cent and this must increase to meet the environmental, social and economic aspirations of the Chilliwack Area and Fraser Valley region.

To help build a sustainable future in the Chilliwack Area, this plan has been designed to achieve a mode share target of two per cent by 2036, which means an increase from 491,000 annual rides today, to 1.9 million annual rides in 2036.

The Transit Future Plan is designed to complement and continue the work completed as part of The *Strategic Review* of Transit in the Fraser Valley (*Strategic Review*). The latter was led by the Province of British Columbia with funding support from the Fraser Valley Regional District, BC Transit, Translink and input from the local governments within the Fraser Valley. Making use of the directions achieved through The *Strategic Review*, the Transit Future Plan for the Chilliwack Area was developed to confirm the long-term visions and to develop the implementation strategy to reach the 25-year vision. In doing so, the Plan outlines resources (transit service hours and fleet), in addition to the necessary supporting infrastructure required incrementally to reach the 25-year vision. A separate Transit Future Plan is being developed for the Abbotsford-Mission area of the Fraser Valley Regional District.

<sup>1</sup> P.E.O.P.L.E 36, BC Stats (Sept 2011). Retrieved May 8, 2012

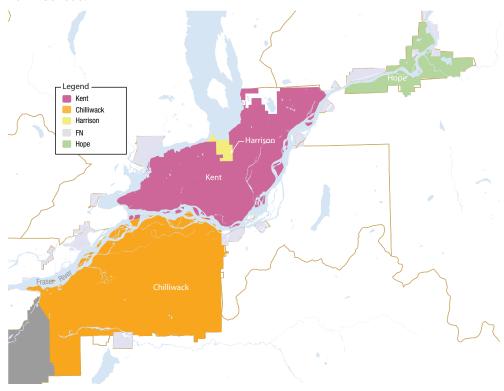
### What is a Transit Future Plan?

A Transit Future Plan envisions what a region's transit network will look like in 25 years and describes what services, infrastructure and investments are needed to fulfill the vision. It promotes and supports land use patterns (i.e. scale, mixture, density and form) that generally encourage and support transit and other sustainable modes of transportation. In fact, the success of transit, cycling and walking is influenced by land use patterns as well as the provision of attractive facilities and services. The Plan is also designed to achieve the goals of the *Provincial Transit Plan* and local government mode share targets. In this regard, the intended outcomes of the Transit Future Plan cannot be achieved by a single agency but requires strategic and financial partnerships between local and regional governments, the Province of British Columbia, BC Transit and TransLink.

### Plan Area

This plan has been created for the Chilliwack Area, which is located in the eastern portion of the Fraser Valley, focusing on Chilliwack, Kent, Harrison Hot Springs and Hope. These communities are connected by three major highways: Highway 1, which runs south of the Fraser River, Highway 7, which runs along the north side of the Fraser and Highway 9 which links Harrison in the north to Highway 1 in the south. The transit services provided in this area of the Region include local services in Chilliwack and a regional service connecting Harrison, Agassiz (Kent community centre) and Chilliwack. Today, there are no transit services to Hope.

The Chilliwack Area has an estimated population of 107,400 according to the 2011 Census.



### **Provincial Transit Plan**

The Transit Future Plan is designed to achieve the goals of the *Provincial Transit Plan*, 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 (TOD) or at least transit friendly development. The Transit Future Plan sets the framework for accomplishing these substantial goals in the Chilliwack Area.

The Provincial Transit Plan sets a number of quantifiable targets including:

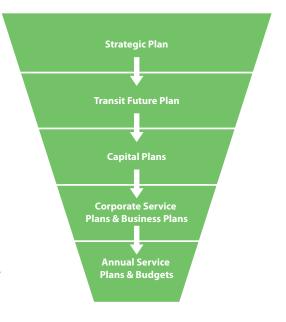
- Reduce greenhouse gas emissions and air contaminants from cars by 4.7 million tonnes by 2020
- Double transit ridership in British Columbia to over 400 million trips a year by 2020
- Increase transit market share in regional centres by one per cent in 2020, and another one per cent in 2030. For the Chilliwack Area, this means quadrupling ridership, or accommodating an increase to around 1.9 million riders per year by 2036.

### Link to Other BC Transit Plans

The Transit Future Plan supports key initiatives in *BC Transit's Strategic Plan*, an overarching framework for BC Transit. Specifically, this plan contributes to the following Strategic Plan priorities:

- Increase integration with other types of sustainable travel
- Influence land use and development patterns
- Identify and establish priority corridors for transit
- Enhance existing partnerships and develop new ones
- Increase our environmental, social and economic accountability

The outputs of the Transit Future Plan help build BC Transit's Capital Plans, Corporate Service Plans, Business Plans, three-year Service Plans, Annual Service Plans and budgeting process.



### Link to Local Plans

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

- The Regional Growth Strategy (2004)
- Official Community Plans:
- City of Chilliwack (updated in November 2011)
- District of Kent (2001)
- District of Hope (September 2011))
- Strategic Review of Transit in the Fraser Valley Plan (December 2010)
- Transportation Plans (including active transportation such as greenways and multi-modal corridors)
- Town Centre or Area development plans

The OCPs for municipalities in the Chilliwack Area direct growth towards becoming complete communities. All OCPs set out multimodal objectives and provide support for transit initiatives. Select initiatives are outlined below:

- City of Chilliwack OCP strives to make transportation multi-modal in form and function. It seeks to link new and existing urban areas by transit, walking and biking, as well as automobile travel
- District of Kent OCP includes transportation policies that support transit as
  a means of providing improved access for seniors and youth to health care
  and other public facilities
- **District of Hope OCP** supports the development of a local and regional transit system as a means to reduce community Greenhouse Gas Emissions
- Village of Harrison Hot Springs OCP directs development to support a vibrant compact village centre of shops, services and residential units that are connected through multi-modal facilities



### The Strategic Review of Transit in the Fraser Valley

The Strategic Review of Transit in the Fraser Valley forms the basis for the Chilliwack Area and Abbotsford-Mission Transit Future Plans. The Strategic Review was a partnership of the Ministry of Transportation and Infrastructure, the Fraser Valley Regional District, BC Transit and TransLink and provided all agencies with a Vision (25-30 year) and 20-Year Strategy to guide the significant expansion of transit services, facilities and policies needed to make transit an attractive transportation choice for Fraser Valley residents and visitors.

In addition to demonstrating a commitment toward the aspirations of the FVRD's Regional Growth Strategy, the recommendations of the process were designed to support more sustainable land use patterns, provide attractive transportation alternatives and reduce greenhouse gases. The SRTFV Final Summary document includes cost estimates associated with meeting the long-term vision of the strategy. The Transit Future Plan builds off of this planning work by confirming the long-term vision and developing the Implementation Strategy to achieve the vision.





# Participation

This Plan was created from feedback received from the community at-large and key stakeholders, in addition to many hours of hard work and dedication by local staff from the City of Chilliwack, the Fraser Valley Regional District, the District of Kent, the Village of Harrison Hot Springs, and the District of Hope. Their contributions ensured this plan best reflects the needs and desires of the communities. The following section describes the public participation process and summarizes the input and feedback received during the *Strategic Review* as well as the Transit Future Plan.



### **Local Government Participation**

Frequent and direct participation with local government and regional district staff was paramount in the creation of the Transit Future Plan as well as the *Strategic Review*. As shown in the figure below, both processes included extensive engagement of staff and council.



As part of the Transit Future Plan, staff and council were involved at four stages, including:

- Introduction to the planning process and outcomes
- Results of public consultation phase one
- Draft implementation strategy
- Final draft Transit Future Plan

### **Community Participation**

Community engagement was also a critical component of both the *Strategic Review* and the Transit Future Plan. Both used a variety of methods for engaging in an interactive process with all stakeholders, as highlighted in the figure below.



The Transit Future Plan community engagement process was guided by the following objectives:

- 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 Transit Future Plan included two distinct phases of public discussion. The following sections summarize each phase and the outcomes achieved.

### Phase 2 – Did we hear you correctly?

The second phase of the consultation program, but the first phase specific to the Transit Future Plan, presented The *Strategic Review's* long range regional and local network visions. Participants were asked to review the long range visions and provide comment in addition to identifying their short-term priorities.

Participation Highlights			
Number of open houses	5		
Open house participants	150		
Comments received	100		
Online survey "The Game Plan"	200		
participants			

#### **Transit Future Bus**

In April 2011, five open houses were held: two in Chilliwack, and one in Kent, Hope, and at the UFV Campus in Abbotsford. Open houses were hosted using the Transit Future Bus, an out of service bus converted into a mobile open house facility. The bus was located at popular destinations in order to reach residents who may not otherwise attend a transit focused open house. On the bus, visitors could provide their feedback through a variety of methods, including:

- Interactive displays
- Comment book
- Verbally by conversing with BC Transit, local government, and operating company staff
- An online, interactive survey titled, "The Game Plan"

Strong themes emerged from nearly 100 responses gathered through the interactive displays on Transit Future bus. More than three-quarters of all comments were service requests. The top two themes for service requests related to the following items:

- Introduction of regional transit service that is direct and fast throughout the Fraser Valley and connecting to Greater Vancouver (over half of all comments)
- Improvement of local service in Chilliwack by increasing service frequency and service span (one-third of all service requests)





#### The Game Plan

The Game Plan was regional in scope and, throughout the first phase, it attracted over 200 responses from the entire Fraser Valley (including Abbotsford and Mission residents). Participants prioritized a series of choices surrounding four topics. The survey responses were analyzed based on the residential location of each response to gain a more precise picture of the needs of Chilliwack, Kent, Harrison, Hope and regional district residents. The questions and responses in priority order are provided below for both the entire Fraser Valley, and also for respondents residing in the Chilliwack Area.

The top two priorities for future investment in service are the same, but the third priority is different. For the Fraser Valley, Abbotsford local service ranks third, whereas for the Chilliwack Area, service between Hope and Chilliwack is third.

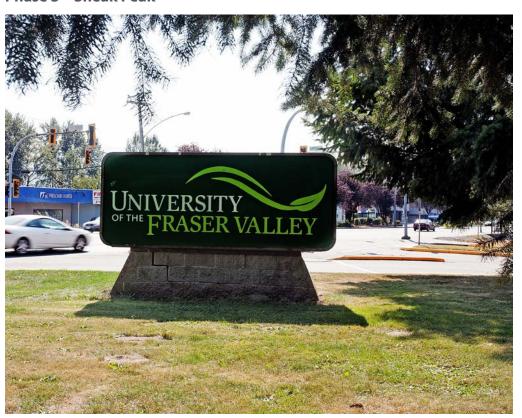
Question	Fraser Valley Prioritized Responses	Chilliwack Area Prioritized Responses		
Why invest in transit?	<ul><li>Livable communities</li><li>Moving more people</li><li>Economic growth</li><li>Environment</li><li>Healthy living</li></ul>	<ul> <li>Livable communities</li> <li>Moving more people</li> <li>Economic growth (tie)</li> <li>Environment (tie)</li> <li>Healthy living (tie)</li> </ul>		
Where should we invest?	<ul> <li>Abbotsford – Chilliwack</li> <li>Chilliwack local service</li> <li>Abbotsford local service</li> <li>Chilliwack – Agassiz-Harrison</li> <li>Hope – Chilliwack</li> <li>Mission – Abbotsford</li> <li>Hope – Abbotsford</li> <li>Mission – Chilliwack</li> <li>Mission – Chilliwack</li> <li>Mission local service</li> </ul>	<ul> <li>Abbotsford – Chilliwack</li> <li>Chilliwack local service</li> <li>Hope – Chilliwack</li> <li>Chilliwack – Agassiz-Harrison</li> <li>Hope – Abbotsford</li> <li>Mission – Chilliwack</li> <li>Abbotsford local service</li> <li>Mission – Abbotsford</li> <li>Mission local service</li> </ul>		
Improve customer amenities	<ul><li>Safety and security</li><li>Easy payment options</li><li>Real-time information</li><li>Stop and station amenities</li></ul>	<ul><li>Stop and station amenities</li><li>Safety and security</li><li>Real-time information</li><li>Park &amp; Rides</li></ul>		
How should we pay for transit?	<ul><li>Provincial funding</li><li>Business revenue</li><li>Passenger fares</li><li>Community pass</li></ul>	<ul><li>Provincial funding</li><li>Business revenue (tie)</li><li>Passenger fares (tie)</li><li>Community pass</li></ul>		

### **University of Fraser Valley Survey**

As part of the second phase, two open houses were held at the University of the Fraser Valley (UFV) in Abbotsford to ensure this key transit market was heard from. Led by staff from UFV, the survey garnered over 200 responses primarily from students, but also from staff. 17 per cent of respondents live in Chilliwack. The key findings from their responses are provided below:

- Chilliwack residents travel most often to the Chilliwack UFV campus (an average of 3.3 times per week), and second most often to the Abbotsford campus (an average of 3.1 times per week)
- 71 per cent of Chilliwack residents travel to campus by car, 17 per cent travel to campus by bus, and 12 per cent travel to campus by walking or biking
- No access to transit was sighted as the primary reason for not taking transit
- 56 per cent of Chilliwack residents do not make use of U-Pass. The primary reason stated was the lack of service between Chilliwack and Abbotsford campuses
- The most important transit improvements, from a select list are presented below in priority order:
- Abbotsford Chilliwack connection
- Longer hours of service and service to more areas
- Faster trips to/from UFV
- Abbotsford Surrey (TransLink) connection

### Phase 3 - Sneak Peak



The third phase of the consultation program provided community stakeholders

with a sneak peak of the proposed service changes in Chilliwack for Summer 2012. Also presented were short-term, mediumterm, and long-term plans for transit. Open Houses were hosted in Chilliwack, Hope, Kent, and Harrison in late February and early March of 2012. In total, 77 people attended the open houses. Residents had the option of providing feedback through written and online surveys; 95 surveys were completed.

Participation Highlights	
Number of open houses	4
Open house participants	77
Online and written surveys received	95

The public was generally supportive of the Transit Future Plan. The short-term, medium-term and long-term networks were well received. In particular, the feedback reinforced the need for:

- Improved frequency in Chilliwack
- A new Chilliwack-Abbotsford connection
- Connecting the entire Fraser Valley Regional District with transit service.

Additionally, there was also constructive feedback about the proposed near-term service changes for the summer of 2012, including an interest in maintaining direct connections to the Cottonwood shopping mall, providing service to Yale West industrial area, providing service to South Sumas industrial area and providing more service coverage, especially for neighbourhoods and the southern UFV campus.



# Setting the Scene

The context for planning transit is heavily influenced and shaped by current circumstances as well as the plans and policies of local municipalities and the Regional District. This section provides a summary of the community context that leads the development of the Transit Future Plan for the Chilliwack Area.

### Regional Context

The following table provides a summary of regional challenges for transit within the Fraser Valley.

### **Regional Challenges**

### Rapid growth in population and jobs

The Fraser Valley Regional District will continue to be one of the fastest growing regions in British Columbia over the next 25 years. Both population and jobs are expected to increase by more than 60 per cent. By 2036, there will be nearly 430,000 people and 203,600 jobs. Growth will be focused on the urban centres which will need to be developed in a sustainable manner in order to be conducive to more efficient and effective transit service.

## Increasing mode share with an aging demographic

The Fraser Valley is expected to experience rapid growth across all age demographics, along with the aging of the baby boomers that will be seen across Canada. The average age in the region will increase; however, there is a significant amount of growth among younger age groups. If transit ridership and mode share are to increase, all aspects of service quality must improve to retain existing customers and attract new customers, particularly choice riders. The network of the future will also have to capture more personal trips (shopping, medical, etc.), a travel market that is difficult to capture.

### Connecting regional centres with transit

Over 10 – 20 per cent of all daily trips travel between different municipalities in the Fraser Valley. This indicates that people travel outside of their home municipality to access jobs, shopping, and medical services across the region. Chilliwack-Abbotsford is one of the three principal regional transit markets and there is no transit option for these trips. Another 5 – 15 per cent of daily travel is between the Fraser Valley and Metro Vancouver communities, showing demand for access to the Langley, Surrey, and Metro Vancouver's Northeast Sector.

## Developing complete communities that are easier to serve with transit

Continuing to solidify the link between transportation and land use planning to ensure development matches the vision of the Official Community Plans, Neighbourhood Plans, *Provincial Transit Plan* and the Transit Future Plan. Jobs in the region are expected to grow faster than population, improving the population to employment ratio and reducing the percentage of people who have to leave the region to work.

# Improving custom and accessible transit service

Custom transit is an important service that enables people with cognitive and physical mobility challenges to access important services and opportunities. As the number of elderly citizens increases, the number of people requiring custom transit is expected to increase. Custom transit and specialized services will be expected to expand to provide more neighbourhood oriented transit to meet these needs.

Serving new neighbourhoods by transit
Serving new neighbourhoods in suburban
areas with transit will continue to present a
challenge. In order for transit to be viable in new
neighbourhoods it is important that new suburban

developments are closely linked to transit planning principles such as strong pedestrian connectivity, transit vehicle friendly road network design, bus stop and terminus considerations, and increased land use density. This will be especially challenging in lower density and hillside communities.

# Aligning local priorities to create a strong regional service

Improvements to regional service require all partners to prioritize and fund this service simultaneously. Both local and regional services are important: approximately 80 per cent of all daily trips generated by each community are 'local' (i.e. start and end in the same municipality). At the same time, there are thousands of regional trips made every day for which there is no transit option.

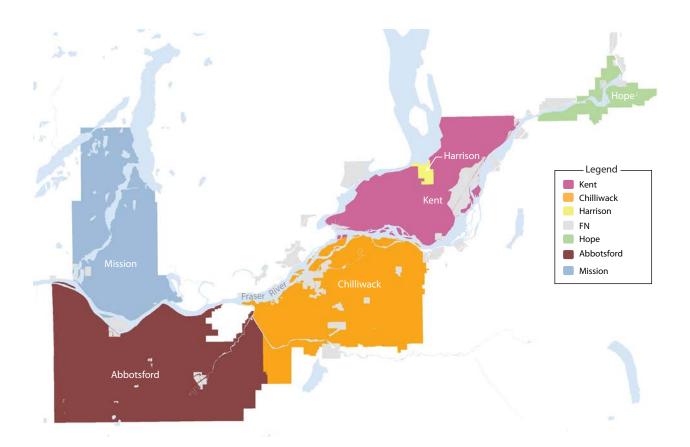
### **Regional Growth Strategy**

The most important factor in how people travel is the proximity of where people live and where they need to go for work, shopping, school, medical care, and recreation. Scale, density and mixture of land uses will largely determine how far, and consequently which modes they may potentially choose for travel. In this regard, transit plays an important role for both short and long distance travel where walking, cycling and driving may not be convenient.

The Fraser Valley Regional District Regional Growth Strategy (RGS) recognizes this linkage and includes policies and objectives to encourage infill development of existing neighbourhoods with higher density and mixed-use developments. The RGS Vision Statement is:

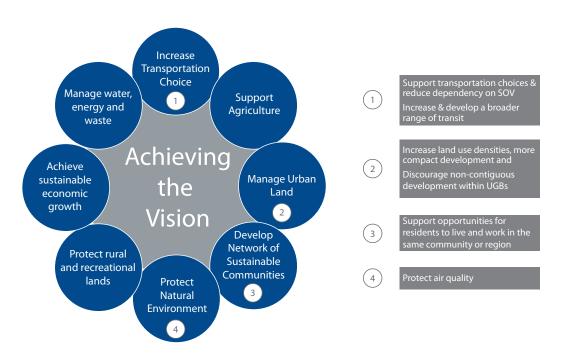
The Fraser Valley Regional District will be a network of vibrant, distinct, and sustainable communities that accept responsibly managed growth while being committed to protecting the land resource and the natural environment to ensure that a high quality of life is accessible to all.

This is especially important given the growth pressure facing the Region which expected to increase by almost 70 per cent by 2036. The majority of this growth is planned for already established urbanized areas of the Fraser Valley. Maintaining the rural character of each community is very important. The RGS identifies urban growth boundaries and is influenced by the Agricultural Land Reserve (ALR) and the desire for neighbourhoods to fit with the rural and hillside environments. Promoting development within city limits that provides ease of access to transit services is instrumental to creating walkable, complete communities.



One of the plan's growth management goals is to develop a network of sustainable communities. This goal will be achieved, in part, by **strengthening the transportation linkages between communities**, while providing opportunities for residents to live and work in the same community. This goal is strongly linked to the RGS` first goal, which is to **increase transportation choice and efficiency**. This includes promoting transportation choice and developing more transit service. Specific actions include working in partnership with other agencies to close gaps in inter- and intra-community public transit. The RGS calls for **settlement patterns that are practical to service with public transportation**, which will result in more efficient inter-regional, regional, and local transit service.

There is a lot at stake regionally and transit plays an important role in contributing toward a sustainable future. In fact, transit supports not only the transportation aspirations of the community, but many goals outlined by the key themes contained in the RGS. The graphic below shows how the goals of the RGS are tied to transportation and transit outcomes.



### **Regional Land Use Patterns**

There are seven unincorporated areas and six municipalities in the Fraser Valley: Abbotsford, Mission, Chilliwack, Kent, Harrison, and Hope. The majority of the regional population is concentrated within the urban boundaries of these six municipalities. Each is a complete community with residents, jobs, and amenities, although residents do travel between communities and into Metro Vancouver for work, school, and services.

Population and employment figures from the 2011 Census are summarized in the table below and show the relative number of residents and jobs within the communities and electoral areas in the Fraser Valley. In 2011 there were about 289,000 people and 129,000 jobs in the Fraser Valley. Chilliwack is the second largest community, with about two-thirds of the population and employment of Abbotsford. Kent, Harrison, and Hope comprise six per cent of the population, and five per cent of all jobs in the Region. The region is also home to 18 First Nations and rural residents.

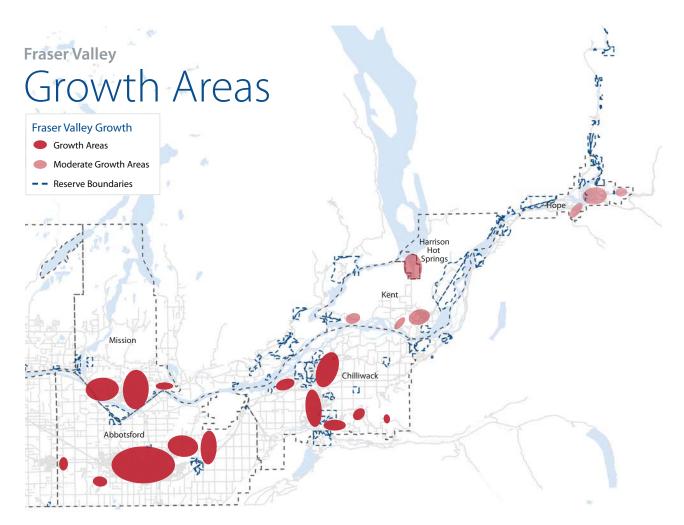
Over the next 25 years, the population and employment of the FVRD is projected to increase to over 429,000 people and approximately 203,600 jobs; a population increase of approximately 67 per cent or an additional 5,621 people per year.

FVRD Population and Employment (2011)						
Municipality	2011 Population	2011 Employment				
Abbotsford	139,339	65,489				
Chilliwack	91,398	39,301				
Mission	42,562	18,302				
Kent / Harrison / Electoral Area C	8,710	3,745				
Hope / Electoral Areas A, B & D	7,269	2,617				
Total	289,278	129,454				

The principles established in the RGS direct growth to the central areas of Abbotsford and Chilliwack. The Urban Growth Boundaries, Agricultural Land Reserves, mountainous terrain, water, and environmentally sensitive areas will constrain growth. This should result in denser communities, which are easier to serve with transit. Increased density, combined with a greater balance of jobs to population, is also expected to decrease the distance that residents have to travel to work, recreation, socializing, and shopping. This is also a positive trend for transit.

Within the seven Electoral Areas of the Fraser Valley, there are 18 First Nations, and 29 individual communities. Some of these are located adjacent to major highways making it easier to serve the communities with regional connections, while others are much more remote. It will be a challenge to provide service to the more remote areas especially as the cost per trip is much higher due to the sheer distance required to reach the community.

The RGS Urban Growth Boundaries provide limits to the areas where development can occur. The approximate locations of growth areas identified in the RGS are illustrated in the graphic below.



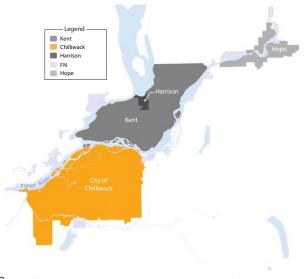
### **Community Context**

### **Community Policies and Plans**

Each community in the Chilliwack Area has an Official Community Plan (OCP) which governs local land use and growth strategies for each municipality. The goals and objectives within these OCPs highlight a trend for continued growth as complete communities. Multi-modal objectives are set out in all OCPs and a number of land use and planning objectives provide strong support for transit initiatives, as outlined in the following section.

#### **Chilliwack**

In November 2011 Chilliwack updated their OCP. Chilliwack's OCP focuses on a "vision of complete communities and sustainable development, combined with a pragmatic approach to address growth and development." Chilliwack's future growth will be guided by the established Urban Containment Boundary. The OCP states that the City will continue to work with the Agricultural Land Commission to reach an agreement that aligns the Urban Containment Boundary with the ALR Boundary. The OCP recognizes the importance of implementing policies that strengthen the distinction between urban and agricultural land, while mitigating their impact on each other. It also identifies locations for high density residential development and regional commercial land use, and clusters industrial land along major transportation corridors. These policies will improve the attractiveness of transit.



The Chilliwack OCP also provides direction on the role of transportation in the growth of the city. In this regard, "transportation will be multi-modal in form and function, linking new and existing urban areas by transit, walking and biking, as well as automobile".

To achieve this goal the city has established the following objectives:

- To create a more livable, attractive and efficient community by reducing the percentage of trips made by private automobile. Emphasize private automobile trip reduction
- To create a balanced, integrated, multi-modal transportation system (including pedestrian, bicycle and transit facilities), in existing and new development areas. Promote a variety of alternative forms of transportation
- To provide access from all areas of the City to the Downtown by all modes of transportation. Emphasize the Downtown as the hub

If these policies are adhered to, transit ridership, in combination with an increase in walking and cycling will help to reduce congestion, and will defer and perhaps reduce significant capital investments in additional road capacity. Most of Chilliwack's residents (up to 82 per cent) currently live within the Urban

Containment Boundary and local planning policies aim to add additional population and employment density within the boundary. Such a densification process could help transform parts of Chilliwack into attractive neighbourhoods of medium densities that feature mixed-use development.

Chilliwack's Downtown Land Use Development Plan presents the community's vision for the Downtown Plan Area over the next 30 years. The plan specifically addresses what can be done to make public transit a viable and attractive option, not only for downtown, but in the rest of the city. The corresponding objectives are outlined below:

- Consider a transit exchange in the downtown core with connections to a future city-wide multi-modal transit hub
- Prioritize community-wide transit routes that facilitate access to downtown
  destinations (such as schools and other educational institutions, civic
  buildings, shopping, and amenities) and allow safe and efficient connections
  with other public and private transit systems and modes, including but not
  limited to regional bus, cycling, and both private and public shuttles to the
  Abbotsford International Airport
- Support primary and secondary multi-modal corridors with infrastructure improvements such as frequent transit service, strategic transit stops, including transit stops, sidewalks, paved waiting and boarding areas, shelters, and seating for transit users

Chilliwack's Downtown Land Use Development Plan sets out several other transit-supportive policies as stated below:

- Higher density multi-family and mixed-use developments will accommodate a significant share of the overall residential growth expected for Chilliwack
- Mixed land use will be encouraged, with retail shops on the ground floor and residential uses above. This will make the Downtown more pedestrian oriented
- The City will consider widening the public right of way along key multimodal streets to improve safety and / or convenience for alternative modes, including pedestrian, bicycle, and transit

Overall, the Downtown Land Use Development plan emphasises densification as a key long-term goal. The plan states that about 10,800 new residents could be accommodated through directed and selected densification in Downtown Chilliwack. The following figure highlights the development and land use plan for Downtown.

### **Downtown Land Use Development Conceptual Plan**



### **LEGEND**

- ■ Traditional Retail Street
   ■ General Commercial Street
   Primary Multi-modal corridor
   Secondary Multi-modal Corridor
   Neighbourhood Greenway
   Parks and Recreation (Existing)
   Community Corner
   Focal Point/Gateway
- Health District

  Village Walk Heritage District

  Core (Pedestrian Oriented)
  Commercial Mixed Use

  Low Medium Density Housing

  Medium High Density Housing

  Service (Auto-Oriented)
  Commercial

  Civic Recreational & Institutional

  Light Industry/Manufacturing

Source: Chilliwack Downtown Land Use and Development Plan

### Hope

The District of Hope's Official Community Plan Bylaw #1147 was last consolidated in September 2011. The overall vision is "to create a vibrant and active community based on sustainable and environmentally friendly economic growth." A key part of this vision is to support the development of a multi-modal transportation network. To achieve this vision, the District will endeavour to provide an integrated transportation network for motorized and non-motorized uses. The District also has a policy within the OCP to promote the reduction of community greenhouse gas emissions. The following policies reflect these directions:

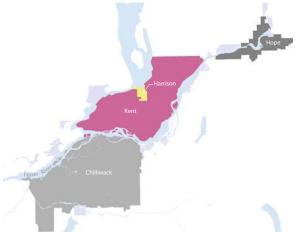
- Support the development of a local and regional transit system with sustaining infrastructure.
- Encourage pedestrian and bicycle infrastructure investments in order to reduce the use of single occupancy vehicles, greenhouse gas emissions and congestion.



#### Kent

The 2001 District of Kent OCP outlines nine guiding principles that provide structure to the policies contained in the plan. These principles are:

- Manage growth within the District of Kent in order to strengthen the community both socially and economically, to preserve the natural environment, protect valuable agricultural land, and to maintain Kent's rural charm.
- Protect the environment and properly manage land and water resources
- Support farming as an economic activity, and lifestyle choice
- Encourage innovative housing solutions and provide housing alternatives
- Enhance community pride and revitalize Agassiz in order to create a diversified and vibrant local economy
- Foster economic growth through diversity of activity and value added services
- Provide adequate infrastructure to ensure appropriate levels of service to meet the needs of existing and future residents and business.
- Promote park, recreational, and community opportunities for residents and visitors.
- Maintain and enhance the quality of life for all Kent residents



The key destination in Kent is Agassiz and the OCP reinforces this commitment to retain Agassiz as the commercial centre of the District. The plan provides for mixed-use commercial and multi-family development within the Town Centre in Agassiz. Agassiz is a destination that provides jobs and amenities to local residents and others in the region, but largely residents travel outside their municipality to reach employment destinations. As such, regional transit connections should continue to be centred within the Town Centre.

### **Harrison Hot Springs**

The Village of Harrison Hot Springs also has an OCP, which was adopted in 2007. The goals of the OCP, related to transportation and transit in particular include:

- Provide efficient, equitable and affordable public services
- Establish a distinct, pedestrian-oriented village centre with a range of commercial services
- Develop tourism and recreation features and activities for the benefit of residents and visitors
- Protect views of the lake and the surrounding mountains
- Protect and maintain air and water quality and biodiversity
- Promote compatible residential and tourism development and community relationships
- Manage traffic and parking and promote transportation alternatives
- Provide for a mix of housing types for all ages and incomes

Similar to Agassiz, the town centre in Harrison is and will continue to be the focal point for activity in the community and regional transit connections.



### **Demographic Characteristics**

Travel patterns and frequency are heavily influenced by the number of people and jobs in that community. Demographic characteristics, such as population, employment, and age distribution inform the development of the future transportation system.

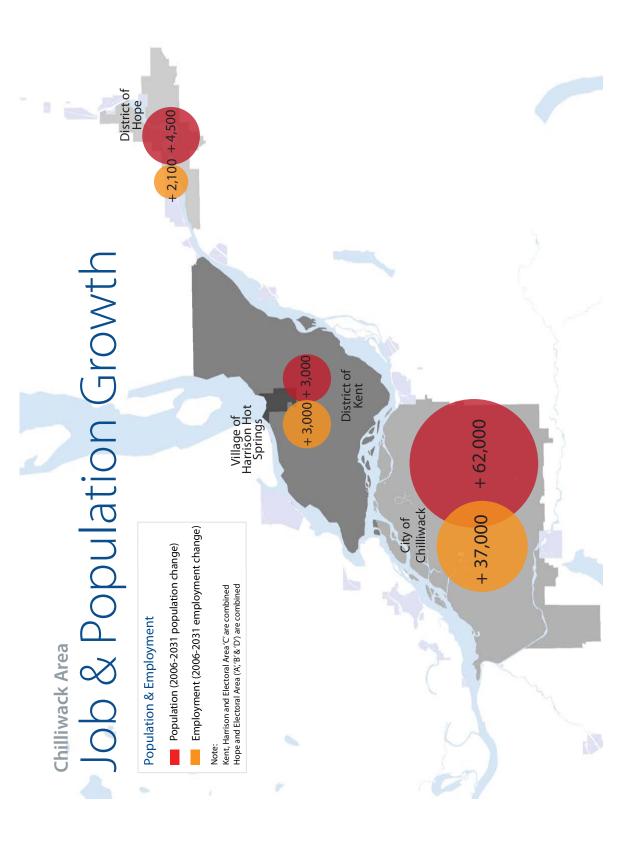
### **Population and Employment**

- The City of Chilliwack and other eastern communities of the Fraser Valley supported a population of more than 98,000 people in 2006, and 107,400 in 2011 – an increase of nine per cent
- At the same time, the employment levels of the Chilliwack Area were approximately 42,000 jobs in 2006, and estimated at approximately 46,000 in 2011 – an increase of 9 per cent
- Over the next 25 years, population and employment in the Chilliwack Area are projected to increase to over 162,500 people and 74,300 jobs. The City of Chilliwack will account for about 90 per cent of this increase.

Fraser Valley Population and Employment Forecast (2011 to 2036)							
Municipality	Population			Employment			
	20011	2036	Per Cent Change	2011	2036	Per Cent Change	
Abbotsford	139,339	208,234	49%	65,489	102,035	56%	
Chilliwack	91,398	144,231	58%	39,301	66,346	69%	
Mission	42,562	59,083	39%	18,302	27,178	48%	
Kent / Harrison / Electoral Area C	8,710	9,996	15%	3,745	4,698	25%	
Hope / Electoral Areas A, B & D	7,269	8,261	14%	2,617	3,304	26%	
Total	289,278	429,805		129,454	203,562		

It is worth noting that the population to jobs ratio for the region will continue to be strong signifying that fewer people will have to travel outside of the area for work. By 2036 there is expected to be one job for every two people.

The following figure highlights the scale of job and population growth forecasted for the Chilliwack Area.

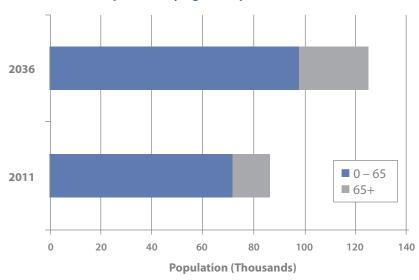


### **Demographics**

While most communities in the Fraser Valley continue to experience the effects of an aging population in future decades, as the baby boomer generation continues to age, the population within the Chilliwack Area is expected to grow 73 per cent by 2036<sup>1</sup>. The 65+ cohort is expected to increase from representing 16 per cent of the total population in 2011 to 22 per cent (i.e. from 14,600 to 27,400). This means that by 2036 almost one in four residents will be over 65 years of age.

The following graph highlights this trend using population forecasts for the City of Chilliwack.

#### **Chilliwack Area Population by Age Group**



An aging population means that proportionately more residents will fall into age groups that display the least propensity to ride transit. It also presents an increased need for transportation access to medical facilities, shopping and other social destinations that help residents age in place. Locating seniors' residences and medical facilities in the core of the community, with good access to the transit network, is an important means to provide mobility.

A survey of transit passengers in 2007 revealed that approximately 40 per cent of all ridership on local routes in Chilliwack are adults and 35 per cent are students. Seniors and BC Bus Pass holders made up 25 per cent of the ridership.

<sup>1</sup> BC Stats. P.E.O.P.L.E. 36. (Sept 2011)

### **Travel Patterns**

Many of the challenges that face the Fraser Valley Region as a whole also apply more specifically to the Chilliwack Area. These include a rapidly growing population and an increasing number of elderly citizens. Residents of Chilliwack, Hope, Kent and Harrison travel between each municipality and also to Abbotsford and Metro Vancouver, and need regional and inter-regional transit connections. Beyond this, there are a number of more specific challenges that face Chilliwack, Hope, Kent and Harrison.

### **Challenges in Chilliwack Area**

# Meeting travel demand within the City of Chilliwack

Approximately 87 per cent of the 285,000 daily trips that begin in Chilliwack remain within the City. Over 70 per cent of work-based trips generated in Chilliwack stay in the City. This shows strong internal travel demand for both work and other trips. As the population and number of jobs grow, particularly in the Downtown area, internal transit service will become even more important.

# Providing connectivity between Kent, Harrison, Hope, and Chilliwack

Approximately 70 per cent of the 6,700 daily trips in Kent and Harrison stay within the community. This applies to about 45 per cent of the 1,400 work-based trips. Chilliwack is the second most popular place of work. A portion of these trips could be better served by transit.

### Demand for inter-regional service to Metro-Vancouver and Abbotsford

There is a strong demand for travel between Abbotsford from Chilliwack with approximately 6 per cent (15,000) of daily trips destined there. Metro Vancouver draws approximately 3 per cent (7,000) of Chilliwack trips.

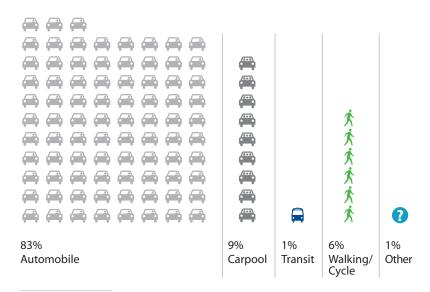
A successful transit system enables users to move to and from their destination as seamlessly as possible. Today, only one per cent of commuting trips in the Chilliwack Area are by transit.

In order to double the transit market share (and quadruple ridership)<sup>2</sup> by 2036, alignment with key destinations is needed. Travel data was reviewed to gain a better understanding of movement within the Fraser Valley; to ensure the future transit system takes people where they want to go, when they want to go.

The five municipalities in the Fraser Valley Regional District are generally self-contained, with residents, jobs and services. However, these communities are also geographically close together and residents benefit from having a wide variety of opportunities to work, play, and use amenities outside of their home municipality. Further, the City of Abbotsford is adjacent to Metro Vancouver and there is a growing amount of two-way travel between these communities. While there are such inter-regional draws most trips are internal. The 2008 Trip Diary, which collected travel information from residents of the Fraser Valley and

<sup>2</sup> Transit mode share is the percentage of trips made by transit. In the Chilliwack Area, it is currently around one per cent. Doubling the market share of transit will increase the mode share from one per cent to two per cent. At the same time, the number of people and jobs is expected to increase significantly. As the number of people and jobs increase, the total number of trips expected increases. Estimating the total number of trips in the future and then applying the two per cent mode share goal results in a ridership target that is four times larger than existing ridership.

# Chilliwack, Agassiz and Harrison Commuter Modes



Source: Statistics Canada, 2006

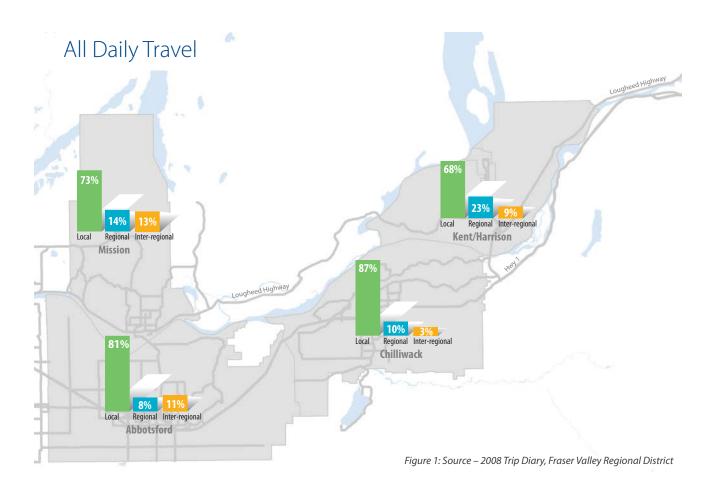
Metro Vancouver, shows that most trips that start in a community are destined to locations within the same community. For example, 87 per cent of trips originating in Chilliwack stay in Chilliwack.

Chilliwack features a Historic Downtown, Cottonwood Mall, a UFV campus, Chilliwack General Hospital, and entertainment and recreational services. Chilliwack residents have a wide variety of jobs and services within their own community.

Developed land in the District of Kent is centred around the community of Agassiz. Downtown Agassiz provides a number of amenities, including schools, seniors` housing, a number of employers, a fitness centre, restaurants and shops. The primary future development area is Mount Woodside, which is the last existing undeveloped, non-ALR area in Kent.

The Village of Harrison Hot Springs is a world class tourist destination located on Harrison Lake. Harrison has tourism-related amenities, such as hotels and restaurants.

Hope is the most easterly community in the Fraser Valley and most residents also work within the community. The Town Centre has restaurants and shops, as well as a recreation complex and UFV campus. Hope is also home to the Fraser Canyon Hospital. The Fraser Valley also includes seven electoral areas, which are largely rural, but include some small areas of development.



Although, a high percentage of trips are local, there are still thousands of trips every day produced between Fraser Valley communities, and between the Fraser Valley and Metro Vancouver. Around 10 per cent of trips from Chilliwack are destined to Abbotsford, Kent, Agassiz, or Mission. There is also demand for trips from the Fraser Valley to the Langleys, Surrey, and other Metro Vancouver municipalities. The largest regional and inter-regional travel between Fraser Valley communities in which transit markets are considered to be significant are:

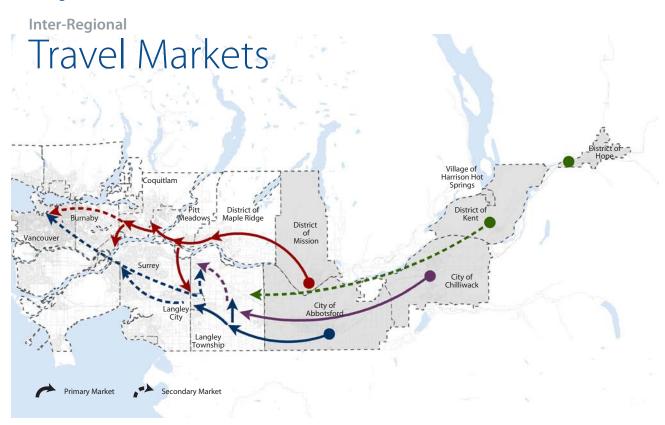
- Abbotsford Metro Vancouver
- Abbotsford Chilliwack
- Abbotsford Mission
- Mission Metro Vancouver

The figures below illustrate these primary and secondary regional and interregional travel markets and opportunities to consider new or enhanced transit service connections.

#### **Regional Travel Markets between FVRD Communities**



#### Inter-Regional Travel Markets Between FVRD and Metro Vancouver Communities



Most trips in the Chilliwack Area are local. This means that most trips stay within the community where they started. Although local trips comprise the largest percentage of trips, there is also a demand for Regional and Inter-Regional travel in the Chilliwack Area. For example, approximately 20 per cent of daily trips from Kent, Hope, and Harrison are destined for other locations within the Fraser Valley. The most common destinations are:

- Downtown Chilliwack
- University of the Fraser Valley Chilliwack
- Cottonwood Hall

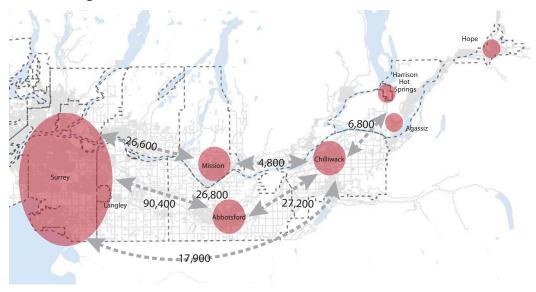
- Chilliwack Hospital
- Historic Downtown Abbotsford
- Abbotsford Regional Hospital

Approximately 5 per cent of daily trips from Chilliwack and 10 per cent of daily trips from Kent and Harrison are inter-regional, with destinations in Metro Vancouver.

#### **Chilliwack**

Approximately 87 per cent of daily trips starting in Chilliwack stay in Chilliwack. Another 6 per cent of trips are destined for Abbotsford, one per cent for Mission, and 3 per cent for Metro Vancouver. At the same time, Chilliwack is the destination for 4 per cent of trips starting in Abbotsford. People from Kent and Harrison also travel to Chilliwack, with approximately 13 per cent of commute trips that start in Kent ending in Chilliwack.

The small percentage of trips between Chilliwack and Abbottsford results in a significant absolute number of daily trips. The graphic below shows that over 27,000 trips travel between Chilliwack and Abbotsford each day, in addition to 4,800 trips between Chilliwack and Mission. The travel demand is equal between Abbotsford / Chilliwack, Abbotsford / Mission, and Mission / Metro Vancouver; however, the three links have very different levels of service. There is a significant potential market for additional regional transit centred in Chilliwack.

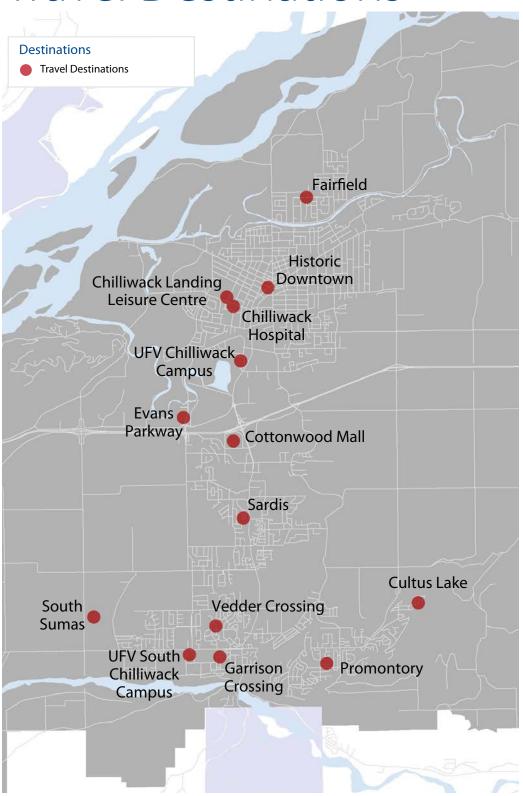


Source: 2008 Travel Diary, FVRD.

Within Chilliwack, the primary destinations for local and regional include: Downtown, Cottonwood Mall, Chilliwack Landing, Leisure Centre, University of the Central Fraser Valley campuses, and the Chilliwack General Hospital. The figure below shows the most common destinations in Chilliwack for all daily trips (by all modes).

#### Chilliwack

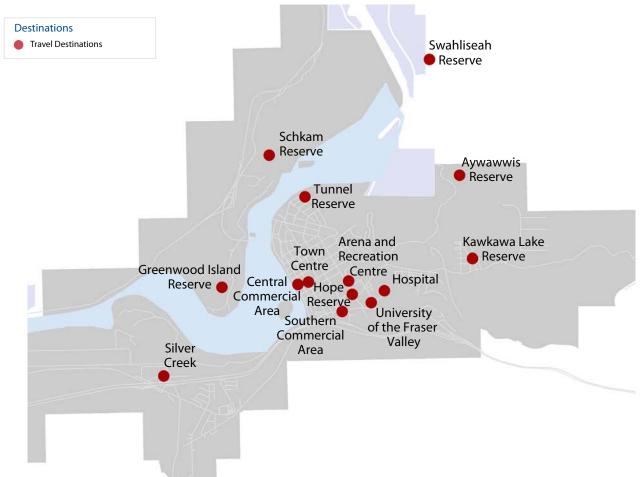
# Travel Destinations



#### Hope

Hope is a complete community with approximately 6,000 residents, shops, restaurants, a Hospital, and local employers. Hope is largely self-contained, and many residents both work and live within the community. Major destinations in Hope include the Town Centre, Central Commercial Area, the Arena and Recreation Centre, UFV Campus, the Hospital, the Southern Commercial Area, Silver Creek, and the First Nation's Reserves. The figure below shows the most common destinations in Hope for all daily trips (by all modes). Because Hope is a complete community, there is less need to travel elsewhere; however, as population increases, there may be a higher demand for transit between Hope and other regional destinations.



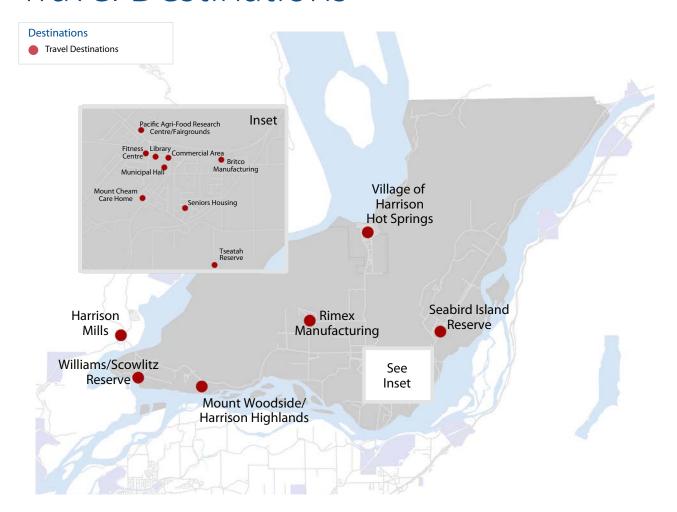


#### **Kent and Harrison**

Approximately 70 per cent of daily trips in Kent and Harrison are local, while another 20 per cent of daily trips are regional. The figure below shows the most common destinations in Kent and Harrison for all daily trips (by all modes). The primary destinations of regional trips are Chilliwack and Abbotsford. One of the reasons that the percentage of local daily trips is lower in this region is that there are fewer local jobs. Only 46 per cent of commute trips that begin in Kent stay in Kent, while 13 per cent travel to Chilliwack and another 6 per cent travel to Abbotsford. An additional 10 per cent of daily trips from Kent and Harrison leave the region all together and travel to destinations in Metro Vancouver, with the most common destinations being in the Langleys.

#### **Kent & Harrison**

## Travel Destinations



# Transit Today

The current system provides the foundation in which to plan for future transit in the Chilliwack Area. This section examines the existing conventional local and regional transit services in the Chilliwack Area, followed by custom transit.

# Conventional Transit System Review

The existing transit system within the Chilliwack Area provides local service within the City of Chilliwack and a regional service connecting Chilliwack to Agassiz and Harrison.

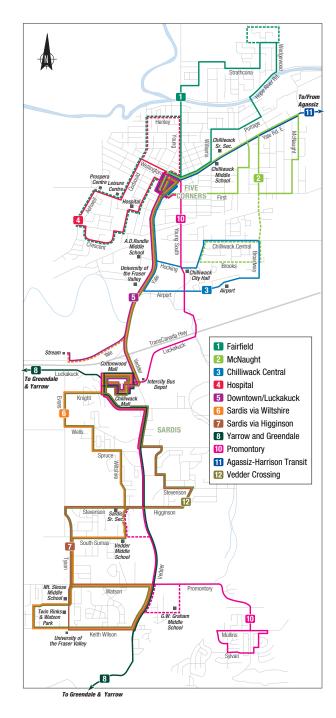
#### **Conventional Transit Challenges**

Continued heavy demand for travel at peak periods and demand for improved span of service Peak period travel is sufficiently high in some areas to warrant improved service frequency. The level of service currently provided limits the time of day at which passengers can travel.

Increase frequency and directness of service Heavy demand along Yale/ Vedder and compatible land use make it an ideal corridor for service enhancements.

#### Improving interregional connections

Thousands of trips every day are made between the Chilliwack Area and Abbotsford, Mission, or Metro Vancouver. There are limited travel options Abbotsford and Chilliwack, resulting in a high number of private vehicle trips.



### Increasing the efficiency of the transit network

The two top performing routes in Chilliwack carry around 50 per cent of all riders, while the six poorest performing routes (in terms of ridership) carry only 25 per cent of the of all riders. This means that buses on some routes are full, while buses on other routes have very few people on them. The buses with very few people on them are much less efficient.

### Matching ridership across age categories with route structure

Chilliwack's transit system only attracts about six rides per person per year. This is low compared to other systems in areas with similar populations.

The transit system in the Chilliwack Area must continue to serve existing riders, while attracting new riders from all age categories, including a growing number of seniors.

#### **Local Service**

The transit system in the City of Chilliwack is comprised of eleven routes:

- Nine conventional routes and
- Two community routes that operate on request during weekdays or seasonally.

Quick Facts	
Ridership (2011)	491,000
Conventional service hours	21,000
Fleet (excluding custom)	9
Number of routes	11

The nine conventional routes mostly provide access to major destinations, such as the downtown core and Cottonwood Mall. North/south service across Highway 1 is provided by several routes connecting downtown to the malls. One community route provides service to Greendale and Yarrow and another provides seasonal service to Cultus Lake.

Approximately 21,400 transit service hours were provided in the Chilliwack Area in 2011. Service operates seven days a week, with most routes running between 6:30 a.m. and 6:30 p.m. (10:00 p.m. on Thursday, Friday and Saturday evenings). Service tends to be more limited on Sundays. No service is provided on statutory holidays.

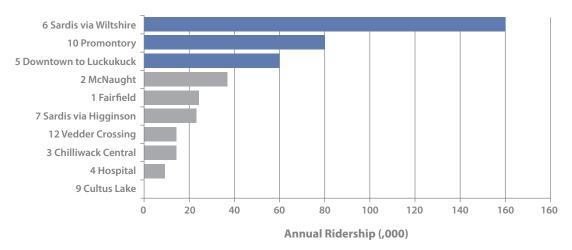
Overall, buses generally operate hourly along each route. A summary of generalized route frequencies by service period for all Chilliwack-area routes is presented in the table below.

	WEEKDAY		WEE	KEND
	AM/PM Peak	Midday	Sat	Sun
Route 1	60 min	>60 min	>60 min	>60 min
Route 2	60 min	60 min	60 min	>60 min
Route 3	15 min	60 min	60 min	>60 min
Route 4	>60 min	>60 min	>60 min	>60 min
Route 5	60 min	60 min	60 min	>60 min
Route 6	60 min	60 min	60 min	No service
Route 7	60 min	60 min	60 min	No service
Route 8	1 trip	1 trip	4 hr	No service
Route 9*	6 tı	rips	6 trips	6 trips
Route 10	>60 min	>60 min	>60 min	>60 min
Route 12	No service. Evening	No service. Evening	60 min (evening	60 min
	service only	service only.	service only)	

<sup>\*</sup> Route 9 operates from 10:00 to 6:30 from July 2 to the day before Labour Day Note: Route 11 is not included because it is a regional transit route with service to Kent and Harrison.

In 2011, the Chilliwack system accommodated just over 492,000 riders. Despite population growth within the City, transit mode share of one per cent has remained unchanged since 1994. A passenger survey carried out in 2007 revealed that approximately 35 per cent of riders were students. Today, most of the ridership occurs on a few routes that connect major destinations. For example, the top three routes carry 50 per cent of the annual ridership. Conversely, the bottom six routes carry approximately 25 per cent of passengers. Many of these poor performing, less efficient routes are designed to provide access and coverage as opposed to more efficient and direct service.

The top two performing routes are the Route 6 Sardis via Wiltshire and the Route 10 Promontory. They serve corridors of diverse and dense development along Vedder Road that includes multi-family residential buildings in addition to many businesses, the UFV campus, and retail centres.



#### **Regional Services**

Regional Chilliwack-Agassiz-Harrison transit service consists of one route, Route #11 – Agassiz- Harrison, which provides regional service between Harrison Hot Springs, Agassiz, Popkum, Bridal Falls, Rosedale, and downtown Chilliwack with nine two-way trips per weekday. On Fridays, two evening trips are provided in addition to the nine daily trips. There are seven two-way trips provided on Saturdays and four two-way trips provided on Sundays during the summer.

#### **Existing Service on Regional Chilliwack Area Routes**

	WEEKDAY		WEE	KEND
	AM/PM Peak	Midday	Sat	Sun*
#11 – Agassiz-Harrison	60 min	>60 min	>60 min	>60 min

<sup>\*</sup> Sunday service is summer only.

A recent on-board survey revealed that most riders travel for school (37 per cent) or work (22 per cent) purposes. The primary destination for 56 per cent of all riders is Chilliwack. At least one-third of all riders are regular weekday riders, with over 90 percent of all riders using the service two to three days per week.

There are no other public transit services connecting municipalities in the Chilliwack Area. Greyhound Bus Lines provide coach bus connections between Hope, Chilliwack and Abbotsford, though they have been reducing service levels over the past few years.

#### **Benchmarking the Existing Transit System**

Transit system performance for Chilliwack was compared to communities of similar size across Canada. The Chilliwack system supports approximately 21,000 hours of service, or 2.2 hours per capita. Although this is agreed to by BC Transit and community partners, it is much lower than service levels being provided in similar size communities elsewhere.

Rides per service hour in Chilliwack are very reasonable relative to other communities, suggesting an average level of productivity. Further, the modest level of service hours contributes to the relatively low level of transit ridership in Chilliwack.

#### **Transit Performance Criteria for Chilliwack and Similarly Sized Cities**

	Population	Annual service hours	Vehicles	Annual ridership	Hours per capita	Rides per capita	Rides per hour
Chilliwack	88,000	21,000	9	492,000	0.2	6	23
Brantford, Ontario	94,000	73,000	29	1,074,000	0.8	12	15
<b>Grand Prairie, Alberta</b>	50,000	37,000	18	553,000	0.7	11	15
Belleville, Ontario	46,000	34,000	13	912,000	0.7	20	27
Campbell River, BC	31,000	21,000	9	580,000	0.7	19	27
Comox Valley	46,000	24,000	10	530,000	0.5	12	22
Prince George, BC	60,000	64,000	26	1,725,000	1.0	29	27

Source: 2011 BC Transit data for Chilliwack, 2009 CUTA Canadian Transit Fact Book for other systems.

#### **Custom Transit**

#### **Custom Transit Challenges**

### Ensuring customers are matched to the appropriate transit service

Due to the relatively high cost of providing handyDART service, it is important to ensure that customers are matched with the type of transit service they need and only customers who meet the eligibility criteria use the handyDART services. This ensures limited resources are allocated appropriately and are available for those that require the service.

### Limited availability during peak travel times on weekdays

The number of subscription trips at peak travel times limits the ability to provide casual trips, and restricts users' ability to travel semi-spontaneously, or travel at all during peak travel periods. Service capacity should be steadily expanded to ensure that customers can request trips for all trip purposes at any time of the service day, and be guaranteed next day service. Opportunities for joint funding or other partnerships to accommodate medical and adult day program trips should also be considered.

### Increasing the efficiency of custom transit service

Developing ways to increase the economic efficiency of custom transit services should be investigated to meet the custom transit market needs. For example, in North Vancouver, the Silver Harbour Seniors' Activity Centre has developed a "Go Bus" that operates three days a week and is designed to provide service for isolated seniors. The bus is free to ride and the service costs are covered by foundations, non-profits, service clubs and others.

# Limited custom transit service availability HandyDART transit hours of operation are more limited than the conventional transit operating system. The hours of service availability and the

service area should align with the conventional transit system.

#### Increasing demand for handyDART service

The aging population will increase the demand for handyDART and other accessible services in the future. This will require an increase in resources and the provision of new accessible transit solutions to allow those unable to use the conventional transit system the ability to travel as spontaneously as those using the conventional system.

#### **Service Description**

Custom transit service, also known as handyDART, provides door-to-door transit service for people who are unable to use the conventional system without assistance. The objective of custom service is to provide eligible customers with access to their community and is not focused on ridership growth.

Potential customers must apply to travel by handyDART. Eligibility is based on:

- Limitations in mobility / agility abilities
- Cognitive abilities
- Medical conditions
- Sensory abilities

The system provides two types of service:

- Regular subscription trips, which are often for transport to adult day programs, school or medical-related appointments
- One-time trips, which are often social or personal trips

Customers reserve on a first come first served basis at least 48 hours in advance by calling the reservation line Monday to Friday between 7:30 a.m. and 5:00 p.m. Important last-minute appointments can be booked until noon of the day prior to travel.

Quick Facts*	
Ridership (2011)	28,000
Custom Service Hours (2011)	8,400
Fleet	6
*2010/2011 data	

HandyDART buses follow scheduled, dependable, patterns in the morning and afternoon peak periods. Most trips during these hours are repeat or subscription trips. Between 10 a.m. and 2 p.m. buses are generally available for more spontaneous point-to-point travel.

BC Transit also offers a Taxi Saver Program, which subsidizes taxi fares by 50 per cent, providing coupons to registered customers who book their own trips with a taxi company. Chilliwack taxi operates several wheelchair accessible vans which are used for this purpose.

#### **Service Area and Hours of Operation**

The handyDART service area is the same as that of the conventional fixed-route transit system. HandyDART provides service within:

- City of Chilliwack (including central Chilliwack, Sardis, Yarrow, and Rosedale)
- Cultus Lake
- Agassiz
- Harrison Hot Springs

The service is provided with a fleet of 6 vehicles and approximately 8,400 annual service hours. The handyDART hours of operation are more limited than conventional transit. handyDART operating hours are:

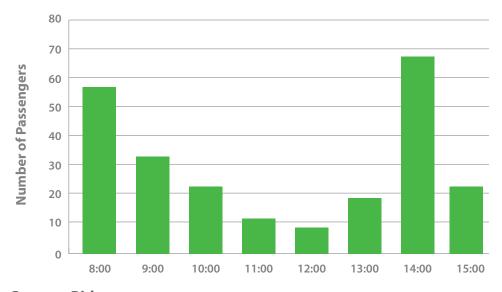
- Weekdays from 7:30 a.m. to 5:00 p.m.
- Saturdays from 9:00 a.m. to 6:00 p.m.
- No service on Sundays

#### Ridership

Approximately 2,400 individuals are registered with custom transit in the Chilliwack Area. A large proportion of these individuals are exclusively taxi saver clients. The handyDART system provides on average 3.5 rides per service hour, which translates to approximately 28,000 rides annually. Approximately 75 per cent of these trips are subscription trips. 10 per cent of trips are made by wheelchair users.

Ridership experiences significant peaks and valleys during the service day. An analysis of ridership conducted in October 2010 revealed that midday ridership (10:00 a.m. - 2:00 p.m.) is significantly less than peak period travel. In fact, ridership from 2:00 p.m. - 3:00 p.m. is greater than four hours of service midday. The results of the analysis are shown in the chart, below.

#### **Passengers by Hour of Day**



#### **Cost per Ride**

Chilliwack Area handyDART charges its clients standard transit fares (\$1.50 per ride per adult; \$1.25 per ride per senior or student). The actual cost per ride for Chilliwack Area's handyDART service in 2011/2011 was \$15.53. This is about four times more than the \$3.87 cost per ride for Chilliwack local conventional transit in 2011.

#### Transit Infrastructure

Transit infrastructure includes transit stops and amenities, accessible transit capital, transit exchanges, park-and ride facilities, transit priority technology, and maintenance facilities. There are no Park & Ride facilities in the Chilliwack Area.

#### **Passenger Amenities**

Most of the transit stops in the Chilliwack Area are marked by a bus stop pole. Many are not accessible for people with disabilities and do not have lighting, shelter, seating or schedule information. For existing stops where passenger boarding activity or transit services (and thus passenger activity levels) are to be increased, passenger amenities at bus stops are essential. In order to make transit an attractive alternative, Chilliwack-area communities will need to increase investments in passenger amenities and ensure that stops are accessible for all customers.

#### **Accessibility**

Accessibility plays a significant role in the success of transit. It can also reduce demands on custom transit by making the conventional services accessible to a larger population. The conventional and custom fleets in the Chilliwack Area are fully accessible.

#### **Transit Priority Measures**

Transit travel time relative to the car has a significant impact on ridership. Giving transit priority in areas of traffic congestion can provide transit customers with a distinct advantage and will reduce the cost for transit services. Transit priority measures provide buses and other transit vehicles with an advantage over general traffic through the use of physical, regulatory, traffic control or other techniques to achieve operational and service improvements. There are no transit priority measures in use within the Chilliwack Area.

#### **Transit Exchanges**

In general, transit exchanges accommodate the largest number of transit passengers either transferring from one bus to another, or accessing transit at a centrally located hub. In addition to being located near commercial centres such as the business district, transit exchanges should include enhanced features such as: shelters and other forms of protection; seating; lighting; telephone; customer information; secure long-term bicycle parking; passenger pick-up and drop-off area as well as a park-and-ride if located in a suburban location.

#### **Exchanges**

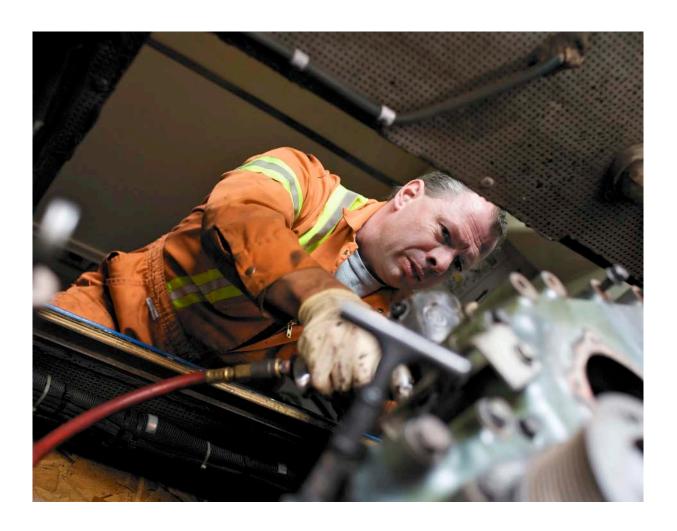
There is currently one transit exchange in the Chilliwack-area; this on-street transit exchange is within the City of Chilliwack, located on Main Street between Princess Avenue and Kipp Avenue. The Downtown Chilliwack exchange features three on street bus bays and currently serves nine routes. Transit amenities at the exchange include:

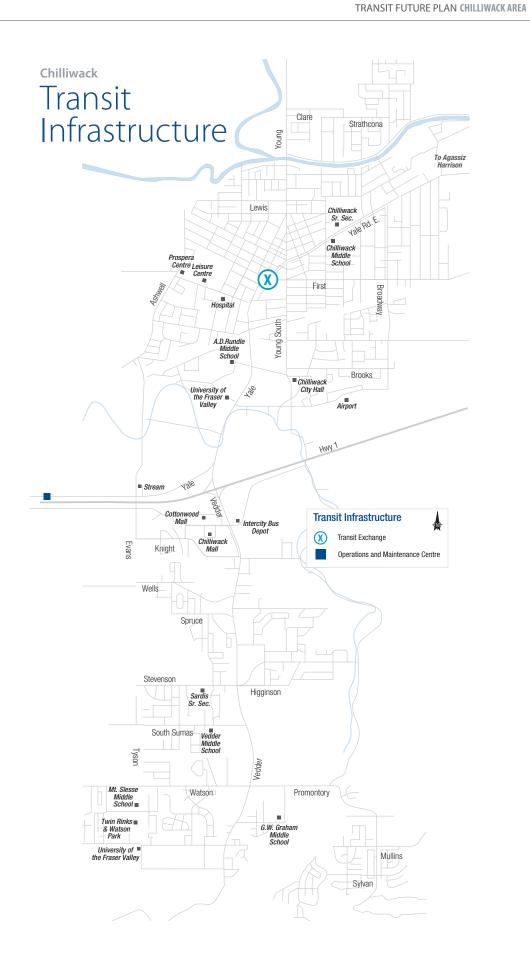
- 2 shelters
- 3 benches
- Bus schedule information boards

#### **Operations and Maintenance Centre**

O&M centres provide a place to store and repair buses, as well as office space for transit staff.

The O&M Centre for Chilliwack Transit is located at 44275 Yale Road West in the City of Chilliwack. The facility is privately owned and leased to the third party operator. The two level building was constructed in 2008/2009 and is located on a 1.27 acre site. The O&M centre has a three bay repair garage and parking for 30 buses. The building has six parking stalls at the front entry.





# Vision, Goals and Targets

#### Transit Future Plan Goals

The goals for the Transit Future Plan were based on the aspirations identified in the *Strategic Review*. Goals specific to the Chilliwack Area were developed in collaboration with the City of Chilliwack, the Fraser Valley Regional District, the District of Kent, the Village of Harrison Hot Springs, and the District of Hope. These goals were designed to guide the development of the Transit Future Plan and all future decisions regarding transit investment in the region.

#### Goal 1 - Transit is efficient and cost effective

Transit will be designed to optimize the use of resources and provide better value to the residents and businesses of the Chilliwack Area resulting in the improved value of transit investments and increased productivity.

- 1.1 Transit maintains or improves efficiency
  - a. Maintain or improve rides per service hour
- 1.2 Match service vehicle to demand, where possible
- 1.3 Create fare policy and products are tailored to various market groups
- 1.4 Ensure investment decisions achieve the long-term objectives and strategies of the Transit Future Plan, local Official Community Plans, and the Regional Growth Strategy
- 1.5 Collect and analyze market research and transit performance data to improve operational efficiencies and to tailor service to current and future customers
- 1.6 Implement alternative funding strategies to secure multiple sustainable funding sources
- 1.7 Identify sufficient, reliable, and predictable funding sources to support transit investments
- 1.8 Increase prevalence of Transportation Demand Management practices

### Goal 2 – Transit service is designed to complement and support the diverse land use patterns and community types

The Chilliwack Area contains communities that range in size from a few hundred to over 75,000 residents. Serving this diverse array of communities, from urban centres to rural communities, requires tailored transit service that meets the needs of each unique community.

#### 1.1 Transit service helps drive and sustain economic development

#### 1.2 Transit supports sustainable urban form:

- a. Establish a clear link between existing and future land use plans and transit service
- b. Connect key destinations and neighbourhood centres, designated in the Official Community Plans with frequent or express transit services
- c. Mixed-use and medium and high density development is concentrated along primary transit corridors
- d. Transit network plans respect Agricultural Land Reserve boundaries

### 1.3 Development proposals support and accommodate transit infrastructure and operations

1.4 Transit Demand Management (TDM) strategies are implemented to increase sustainable travel choices

### Goal 3 – Transit service is reliable, safe, convenient, and integrated with other transportation modes

The Chilliwack Area Transit Future Plan places a strong emphasis on the customer. This goal focuses on best practices that make transit attractive and convenient to customers.

#### 3.1 Transit is fast and direct:

- a. Implement transit priority measures such as exclusive transit ways, queue jumpers, High Occupancy Vehicle lanes, bus-only lanes, bus and bicycle shared lanes, traffic signal priority, preferential turning arrangements, etc.
- b. Stop spacing is appropriate for the type of service provided
- c. Reduce the amount of deviations in transit routes

#### 3.2 Transit is safe

- a. Design and operate transit infrastructure and services to ensure customers and employees are safe and secure
- b. Operators work in a safe and secure environment, and are respected by customers

#### 3.3 Transit is convenient

- a. Increase frequency on key corridors to a level where passengers are able to use transit without consulting a timetable
- b. Increase transit service span (hours of operation)

c. Create a network that effectively serves neighbourhoods and provides strong connectivity to popular destinations

#### 3.4 Transit is accessible

- a. Ensure that transit infrastructure and vehicles are universally accessible
- b. Work towards implementing visual and audible stop announcements
- c. Consider region-wide income levels for the majority of the region's population when making fare level decisions
- d. For those unable to use the conventional transit system provide targeted transit services and alternative service delivery methods such as dial-a-ride and para-transit. Ensure these services are as accessible and convenient as conventional transit.

#### 3.5 Transit is modern and attractive

- a. Design, install and maintain modern, accessible shelters and other customer amenities
- b. Design and maintain transit vehicles to provide a comfortable and clean on-board experience

#### 3.6 Transit is integrated with the transportation network

- Encourage and create high quality pedestrian and cycling links to transit stops and stations
- Provide bicycle storage at appropriate stations, stops, and on transit vehicles
- Establish a clear link between existing and future transportation plans and transit service
- Published customer information at cycling facilities

### Goal 4 – Improve the image and marketing of transit through excellent customer service and communication

#### 4.1 Transit operators are excellent customer service agents

- a. Operators are friendly and contribute to a positive customer experience
- b. Operators are knowledgeable about the system

#### 4.2 Transit is advertised and promoted to increase ridership

- a. The arts (painting, poetry, drawing etc.) are integrated with transit
- b. Increase public awareness of the importance and benefits of transit through partnership opportunities

### 4.3 Customer information is widely distributed, easy to understand, and accurate

#### 4.4 Fare products are diverse and easily attainable

#### Goal 5 - Service contributes to environmental sustainability

- 5.1 Transit helps meet provincial, regional and municipal greenhouse gas reduction targets
  - a. Continuously look for opportunities to go green, whether it is by continuing to be on the leading edge of new propulsion technology for the fleet, or by building green facilities and infrastructure
- 5.2 Transit promotes healthy living by increasing walking, cycling and transit trips
  - a. Integration with the active network promotes walking and cycling to transit stops
- 5.3 Transit encourages and supports more walkable and compact land use patterns that reduce energy consumption and greenhouse gas (GHG) production

#### **Performance Standards**

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 create the future network. Performance standards were established to evaluate the transit system within the City of Chilliwack relative to its peers. Together, these criteria assess overall performance and identify potential issues that need to be addressed. The results, on a route and system level, guided the development of the Implementation Strategy, and establish the criteria from which all future decisions will be based.

Performance Criteria	Target Threshold	Minimum Threshold
Rides per Service Hour	35	12
Rides per Service Kilometre	1.5	0.5
Cost per Ride	\$2.50	\$7.00
Cost Recovery	35%	15%
Passengers per Capita	30	10

#### **Targets**

Moving closer to the performance standards will provide people in the Chilliwack Area with better transit service and is also expected to result in a better-used and more efficient system. The goals for the Chilliwack Area Transit Future Plan establish increased ridership and mode share targets that BC Transit and the Chilliwack Area local governments support and will work toward, together.

The Transit Future Plan sets a transit mode share target of two per cent of all trips by 2036. A transit mode share of two per cent implies that ridership will be expected to grow from 492,000 to 1,900,000. This is a doubling of the current more share for transit, and experience elsewhere suggest that this is a target that will require significant investment in transit to achieve.

### The Future

A long-term vision for transit in the Fraser Valley was established through the *Strategic Review* of Transit in the Fraser Valley which sought to accelerate the provision of local, regional and inter-regional transit over a 25-year period. This vision was further refined for the Chilliwack Area by community stakeholders through the Transit Future Plan process. Largely based on work developed during the *Strategic Review*, the vision was translated was into specific implementation actions and priorities focussed specifically on the Chilliwack Area.

### **Service Layers**

The Transit Future network is comprised of three layers of transit service. Together the different layers of service create a comprehensive transit network to best meet the existing and future needs of the Chilliwack Area. The service layers are designed to efficiently and effectively move people around the region facilitated by the implementation of transit priority measures.

#### Frequent Transit Network (FTN)

Frequent Transit service provides medium to high density land use corridors with a convenient, reliable, and frequent transit service all day long (15 minutes or better, 15 hours a day, 7 days a week). The goal of the Frequent Transit Network (FTN) is to allow people to spontaneously travel without having to consult a transit schedule. The Frequent Transit Network carries a large share of the transit system's total ridership and for this reason, justifies capital investments such as transit priority, right-of-way improvements, a high level of transit stop amenities, and corridor branding.



#### **Local Transit Network (LTN)**

The local transit network is designed to connect neighbourhoods to local destinations and to Frequent and Inter-regional transit services. Local transit services allow customers to plan a trip to work, school, local shopping centre or personal trips by transit. Frequency and vehicle type are selected based on demand. In some cases, smaller transit vehicles can be utilized to better match passenger demand and operating conditions on local roads.



#### **Targeted Services**

Targeted services are a collection of transit services that do not fit into the other definitions and are more focused on the specific needs of customers. These services include:

- Interregional and regional services that provide connections between cities
- Custom transit: door to door services for customers unable to use the conventional service
- Express Service: a direct limited stop route between destinations
- Dial-a-Ride or para-transit: on demand service with a predefined service area designed to provide access in low density areas



More information about the target service levels for FTN, LTN, and Targeted transit routes is provided in the following table.

	Frequent	Local	Targeted
Land use	High to medium density along corridors	Medium to low density	Varies depending on service
Vehicle Type	Standard or high capacity bus or street car/tram	Standard or small bus	Standard or small transit vehicles, vans, taxis, commuter rail vehicles
Service Frequency	15 minutes or better between 7:00 a.m. – 10:00 p.m., 7 days a week	Frequency based on demand	Varies depending on service
Service Span	5:00 a.m. – 1:00 a.m., 7 days per week, extended based on demand	6:00 a.m. – midnight, 5 days per week, extended based on demand	Varies depending on service
Stop interval	Frequent stops along a corridor, 500m apart or less	250m – 500m	Varies depending on service
Facilities and Amenities	Local Stops  • quality customer amenities at stops  Select major stops with enhanced amenities  • level door boarding  • off-board fare payment  • real time customer information  • bike storage	<ul> <li>Local Stops</li> <li>quality customer amenities at stops</li> <li>enhanced amenities around major stops</li> </ul>	Varies depending on service
Signal Priority	Transit is given signal priority over other traffic at key intersections along the corridor	Transit is given signal priority at key delay points only	Only if part of a Rapid or Frequent Corridor
Lane Priority	By-pass lanes at key areas of congestion, High Occupancy Vehicle lanes, peak hours bus lanes	No lanes	Only if part of a Rapid or Frequent Corridor

With these service layers and the geography of the Chilliwack Area in mind, the Future Transit Network in the Chilliwack Area can be divided into two more general categories:

#### **Conventional Service:**

- Local service within the City of Chilliwack, including a RTN, FTN, and LTN routes. Targeted improvements include more direct routes, increased frequency and span of service
- Regional service between communities in the Eastern part of the Fraser Valley through new or more frequent connections between Chilliwack, Kent, Harrison-Agassiz and Hope as well as to Abbotsford from Chilliwack. These are targeted services

### Custom Service, which is another type of targeted service. Improvements to custom service include:

- Increased span of service to align with conventional service
- Increased availability during morning and afternoon peak periods to enable more spontaneous travel for users

#### **Conventional Services**

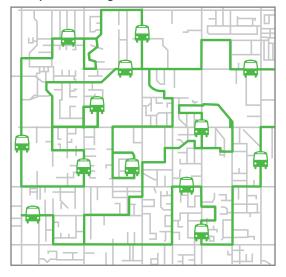
The network proposed in the Transit Future Plan for the Chilliwack Area will support local land use and transportation plans by connecting regional and local destinations with quality transit services, rendering transit a feasible travel alternative in the Region.

The network for conventional service is presented in two sections below. Each section covers a different geographic area:

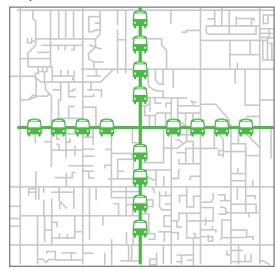
- Local Chilliwack routes are designed to connect neighbourhoods to local
  destinations, promote frequent transit routes along Vedder Road and
  eventually Evans Road, and also connections to regional routes. The higherorder routes would have increased service frequency. Local routes would
  continue to maximize transit area coverage and feed into the higher-order
  routes. Frequency and vehicle type would be selected based on demand.
- Regional express routes connect surrounding communities to Chilliwack along local highways. These routes would offer limited or non-stop service between communities. Connections from Chilliwack to Abbotsford and Hope would be introduced and service to Harrison/Agassiz improved.

The Transit Future Network will feature more direct, faster service, allowing customers to better mimic the route they would otherwise travel by car. The figures below contrasts a schematic of an extensive, somewhat confusing network, characterized by circuitous routing and infrequent service, with a more direct and straightforward network with frequent service. With the added frequency and more grid-like structure, riders will more often transfer where two routes intersect, instead of at focal points throughout the system.

#### Infrequent, Coverage Service



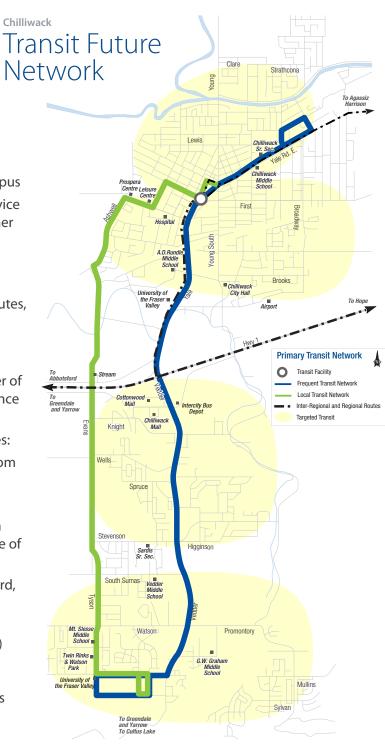
#### Frequent, Direct Service



#### **Local Transit Network**

The future of local transit within the City of Chilliwack includes a number of improvements that will be introduced in a staged manner. The highlights include:

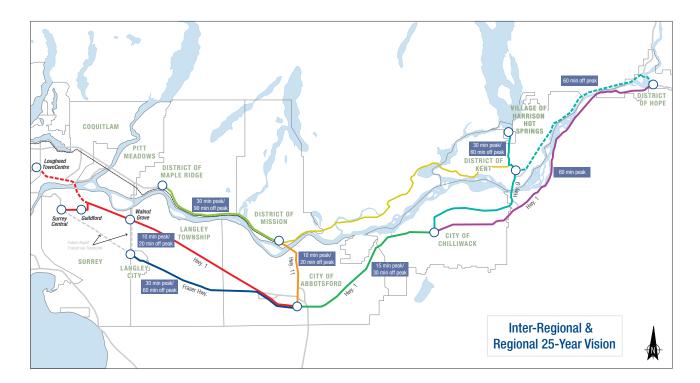
- Connected north-south corridors
- Introduction of Frequent Transit along Yale Road and Vedder Road that operate between Downtown Chilliwack and the University of the Fraser Valley South Campus
- Establishment of one uninterrupted service along Evans Road with increasingly higher frequency of service
- Enhanced local routes:
  - » Significant increase in span and frequency of service for other local routes, over existing levels
  - » New route structure that provides improved connections to key destinations, placing a greater number of residents within a short walking distance to transit service
- Increased service to smaller communities:
  - » Yarrow and Cultus Lake will benefit from increased service
- Improved transportation connections:
  - » Between local routes and north-south routes through route redesign and use of a new Transit Exchange facility
  - » Between regional centres in Abbotsford, Chilliwack, Harrison/Kent and Hope through new or improved service
  - » Between modes (e.g. walking, cycling) through careful design of new transit infrastructure (e.g. Transit Exchange, transit stops) and passenger amenities (e.g. bicycle racks, parking)
- Integrated land use:
  - » Provides alignment between transportation and land use objectives by concentrating development along key corridors
  - » Density and mix of land use support higher order transit



#### **Regional and Inter-Regional Services**

The future of regional travel will build on existing markets and establish new connections that provide travel choice to markets of greatest potential within the Chilliwack Area.

- New regional service:
  - » Chilliwack to Abbotsford with 15-minute peak and 30-minute off-peak service
  - » Chilliwack to Hope with 60-minute weekday and weekend service
- Enhanced regional service:
  - » Chilliwack to Agassiz-Harrison with 30-minute peak and 60-minute offpeak service
- New connections to inter-regional destinations:
  - » Travel to Metro Vancouver in the Chilliwack Area will be through connecting transit service in Abbotsford (RapidBus service on Highway 1)



#### **Custom Transit**

Custom transit has the objective of increasing access for people who are unable to use the conventional system without assistance. BC Transit is developing a province wide standardized eligibility criteria to determine if an individual is unable to use conventional transit, and thus eligible for custom transit. The service areas are the same for custom and conventional services. Over the course of the Transit Future plan, the span of service to patrons using custom transit should also be aligned with that used for conventional service.

Current custom service runs from 7:30 a.m. to 5:00 p.m. on weekdays and from 9:00 a.m. to 6:00 p.m. on Saturdays, with no service on Sundays. This amounts to approximately 8,400 hours of service which is delivered with a fleet of 6 vehicles.

Conventional transit operates seven days a week, with services running between 6:30 a.m. and 6:30 p.m. (9:00 p.m. on Thursday, Friday and Saturday evenings). In addition, Sunday service will be improved to provide service between 9:00 a.m. and 8:00 p.m.

Increasing the span of service does not address periods of high demand in the early morning and early afternoons. Incremental additions to the fleet are required to improved service during these busy periods. This will address current demands as well as the increased ridership expected as a corollary of an aging population. The Transit Future Plan calls for two additional custom transit vehicles, in order to augment service during busy periods. Timing is discussed further in the implementation section.



### **Future Requirements**

To quadruple ridership within the next 25 years, and to achieve Chilliwack Area and *Provincial Transit Plan* targets, significant transit operating and capital investment is required. This section of the plan outlines service hours and fleet projections as well as identifies the required transit infrastructure to fulfill the 25-year vision.

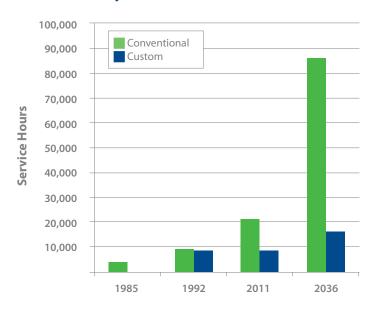
Conventional Service Hours and Vehicles			
Year	Service	Service Hours	Fleet
2011	Base Service Level	21,400	9
2036	Base + Increased Service	86,000	36

#### **Service Hours and Vehicles**

#### **Local Conventional Service**

The City of Chilliwack's population is expected to grow by 55 per cent by 2036. If transit mode share remained at its current level of one per cent, ridership would increase by 55 per cent, or from 492,000 rides per year to 760,000. Under the Transit Future Plan, transit mode share is expected to double to two per cent and the resulting ridership target is 1,900,000. In very broad terms, a four-fold increase in service hours is necessary over the life of the plan to realize a two per cent mode share.

#### **Historical and Projected Local Conventional and Custom Service Hours**



#### **Regional Service**

Two types of service are anticipated to serve regional markets in the Chilliwack Area:

- Para-transit (flexroute) Fixed route service designed with the ability to travel off route (within a certain distance) by request. Purpose of the route is to connect communities and provide coverage to areas without service. This service is designated for routes connecting Hope, Harrison, Agassiz and Chilliwack.
  - » Chilliwack to Agassiz-Harrison service would be along Highway 9, with 30-minute peak and 60-minute off-peak frequencies
  - » Chilliwack to Hope service would be along Highway 9, with 60-minute peak and off-peak frequencies
- Highway Express Closed door service (no opportunity for boarding/ alighting) along the highway between destinations, with limited stops at each destinations. A quick, direct service with transit priority as appropriate to maintain trip time. Regular fleet, highway express coaches, or double deck buses may be used. This service is designated for the route between Abbotsford and Chilliwack and service would operate on 15-minute peak and 30-minute off-peak frequencies

The projected resources (fleet and operating hours) required to provide the 2036 regional and inter-regional network were calculated by route, service level and type of service. Travel speed was estimated based on corridor specific traits and projections and in some cases transit priority measures were assumed to be in place to maintain trip time.

2036 Fleet and Service Hours by Route				
Route	Route Length (km)	<b>Annual Hours</b>	Fleet Size	
Abbotsford – Chilliwack	34	15,000	6	
Chilliwack – Agassiz – Harrison	34	17,000	7	
Chilliwack – Agassiz – Hope	62	9,000	5	
Chilliwack – Hope	57	13,000	4	
Kent – Mission	52	7,000	3	
TOTAL		61,000	25	

Service into Metro Vancouver would be accommodated via transfer in Abbotsford to the RapidBus service. This connection forms part of the vision for the Chilliwack Area but is not factored into the plan in terms of service hours or fleet requirements.

#### **Custom Service**

The following table summarizes the incremental measures to bring custom transit service up to the same span of service as conventional service, and identifies resources to provide additional service during peak periods.

Custom Service Hours and Vehicles			
Year	Service	<b>Annual Hours</b>	Fleet Size
2011	Base Service Level	8,400	6
2036	Increased Span of Service	4,700	0
2030	Additional Peak Period Service	3,100	2
	TOTAL	16,200	8

With an aging demographic it is possible that personal and shopping trips will grow at a faster rate than work trips over the life of this plan. Future transit investment should focus on serving major shopping destinations to serve the shopping and personal business market share.

#### **Transit Infrastructure**

Implementing the network changes highlighted within this plan requires significant investment in transit infrastructure such as customer facilities, operating facilities, and transit priority measures. All transit infrastructure should be planned and designed such that it meets universal accessibility guidelines.

#### **Transit Exchange:**

Transit exchanges are typically located within the activity centres of the community, such as 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. An onstreet transit exchange is required for Downtown Chilliwack and it should provide weather protection, seating, transit route and schedule information, lighting, bicycle parking and other amenities as shown in the table below.

#### **Enhanced Passenger Amenities:**

Passenger amenities at transit stops can have a significant impact on attracting new users. The plan suggests that over the long-term, the City should work towards providing seating, shelters, lighting, and customer information at most stops in Chilliwack. Listed in the table below are the amenities that should be considered at exchanges, higher activity transit stops, and lower activity transit stops. It is anticipated that the Yale/Vedder and eventually Evans lines would have a higher level of attributes or amenities.

Facility	Attributes
Exchanges	<ul> <li>Enhanced transit shelters</li> <li>Off-board fare payment</li> <li>Real-time schedule information</li> <li>Customer way finding information (such as directional signage)</li> <li>Bike storage</li> <li>Universally accessible</li> <li>Pedestrian oriented lighting</li> </ul>
Major stops with enhanced amenities (includes Community Centre transit stops)	<ul> <li>Enhanced transit shelters</li> <li>Off-board fare payment</li> <li>Real time schedule information</li> <li>Bike storage</li> <li>Customer way finding information (such as directional signage)</li> <li>Universally accessible</li> </ul>
High activity transit stops	<ul> <li>Transit shelters</li> <li>Bike storage</li> <li>Quality customer information</li> <li>Universally accessible</li> </ul>
Low activity transit stops	<ul><li> Universally accessible</li><li> Bench</li></ul>

#### **Transit Priority Measures:**

Transit priority is a term used to refer to a variety of physical and operational improvements designed to give transit vehicles and their passengers' priority over general vehicle traffic. Transit priority elements can be:

- Regulatory, such as "Yield to Bus" regulations and signage, which is already in place in the Chilliwack Area
- 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, bus bulges, and transit signal priority measures

Opportunities for priority measures that reduce delays to bus services should be explored initially along the Yale/ Vedder corridor and possibly along the Evans route. Measures can be employed such as transit signal priority and queue jumpers at intersections where delays and congestion exist today or where they are anticipated to degrade in the future. Transit priority treatments will improve service for transit. Although some treatments will impact other vehicles, they are key to supporting long-term transit ridership by prioritizing transit travel over private vehicles.

#### **Operations and Maintenance Centre**

The existing O&M centre can be used for the foreseeable future. It current has space for 30 transit vehicles but can likely accommodate up to 45 buses on site. This meets the demand for bus requirements identified in the Future Transit Network as well as regional buses.

#### Park and Ride

There may be opportunities to introduce future Park and Ride facilities in the Chilliwack Area. Park and Ride may be useful in the Kent / Harrison or Hope areas, where transit service will be focused on Regional connectivity. There may be opportunities to work with local partners and businesses to provide shared use parking.

#### Benchmarking

The local conventional transit included in the Chilliwack Area Transit Future Plan was compared to other transit systems with populations that are similar to the City of Chilliwack's forecasted 2036 population. While the hours per capita are still low compared to other systems, it represents a significant investment over existing service. The number of riders per capita is expected to more than double existing as service improves and becomes more direct. The system is expected to maintain the number of rides per service hour, even as the number of service hours increases over time. This shows that they system will continue to be productive, while providing more frequent and convenient service.

Populations forecasts for 2036 (the long-term horizon for the Transit Future Plan) were not developed. To estimate future local transit performance, the forecasted 2031 City of Chilliwack population was used as the 2036 service area population.

	Population	Annual service hours	Vehicles	Annual ridership	Hours per capita	Rides per capita	Rides per hour
Chilliwack (2011)	88,000	21,000	9	492,000	0.2	6	23
Chilliwack (2036)	125,000	86,000	36	1,900,000	0.7	15	22
Lethbridge, Alberta	85,000	110,000	38	2,215,000	1.3	26	20
Sudbury, Ontario	160,000	161,000	60	4,250,000	1.0	27	26
Burlington, Ontario	169,000	161,000	52	1,861,000	1.0	11	12
Kelowna, B.C.	123,000	174,000	64	4,344,000	1.4	35	25
Thunder Bay, Ontario	110,000	165,000	49	3,577,000	1.5	33	22

#### Benefits of the Transit Future Network

The 25-year network is designed to achieve the goals of the Transit Future Plan in the following ways:

#### Transit is efficient and cost effective

 Direct routes will better manage transit resources and operating hours of service allowing for more frequent service and longer service span which will lead to increased ridership  Additional frequency of service for regional/inter-regional service will target markets that are currently under-serviced and will also lead to increased ridership

#### Transit supports economic development by integrating with land use

- Improved transit will support the growth anticipated in the Chilliwack Area and provide existing and new residents with additional transportation choices
- Higher frequency routes along Vedder Road and Evans Road will provide strong support for transit-oriented development within the City of Chilliwack, featuring a mix of land uses and higher density along these corridors
- Improved service downtown and planning for a new Transit Exchange are consistent with policies in the Chilliwack Downtown Land Use Development Plan
- Improved regional service expands access to services and destinations in neighbouring communities and provides linkages by transit to areas of interest currently accessible exclusively by automobile

### Transit is reliable, safe, convenient and is integrated with all transportation modes.

- Direct routes will improve reliability of service and convenience for transfers
- Short walking distance for most residents will enhance convenience
- Opportunities are created for integration between local and regional transit services
- Transit priority along Vedder Road corridor will improve reliability and speed
- Opportunities to integrate cycling with transit use will be facilitated

### Transit has an improved image and marketing through excellent customer service and communication

- Passenger amenity improvements including a new Chilliwack Transit Exchange, more comprehensive information at transit stops to communicate route and schedule information
- More direct routes will improve ease of use for passengers
- Regional service that provides linkages to the places customers want to travel to

#### Transit service contributes to environmental sustainability

- Improved transit service will give travellers the choice to use more convenient, sustainable transportation options and help achieve a better transit mode share, both locally and regionally
- Improved access to transit promotes development that is more complete
- Integrated, multi-modal transportation system (including pedestrian, bicycle and transit facilities)
- As the transit fleet expands, opportunities to adopt greener vehicle technology will arise
- Greater use of transit supports Official Community Plan visions to have more active, sustainable transportation networks within Chilliwack, Hope, Harrison, and Kent

# Implementation Strategy

The Transit Future Plan presents a future transit network for the Chilliwack Area that requires a significant commitment to transit supportive land use, a transformation of today's transit local network and expanded regional connections. It was developed in collaboration with municipal staff and influenced by feedback from the community and transit customers. The implementation strategy guides the creation of the Transit Future network by outlining key area-wide priorities, and then by detailing service strategies for each component. In conjunction with service expansion, implementing operational adjustments to improve the existing system is always recommended.

The priorities are not scheduled on a year-by-year basis as the implementation of the Transit Future Plan is dependent on numerous unpredictable factors such as:

- The availability of funding from local, provincial, and federal governments
- Community growth factors (e.g., community development and shifts in demographic profile)
- Operational and capacity demands of the system
- Opportunities for value-added partnerships(e.g., road improvement projects by local government)

There are three time horizons that lead to the level of transit service targeted in the Vision.

- Near-term improvements apply to local service improvements that are planned in the City of Chilliwack in the summer of 2012
- Short-term improvements
- Medium to long-term improvements

The benchmarking exercise conducted as part of the Transit Future Plan suggests a number of service enhancements that have been included in the development of the Implementation Strategy:

- Expanding the hours of service during weekdays and weekends
- Increasing frequencies along the most attractive corridors that have potential for growth in transit ridership
- Expanding the service area
- Make existing routes more direct
- Increasing hours per capita by providing more convenient, direct routes;
   by extending the service hours and days of service, and by running higher frequency routes along key corridors

#### **Near-Term Priorities**

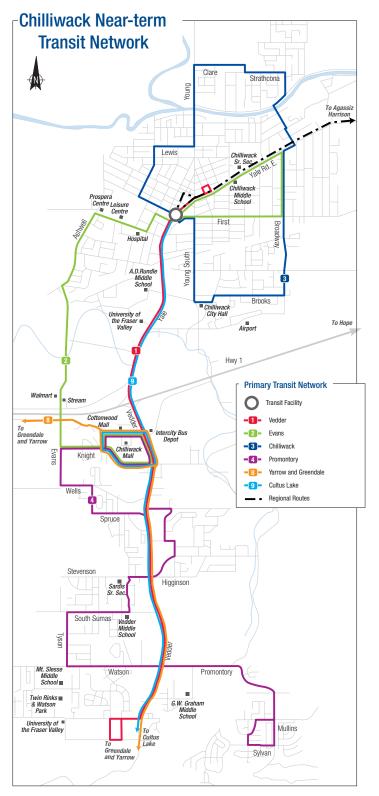
A series of service improvements are planned for implementation in the summer of 2012. These near-term improvements are generally focused within Chilliwack's urban area. The improvements begin to create the 25-year network vision by creating direct north/south services, and increasing frequency.

The new route structure essentially removes all existing routes (except those serving Yarrow and Cultus Lake) and replaces them with new routes. Key near-term implementation features include:

1. Implementation of the Yale-Vedder Line
The existing network structure forces
passengers to transfer at Cottonwood Mall
in order to continue north or south along
the Yale-Vedder corridor. This first priority
establishes the network spine along YaleVedder directly connecting Downtown,
Sardis and South Chilliwack. It also directly
connects the two University of Fraser Valley
campuses, major shopping centres, various
businesses and services along Vedder, and
downtown. The route will operate all day
with buses every 20 minutes.

#### 2. Realignment of Local Route

To complement the network spine, local routes must be realigned. Their purpose is to provide service to residential neighborhoods and direct connections to the spine. The blue "Chilliwack" route will operate every 30 minutes while the green "Evans" and purple "Promontory" routes will operate about every 60 minutes. They will connect with the core network spine and with key destinations including Downtown, key employers and employment areas, shopping, recreation, schools, and medical facilities.



#### **Route Frequencies**

	WEEKDAY	WEEKEND			
	AM/PM Peak	Sat	Sun		
Route 1	20 min	20 min	60 min		
Route 2	60 min	60 min	60 min		
Route 3	30 min	30 min	30 min		
Route 4	60 min	60 min	60 min		
Route 8	1 trip	4 hr	No service		
Route 9*	6 trips	6 trips	6 trips		

<sup>\*</sup> Route 9 operates from 10 a.m. to 6:30 p.m. from July 2 to the day before Labour Day

#### These changes are designed to:

- Make transit easier to use with regular frequencies, simplified route structure
- Improve the level of service to the core of the community
- Night service on all routes on Thursday, Friday and Saturdays (9:00 p.m.)

#### **Features:**

- Streamlined North-South service along Yale/Vedder
- Direct service to Stream, Walmart and both UFV campuses
- Three out of four routes provide service to the Chilliwack and Cottonwood Malls

#### **Near-term Plan Requirements**

Service	Frequency (minutes)	Hours of Operation	Additional Annual Hours	Additional Fleet
Yale-Vedder Line	20 – 60	9:00 a.m. to 9:00 p.m.	2,500	1
Realignment of Local Routes	30 – 60 9:00 a.m. to 9:00 p			
		TOTAL	2,500	1

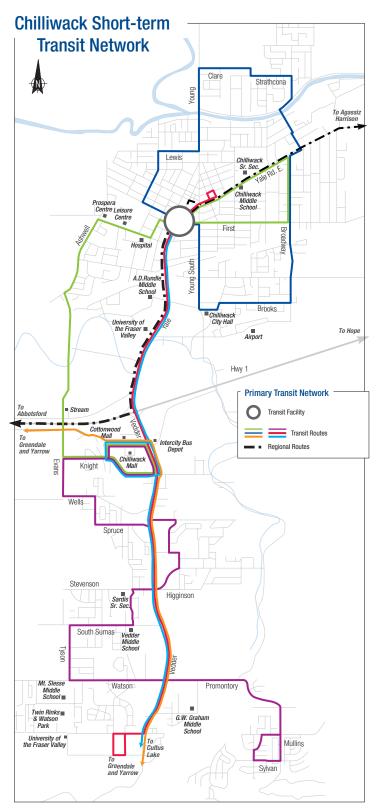
### **Short-Term Priorities**

Improvements to both local and regional transit within the Chilliwack Area are recommended in the short-term. Projects include expanding transit service periods, initiating a new regional transit connector to Abbotsford, and increasing service to Harrison and Agassiz.

The review of Downtown Chilliwack's Transit Exchange, will serve both local and regional transit customers. The new exchange will provide for transfers between local routes, between local routes and regional routes, and between the two planned regional routes. This improvement does not require any investment in new fleet or service hours, but it will require further study and eventual investment in infrastructure.

# A Review of Downtown Chilliwack's Transit Exchange

The existing transit exchange in Downtown Chilliwack has capacity for four vehicles at one time, and is located on the West side of Main Street between Princess and Kipp. The amenities at this facility include one standard sized shelter and benches. The routes that serve the facility are labeled, but schedule information is not provided. In light of route restructuring and expansion over the next 25-years, the facility's location, capacity and amenities should be strategically reviewed. The results will outline the longevity of the current location and the phasing strategy if change is required. Opportunities to redevelop adjacent land to help ensure safety and economic vitality of the area should be sought.



#### **Local Chilliwack Service Improvements:**

Key short-term local Chilliwack transit initiatives include:

#### **Improved Sunday Service**

Sunday service in Chilliwack is limited and not available to all residents that are accustomed to weekday service. Most routes currently operate hourly between 9:30 a.m. and 6:00 p.m. on Sunday. Improved Sunday service will result in improved bus frequencies and longer hours of operation. Sunday service hours will be from 9:00 a.m. to 8:00 p.m. on Routes 1 – 4. The frequency of Route 1 will improve to 30 minutes throughout the day. Routes 8 and 9 will maintain the same service schedule.

#### **Holiday Service**

Currently transit service is not provided in the Chilliwack area on statutory holidays. This short-term improvement will see transit service provided at Saturday level service (at least hourly) on all routes on Statutory Holidays.

#### **Improved Local Service Frequency**

Beyond the significant improvements to transit route structure and frequency to be implemented in the summer of 2012, additional service is planned for the short-term. The table below summarizes the route frequencies that are expected to be in place at the end of the short-term implementation period.

<b>Short-Term</b>	Improvement	Route	Frequencies
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	WEEKDAY		WEEKEND	
	AM/PM Peak	Midday / Evening	Sat	Sun
Route 1	15 min	15 min	15 min	30 min
Route 2	30 min	30 min	30 min	60 min
Route 3	30 min	30 min	30 min	30 min
Route 4	30min	60 min	60 min	60 min
Route 8	1 trip	1 trip	4 hr	No service
Route 9*	5 trips	1 trip	6 trips	6 trips

<sup>\*</sup> Route 9 operates from 10 a.m. to 6:30 p.m. from July 2 to the day before Labour Day

#### Custom transit improvements to span of service

Over time, improvements to the span of service for custom transit will move towards alignment with the span for conventional service. The addition of these new hours will be undertaken gradually over time. In the near-term, the custom transit service hours will expand to include:

- Monday Friday: 6:30 a.m. to 6:30 p.m.
- Saturday 9:00 a.m. to 6:30 p.m.
- Sunday 9:30 a.m. to 6 p.m.

Additional operating hours of service will give custom transit users more access to services they need. Service will be improved during periods of peak demand by adding one additional vehicle to the fleet.

#### **Regional Service Improvements**

Regional transit initiatives for the short-term include:

#### **Establishing the Abbotsford-Chilliwack Express (ACE)**

Residents of the Fraser Valley can travel by transit from Abbotsford to Mission, and Chilliwack to Agassiz and Harrison, but there is a missing link between Abbotsford and Chilliwack. Recognizing the daily travel demand between these communities is equal to that of Abbotsford-Mission, and that Abbotsford-Mission is connected with Route 31 – Valley Connector which has 78 daily one-way trips and meets performance standards, the new service is expected to prosper from day one.

This new route will provide service to/from key travel markets including:

- Abbotsford: South Fraser Way corridor, Sumas Way shopping area, Seven Oaks Mall, downtown Abbotsford
- Chilliwack: historic downtown, Cottonwood Mall, and Chilliwack Landing and Leisure Centre
- Other major destinations include the University of the Fraser Valley, which has campuses in Abbotsford and Chilliwack and local hospitals that also have locations in each city

ACE will operate as a Highway Express service (closed door service, no opportunity for boarding/alighting between the two communities) and will travel along Highway 1 with a frequency of 30 minutes in peak times, and 60 minutes in off peak. The route length is 34km and will require five vehicles to provide this service.

#### Increased Service between Chilliwack – Agassiz-Harrison

Existing service operates almost hourly Monday through Friday, and every two hours on Saturday. Four trips per day are provided on Sunday in the summer only. Service can be enhanced to Agassiz-Harrison to and from Chilliwack by adding more trips in peak periods. Based on a September 2011 passenger survey, a significant percentage of passengers (up to 53 per cent) travel in peak times for work and to attend school (includes post-secondary classes) suggesting a strong peak commuter market. In base periods, shopping and recreational trip purposes make up a significant percentage of trips (32 per cent to Chilliwack and 30 per cent to Agassiz-Harrison). Service could be provided every hour between 9 a.m. and 3 p.m. when demand warrants an increase in trips. Sunday service could be provided year round.

#### Hope - Chilliwack Feasibility Study

Prior to implementing a new service to a community, a Feasibility Study should be conducted to gather more detailed information in order to ensure the service design is best suited for the community's needs. The Feasibility Study will establish:

- estimated demand, ridership, and performance expectations
- route and frequency
- estimated cost
- suggested implementation timeframe and potential phasing strategy

#### **Short-Term Plan Requirements**

Implementing the short-term plan will require an investment in fleet and an increase in service hours at the local and regional levels. The requirements for each improvement at the local level for conventional service are summarized in the table below. Approximately 48,100 local service hours will be required to provide the service outlined in the preceding section, which is more than double the existing service hours.

#### **Conventional Service Improvements**

Service	Frequency (minutes)	Hours of Operation	Annual Hours	Additional Fleet
Improved Sunday Service	30 – 60	9:00 a.m. to 8:00 p.m.	1,300	0
Holiday Service	30 – 60	9:00 a.m. to 8:00 p.m.	1,000	0
Improved Local Service Frequency	15 – 60 6:30 a.m. to 9:00 p.m. Thursday to Friday		9,900	4
TOTAL			12,200	4

At the regional level, establishing the ACE service and enhancing the existing Chilliwack-Agassiz-Harrison service will also require more service hours and investment in fleet. The requirements for regional service are summarized below.

#### **Regional Service Improvements**

Fleet and Service Hours by Route				
Route	Route Length (km)	<b>Annual Hours</b>	Fleet Size	
Chilliwack – Harrison	34	7,000	3	
Abbotsford – Chilliwack	34	15,000	5	
TOTAL		22,000	8	

#### **Custom Service**

One additional vehicle is recommended to provide additional peak period service. This increased capacity will help provide trips in the busiest time periods for those who are currently unable to receive service.

Custom Fleet and Service Hours by Route			
Year	Service Annual Hours		Fleet Size
2011	Base Service Level	8,400	6
2016	Increased Span of Service	3,100	0
	Additional Peak Period Service	1,500	1
	TOTAL	13,000	7

## Medium to Long-Term Priorities

Additional improvements to both local Chilliwack and Regional service are scheduled for the medium to long-term future. Medium to long-term projects include further restructuring of local service, additional network connections, realigning the Evans Line, improving custom transit, and establishing a new regional transit connection to Hope.

#### **Local Chilliwack Service Improvements:**

Key medium to long-term local Chilliwack transit initiatives include:

#### **Extending the Evans Line**

The Evans line will be a realignment of the green route shown in the short-term implementation map. It will have a 20 minute frequency and extend from Downtown Chilliwack to the southern University of Fraser Valley campus. The Evans line will provide a direct route connecting South Sumas, Downtown, Wal-Mart, and Stream, a major local employer.

#### **Restructuring Local Service**

Local services will be restructured to provide access to key destinations in Chilliwack. Where feasible, they will connect with the core network spine and the Evans line to ensure the most direct connection to key destinations. Frequency should be at least every 30 minutes.

#### **Expanding Custom Service**

In the short-term improvements, handyDART service hours were extended to move closer to conventional service hours. Sunday service was also introduced in the short-term improvements. In the medium- and long- term, handyDART services should be improved until the service span and extent are equal to those for the conventional system. Before the end of the long-term horizon, service hours on Thursdays – Saturdays should be extended to 9 p.m. On Sundays, service should start at 9:00 a.m. and end at 8:00 p.m. As the population grows, the peak periods are expected to continue to be busy, during the medium- and long-term, a second additional fleet vehicle purchase is planned.

#### **Enhancing Service to Cultus Lake**

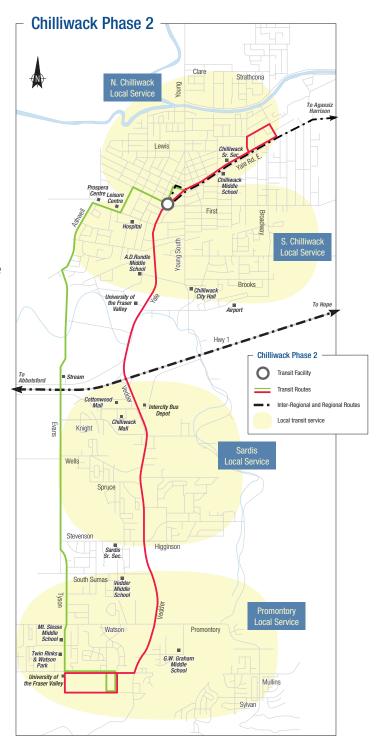
Existing service operates in summer months only (July 2nd to September Labour Day weekend) with six trips per day, 7 days per week. Future service changes may include year round service, adding trips in peak periods, and extending the service day. Both these expansions would be contingent on reaching a local cost sharing agreement with the Fraser Valley Regional District (FVRD). This route may also be restructured to fit with future changes to the local network in Chilliwack.

#### **Enhancing Service to Yarrow and Greendale**

Limited weekday service between Yarrow, Greendale, and Chilliwack is available by request only. Trips leave Yarrow and Greendale at approximately 8:00 a.m. and a return trip from downtown Chilliwack leaves at 2:30 p.m. More trips could be scheduled during the weekdays with additional trip on weekends if the service experiences a significant increase in demand.

#### **Increasing Transit Service Levels**

Service levels on the local Chilliwack transit network will be increase over time as demand warrants. Service on the Vedder and Evans Routes will be increased until they reach the service spans and frequencies identified for the FTN. Service levels on other local routes will be increased until they meet the LTN service spans and frequencies.



#### **Regional Service Improvements:**

Key medium to long-term regional transit initiatives include:

#### **Establishing a Hope-Chilliwack Connector**

Connections between Hope and Chilliwack will accommodate passengers travelling for work, school, medical, and social purposes. The service may be a para-transit (flexroute) style service. This means a fixed route service will be designed with the ability to travel off route (within a certain distance) by request. The purpose of the route is to connect communities and provide coverage to areas without service. This service is designated for the routes connecting Hope, Harrison, Agassiz and Chilliwack. The table below outlines a comparison of the service frequency for Chilliwack to Harrison and Chilliwack to Hope routes:

Service Levels for the Chilliwack Transit Future Plan Regional Routes			
Route	Road	Headway	
		Peak	Off-Peak
Chilliwack – Agassiz – Hope	Hwy. 9	30	60
Chilliwack – Hope	Hwy. 1	60	60

Feasibility study to provide service along Hwy 7 between Kent and Mission Prior to implementing a new service to a community, a Feasibility Study should be conducted to gather more detailed information in order to ensure the service design is best suited for the community's needs. The Feasibility Study will establish:

- estimated demand, ridership, and performance expectations
- route and frequency
- estimated cost
- suggested implementation timeframe and potential phasing strategy

## **Ongoing Initiatives**

#### Address existing service needs

There are often immediate service demands and operational service issues that need attention. Operational service issues need to be addressed ahead of other transit improvements to ensure the satisfaction of existing customers. Examples of operational service requirements are:

- Adding running time to an existing schedule to maintain reliability
- Adjusting timing points to best match travel time
- Increasing service frequency when demand warrants
- Implementing services where there are critical gaps in the system
- Increasing service span (hours of operation) or the service week when demand warrants
- Route restructuring for construction or operational reasons

#### Match vehicle type to local service demand

Establishing the Transit Future Network will create new and modified bus routes that are more frequent and efficient. Many of the Local Transit routes may present an opportunity to utilize smaller vehicle types to further increase efficiency and reduce capital and operating costs.

An example of a smaller vehicle is the Vicinity, a 27.5 foot vehicle BC Transit is testing. The Vicinity seats 23 passengers with room for 16 standees and is compact and narrow making it suitable for use on residential streets. The Vicinity is a low-floor bus with a ramp at the front door and kneeling capabilities. 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.



Improve customer information

Customer information improvement makes it easier for existing customers to navigate the transit system as well as aiding new users in learning to use the transit system for the first time. The following customer information tools are of particular interest:

- Online trip planner
- Real-time information system
- Additional transit information at the stop level
- Website upgrades to be more user friendly

#### Improve transit facilities

Continued improvement and maintenance of transit facilitates and on-street customer amenities are important to improve the perception of transit and the customer's experience, and for the continued operation of the transit system. Some improvements that have been identified are:

- Ensure that transit stops on most of the local and frequent transit routes are spaced at an appropriate interval between 300m – 500m (excludes express and RapidBus corridors). In some locations transit stops are spaced closer together leading to slower transit trips and higher maintenance costs.
   Corridor transit and transportation projects should include a review of stop locations before infrastructure investments are made.
- Invest in on street customer amenities such as furniture at stations and stops
- Provide Park & Ride opportunities to cater to rural or semi-rural areas where local service is less frequent or does not exist. Park & Rides can also be used to establish new ridership markets.

#### Make transit more accessible

Transit service should strive to be universally accessible to all. Recognizing the mobility requirements of an aging population there will be an increasing need for more accessible transit solutions. Accessibility could be improved by making investments in:

- Identifying alternative options to fixed route transit service in rural and suburban areas with dispersed population
- Upgrading existing and new transit infrastructure to meet BC Transit's Infrastructure Design Guidelines
- Improving fleet access for mobility aids and strollers
- Designing accessible service to facilitate spontaneous travel
- Improving written and online material for those with visual impairments
- Providing customers more convenient and affordable fare payment options
- Integrating handyDART services with conventional services where possible
- Improving accessibility for cyclists to use the transit system
- · Developing and trialing new accessible transit solutions

# Moving Forward

## Funding the Plan

Today the Chilliwack Area is part of the Central Fraser Valley Transit System and is funded through a combination of provincial funding, local property tax, passenger fares and advertising revenue. Budgets for partner agencies are confirmed on different schedules: BC Transit and B.C. Provincial budgets are set every five years, while local government budgets are confirmed on a year by year basis making it difficult to plan for future growth. A limitation on future funding is the ability to continuously increase property tax to fund the local share of transit projects and operations, particularly for large capital projects. One of the priorities identified in *BC Transit's Strategic Plan* is to "develop stable and predictable revenue sources." The proposed actions for this are:

#### **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**

- Examine and implement improvement for conveying transit system budget information to local governments, such as the provision of multi-year budgets aligned to local government calendar years
- Continue to confirm government of 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 assets and resources for reinvestment to further transit service objectives
- Explore opportunities to offset costs by leveraging BC Transits expertise and scope with other organizations (e.g., fleet procurement or bulk fuel contracts)
- Continue to support local governments to offset costs by identifying and creating local transit funding partnerships with other agencies
- Explore new revenue opportunities and funding mechanisms in conjunction with development of rapid transit lines

Full implementation of the Transit Future Plan will require significant capital and operating investment in the transit system over the next 25 years. In particular, investments in transit operations are critical to the plan's success by increasing the number of service hours available. The ambition of the plan and the *Provincial Transit Plan* will require BC Transit and its partners to continue its endeavours to achieve stable and predictable revenue sources. For this reason, BC Transit will work with local government partners to investigate alternative funding and transit incentive options in an attempt to reduce the dependence on increasing local property, provincial and federal taxes to fund transit projects.

## Implementing the Plan

The Implementation Strategy directs short-term to long-term investment in the Chilliwack Area and informs the three-year service planning process. This process aims to provide a closer link to local government budgeting processes in order to ensure that funding availability is better aligned with local needs and provincial funding. This is accomplished by providing three-year base budgets, and proposed service expansion cost estimates by year. The service planning process is also performance based and allocates a percent of annual service hours to groups of systems. These groups are created from performance criteria and thresholds, as described below:

- Rides per Service Kilometre (a boarding is an entry to a transit vehicle)
   A measure of productivity. Longer regional services or systems that have a spread out urban form will not perform as well compared to compact urban communities
- Rides per Service Hour A measure of effectiveness
- Cost per Passenger Trip Measures how expensive a service is to operate relative to the volume of people using the service
- Cost Recovery Measures the cost of providing service versus the rate of return through the fare box
- Passengers per Capita A relative measure of the overall service level

#### What We Need to Succeed

BC Transit has begun to take steps to guide the Transit Future Plan from a vision to a reality. These efforts will only be successful if done in partnership with local governments, the Regional District, the Ministry of Transportation and Infrastructure, and the community. A continuous and open dialogue is required to ensure strong links between:

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

#### How will this plan be used?

- As a tool to communicate the region's vision for transit to partners, stakeholders, and the public
- To 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 proposals

## What actions does BC Transit need from local and regional partners to succeed?

- Integrate the Transit Future Plan into regional plans, Official Community Plans and transportation plans
- Integrate and consider the Transit Future network when developing local corridor plans or any road infrastructure projects. For example, incorporating transit signal priority measures with an intersection upgrade project.
- Integrate and consider the Transit Future network when developing active 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.
- Ensure that local and major development proposals and projects are received and reviewed by BC Transit to ensure support of the Transit Future Plan
- Implement Travel Demand Management strategies that encourage shifting automobile trips to transit such as implementing transit priority measures, marketing efforts, restructuring parking fares and reducing parking availability/requirements in areas well served by transit
- Support and encourage Transit Oriented Development
- Work with BC Transit to explore incentives to attract high density and mixeduse development to areas well served by transit
- Work with BC Transit to pursue new funding streams for transit services and infrastructure fares, and reducing parking availability/requirements in areas well served by transit

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







