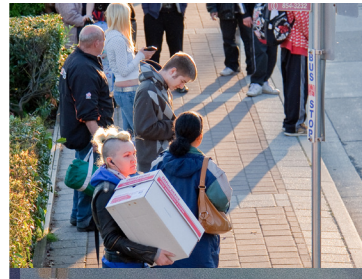


SUMMARY

Strategic Review of Transit in the Fraser Valley



Attention: Ashok Bhatti, Project Manager
Ministry of Transportation

We are pleased to provide you with a final of the Summary document for the Strategic Review of Transit in the Fraser Valley. This document summarizes the key findings of the four Foundation Papers developed over the course of the project as well as the input and feedback provided by public stakeholders as well as local, regional and provincial staff and politicians.

The Strategic Review provides 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 are designed to support more sustainable land use patterns, provide attractive transportation alternatives and reduce greenhouse gases.

We wish to thank the representatives of the sponsoring agencies – Ministry of Transportation, Fraser Valley Regional District, BC Transit and TransLink – for their guidance and support, as well as the public stakeholders that represented local interests and transit customers throughout the region on this assignment. The significant resource commitments presented in the Vision and 20-Year Strategy are largely a reflection of the importance that transit plays in building a sustainable and livable Fraser Valley.

Regards,

John Steiner,
Project Manager

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1.0 A 'Made-In-Fraser Valley' Transit Strategy

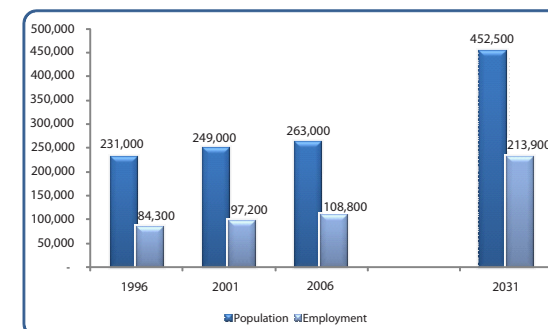
Background

The Fraser Valley Regional District (FVRD) offers residents, workers and visitors a high quality of life, with a mixture of urban, suburban, rural, and natural environment experiences. The region is home to over 263,000 residents living within its six municipalities and seven Electoral Areas. Residents in the region benefit from growing employment opportunities closer to home and affordable housing prices relative to other parts of the Lower Mainland. Over the next 25 years or so, the region is expected to change dramatically with more than a 70% increase in population and employment with much of this growth anticipated to occur within the region's urban growth boundaries. As such, managing this growth and fostering the sustainability of these communities is essential particularly in the area of reducing automobile dependence and increasing travel options.

The FVRD's *Regional Growth Strategy* (RGS) demonstrates a commitment to 'Increase Transportation Choice and Efficiency,' which includes reducing dependency on single-occupant vehicle travel and enhancing commitments toward the provision of attractive bicycle and pedestrian facilities, as well as a broader range of transit services. The *Provincial Climate Action Plan* and *Provincial Transit Plan* recognize the need for creating attractive transit services in growth areas in order to support more sustainable land use patterns, to provide attractive transportation alternatives and to reduce greenhouse gas emissions.

Today, transit services in the Fraser Valley are not as extensive as those of similar size communities in British Columbia and relatively modest when compared to communities where transit is considered an attractive alternative to driving.

**Fraser Valley
Population & Employment Growth**



The Provincial Transit Plan



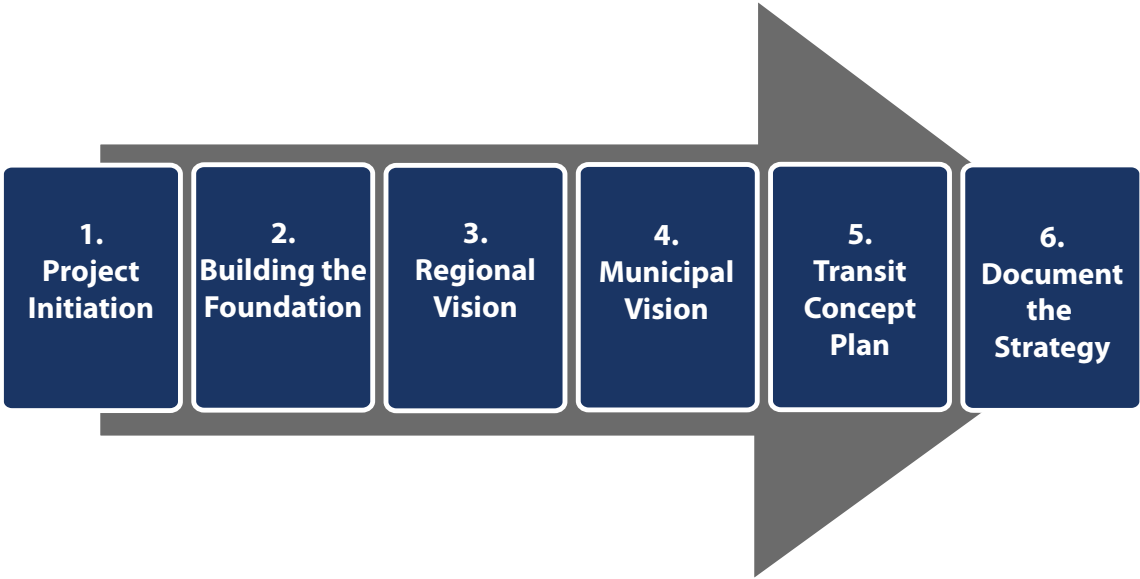
The *Strategic Review of Transit for the Fraser Valley* represents an opportunity to accelerate the provision of **local** (within each of the three largest communities), **regional** (between Fraser Valley communities) and **inter-regional** services (between the Fraser Valley and Metro Vancouver) over the next 20 to 30 years. This Summary document presents the Transit Vision and 20-Year Transit Strategy as described in each of the four sections noted below.

Section 1: Made-in Fraser Valley Transit Strategy outlines the process and the stakeholders involved in developing the long-term direction,

Section 2: Diverse Factors Shaping Transit summarizes the conditions that influence the provision and success of transit in the Fraser Valley and the long-term directions examined.

Section 3: A Vision for Transit provides a significantly enhanced image of transit in the Fraser Valley that could be accomplished within 25-30 years. It requires a significant paradigm shift in the way local, regional and provincial agencies work together to fund and manage transit services and facilities, as well as dramatically different land use patterns from what is envisioned in community plans. None-the-less, the Vision is a reflection of community aspirations for significantly enhanced mobility and accessibility.

Section 4: The 20-Year Strategy outlines unprecedented increases to local, regional and inter-regional services along with transit facilities and support strategies. This Strategy also requires a new approach to planning and delivering transit in the Fraser Valley as well as support activities to increase success.



The Process of Preparing the Strategy

The process for developing the Strategy was separated into six phases. Each phase of work concluded with a technical memorandum, presentations and/or discussions to confirm the direction and shape subsequent phases of the process.

The second stage **Building the Foundation** involved detailed market research and analysis, discussions with local and regional stakeholders and the preparation of three Foundation Papers as follows:

Foundation Paper #1 – Transit Market Analysis provides a comprehensive assessment of the local, regional and inter-regional transit markets in the Fraser Valley in order to identify where there is the greatest potential to increase transit ridership and to shape growth in the long-term.

Foundation Paper #2 – Summary of Relevant Practices examines a number of practices and arrangements that are used in other communities that may be considered in developing a long-range transit strategy for the Fraser Valley.

Foundation Paper #3 – Managing and Financing Transit in the Fraser Valley provides an overview of the current models for governing transit in British Columbia, and highlights some of the historical facts about funding transit in the Fraser Valley in comparison to other communities in Canada.

The Regional and Local Transit Visions in Phase 3 and 4 include the identification and development of all feasible transit concepts for the Fraser Valley over the next 20 to 30 years along with a comprehensive evaluation of the local, regional and inter-regional concepts. The results of this process informed the Vision for transit and 20-Year Strategy.

These final four phases of the study include the development of another working paper entitled **Foundation Paper #4 – Local and Regional Transit Opportunities**, followed by the preparation of this **Summary** document.



Shaping the Strategy

The process of developing the strategy included local, regional and provincial agencies responsible for, and affected by, the future of transit in the Fraser Valley. The key partners in this work are the Fraser Valley Regional District, the Ministry of Transportation and Infrastructure, BC Transit and TransLink. The Strategy also benefited from the participation of the general public as well as those individuals that were selected by local agencies to join the *Public Advisory Committee*. All agency and public stakeholders helped to develop the goals and objectives of the study and to identify potential transit services that should be considered in the Fraser Valley over the next 20 to 30 years.

Project Steering Committee

- Jim Hester, BC MoTI (Project Sponsor)
- Hugh Sloan, FVRD
- Mike Davis, BC Transit
- Jim Prokop, TransLink
- Ashok Bhatti, BC MoTI (Project Manager)
- Siri Bertelsen, FVRD
- Alison Stewart, FVRD
- Wanda Leroux, BC Transit
- Peter Murray, BC Transit
- Peter Klitz, TransLink

Public Advisory Committee

- Alvin Epp, Abbotsford
- Lynn Harris, Abbotsford
- Doug Mattka, Abbotsford
- Sukh Sidhu, Abbotsford
- Lubbert van der Laan, Abbotsford
- John Visser, Abbotsford
- Karin Rempel, Chilliwack
- John-Henry Harter, Chilliwack
- Kirsten Brandreth, Chilliwack
- Pat Dunn, Chilliwack
- Calvin Adams, Mission
- Mike Scudder, Mission
- Paul Horn, Mission
- Sylvia Pranger, Kent
- Roy Daykin, Mission
- Gail Guimont, Hope
- Larry Ortis, Hope
- Wayne Green, United Way
- Craig Toews, UFV
- Lloyd Forman, Electoral Area A
- Tracy Irwin, Fraser Health Authority

FVRD Transportation and Transit Committee

- Karen Stanton, Chilliwack
- Rod Sanderson, Chilliwack
- Russ Mammel, Abbotsford
- Carl Johannsen, Abbotsford
- Rick Bomhof, Mission
- Barclay Pitkethly, Mission
- Larry Burk, Harrison Hot Springs
- Maurice Wutzke, Hope
- Kerry Hiltz, Kent

Other Agencies

- Farwest Transit Services
- Southern Rail
- West Coast Express
- District of Maple Ridge
- City of Surrey
- Langley Township

2.0 Diverse Factors Shaping Transit

The success of transit in any community goes well beyond simply the provision of attractive transit services and facilities. This section outlines those unique features of the Fraser Valley and transit service characteristics that were used to develop the Vision and long-term strategy.

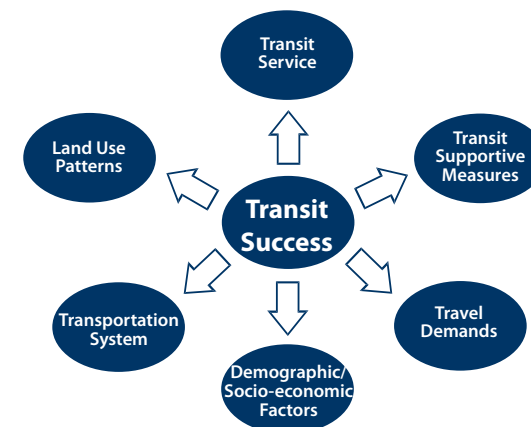
Demographic Characteristics

Demographic patterns, such as population and employment levels as well as age profiles have a significant influence on travel demands.

In the long-term, those patterns highlighted below will place growing pressures on transportation infrastructure and influence the provision of transit services.

Over the next 20 years, the Fraser Valley Regional District will continue to be one of the fastest growing regions in British Columbia. In 2006, the FVRD consisted of approximately 263,000 people and 109,000 jobs. By 2031, both are expected to increase by more than 70%, or to over 450,000 people and almost 215,000 jobs. Over 98% of this growth will occur in the three main urban centres, with Abbotsford accounting for approximately 40% of the increase.

The balance of population to jobs in each community creates a foundation of economic and environmental sustainability. Fraser Valley communities have the unique balance of population and employment which is a feature often attributable to “complete communities”. Today, the population to employment ratio is approximately 2.4:1, and it is expected to continue to improve over the next 20 years to approximately 1.9:1.



The average age of residents living in the Fraser Valley will increase where by the population of people age 55 and over will grow at a faster rate than the regional growth rate. Unlike other communities in the Lower Mainland, significant relative and absolute growth is also projected for the younger age cohorts. Along with this change in the make-up of the community comes increasing need to make the Fraser Valley more accessible for people with various physical, cognitive and sensory disabilities. This will place new pressures in the transportation system and other community infrastructure as well as demands on a range of health, education and other services.

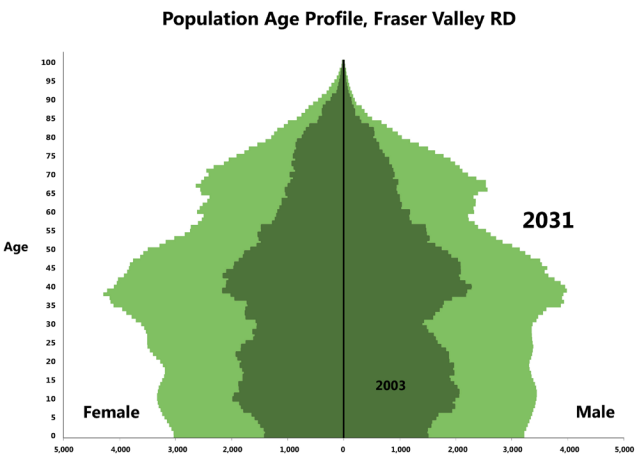
Land Use Patterns

Local and regional policies provide the framework to guide growth and development patterns that influence transportation demands. In order to achieve the regional Vision, local municipalities have committed to the development of a network of sustainable communities where residents can live, work and play in their own community.

Much of the population & employment in each community are located within the Urban Growth Boundaries. Today, over 80% of the population lives inside the urban growth boundaries of the three municipalities. The percentage of population living within urban growth boundaries will increase over the next 25 years creating a greater need for enhanced ‘local’ transit services to get around each community.

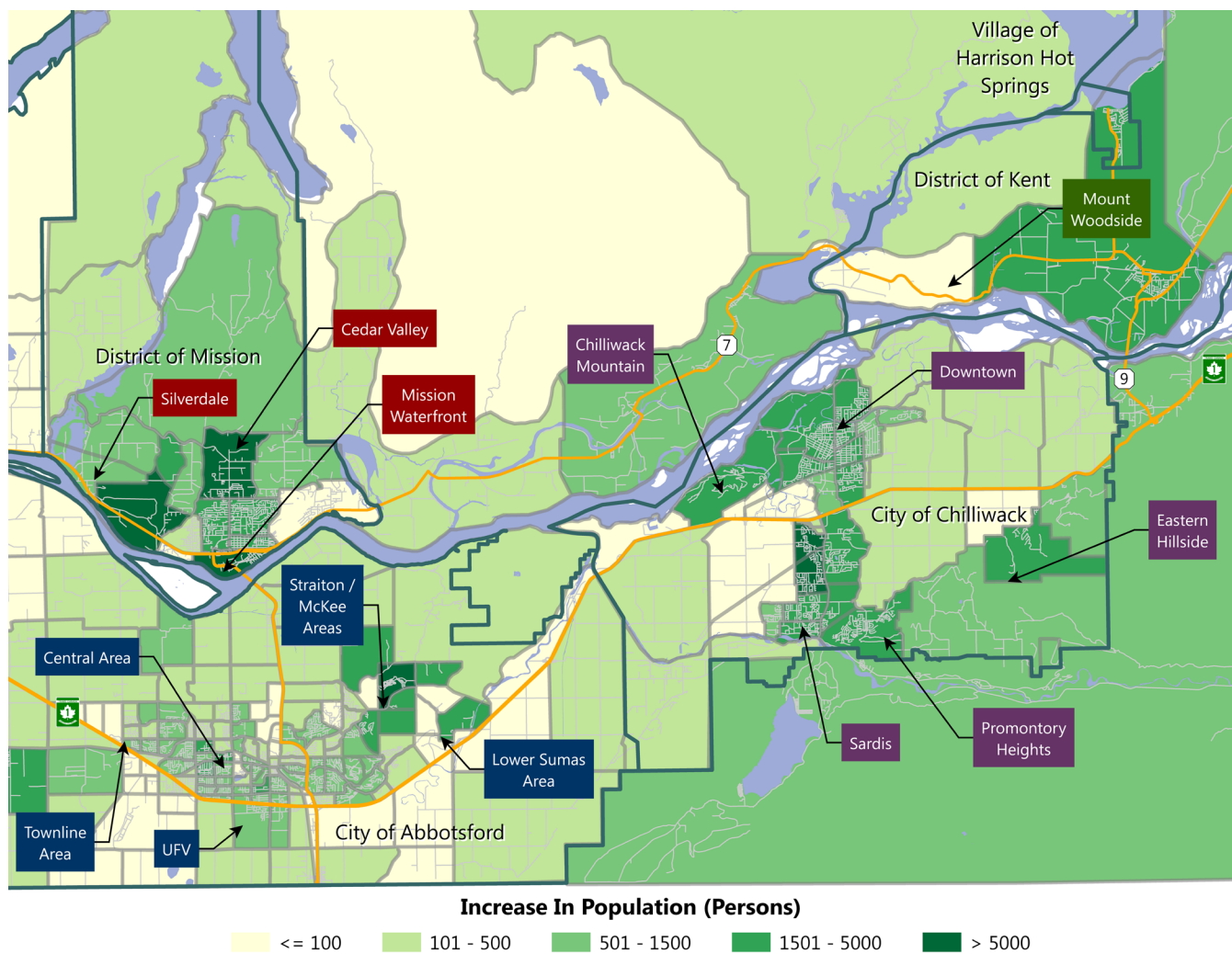
Over the next 20 years, population and employment growth will occur not only in the core areas of Abbotsford, Chilliwack and Mission, but on the fringes of the established areas. The three largest municipalities are committed to densification and infill of the existing built up areas. However, planned growth is also identified for ‘greenfield’ areas such as the Straiton-McKee area in Abbotsford, Silverdale in Mission, and Promontory Heights in Chilliwack. The lower density form of these and other growth areas further contributes to the challenge of providing attractive two-way transit services to growing areas.

While further infill and densification is anticipated in the core areas of Fraser Valley communities, most areas will support lower density uses suited to conventional and community transit services. On average, the projected population densities of most established and growth areas of the Fraser Valley will support conventional and community services. Commitments toward rapid transit will require further refinements to local area planning to increase scale and density of uses along desired corridors and at key nodes served by rapid or frequent transit services.



“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.”

Choices for Our Future, FVRD Regional Growth Strategy Vision

2031 Fraser Valley Population Growth

Travel Demands

The travel demands for Fraser Valley communities are largely influenced by land use patterns. This section highlights existing and forecast travel demands based on various sources of information that help to define the target markets and shape the Transit Strategy.

The FVRD generates over 800,000 trips each day, with Abbotsford accounting for over 65% of them. Of those daily trips however, only 1% (or approximately **8,000**) are made using transit, while driving accounts for approximately 90% of all daily trips. This compares with approximately 3% of all trips in Kelowna and Kamloops that use transit, 8% in Victoria and 11% in Vancouver.

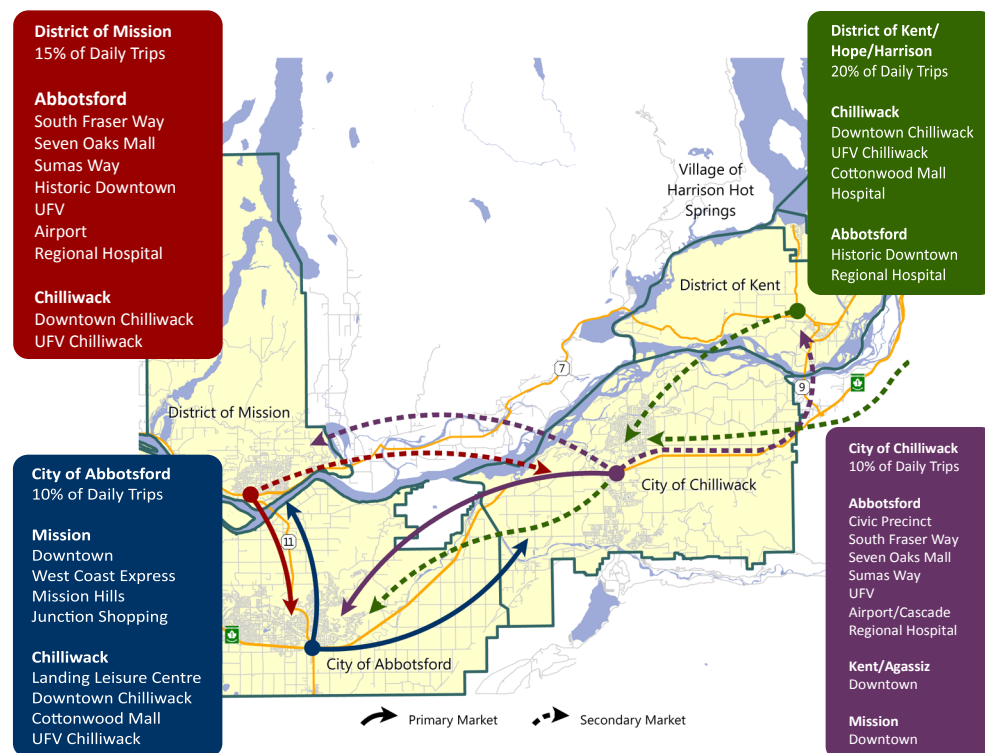
Over 80% of all daily trips generated by each community are 'local' in that they start and end in the same community. For example approximately 87% of all daily trips that start in Chilliwack, remain in Chilliwack. Conversely, approximately 11% of all daily trips generated by Abbotsford either begin or end in Metro Vancouver. The extensive internal travel for Fraser Valley communities is reflective of a 'complete community,' and is unique for communities at the fringe of a large urban centre. Because of the projected growth patterns, this is not expected to change.

The major 'trip generators' of each community need to be within reasonable walking distance of the most attractive local transit services and be accessible to regional and inter-regional services. Market research and travel models of each community indicate that there are several key generators that attract a large majority of the trips today. These generators must be the target of the most attractive transit services in each community.

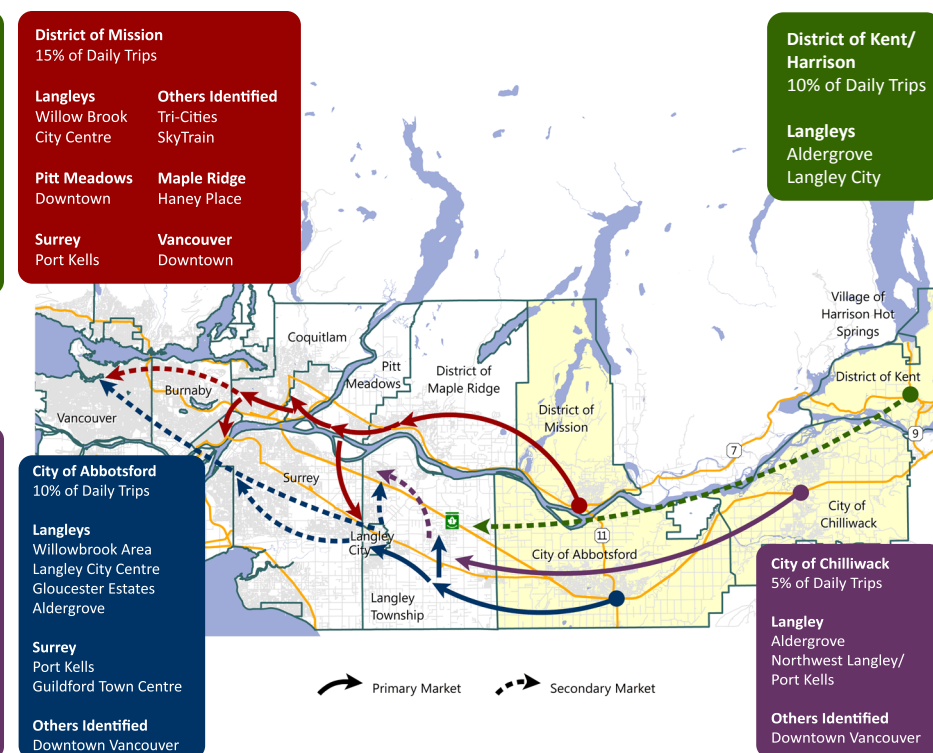
Regional travel between Mission-Abbotsford, Chilliwack-Abbotsford, Chilliwack-Agassiz/Harrison are the principal 'regional' transit markets. Over 10-20% of all daily trips are regional in that they are made between Fraser Valley communities. Today, the Mission-Abbotsford and Chilliwack-Agassiz/Harrison travel markets are the only ones served by transit.

Inter-regional travel between the Fraser Valley and Metro Vancouver communities of the Langleys, eastern areas of Surrey as well as Metro Vancouver's Northeast Sector are the primary travel markets today and in the long-term. These markets account for a majority of the 5% to 15% of daily travel generated to and from the Fraser Valley.

Primary Regional Travel Markets



Inter-Regional Travel Markets



Transportation System & Transit Services

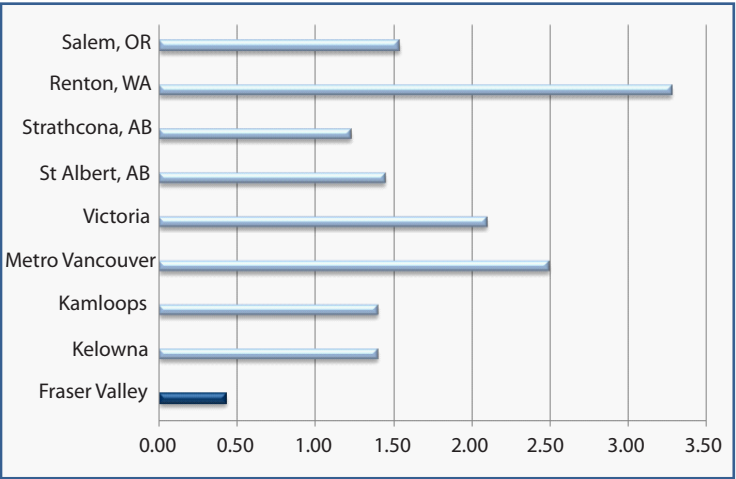
The transportation system and transit services also influence how people choose to travel for work, social, recreation and other purposes. This section highlights how existing transit services shape travel choices and the future opportunities for transit in the Fraser Valley.

Vehicle ownership in the Fraser Valley is higher than any other part of the Lower Mainland which in turn influences the propensity to choose transit. On average, the typical household in the Fraser Valley has 1.8 vehicles, while the average is 1.4 vehicles in Metro Vancouver. High vehicle ownership rates generally reduce the propensity to use transit for most daily trip making.

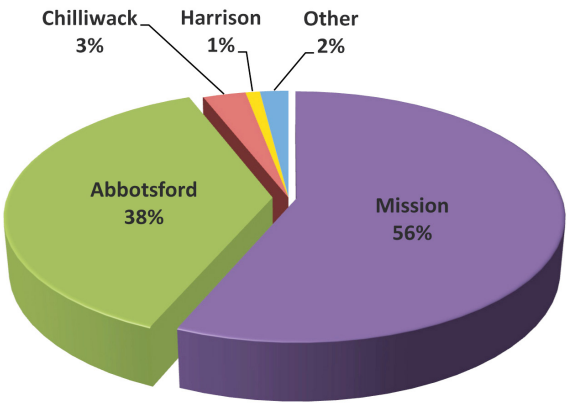
The total transit resources serving the Fraser Valley are significantly below that of other communities where transit may be considered an attractive alternative. Although not a definitive indicator of attractive transit, the Fraser Valley receives less than 0.5 service hours per capita. All other communities that have higher transit mode shares have two to five times the service hours per capita, indicating a possible link between transit capacity and the propensity of people to take transit.

The West Coast Express (WCE) provides and inter-regional service for many Fraser Valley communities, particularly Mission and Abbotsford. Approximately 6,000 trips board the WCE at Mission Station each day (slightly more than 10% of the entire line). Of those, 56% are from Mission and 38% are from Abbotsford. Over 80% of those people (almost 500 customers) are destined to downtown Vancouver for work.

Annual Service Hours per Capita



Place of Residence of West Coast Express Riders Boarding in Mission



Funding and Managing Transit

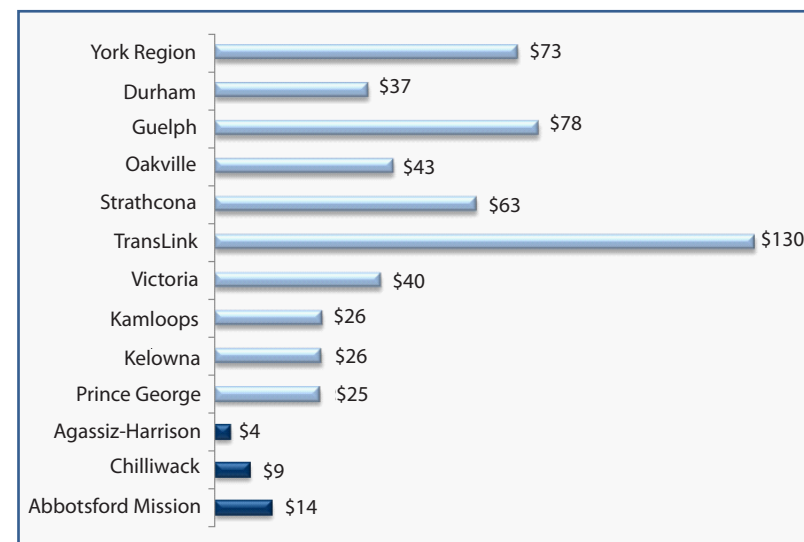
Funding and managing of transit services and facilities in the Fraser Valley is jointly handled by BC Transit and local area municipalities. Over the last decade or so however, all agencies have faced funding challenges although there have been some funding increases more recently. In the absence of funding that is both stable and predictable, it is difficult to plan the phased and steady improvement of services over the medium and long-term. The following discussion highlights some of the funding and management challenges to expanding transit.

Transit is jointly funded by local and provincial agencies. Fraser Valley transit services cost approximately \$10 million per year to operate and maintain. 46.7% is funded by the provincial government and 53.3% is funded locally through fares & property tax. In most other jurisdictions in Canada, transit is funded entirely through fares and property tax.

Investments in transit have increased significantly over the last 5-years or so in order to simply catch-up to current levels. The total transit service hours provided in the Fraser Valley has increased by approximately 6.5% per year between 2003-2008 (22% in 2009), while the annual system costs have grown by 3.5% (18% in 2009) per year during the same periods. Despite these dramatic increases, the transit system is still underserved when compared to the service hours per capita measures of other communities.

Property taxes directed toward transit in the Fraser Valley are among the lowest in the province and mid-size communities in other parts of Canada. Today, Fraser Valley residents spend anywhere from \$4 to \$14 annually per capita on transit in the form of a property tax. This amount is less than levels of other mid-size communities in BC, and is significantly below levels of other large municipalities in Canada where provincial funding is not provided and property taxes. This source of revenue is relatively static in that it does not automatically increase with inflation.

With the exception of services between Abbotsford and Mission, the existing governance structure makes it difficult to fund and deliver regional and inter-regional services in the Fraser Valley. While the current "Municipality by Municipality" approach was adequate when services were first established, there is now a greater need to travel between Fraser Valley communities and to Metro Vancouver. In order to accelerate the growth of local, regional and inter-regional services, new models for planning and delivery are needed along with stable and predictable funding services.



Transit Property Tax per Capita



3.0 A Vision For Transit

The Transit Vision reflects the ultimate direction for transit in the Fraser Valley identified by agency and public stakeholders in the very long-term, and is supported through the technical evaluation of market opportunities. The Vision commits to a new era where transit can be a real choice for school, work and other personal travel. It presents the compelling reasons for resolving current obstacles to significantly enhancing transit services and facilities are resolved. Not only is the transit mode share expected to increase from approximately 1.1% of all trips today to 4.1% in the long-term Vision, many other aspirations of the community are being supported. However, governance and funding questions will have to be addressed and land use plans will need to, among other things, focus transit oriented development on key corridors for the Vision to become a reality. In this regard, the Vision will require many fundamental shifts that may realistically take as many as 30 years to accomplish, and will guide the 20-Year Strategy described in Section 4 of this Summary document.

Aspirations for Transit in the Fraser Valley

Fraser Valley communities are committed to a future in which transit will not only become an attractive alternative, but where transit will shape and support the creation of economically, socially and environmentally sustainable communities. Public Advisory Committee members and the public broadly identified their aspirations for transit over the next 20 years or so that were used to define the goals and objectives for that shape the Vision. These goals – *transportation choice, mobility, environment, community, implementable and efficient use of resources* – were used to assess the options and to identify the ultimate directions included in the Vision as well as the 20-Year Strategy.

How the Vision was Developed

The Vision was developed through an iterative process that included a comprehensive assessment of individual ideas and concepts for improved local, regional and inter-regional transit services that were designed to support and shape the projected demands. The most attractive transit services that best support the goals and objectives for transit in the Fraser Valley were combined to form a complete Vision where transit can be an attractive and viable alternative to shape and support the needs of the region's communities.

Aspirations for Transit in the Fraser Valley

1. Transportation Choice



Provide attractive transit services that support customer expectations for local, regional & inter-regional travel

2. Mobility



Enhance accessibility to regional services for people of all physical, cognitive, age and income levels

3. Environment



Enhance air quality and reduce impacts on natural environments

4. Community



Shape & support the development of sustainable, livable communities

5. Implementable



Ensure that the strategy is affordable and can be reasonably achieved over the next 20 years

6. Efficient Resources



Wisely invest those resources that will maximize ridership and achieve other transit and community goals

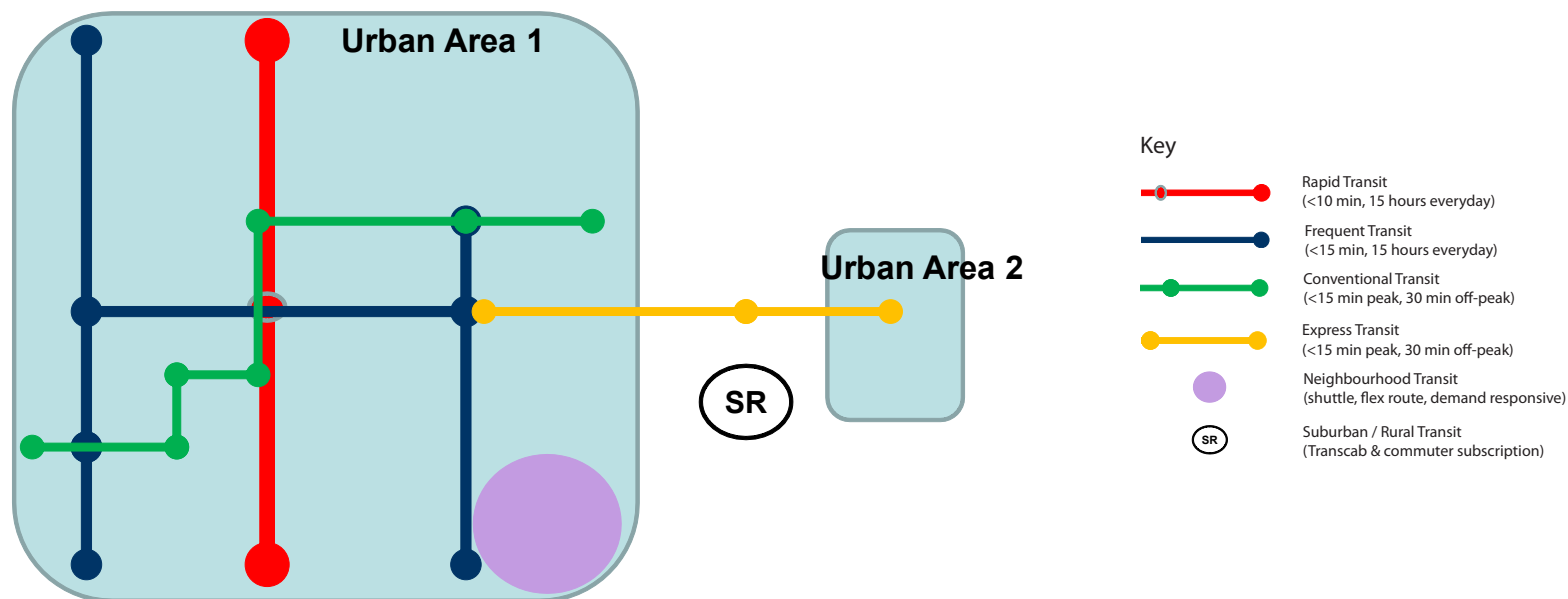
Key Features of the Vision

The Vision for transit in the Fraser Valley provides the basis for a significantly different transit experience than what exists today. Although the Vision represents a significant leap forward from today's systems, it identifies service levels and resources that will enable the Fraser Valley to catch-up to the benchmarks of other mid-size communities in BC and elsewhere.

The Vision puts forward a **broader range of transit services designed to suit the varied long-term travel markets**. The services will include everything from more direct and frequent services on main corridors within and between communities where customers would not require schedules through to more flexible services for lower density neighbourhoods that connect to frequent services.

For the purpose of the strategy, the services are generally categorized as follows:

- **Bus Rapid Transit (BRT)** is a premium transit service with frequent (<10 minute, 15 hours every day), reliable and direct services throughout the day operating in protected areas of the roadway with integrated land use patterns;
- **Frequent Transit** Services also serve as the foundation of the transit system using conventional buses to provide with attractive all-day service (<15 minute, 15 hours every day) along those major corridors with strong scale, mixture and density of uses;
- **Conventional Transit** connecting with the Frequent Transit and BRT services with attractive peak services providing connections to local activity nodes (<15 minute peak, <30 minute off-peak);
- **Neighbourhood Transit** serves lower density areas of the community with reasonable peak and off-peak frequencies, including shuttle, flex routes and demand-responsive services using smaller buses suited to neighbourhood streets (15-30 minute peak, >30 minute off-peak);
- **Express Transit** provides premium services regionally and inter-regionally (<15 minute peak, <30 minute off-peak using coach style vehicles for passenger comfort and safety);
- **Suburban and Rural Transit** includes private and/or public subscription or taxi services in very low demand areas to connect with the public transit system;
- **Custom transit - Handy DART - services** for those people that have a disability that is sufficiently severe that the person is unable to access conventional services without assistance; and
- **West Coast Express services** to support a small, but increasing amount of travel between the Fraser Valley and downtown Vancouver.



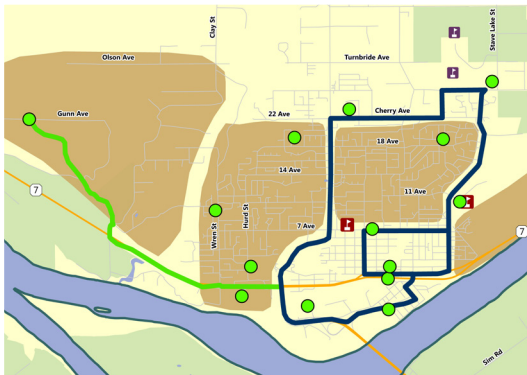
The Vision for transit in the Fraser Valley includes the following key transit services and facilities:

Optimized, restructured and significant increases to 'local' services in Abbotsford, Chilliwack and Mission. Overall, local services would increase anywhere from 350% in Abbotsford to over 600% in Chilliwack to support the primary travel markets in the Fraser Valley. Much of the increase would be concentrated in the 'urban' areas of Abbotsford, Chilliwack and Mission, with more modest service increases in lower density growth areas. Within Abbotsford and Chilliwack, rapid bus services will serve the South Fraser Way and Yale Road corridors respectively, along with interconnected frequent transit corridors, conventional services and connections with community transit services. Mission will be served by a core frequent transit service in the established areas of the community, and growth areas such as the downtown, waterfront and Cedar Valley. Approximately 80% of all daily in the Fraser Valley start and end in the same community. In an effort to provide attractive transportation alternatives, reduce greenhouse gases, promote sustainable and accessible communities, the Vision includes significant increases to local services. Overall, the Vision would include approximately 420,000 hours of local services (in comparison to just under 85,000 hours today).

VISION: Local Transit Services

District of Mission:

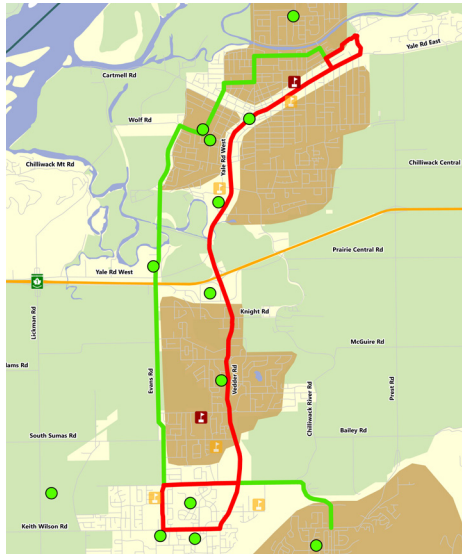
Neighbourhood and Demand Responsive Services
Expanded conventional transit services
Frequent Transit Networks on major corridors



- Key
- Rapid Transit (Bus or Urban Rail)
 - Frequent Transit Service
 - Conventional Transit Service
 - Community Transit Service (Neighbourhood, Flexible Route or Dial-A-Bus)
 - Suburban and Rural Transportation (Transcab and Commuter Subscription)
 - Major Trip Generator
 - Prison
 - Secondary School
 - Middle School

City of Chilliwack:

Neighbourhood and Demand Responsive Services
Expanded conventional transit services
Frequent Transit Networks on major corridors



City of Abbotsford:

Rapid Bus Transit on South Fraser Way (Clearbrook to UFV)
Neighbourhood and Demand Responsive Services
Expanded conventional transit services
Frequent Transit Networks on major corridors



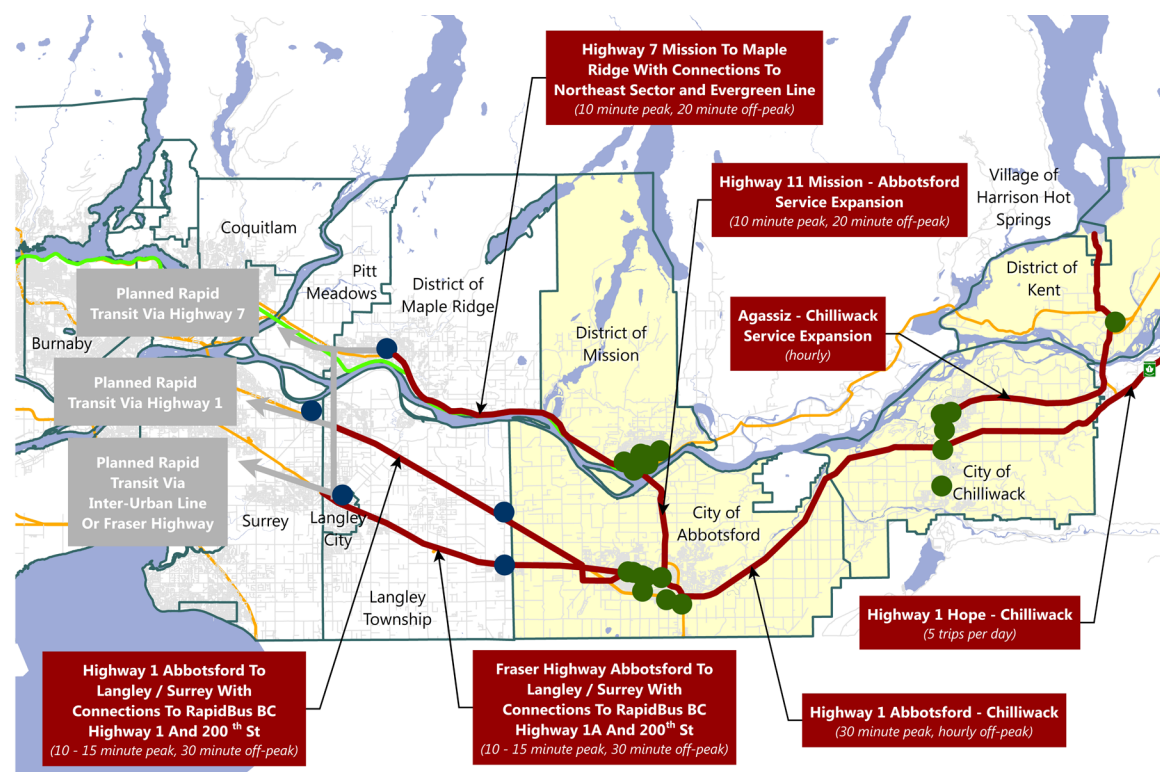
New and attractive 'regional' services between Fraser Valley communities. Regional connections between communities will be strengthened by a network of express coach bus services that link to the core areas of Fraser Valley communities – Mission-Abbotsford-Chilliwack – as well as other attractive local rapid bus and frequent transit services to support access throughout the community. Additional services would also be provided between Chilliwack and Agassiz as well as a new service to Hope. Premium service features and fare system could be used to provide these long-distance services. The Vision would include almost 40,000 hours of regional services.

New 'inter-regional' services providing attractive connections between the Fraser Valley and Metro Vancouver. In addition to the West Coast Express service, network of express bus services would also provide frequent peak and off-peak connections between the primary travel markets of the Fraser Valley and the Langleys, eastern areas of Surrey as well as the Northeast Sector of Metro Vancouver. These inter-regional services would be connected to the core areas of Abbotsford or Mission and connect with rapid transit services planned for the Surrey and Langley areas along the Fraser Highway, 200th Street and Highway 1 corridors. The Vision would include approximately 85,000 hours of inter-regional transit services.

VISION: Regional and Inter-Regional Transit Services

Key

- Inter-Regional Destination
- Regional Destination
- Regional Services in Metro Vancouver
- Express Bus (Premium or Conventional)
- West Coast Express



New transit infrastructure is needed to support transit operations. At the most basic level, a new and/or expanded bus depot facility is required to accommodate the growth in bus fleet from 40 to 140 vehicles in order to provide local, regional and inter-regional services. For passenger convenience, strategically located park-and-ride facilities will be required to access regional and inter-regional services in each community. Attractive, comfortable and safe passenger facilities – stops and stations – will also be provided on all planned frequent and rapid transit corridors. Finally, transit priority treatments – such as bus lanes, queue jumpers, transit signal coordination – will be provided on rapid and frequent transit corridors as well as for some express bus services where recurring congestion is anticipated, such as along South Fraser Way, Yale Road, Highway 1 and Fraser Highway. The annual capital debt for capital infrastructure would be approximately \$8.6 million per year.

Stronger land use and transit connections. Type, scale, density and mixture of land uses influence the forms of transit service that will generally work most efficiently in a community. In lower density areas, flexible and neighbourhood transit services will typically suit the travel patterns. In order for rapid or frequent transit services to be viable within Abbotsford, Chilliwack and Mission, many of the corridors identified in the Vision will require greater mix of uses and density and be designed as people places with easy and attractive access to transit than is currently planned.

The Vision includes an elevated and accelerated commitment toward transit investments in the Fraser Valley. It also requires substantially more revenue from existing and new funding sources as well as the governance arrangements to provide an enhanced local, regional and inter-regional transit system. Further emphasis of planned growth and densification along rapid and frequent transit corridors is essential for the services to effectively generate the ridership and farebox revenue that is required.

Although the Vision may take 30 years to achieve, all agencies are encouraged to accelerate the implementation of the 20-Year Strategy described in Section 4 in an effort to reduce the timeline to achieve the Vision. An aggressive approach toward changing the way transit is delivered in the Fraser Valley will serve to support goals to increase transportation choice, enhance mobility, minimize environmental impacts and provide complete communities.

Vision Resources Requirements (2040)

TRANSIT VISION GOALS	TODAY	The Vision
Annual Service Hours (,000)		
Local	90	418
Regional & Inter-regional	16	123
Total (% growth)	106	541 (410%)
Service Hours/Capita (2030 pop.)	0.41	1.27
Transit Mode Share	1.1%	4.1%
Annualized Cost (2030 \$ millions)		
Operating & Vehicle Debt	\$9.5	\$72.3
Capital Debt (exchanges, depots, etc)	—	\$8.6
Total	\$9.5	\$80.9
Fleet Size (buses/trains)	40/37	135/37
Annual Ridership (million passengers)		
	2.7	14.6
Average Cost/Ride (no capital)		
	\$3.40	\$4.95

Note: All costs includes annual escalation of 2.0% per year for 20 years

Overall, operating and vehicle debt costs to support the growth in service hours as well as other support facilities is projected to increase from approximately \$10 million per year to over \$80 million annually (2030 \$).

Analysis of Rail for the Fraser Valley

The West Coast Express currently serves a regional market for Fraser Valley residents, largely to the downtown area. However, there has been ongoing interest in expanding the rail system in the Fraser Valley for many years with a particular interest in the re-instatement of the inter-urban line connecting Abbotsford and Chilliwack to the Langleys, Surrey and other parts of Metro Vancouver.

While an expanded rail network remains a possible feature of the transit system in the Fraser Valley for the long-term, the provision of rail is beyond the Vision for several reasons:

- Significant investment is required in the Fraser Valley just to get a desirable level of local, regional and inter-regional transit to move from a \$10 million per year system to almost \$90 million in 2031. The 2031 annual operating and debt service cost for a commuter rail service along the inter-urban line between Abbotsford and Surrey of approximately \$68.9 million would almost equal that of the entire investment required to achieve the Vision.
- The projected 2031 cost per ride (\$70 - \$110 / ride) and cost per service hour (\$19,750 - \$21,500) for a commuter rail service on the inter-urban line are significantly higher than most alternatives considered such as a premium bus service in a dedicated lane on the Highway 1 corridor (\$5.75/ride).
- As previously noted, the Vision includes an increase in service hours of more than 400% (to over 540,000 hours annually) and will likely take 25 to 30 years to implement. A peak only, commuter rail service for the entire inter-urban line would provide less than 1% of the service hours included in the Vision for the Fraser Valley.
- The projected 2031 annual ridership for the entire inter-urban line of 1 million passengers (most of which is between Langley and Surrey) would be comparable to the projected ridership for an all day, frequent express bus service operating in a priority lane on Highway 1 between Abbotsford and North Langley-Surrey. In this regard, the ridership for the inter-urban line would be less than 5% of the entire projected transit ridership for the Fraser Valley.

Although an inter-regional railway service between the Fraser Valley and Metro Vancouver may be part of a long-term future, a strong foundation of local, regional and inter-regional services as presented in the Vision is an essential starting point. In this regard, opportunities for rail service between Chilliwack-Abbotsford and Langleys/Surrey should be retained for a possible future service. This would include preserving rail corridors in the Fraser Valley Regional District and adjacent Metro Vancouver.



Summary of Commuter Rail Analysis

	Commuter Rail Abbotsford to Surrey (Inter-urban)	Commuter Rail Chilliwack to Surrey (Inter-urban)	Express Bus, Exclusive Lane Abbotsford-North Surrey/Langley 200 Street (Highway 1-Langley- Rapid Bus)
Route Length (km)	61	99	32
2031 Ridership			
<i>Maximum Daily</i>	3,770	3,900	4,000
<i>Annually (mill psgr)</i>	0.98	1.01	1.20
Annual Service Levels			
<i>Periods of Operation</i>	Weekday Peak Only	Weekday Peak Only	All Week, All Day & Evening
<i>Annual Service Hours</i>	3,500	5,200	25,600
Annual Cost (\$,000 2031)			
<i>Operating & Vehicle</i>	\$ 6,900	\$ 10,300	\$ 3,600
<i>Capital</i>	\$ 62,000	\$ 101,400	\$ 3,300
Total	\$ 68,900	\$ 111,700	\$ 6,900
Cost per ride	\$ 70	\$ 110	\$ 5.75
Cost per service hour	\$ 19,750	\$ 21,500	\$ 270

Note: Rail analysis reported in this table examines the provision of peak only commuter rail service using diesel multiple unit trains similar to West Coast Express.

4.0 The 20-Year Strategy

Based on today's transit system, finance and governance challenges for the Fraser Valley and the ability to achieve planned densities within the timeframe of the plan, the 20-Year Strategy can be considered a 'stretch' to accelerate the provision of a significantly enhanced transit system. The 20-Year Strategy requires an unprecedented level of investment and changes in how local, regional and inter-regional transit services and facilities are provided. It also requires a significant commitment toward reshaping planned growth patterns around frequent transit corridors and building toward the Vision presented in Section 3.0.

Transit Services

Consistent with the Vision, the 20-Year Transit Strategy provides for a broader range of transit services. In order to support the most significant travel markets within each municipality, the strategy concentrates on significantly increasing local service from approximately 83,000 to 250,000 hours annually within each of three largest Fraser Valley communities. The Strategy also includes the provision of 32,000 hours of new and enhanced regional services between Abbotsford-Mission-Chilliwack and Agassiz that will support better access to community services, such as health care and shopping, and the growing need for enhanced regional connections. Over 27,000 hours of new and improved inter-regional transit services are also provided between the existing and future major travel markets of Langley and Surrey as well as the Northeast Sector of Metro Vancouver. These services will connect with other rapid transit services currently being planned by TransLink and the Ministry of Transportation and Infrastructure for the south of Fraser Communities (Surrey and the Langleys) and the Northeast Sector (Coquitlam, Port Coquitlam, Pitt Meadows and Maple Ridge).

Supporting the Fraser Valley's Goals

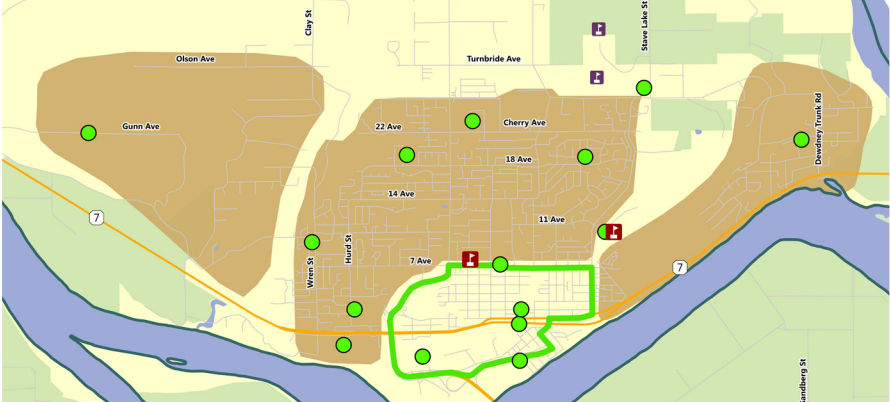
The 20-Year Transit Strategy moves the Fraser Valley closer towards its goals in that it provides transportation choice, enhances mobility, reduces environmental impacts, supports community aspirations, is implementable and makes efficient use of resources. The relative measures of success are illustrated in the adjacent figure for each of these goals for the transit system goals.

20-Year Strategy Measures of Success

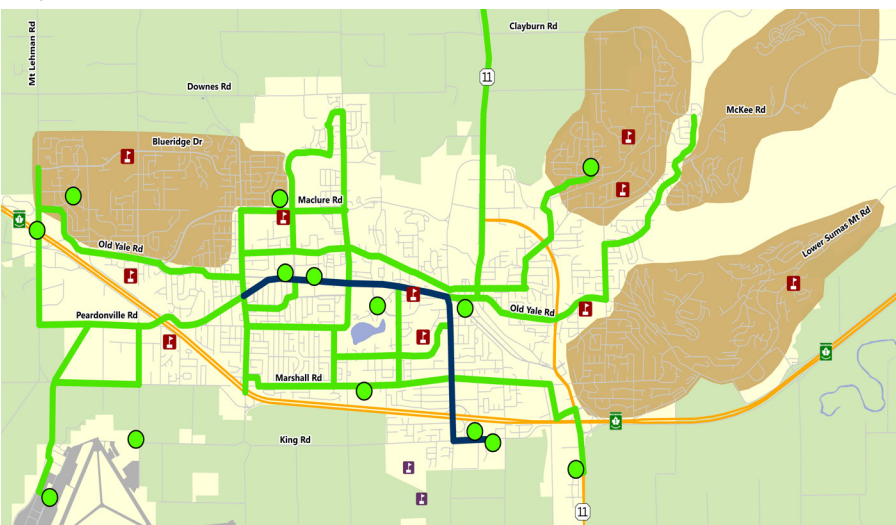
Transit Goals	Today	20-Year Transit Strategy
Transportation Choice		
2030 Annual Service Hours (,000)		
Local	90	246
Regional & Inter-regional	16	59
Total (annual % growth)	106	305 (109%)
Service Hours/Capita	0.41	0.71
Transit Mode Share	1.1%	2.3%
Service Coverage	-	●
Attractive Services (frequent, direct)	-	●
Intermodal Connections	-	●
Mobility		
Accessibility for all mobility levels	-	●
Serve Key Community Facilities	-	●
Affordable for disadvantaged	-	●
Environment		
Change in 'Base 2030' GHGs (%)	-	-1.0%
Impacts on Greenspace	-	●
Encourages Compact Growth	-	●
Community		
RGS Sustainability Goals	-	●
Supports Complete Communities	-	●
Enhances Economic Development	-	●
Supports Rural-Urban Access	-	●
Implementable		
Ridership grows with expansion	-	●
Easy to Phase Implementation	-	●
Annualized Cost (2030 \$ millions)		
Operating & Vehicle Debt	\$9.5	\$39.1
Capital Debt (incl. exchanges & depots)	-	\$ 3.1
Total	\$9.5	\$42.2
Avg Annual Increase (20yr Compound)	-	7.6%
Fleet Size (buses/trains)	40/37	70/37
Efficient Use of Resources		
Financially Aligned to the Markets		
2030 Annual Ridership (millions)	2.7	8.3
Average Cost/Ride	\$3.40	\$4.72
Reliance on existing infrastructure	-	●
LEGEND	Minimal Contribution ○	Significant Contribution ●
Contributes toward goals:		

20 - YEAR STRATEGY: Local Transit Services

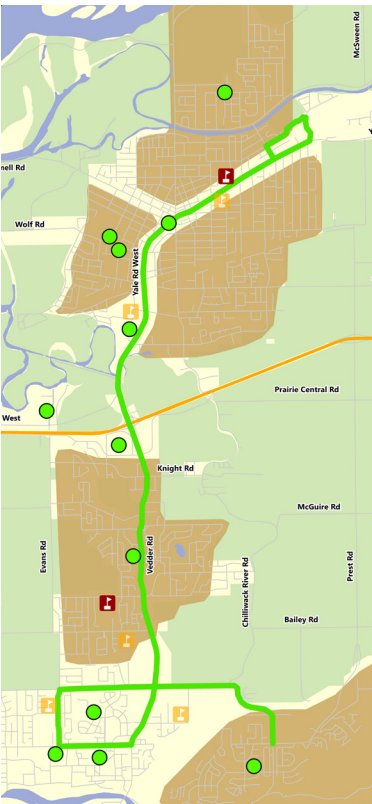
District of Mission



City of Abbotsford

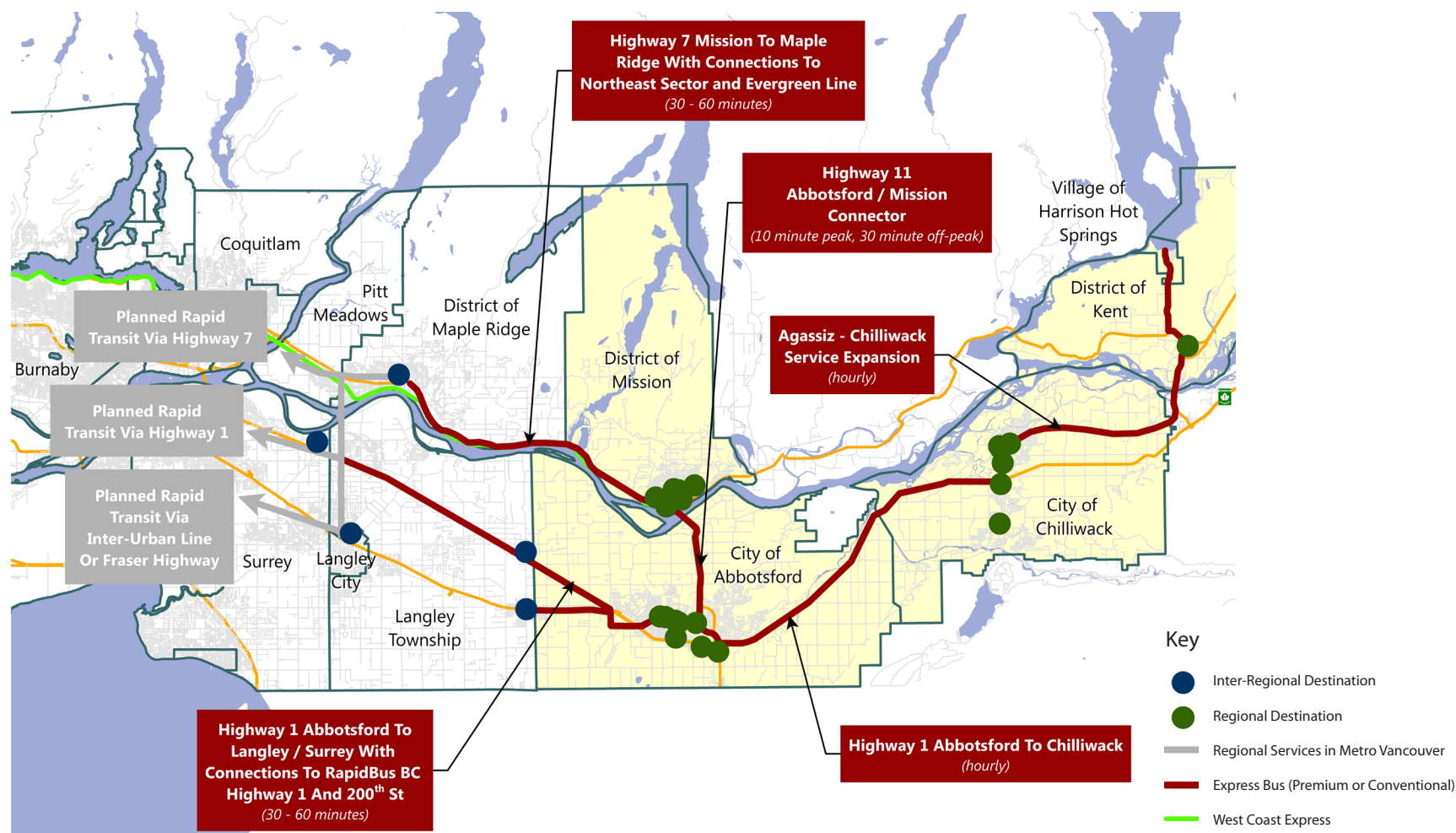


City of Chilliwack



- Key
- Frequent Transit Service
 - Conventional Transit Service
 - Community Transit Service (Neighbourhood, Flexible Route or Dial-A-Bus)
 - Major Trip Generator
 - Prison
 - Secondary School
 - Middle School

20 - YEAR STRATEGY: Regional & Inter-Regional Services



Transit Facilities

In support of the planned services included in the 20-Year Transit Strategy, the resources required to deliver these services and to support passenger needs are fundamental to the success of transit. The following discussion highlights key transit facilities included in the Strategy. The type, timing, location and scale of these transit facilities should be addressed in the 5-year planning process undertaken by local municipalities and BC Transit.

Transit fleet. The Strategy includes significantly more hours of transit service along with a broader range of transit services – neighbourhood through to express coach. In total, the transit fleet required to deliver the services contained in the Strategy would increase from approximately 40 buses to over 75 buses over the next 20 years.

On-street facilities. On-street facilities refer to loops, transfer points, or exchanges where a number of routes come together and allow passengers to transfer between routes. Movement toward more of a grid system of services in Abbotsford for the medium to long-term will result in most transfers between routes occurring on-street. In order to accommodate more frequent services along the South Fraser Way/McCallum/King Road corridors however, enhanced bus loops or transfer points may be required nearby Clearbrook Road, UFV as well as Essendene Avenue.

In Chilliwack, on-street facilities would also support most transfers between routes with some provision for turnaround areas northeast of downtown along Yale Road and in the south nearby UFV off Keith Wilson Road. Within Mission, most transfers between routes can be generally accommodated on-street. Facility improvements may include purchase of land, reconstructing passenger areas, curb lines and landscaping. It is estimated that the cost will average out to \$5 Million per facility.



Park-and-ride lots. Park-and-ride lots are essential to intercept regional and inter-regional driving trips by providing easy access to attractive transit services. In the District of Mission, additional park-and-ride and/or pick-up and drop-off facilities may be examined nearby the existing lot to support better access to regional services along Highway 11 and planned inter-regional services to the Northeast Sector. Similarly, park-and-ride lots may be provided at the western edge of Abbotsford to intercept inter-regional trips to Langleys/Surrey and in the east to connect with enhanced regional service to Mission and the West Coast Express early morning and evening trips. It is estimated that the cost will average out to approximately 2010 \$4.5 million per facility.

Transit Centres. Transit centres are the storage and maintenance facilities where buses are parked and maintained on a daily basis. There is currently one such facility in Abbotsford covering the Fraser Valley. Assuming the expansion of the fleet, the capacity of the existing transit centre will be exceeded in the next few years and a new or expanded facility will be required. For the purpose of the strategy, the cost of a new facility is estimated to be approximately 2010 \$36 Million.

Transit priority treatments. In the long-term, transit services along some corridors in Abbotsford, Chilliwack and Mission will be frequent and direct. In an effort to make transit attractive, a range of priority treatments may be considered along those corridors to address anticipated areas of recurring congestion. These treatments may include everything from signal coordination along the corridor service transit and pre-emption through to queue jumpers at intersections to bring buses to the front of the queue.

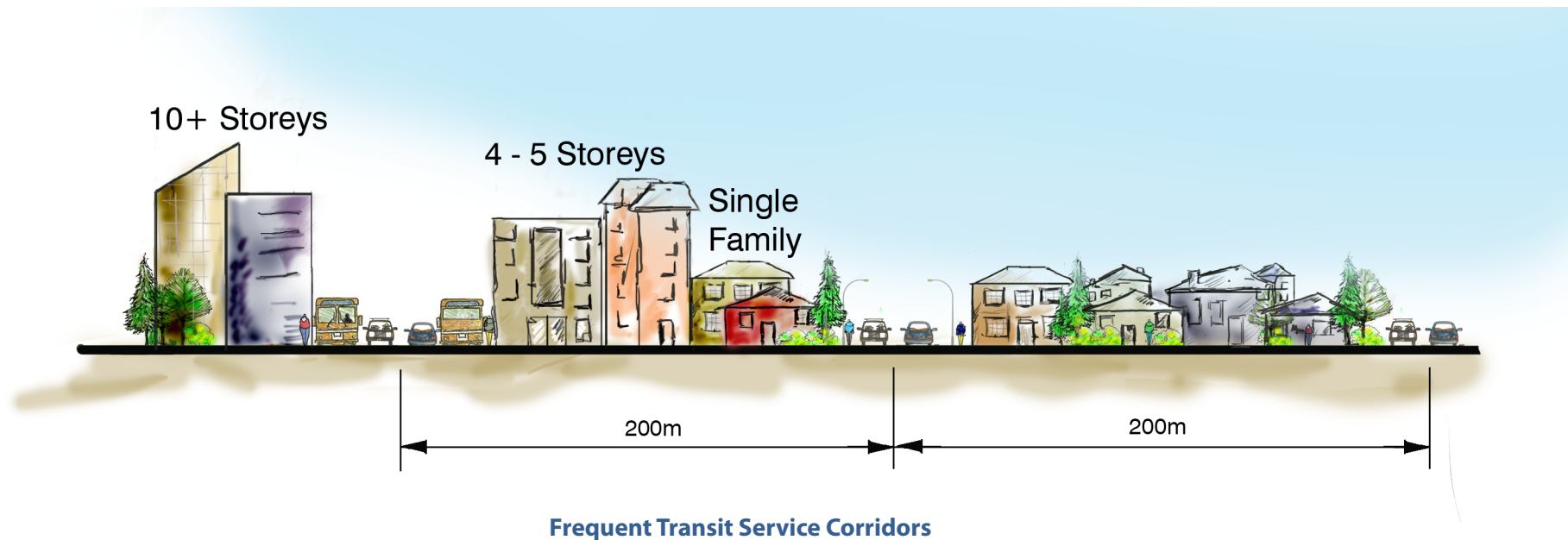


Land Use Patterns and Transportation Facilities

Both the Vision and 20-Year Transit Strategy will rely on land use and transportation supportive actions by local, regional and provincial agencies as briefly highlighted below.

Transit-supportive development patterns are essential to support significant transit investments. The Vision and Strategy include several corridors in Abbotsford, Chilliwack and Mission where frequent and rapid transit is identified as part of the long-term plan. In an effort to ensure that there is sufficient ridership to justify the service levels, the scale, density and mixture of uses planned along these corridors must be significantly increased. For example, residential densities along these corridors should range anywhere from 50 to 150 units per hectare.

Transportation investments that support easy and convenient access to transit are critical. In addition to providing significantly enhanced transit services, local municipalities must invest in attractive and accessible pedestrian and cycling facilities along and nearby transit corridors. For those corridors with frequent transit services as well as at major transfer points, attractive passenger amenities must be a high priority to enhance the customer experience.



The System Costs

Overall, the Transit Strategy will bring a significant increase in transit services, support facilities and programs to the Fraser Valley. In order to support these enhancements, the annual operating and vehicle debt costs would grow from approximately \$10 Million per year today to almost \$42 Million per year in 2031. This equates to an unprecedented increase of 7.6% per year in the revenue required from local, regional and provincial sources.

The Next Five Years are Critical

Agencies and public stakeholders have recognized that both the 20-Year Strategy and Vision is a far reach from the current realities of today. There is much work for local, regional and provincial agencies to undertake in order to demonstrate that this is a viable future, and to perhaps accelerate the Vision.

Local municipalities and BC Transit will soon begin developing shorter-term plans that will move toward implementing the **20-Year Strategy** as set out in this study. Further discussions will be required between the municipalities, BC Transit, the province and the Fraser Valley Regional District to resolve a range of issues including, but not limited to:

- Optimization of existing transit resources in each community;
- Significant growth in transit services and facilities to permit enhanced local services in each of the three municipalities and introduction of some regional and inter-regional services;
- Increases to existing revenue sources such as property taxes, fares and provincial contributions along with other financial assistance;
- New revenue sources to minimize the impact on local and provincial resources;
- Enhanced forms of governance for planning, managing and operating regional, inter-regional as well as local transit services; and
- Inter-municipal agreement and fare system reviews to support expanded local, regional and inter-regional service.

