



Transit Future Plan

ABBOTSFORD - MISSION | January 2013



Acknowledgements

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- The City of Abbotsford
- The District of Mission
- The Fraser Valley Regional District
- First Canada, ULC
- The Ministry of Transportation and Infrastructure
- TransLink

Finally, thank you to the nearly 1,500 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.

Table of Contents

- 02 Executive Summary**
 - Visions and Goals
 - The Transit Future Network
 - Implementation Plan
 - Moving Forward
- 20 Introduction**
 - Why Do We Need a Transit Future Plan?
 - What is a Transit Future Plan?
 - Study Area
 - Linkages to Other Plans
- 24 Participation**
 - Municipal Participation
 - Community Participation
- 30 Setting the Scene**
 - Population and Demographics
 - Land Use
 - Transportation
- 46 Transit Today**
 - Conventional Transit System
 - Custom Transit
 - Customer Infrastructure
 - Operations and Maintenance Centre
 - Benchmarking the Existing Transit System
- 60 Visions and Goals**
 - Vision Statement
 - Goals
 - Performance Guidelines
 - Ridership Target
- 68 The Future**
 - Service Layers
 - Inter-Regional and Regional Transit Future Network
 - Abbotsford Transit Future Network
 - Mission Transit Future Network
 - Abbotsford - Mission Future Resources
 - Benchmarking
 - Transit Infrastructure
- 88 Implementation Strategy**
 - Quick Wins
 - Inter-Regional and Regional Network Priorities
 - Abbotsford Priorities
 - Mission Priorities
 - Ongoing Initiatives
- 110 Moving Forward**
 - Funding the Plan
 - Implementing the Plan
 - Keys to Success



Executive Summary

Transit has tremendous potential to contribute to more economically vibrant, healthy and sustainable communities. The need to realize this potential in Abbotsford and Mission is increasingly important because of factors such as climate change, population growth, an aging demographic and mobility for individuals who do not have access to a private automobile. Abbotsford and Mission are projected to grow by 50 per cent, adding another 85,000 people over the next 25 years. Meanwhile, the rest of the Fraser Valley Regional District is going to add 55,000 residents, and the adjacent communities to the west (Surrey and Langley) will be larger than the City of Vancouver with nearly 1 million residents. With such significant increases in population come increases in the sheer number of vehicles and significant growth in the number of trips taken. This plan is intended to anticipate this growth, and create a long term, sustainable transit system that carries an increasing number of passengers which aids in reducing the growth rate of traffic congestion. It is also intended to support transit oriented development, and is designed to complement Abbotsford's and Mission's development plans by connecting growth nodes, key destinations and employment areas.

The Abbotsford - Mission Transit Future Plan envisions the transit network 25 years from now and describes what services, infrastructure and investments are needed to get there. In order to achieve the **8 per cent mode share target**, the plan is designed to create a stronger link between transit plans and local land use and transportation plans. It also supports the *Provincial Transit Plan* and key initiatives of *BC Transit's Strategic Plan*.

The Transit Future Plan includes a review of the existing transit services, local land use plans, travel data and travel demand forecasts. Consultation efforts included detailed discussions with the District of Mission, the City of Abbotsford, and the Fraser Valley Regional District, and included the Transit Future bus tour, public open houses, a project website, and online surveys. In total BC Transit engaged more than 1,500 members of the public.

The background research and community engagement resulted in the creation of a unified vision for transit and the development of a transit network designed to meet the needs of Abbotsford and Mission for years to come.

Vision and Goals

Vision

“The Abbotsford-Mission Transit System provides increasingly viable and effective travel options for many who live, work, and play in Abbotsford and Mission. It is enhanced for existing customers and is attractive and convenient for new customers. The system’s resources and network are aligned with the future travel markets that have developed due to population and employment growth. More and more people chose transit to meet their transportation needs.”

Goals

1. Transit supports and enhances economic development by integrating with land use
2. Transit is an attractive transportation choice by being reliable, safe, convenient, accessible and integrated with other transportation modes
3. Transit is efficient and cost effective
4. Excellent customer service and communication improve the image of transit.
5. Service contributes to environmental sustainability

Mode Share and Ridership Target

The Transit Future Plan is designed to achieve a **ridership goal of 15 million annual passengers in 2036**; a six-fold increase from 2.3 million annual passengers in 2011. The target was created with input from the municipalities and stakeholders and was complemented by a peer review. If future population and ridership targets are realized, a **transit mode share of 8 per cent** should be achieved. This is a relatively ambitious target; however it is achievable with investment and transit supportive land use development.

Targets are a critical component of the Transit Future Plan as they are an effective way to measure progress towards achieving the goals of the plan. Achieving the target is dependent on a number of factors such as transit system growth and transit supportive land use.

The Transit Future Network

The Transit Future Network for the region, Abbotsford and Mission are comprised of five layers of transit service. Together, the different layers create a comprehensive transit network to best meet the existing and future needs of Abbotsford and Mission.

Rapid Transit

Rapid Transit service is designed to move high volumes of passengers between major destinations along key transportation corridors. Services are very frequent (15 minutes or better) and stop less often than traditional transit services. Together, investments in Rapid Transit infrastructure, technology, vehicles, and service levels greatly increase system performance. To improve travel time and reliability, Rapid Transit utilizes an exclusive or semi-exclusive right-of-way to eliminate or significantly reduce the impact of general traffic on transit vehicles. Rapid services may use high capacity transit vehicle technologies such as light rail and bus rapid transit vehicles. Other investments required along the corridor include premium transit stations, off-board ticketing, and typically corridor branding.

Frequent Transit

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

The Local Transit Network (LTN) is designed to connect neighborhoods to local destinations and to Rapid and Frequent 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, and in some cases, smaller transit vehicles can be utilized to better match passenger demand and operating conditions on local roads.

Targeted Transit

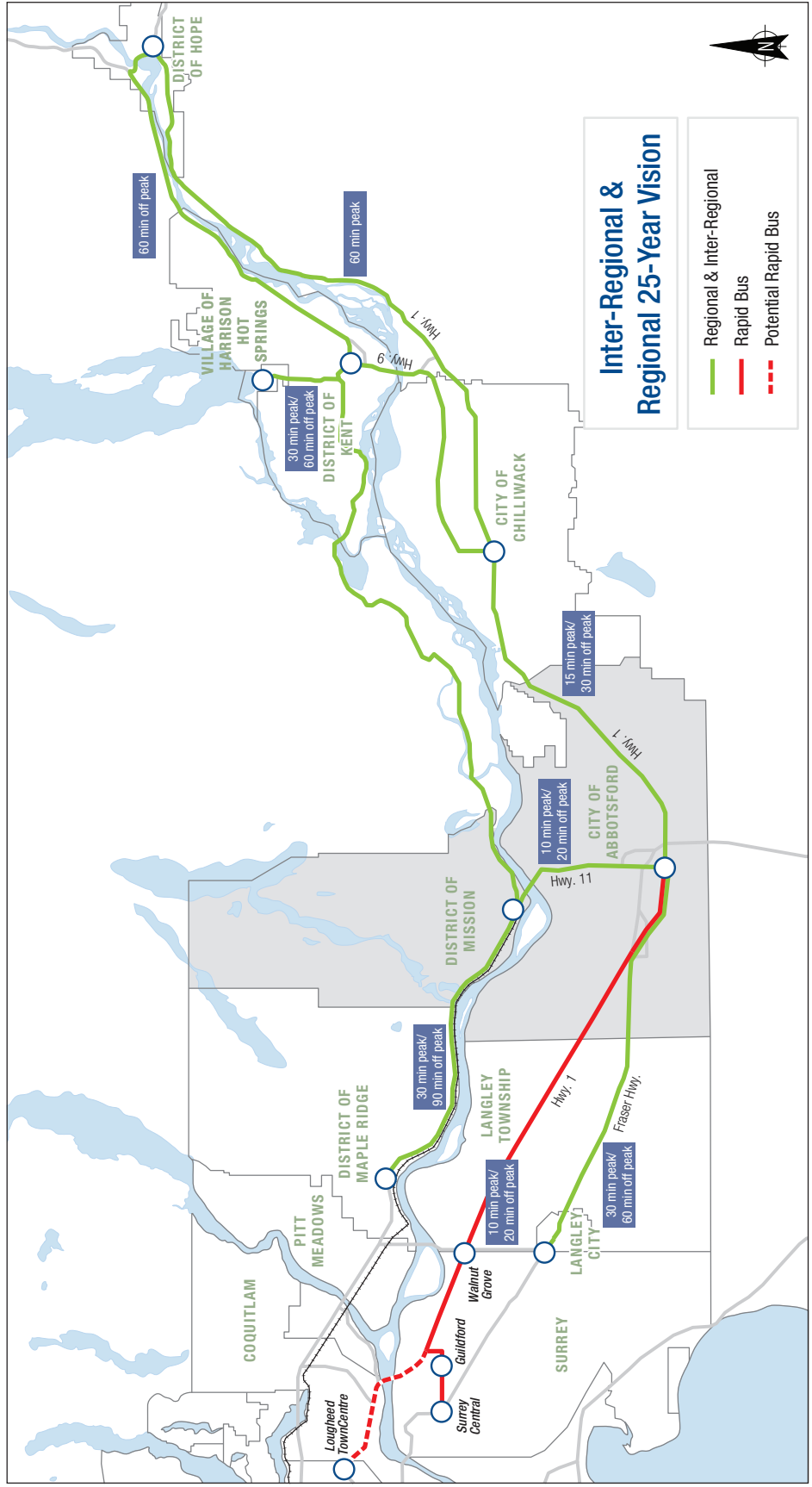
Targeted services are a collection of transit services that do not fit into the other definitions and are more focused on the specific needs of customers. These services include:

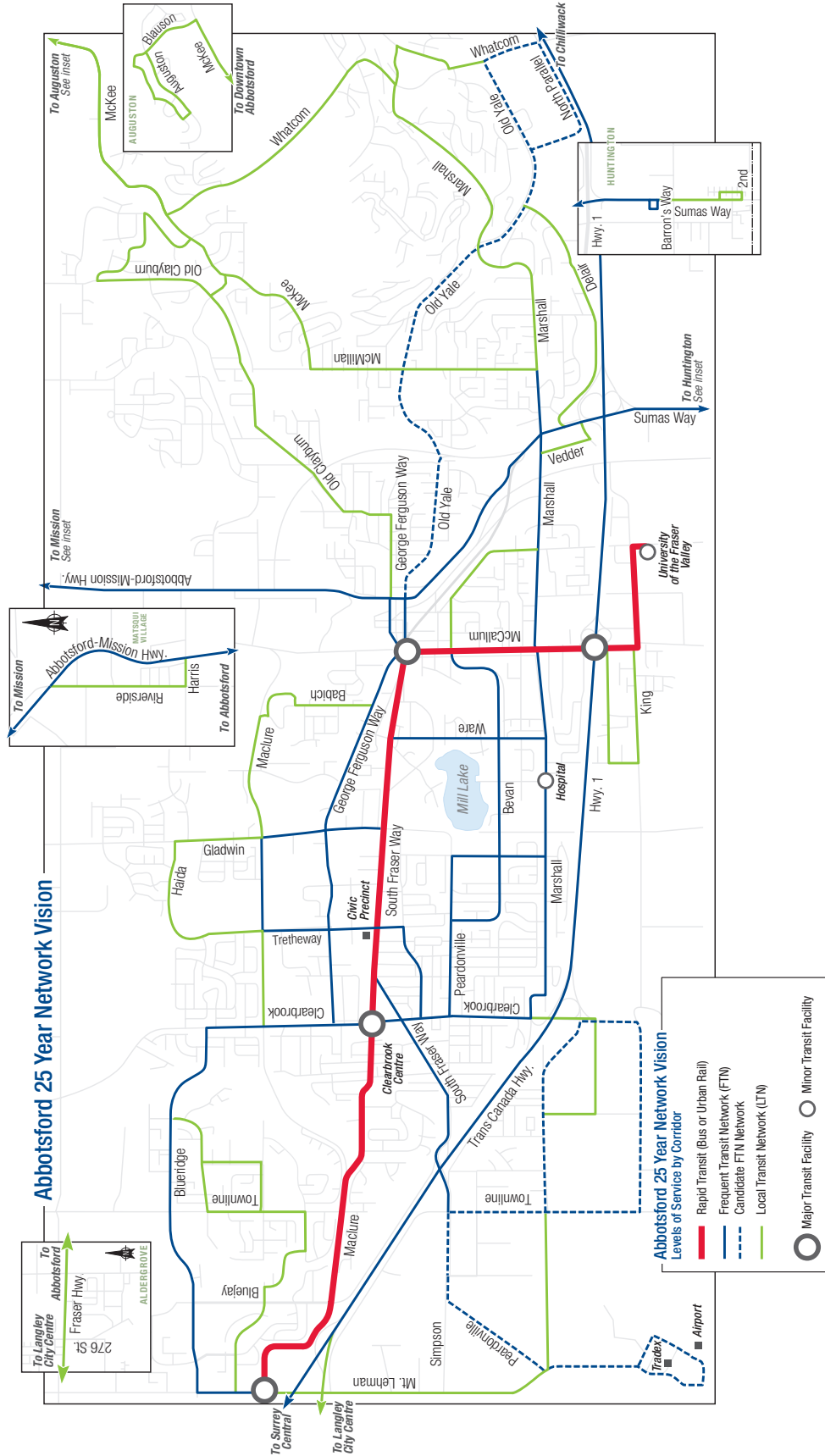
- Express service: a direct, limited stop route between destinations, usually designed for work and school commuters that share common start times and locations.
- Dial-a-Ride or para-transit: on-demand service with a predefined service area designed to provide access to transit service in low density areas that cannot support fixed-route service.
- Custom/handyDART: door-to-door services for customers unable to use the conventional service

Inter-Regional and Regional Transit

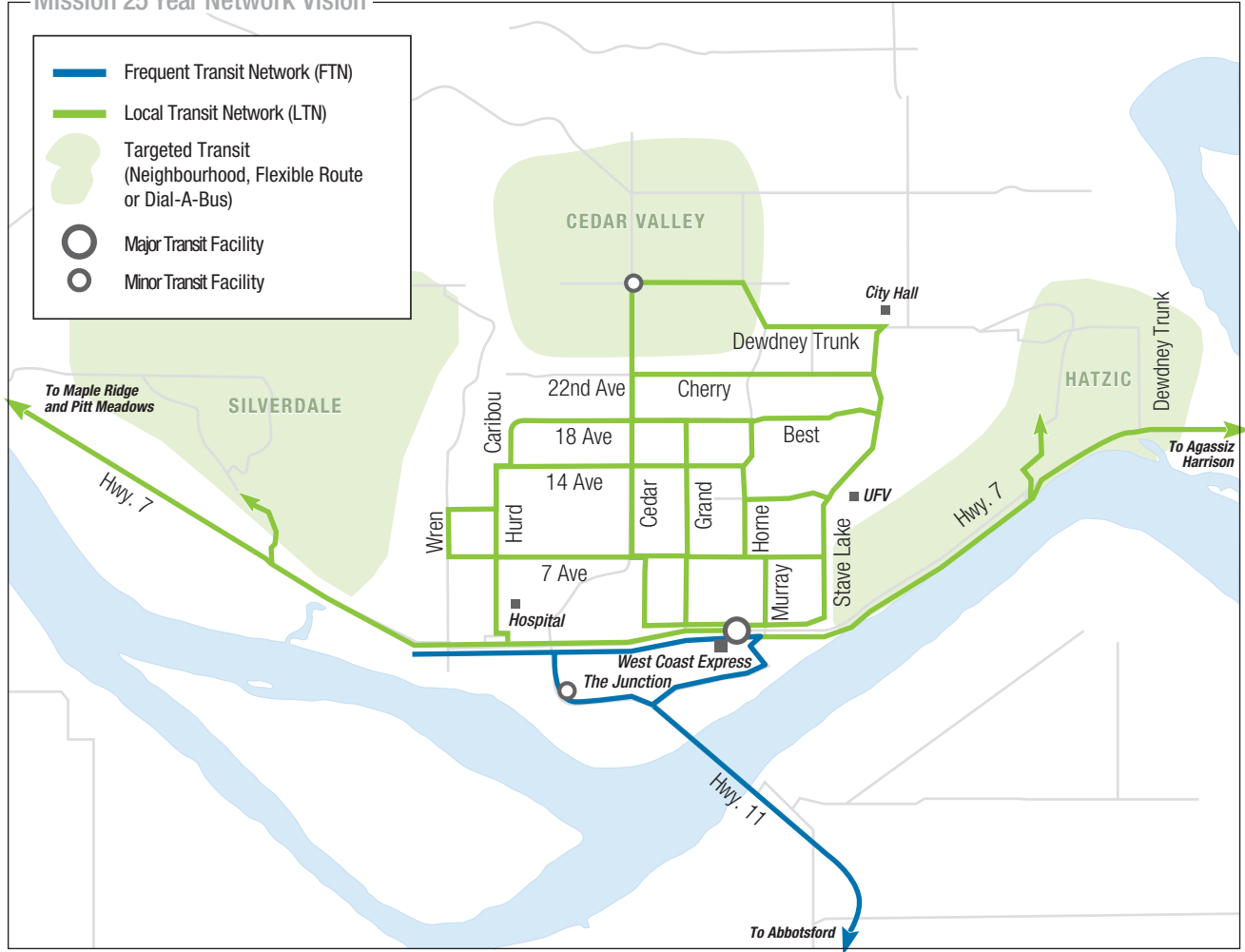
Inter-Regional service is designed to connect communities across Regional District boundaries (e.g., Abbotsford to Surrey). Regional services are designed to connect communities beyond the designated Transit Service Area, but within a Regional District (e.g., Chilliwack to Abbotsford). Both of these are point-to-point services, operating with zero or very few stops between communities, and usually travel on highways, offering a fast service that is competitive with the automobile. Due to a longer than average trip duration, amenities onboard should focus on customer comfort and other premium amenities such as wireless internet.







Mission 25 Year Network Vision



Implementation Strategy

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

Immediate Priorities

Abbotsford and Mission

Improve efficiency and reliability

- Conduct an efficiency and operational review to determine service adjustments that will address underperforming routes or route segments

Improve customer information and customer service

- Improve the functionality and increase the availability of customer information

Meet additional West Coast Express arrival and departure times

- Add trips to the Route 31 – Valley Connector, and key Mission and Abbotsford routes so passengers can transfer to the West Coast Express.

Short Term Priorities

Infrastructure

Increase Operations and Maintenance Centre capacity

- Increase the capacity to accommodate the 25-year fleet projection of 220 transit vehicles

Establish the McCallum Exchange

- Introduce a new exchange in the vicinity of McCallum and South Fraser Way in Abbotsford to facilitate the development of the Transit Future Network. Determine the role of the existing Bourquin Exchange.

Introduce the McCallum Park and Ride

- In concert with the opening of Highway 1 regional and inter-regional connections should be the introduction of a Park and Ride in Abbotsford at the McCallum interchange

Establish the Clearbrook Exchange

- Upgrade transit amenities at this high traffic intersection, including provision for Rapid line amenities

Mission Transit Exchange Review

- Conduct a review to determine the requirements for short, medium and long term time horizons for transit infrastructure in downtown Mission and at the West Coast Express station

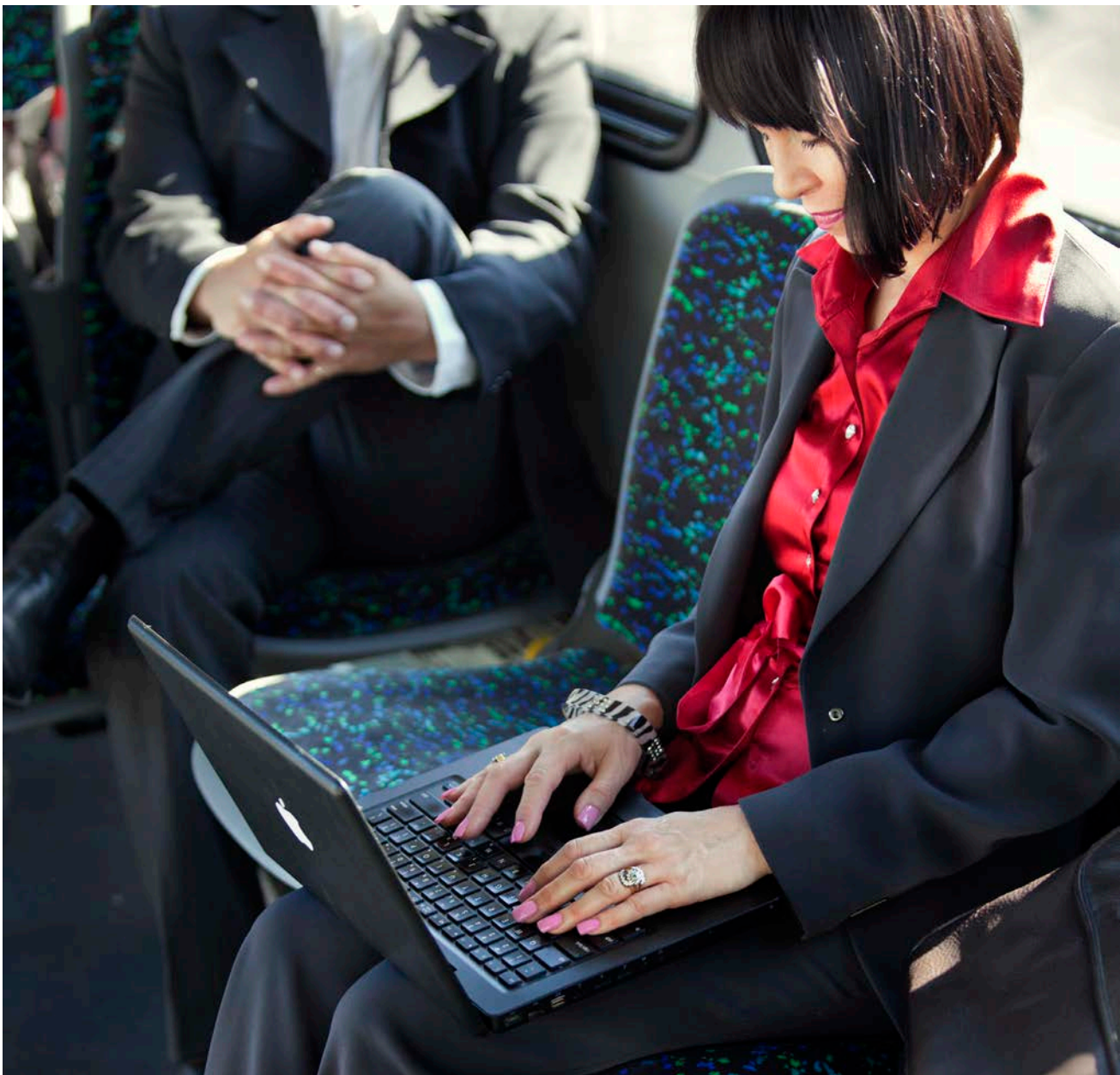
Abbotsford

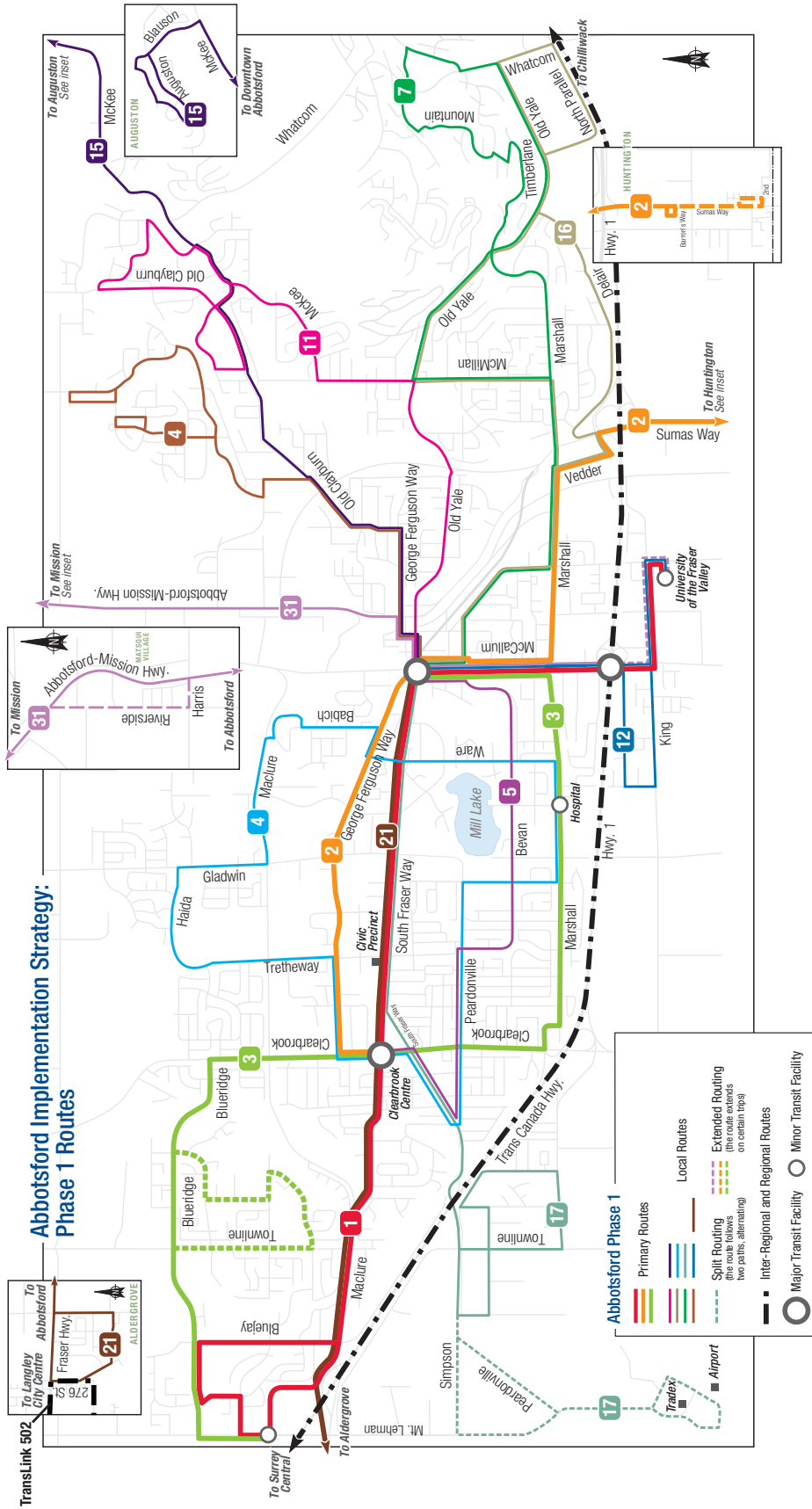
Establish the Transit Future Network structure

- Realign existing routes to form the Rapid and Frequent transit routes along the City's most dense and diverse corridors. Increase service levels where required, but focus on building the all day, every day, 15 minute frequency on the Rapid and George Ferguson corridors.

Rapid Transit Phase One

- Conduct a study to confirm the corridor, and review and analyze transportation and travel demand forecasts to better determine phasing opportunities.





Mission

Establish the Transit Future Plan network structure

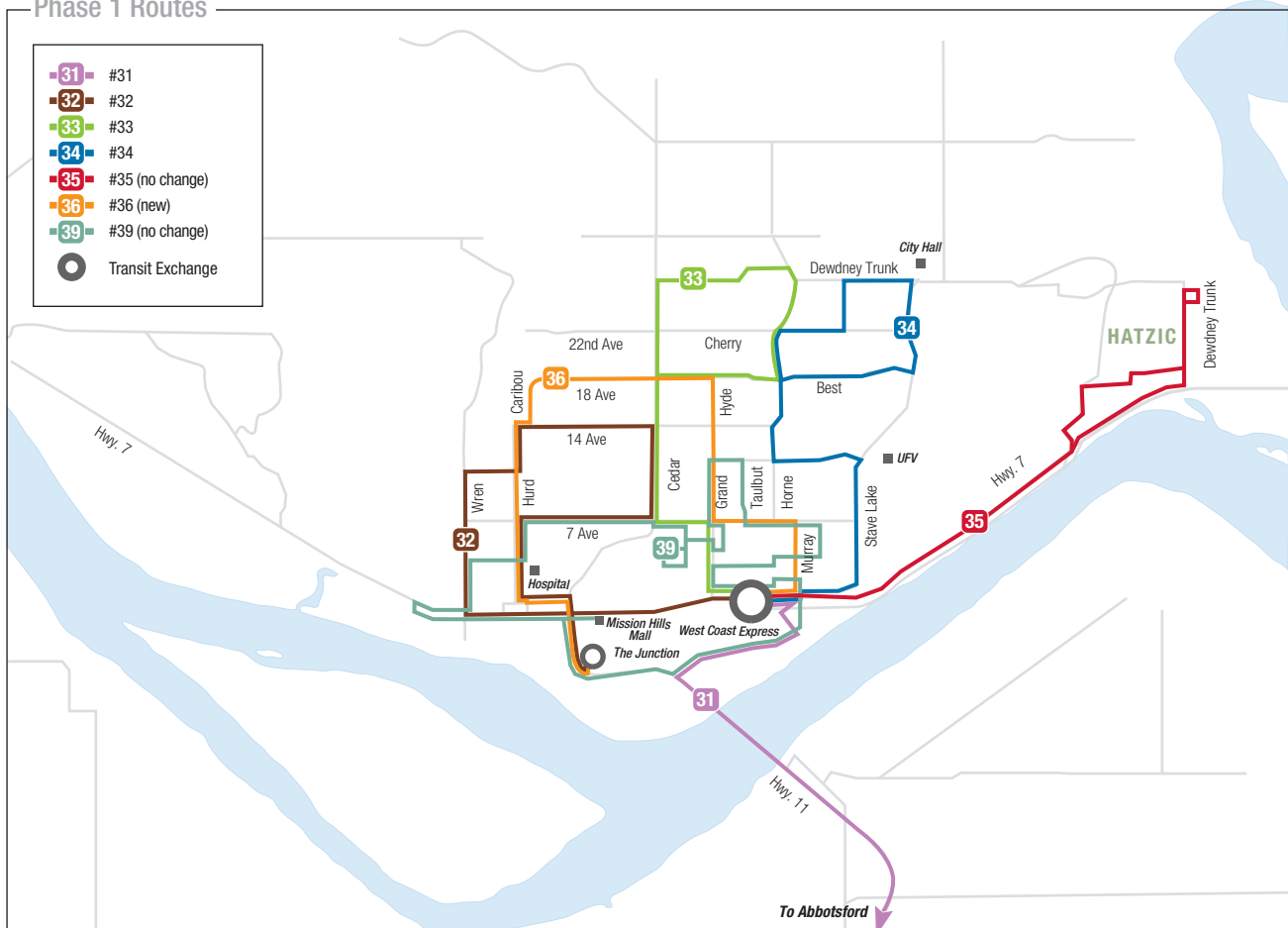
- Streamline service in Mission to replace one-way loops with bi-directional service that follows the same path every time. This change will make the system easier to understand and more dependable.

Improve transit service span

- Sunday service: Provide Sunday service on all Mission routes
- Holiday service: Provide Sunday level of service on holidays
- Evening service: Extend weekday and Saturday service until 10:30 p.m. on routes 33, 34 and 36, replacing Route 40
- Improve weekend service to Hatzic

Mission Implementation Strategy:

Phase 1 Routes



Inter-Regional and Regional Service

Introduce service connecting Abbotsford and Surrey via Highway 1

- Provide a direct connection between Abbotsford and the new Carvolth Exchange located at 202nd St and 86th Ave in Langley, BC. From Carvolth, passengers can travel by express bus to the Braid SkyTrain station, which is served by the Millennium Line.

Introduce service connecting Abbotsford and Chilliwack

- Provide a direct connection between Abbotsford and Chilliwack that focuses on the commuting and student markets.

Medium Term Priorities

Infrastructure

High Street Terminal

- Formally open the High Street terminal, which forms the West terminus of the Rapid Transit line. Early planning should include an integrated bus terminal that has priority access over the automobile and provides convenient access to amenities for transit passengers.

Identify and implement transit priority opportunities with short implementation timelines

- Corridors and intersections of concern and the appropriate transit priority measures need to be identified and then implemented. Priority should be given to the FTN and RTN corridors.

Abbotsford

Complete the Frequent Transit Network

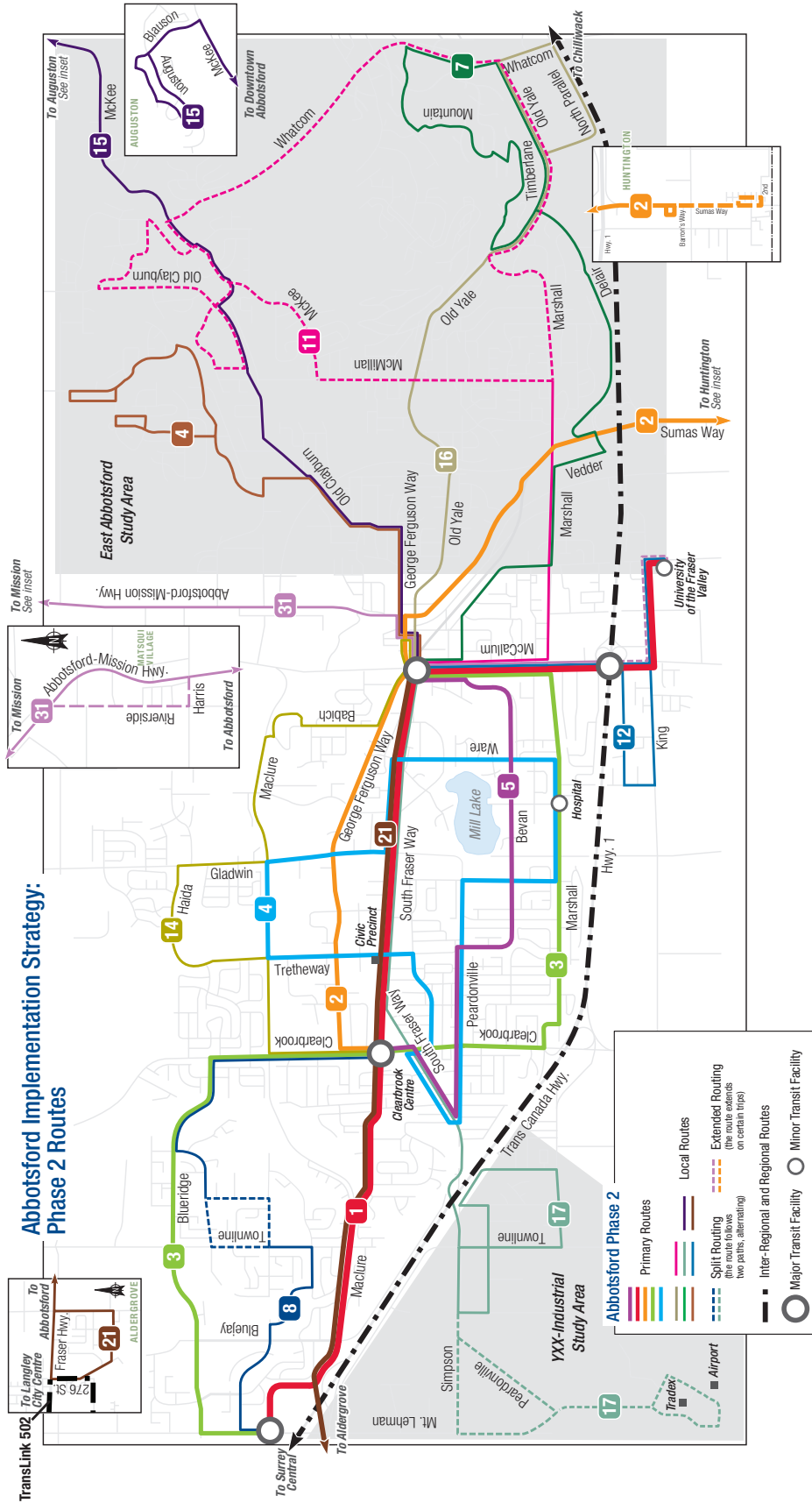
- Implement the final segments of the Frequent Transit Network (FTN) along Sumas, Gladys and Blueridge. The FTN supports Abbotsford's Official Community Plan direction to increase mixed-use density along these corridors.

Rapid Transit Phase Two

- With the introduction of the High Street Terminal, the phasing recommendations of the Rapid Transit Phase One Study can be implemented, and an official opening of the line ceremony can be held.

East Abbotsford Study

- Produce a study that will result in a transit strategy tailored to the distinct land use east of downtown Abbotsford, and that will best meet the needs of these residents.



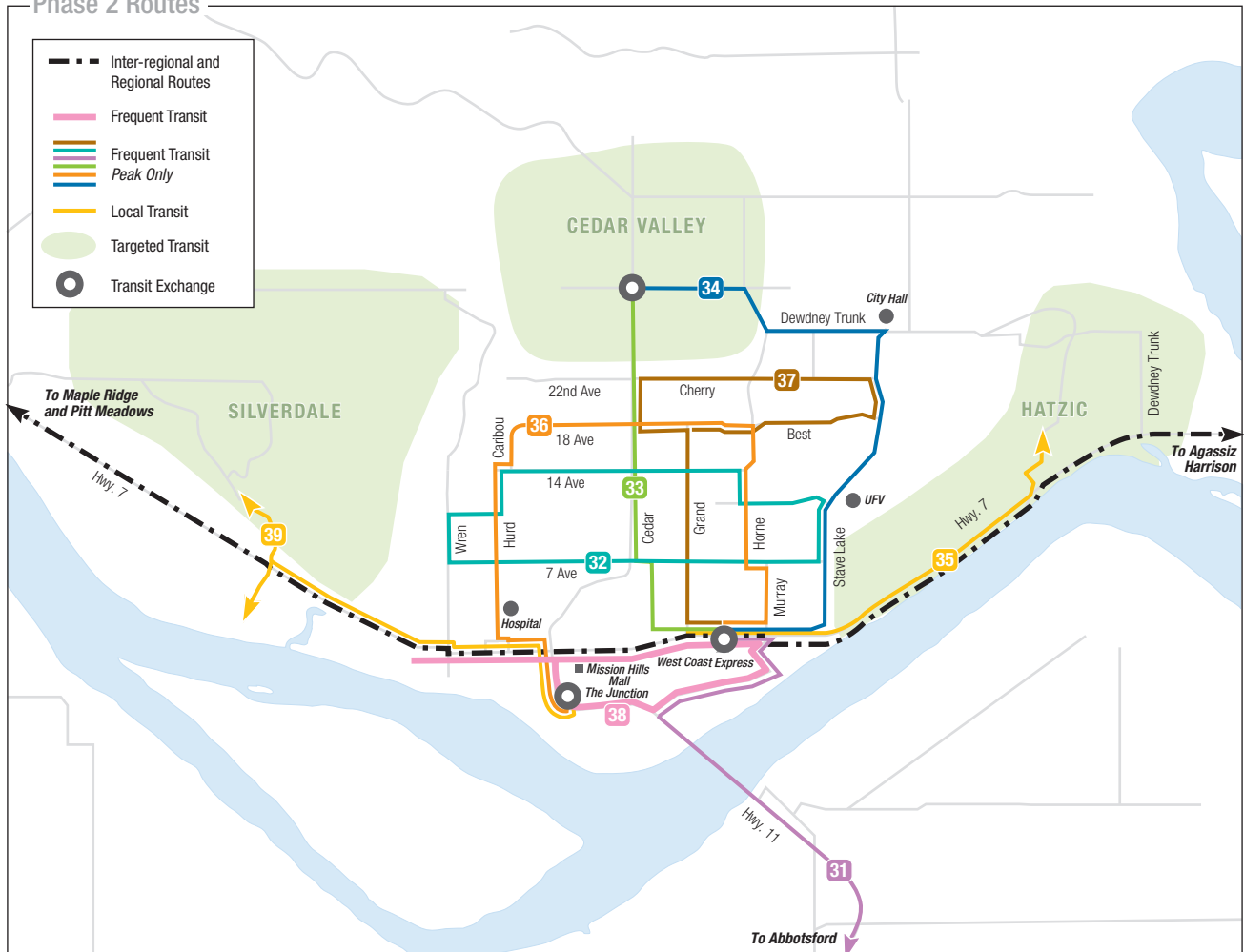
Mission

Establish the Transit Future Network structure

- As demand warrants, increase service to every 15 minutes in the peak periods and 30 minutes in the off peak periods. This will allow the routes to be realigned to form the Transit Future Network which features spontaneous travel in the peak periods and a timed-transfer.

Mission Implementation Strategy:

Phase 2 Routes



Inter-Regional and Regional Service

Mission – Maple Ridge

- Increase service between Mission and Metro Vancouver, with a focus on providing bi-directional service. Long Term Priorities

Long Term Priorities

Abbotsford

YXX – Industrial Study

- Conduct a study to determine a service plan that is tailored to the unique needs of this high growth area.

Increase service levels on FTN corridors

- Increase service to 15 minutes all day, everyday on the Frequent Transit Network, giving priority to weekdays over weekends.

Mission

Targeted Transit

- Based on the development of three key areas of growth, (Hatzic, Cedar Valley and Silverdale) determine the most appropriate type of service to effectively and efficiently serve these neighborhoods. This might include zone dial-a-ride, taxi-cab, community shuttle or fixed-route service.

Increase service

- Increase service as demand warrants on the primary routes within Mission.

Inter-Regional and Regional Service

Abbotsford – Langley via Fraser Highway

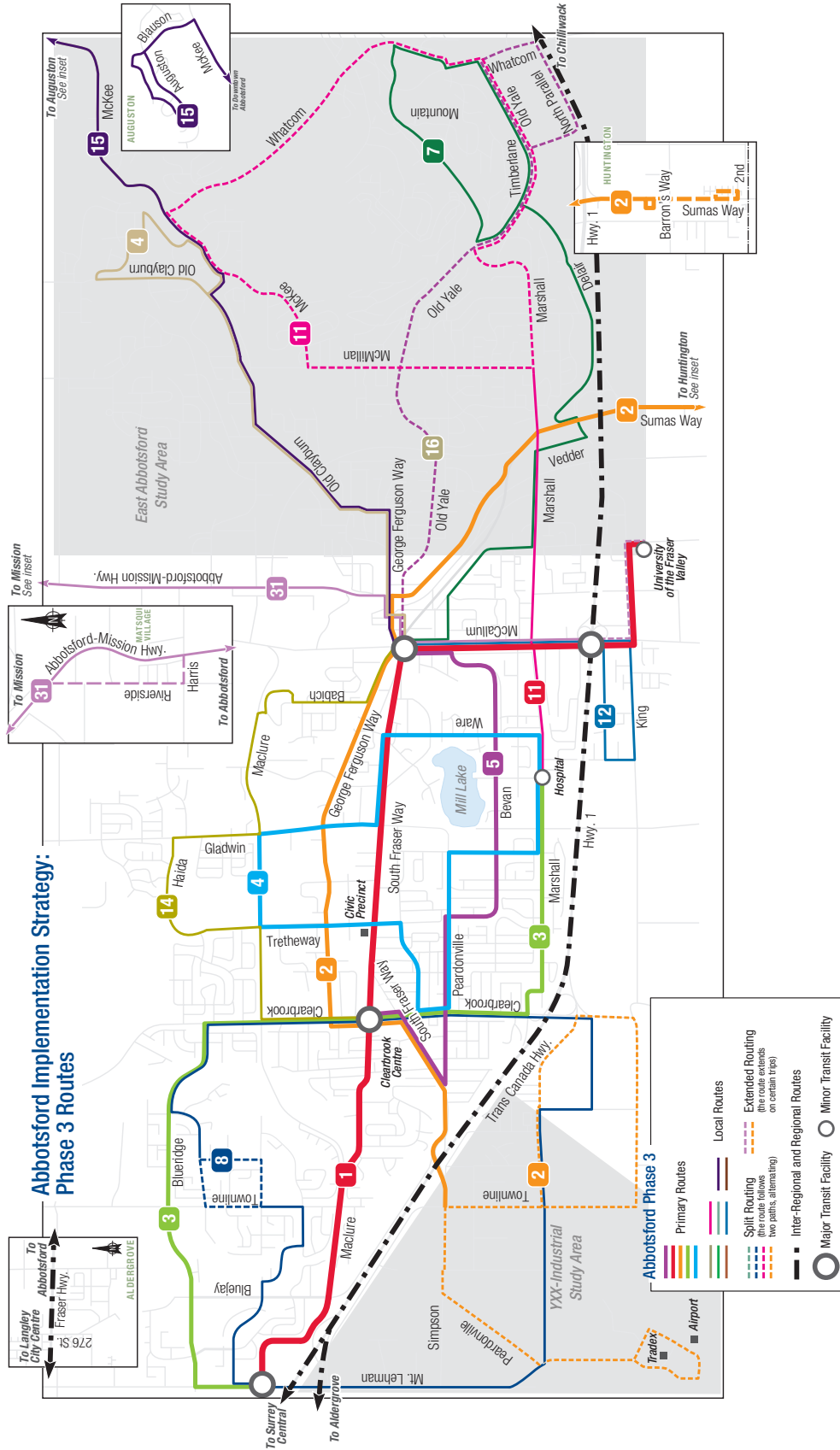
- Extend service along the Fraser Highway to serve the growing nodes of development between Abbotsford and Langley. This service will more closely resemble local service instead of express service, which will complement the Express, Rapid service along Highway 1 between Abbotsford and Metro Vancouver.

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 cost to provide service along Hwy 7 between Kent and Mission.

Ongoing Initiatives

1. Enhance Custom transit service
2. Address existing service and operational needs
3. Develop the Local Transit Network (LTN)
4. Match vehicle type to local demand
5. Improve customer information
6. Improve transit facilities
7. Make transit more accessible



Moving Forward

Funding the Plan

Meeting the mode share and ridership targets of this plan will require significant capital and operating investments in the transit system over the next 25 years. The plan calls for an increase from the existing 129,800 hours to approximately 538,500 service hours in 2036. The plan also identifies several capital investments that include:

- Expanding the transit fleet from the existing 62 vehicles to 220 vehicles
- An expanded or new operations and maintenance centre
- New or improved transit exchanges in Mission and Abbotsford
- Improvements to customer amenities at transit stops

Today, the Abbotsford – Mission system is funded through a combination of provincial funding, local property tax, passenger fares and advertising revenue. Given the significant increase in transit investment expected over the coming decades, the way in which transit is and will be funded needs to be examined. BC Transit and its funding partners will need to work together to achieve the stable and predictable funding sources beyond the existing funding mechanisms.

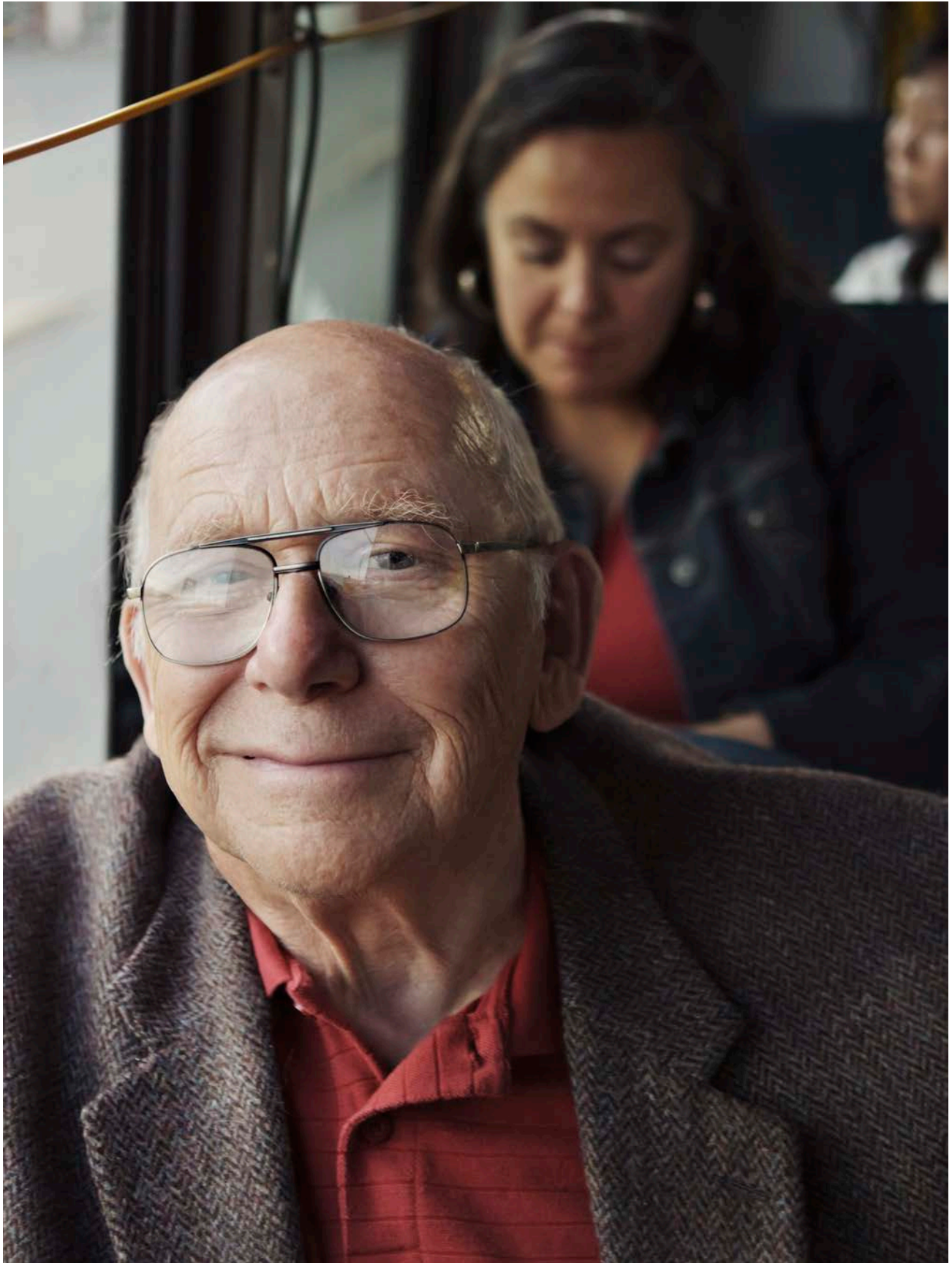
Keys to Success

To guide the plan from vision to reality will require an on-going dialogue between the Province, BC Transit, the City of Abbotsford, the District of Mission, the Fraser Valley Regional District and other local partners on transportation policy, funding and the linkage between land use and transit planning.

Moving forward, the Transit Future Plan will be used to communicate the vision and direction for transit in each community and region. Integrating this plan with the Regional Growth Strategy and local Transportation and Official Community Plans is a critical first step towards implementing the plan. Other steps include integrating the transit strategy into other municipal projects, with supporting travel demand management measures, transit oriented development and transit friendly land use practices.

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

The complete Transit Future Plan document can be found online at www.bctransit.com.



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today
- Visions and Goals
- The Future
- Implementation Strategy
- Moving Forward

Introduction

Why Do We Need a Transit Future Plan?

Transit has tremendous potential to contribute to more economically vibrant, livable, and sustainable communities. The need to realize this potential in Abbotsford and Mission is increasingly important because of factors such as climate change, population growth, an aging demographic and mobility for individuals who do not have access to a private automobile. In partnership with local governments, BC Transit has initiated the development of a Transit Future Plan for Mission and Abbotsford, and in other communities across the province to support the creation of more sustainable and livable communities. Transit Future Plans are intended to:

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

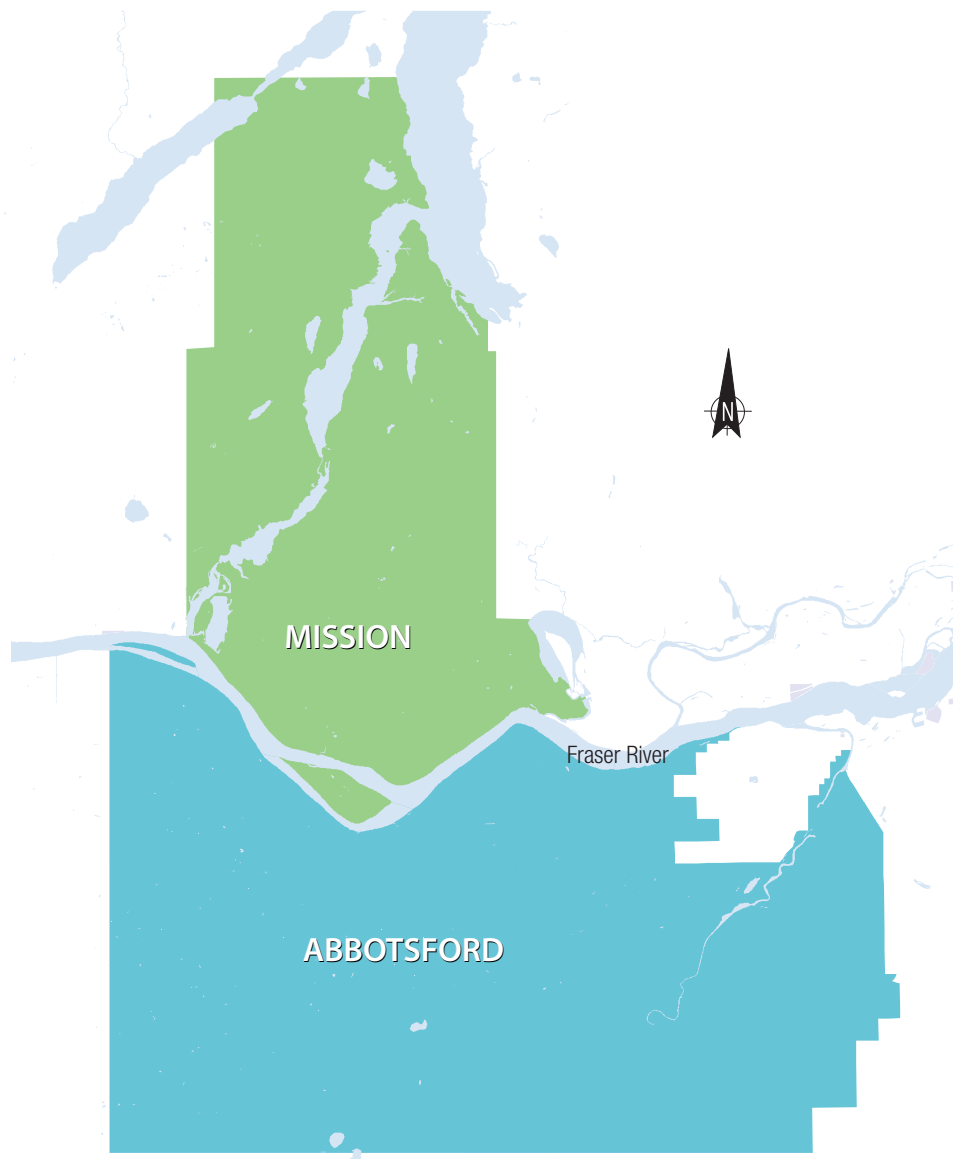
What is a Transit Future Plan?

The Abbotsford – Mission Transit Future Plan envisions the transit network 25 years from now and describes the services, infrastructure and investments that are required to achieve the vision. The plan promotes and supports planned land use in the region that will facilitate an increase in the use of transit and other sustainable modes of transportation. Although it is BC Transit's role to guide the plan from vision to reality, the intended outcomes of the plan cannot be achieved by a single agency but rather through strategic and financial partnerships between local governments, the Province of British Columbia and BC Transit. Municipal, regional and provincial planning agencies' support is pivotal to the success of the plan through strategic transit oriented development, transit friendly land use practices and travel demand management practices.

Study Area

This plan focuses on Abbotsford and Mission, which is located in the Southwestern corner of British Columbia, just east of Metro Vancouver. It also includes the surrounding electoral areas and First Nations of the Fraser Valley Regional District.

Abbotsford and Mission are separated by the Fraser River, and connected by Highway 11. Sitting directly south of Mission, Abbotsford is more than three times the size of Mission and in terms of both geography and population both communities provide opportunity for jobs, recreation, shopping and commercial opportunities. However, in keeping with its size, the larger medical, educational and employment centres are within Abbotsford, while Mission has the region's passenger rail link to Metro Vancouver via the West Coast Express.



Linkages to Other Plans

The Transit Future Plan is influenced by the following Provincial, BC Transit and local planning initiatives:

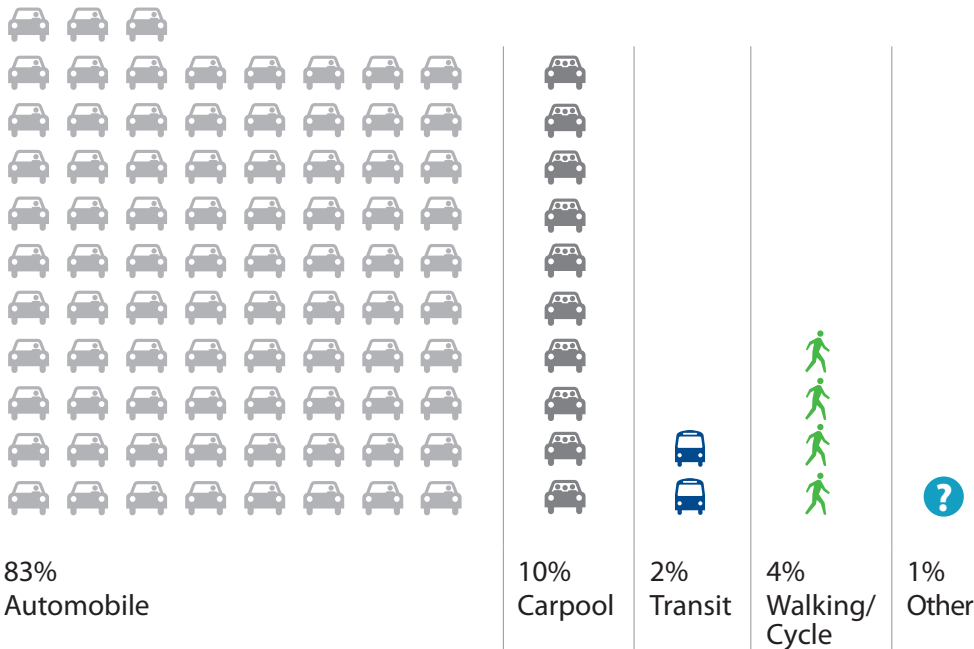
Provincial Transit Plan (2008)

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

The *Provincial Transit Plan* sets a number of measurable targets such as:

- Reducing greenhouse gas emissions and air contaminants from cars by 4.7 million tonnes by 2020
- Doubling transit ridership in BC to over 400 million trips a year by 2020

Central Fraser Valley Commuter Modes



Source: Statistics Canada, 2006

BC Transit 2030 Strategic Plan (2010)

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

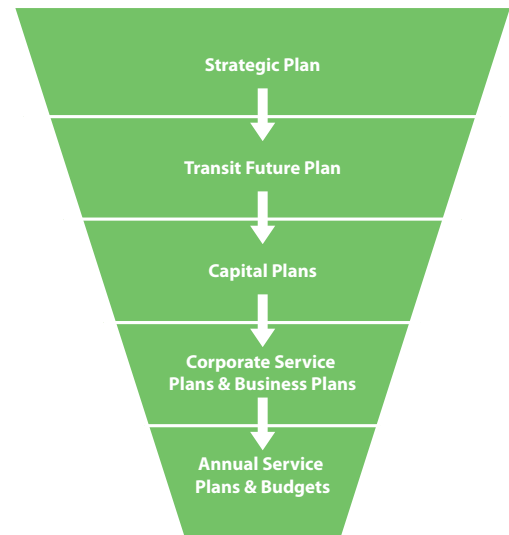
The Transit Future Plan supports key initiatives in *BC Transit's Strategic Plan*. Specifically this plan contributes to the following Strategic Plan priorities:

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

Transit Future Plans developed for each community provide guidance to future BC Transit Capital Plans, Corporate Service Plans, Business Plans, three year Service Plans, Annual Service Plans and budgeting processes.

Integration with Mission and Abbotsford Planning Initiatives

The integration of transportation and land use planning at the municipal, regional and provincial level is one of the most important considerations in the design of the Transit Future Plan. The plan is specifically designed to support both municipalities' Official Community Plans, Transportation and Neighborhood Development plans, as well as the Fraser Valley Regional District's Regional Growth Strategy. More details about these plans can be found in the following Setting the Scene section.



Participation

Development of the Transit Future Plan included feedback received from the community and key stakeholders, in addition to many hours of hard work and dedication by local staff from the City of Abbotsford, the District of Mission and the Fraser Valley Regional District. Their contributions ensured this plan best reflects the needs and desires of the region. The following section describes the public participation process and summarizes the input and feedback received.

Local Government Participation

Frequent and direct participation with local government and regional district staff was paramount to the creation of the Transit Future Plan. Their involvement ensured alignment with local planning goals and future land use development. Serving as the Steering Committee for the planning process, the Mission-Abbotsford Transit Committee (MATC) is composed of three members of Council from Abbotsford and three from Mission. The Committee was provided with monthly updates and gave direction on major components of the plan. The Mission and Abbotsford Councils and the Regional District Board were also updated at major milestones, including:

- Introduction to the planning process and outcomes
- Draft long range network vision and goals
- Transit system data analysis results
- Draft short term implementation strategy
- Final draft Transit Future Plan



Community Participation

Consultation with the broader community was conducted in two phases at key milestones to ensure the final plan reflected the needs and priorities of the community. These phases were coordinated with the consultation on the Chilliwack Area Transit Future Plan in recognition of regional travel patterns. Opportunities to provide input were numerous and events were held in various locations including shopping malls, recreation centres and the University. Participants could visit the Transit Future bus, complete online or written surveys, play the Transit Future game, or share their opinions with BC Transit and local staff.

The two-phased consultation strategy sought to achieve the following goals:

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

Phase One

The first phase of public consultation focused on getting feedback on The Strategic Review's long range visions (regional and local). More specifically, participants were asked to provide their top request for transit investment to inform the first steps of the implementation strategy. Phase one also educated the public on the direct connection between land use and transit. Comments about the existing transit system were also welcomed.

Quick Facts	
UFV open house & focus group	50
UFV survey responses	200
Transit Future bus participants	230
Online survey "The Game Plan" participants	190
Transit Future bus comments received	250
Number of open houses	11

Recognizing that less than two per cent of the population in Abbotsford and Mission take transit at present, phase one made a concentrated effort to reach riders and non-riders alike.

University of Fraser Valley Survey

The survey garnered over 200 responses primarily from students, but also from staff. Two-thirds of respondents live in Abbotsford or Mission. The key findings from their responses are provided below:

- Abbotsford and Mission residents travel most often to the Abbotsford University of the Fraser Valley campus (an average of 3.9 and 3.7 times per week, respectively), and second most often to the Chilliwack campus (an average of 2.3 times per week).
- 32 per cent of Abbotsford residents and 26 per cent of Mission residents travel to campus by bus. 54 per cent of Abbotsford residents and 71 per cent of Mission residents travel to campus by car. 14 per cent of Abbotsford residents and 3 per cent of Mission residents travel to campus by walking or biking.
- The length of the transit trip and indirect routing are the top two reasons given for not taking transit to campus.
- 77 per cent of Abbotsford and Mission students make full or partial use of the U-Pass. The majority of comments showed that they make use of the U-PASS benefit to the recreation centres.
- The most important transit improvements, from a select list are summarized below in priority order:
 - » Faster trips to/from the University of the Fraser Valley
 - » Longer hours of service and service to more areas
 - » Abbotsford – Chilliwack connection
 - » Abbotsford – Surrey (TransLink) connection



Transit Future Bus

In April 2011, eleven open houses were held: three in Mission and eight 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 more than 250 responses gathered through the interactive displays on the Transit Future Bus and other concurrent open houses. Nearly three-quarters of all comments were service requests. The top three themes for service requests were:

1. Introduce regional transit service that is direct and fast to Metro Vancouver (over half of all service requests)
2. Increase service frequency and service span (nearly one-third of all service requests)
3. Introduce regional transit service connecting Chilliwack to Abbotsford, with a focus on connecting the University of the Fraser Valley campuses (13 per cent of service related requests)

Comments were also received on non-service related topics, and include:

- Connecting transit design and land use, and realigning the existing transit system structure
- Improvements to transit amenities
- Funding, cost, fares
- Improvements to reliability and on-time performance



The Game Plan

The Game Plan, an online interactive and informative planning game, attracted more than 200 participants. The Game invited participants to prioritize responses to four questions about transit. The survey responses were analyzed based on the residential location of each response to gain a more precise picture of the needs of Abbotsford and Mission residents. The questions and responses in priority order are provided below for both the entire Fraser Valley, and also for respondents residing in Abbotsford or Mission. The priorities for future investment in service vary. Abbotsford and Mission residents prioritized service between the two communities, whereas the greater Fraser Valley prioritized service between Abbotsford and Chilliwack.

The Game Plan: Survey results

Question	Fraser Valley Prioritized Response	Abbotsford – Mission Prioritized Response
Why invest in transit?	Livable communities Moving more people Economic growth Environment	Moving more people Livable communities Environment Economic growth
Where should we invest??	Abbotsford – Chilliwack Chilliwack local service Abbotsford local service Chilliwack – Agassiz-Harrison Hope – Chilliwack Mission – Abbotsford Hope – Abbotsford Mission – Chilliwack Mission local service	Mission – Abbotsford Abbotsford – Chilliwack (tie) Abbotsford local service (tie) Mission local service Mission – Chilliwack Hope – Abbotsford Chilliwack local Chilliwack – Agassiz-Harrison Hope - Chilliwack
Improve customer amenities.	Safety and security Easy payment options Real-time information Stop and station amenities	Safety and security Real-time information Easy payment options Stop and station amenities
How should we pay for transit?	Provincial funding Business revenue Passenger fares Community pass Local gas tax Vehicle Tax Parking tax Property tax Road tolls	Provincial funding Community pass Business revenue Passenger fares Local gas tax Property tax Parking tax Vehicle tax Road tolls

Phase Two

The second phase of the consultation program presented community stakeholders with the draft implementation strategy for inter-regional and regional services. Also presented in April 2012 were short-term, medium-term, and long-term plans for transit in Abbotsford and Mission. In total, approximately 375 people attended seven open houses. Residents also had the option of providing feedback through written and online surveys.

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 support for:

- Improved service to/from Metro Vancouver
- A new Chilliwack-Abbotsford connection
- Abbotsford Rapid Transit line
- More frequency and direct routes



Setting the Scene

Population growth, demographic characteristics, land use patterns, and travel patterns are key factors in planning a successful transit network. To develop the Transit Future Vision, BC Transit analyzed both existing and future trends in demographics, land use, and transportation. The subsequent sections contain highlights of this analysis by focusing first on the Regional District and then on Abbotsford and Mission.

Population and Demographics

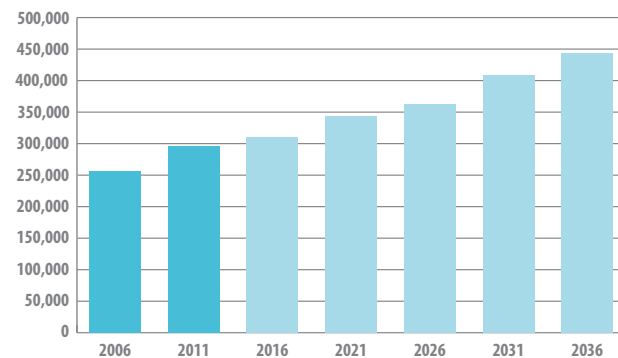
Regional Population and Demographics

The Fraser Valley Regional District (FVRD) is home to almost 300,000 people, and has experienced a 1.5 per cent increase in population per year between 2006 and 2011. This trend is projected to continue, growing approximately 1.6 per cent per year over the next 25 years. This will result in a FVRD population increase from around 300,000 in 2011 to almost 440,000 in 2036.

Most of the Region's population and employment is concentrated in the urban boundaries of three municipalities.

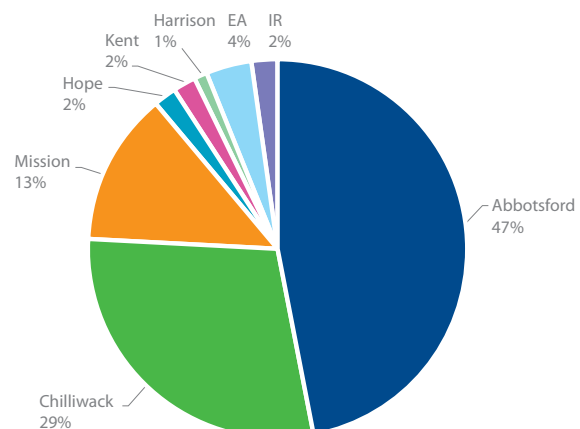
The FVRD is comprised of six municipalities and seven unincorporated areas. Abbotsford, Chilliwack and Mission support approximately 90 per cent of the region's population and employment. In fact, the City of Abbotsford is home to almost half the region's population. Chilliwack and Mission contain the majority of the remaining residents and jobs, with small population and employment areas located in Hope, Kent, Harrison, and the unincorporated areas.

Fraser Valley Regional District Population



Source: FVRD Draft Municipal Population Estimates and Projections (September 2012)

Population by Municipality



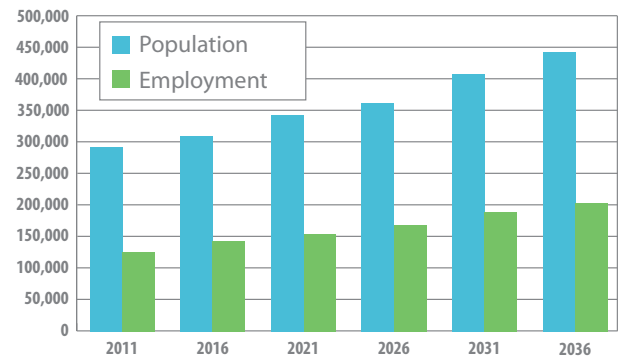
Source: FVRD Draft Municipal Population Estimates and Projections (September 2012)

Employment is expected to grow faster than population, improving the ratio of jobs to people.

While population in the Fraser Valley is expected to grow by 50 per cent, employment is expected to increase by almost 60 per cent, adding 74,000 new jobs over the next 25 years. Following the population trends, 90 per cent of the growth will be concentrated in Abbotsford, Chilliwack and Mission.

As the number of jobs per person increases in a community, the amount of people working and living in the same community may increase. Creating a vibrant local transit network in each community that is supported by strong regional connections will help increase the number of trips taken by transit.

Fraser Valley Regional District Population and Employment Forecast (2011 - 2036)



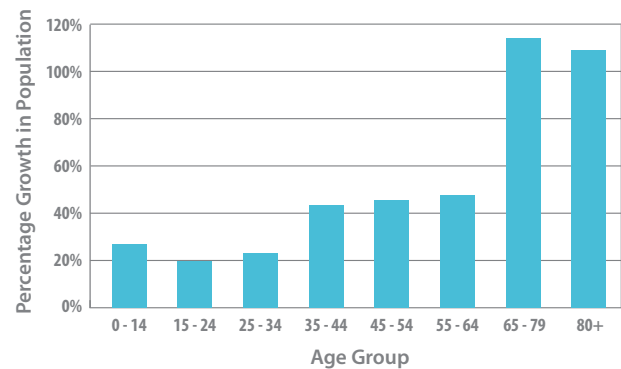
Population Distribution by Age

Over the next 25 years, the number of people over the age of 65 is expected to double.

Seniors and youth are already key target markets for transit in the FVRD and these markets are expected to grow over time. Seniors rely on transit and other public services for travel as they age and are no longer able to drive. Like most of North America, FVRD is expecting an increase in the number of seniors as the baby boomers age, resulting in a doubling of those over 65 years by 2036.

At the same time, the Fraser Valley will be home to an increasing number of young families and youth will continue to be the largest population cohort within the Region. Transit can be especially important for early teens and adolescents who cannot drive but may be able to use transit to travel to school and for recreational activities. The graph below illustrates the age cohorts that will experience the most significant growth over the next 25 years.

Fraser Valley Regional District Population Growth by Age Group (2011 - 2036)

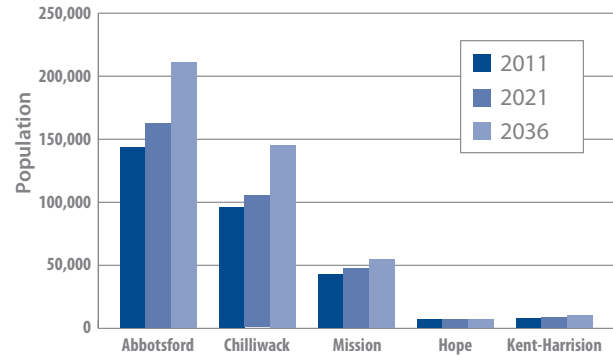


Source: BC Stats P.E.O.P.L.E. 36 (Sept. 2011)

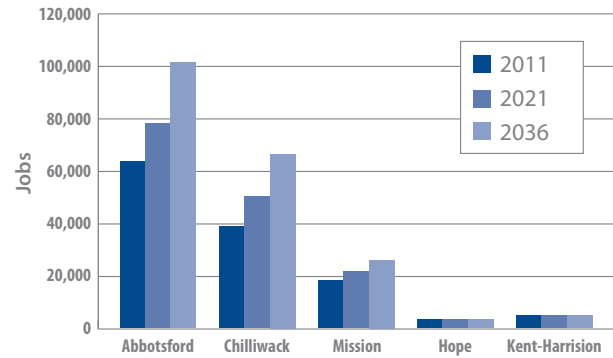
Population Distribution by Area

Population distribution and density have a significant impact on transit system performance. Region-wide, an additional 140,500 people and 74,000 jobs are projected. Abbotsford is forecasted to remain the major center within the Fraser Valley, absorbing over 50 per cent of the population and employment growth. Chilliwack is projected to see about 36 per cent of the growth. Focusing this growth in mixed use and dense nodes or corridors will support higher levels of transit service. The graphs that follow show how the population and employment of the region are distributed among the municipalities now, and how they will be in the mid-term and long-term.

Population Projections by Municipality



Employment Projections by Municipality



Source: FVRD Population Projections by Local Health Area Boundaries

Population and Demographic Challenges

Expanding service to meet the needs of the growing population and work force.

Population and employment in the FVRD is expected to grow more quickly than in the past and employment is expected to grow more quickly than population. With the number of people working and living in the same community increasing, transit must grow to serve the growing market. Investment in transit will be needed to keep pace with rapid growth and shifting demographics within the urban areas.

Additional pressure on Custom and accessible transit service

As the number of elderly people in the region increases, custom transit and specialized services will be expected to expand to provide more neighbourhood oriented transit to meet the needs of seniors who may have mobility limitations.

An aging population will continue to shift the travel patterns and needs of communities and design of transit.

With the region’s aging demographics, some of the traditionally strong transit customer groups are changing. 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..

Serving diverse groups with different needs and expectations.

There are a number of key markets within Abbotsford and Mission, including a growing number of seniors, work trips for commuters (in Abbotsford, across the FVRD, and in to Greater Vancouver), school trips for the University of the Fraser Valley students, and a growing number of youth. Each of these markets has special needs and expectations for transit. To grow ridership in each market sector will require special consideration of these needs.

Land Use

A successful transit system must be developed with an understanding of future land use plans and transit-supportive policies. The FVRD's Regional Growth Strategy sets the long term vision for the entire region. Abbotsford and Mission have Official Community Plans (OCPs) which summarize the communities' visions for the future, govern local land use, and outline strategies and objectives to achieve the vision. This section summarizes existing and future land use plans that are relevant to transit.

Regional Land Use

Regional aspirations are for a connected network of vibrant, distinct and sustainable communities.

The Regional Growth Strategy (RGS) recognizes the separation between communities and builds on the need for stronger connectivity in order to support commitments toward concentrated growth within urban boundaries. Improved inter-regional and regional transit connections will help achieve and support the following goals:

- Increase transportation choice and reduce dependency on the single-occupant vehicle
- Discourage non-contiguous development within Urban Growth Boundaries
- Support opportunities for residents to live and work in the same community or region
- Protect air quality

Population and employment growth in the region is predominantly concentrated in the urban boundaries of Abbotsford, Mission and Chilliwack.

Consistent with the Regional Growth Strategy, population and employment growth is planned within the urban boundaries of the three largest municipalities: Abbotsford, Chilliwack and Mission. Growth in the FVRD is influenced by the Agricultural Land Reserve, which restricts most growth to within the urban boundaries. The concentration of population and employment within urban boundaries will enhance long-term transit markets in the Fraser Valley and foster the development of transit supportive land use.

Abbotsford Land Use

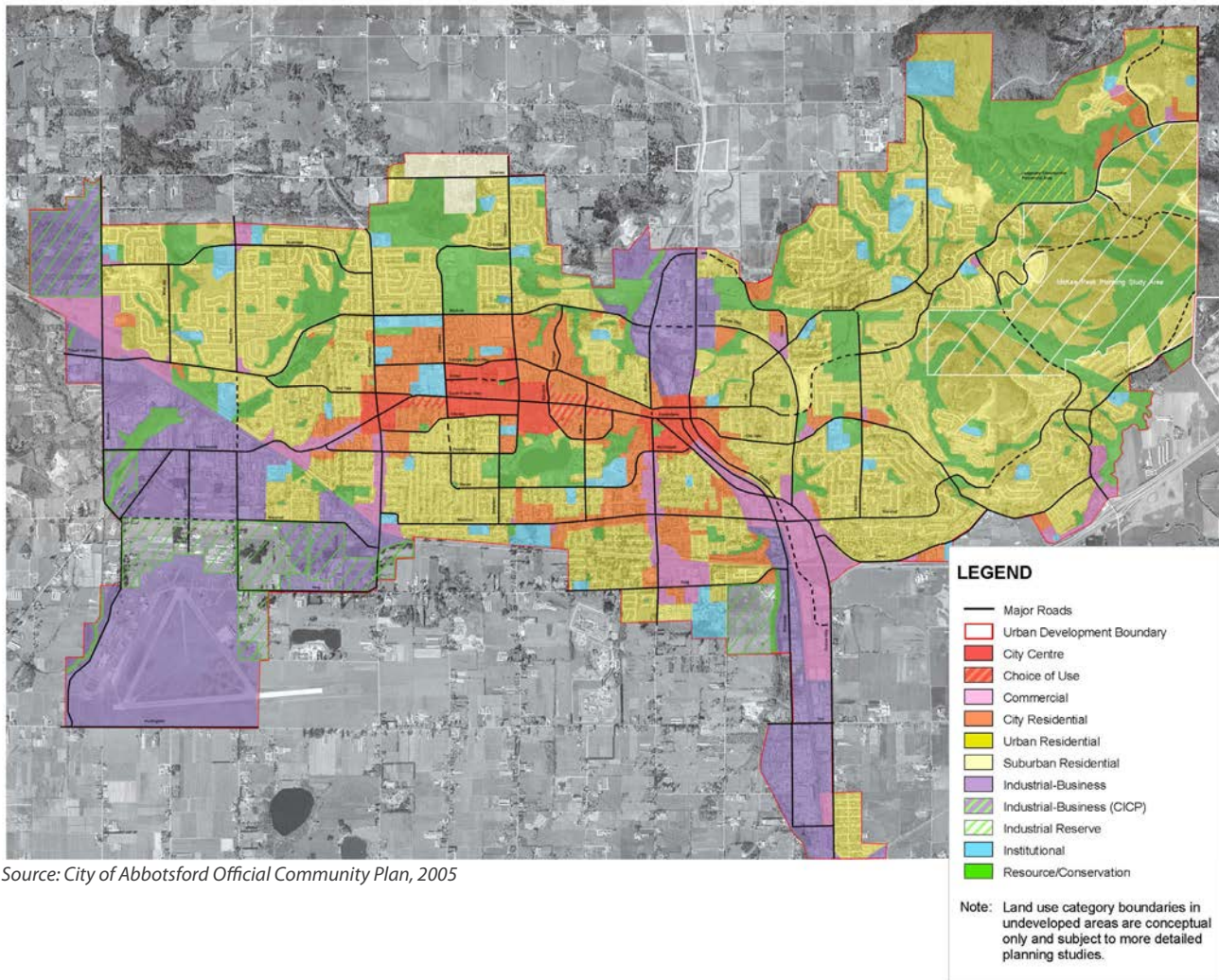
The population of Abbotsford is projected to increase by almost 50 per cent over the next 25 years, with much of that to occur in targeted growth areas.

The City of Abbotsford already has some higher density population and employment centres. Future plans continue to accommodate growth within the existing urban boundaries, with the Central and Townline Areas, Straiton / McKee, and Lower Sumas expecting high population growth. Existing population densities within central Abbotsford are typically in the range of 30 - 70 people per hectare. In the future, the downtown area is expected to see population densities exceeding 70 people per hectare through densification.

Much of the growth in Abbotsford is planned for several major corridors, creating mixed-use, dense development that supports transit use.

Abbotsford's Future Land Use Map (2005 OCP) depicts concentrated, mixed-use development along South Fraser Way and George Ferguson Way as illustrated below. Pockets of 'City Residential' development also occur along Marshall and McCallum. Primary industrial and commercial designated corridors are Sumas Way, McCallum, Clearbrook, and a large area south of Highway 1 to the west of Clearbrook, which includes the airport.

Abbotsford Future Land Use



Source: City of Abbotsford Official Community Plan, 2005

In an effort to guide planned growth, Abbotsford's Official Community Plan also includes a number of transit supportive strategies, objectives and policies.

One of Abbotsford's five strategies outlined in the OCP is "making better connections." Many of the City's objectives will result in land use and policy directions that improve the effectiveness and efficiency of transit. Key objectives that complement the Transit Future Plan are:

- Accelerate Transit Oriented Development (TOD) by supporting highest densities and density bonusing along primary transit corridors (South Fraser Way and McCallum Rd)
- Develop transit that supports the OCP land use vision and stimulates economic development
- Identify areas for infill development along transit serviced commercial streets near the City Core
- Concentrate higher-density residential and employment areas within walking distance of transit routes
- Require developments on transit corridors to provide public realm areas for pedestrians, cyclists and transit riders

Achieving the ridership targets set forth in this plan will help achieve the City's GHG reduction target for the transportation sector of 20 per cent below the 2007 City inventory.



Mission Land Use

Population in Mission is expected to grow by almost 40 per cent over the next 25 years, while employment is expected to grow by almost 50 per cent in the same time period. This will help create a denser community with increased opportunities to live and work in Mission.

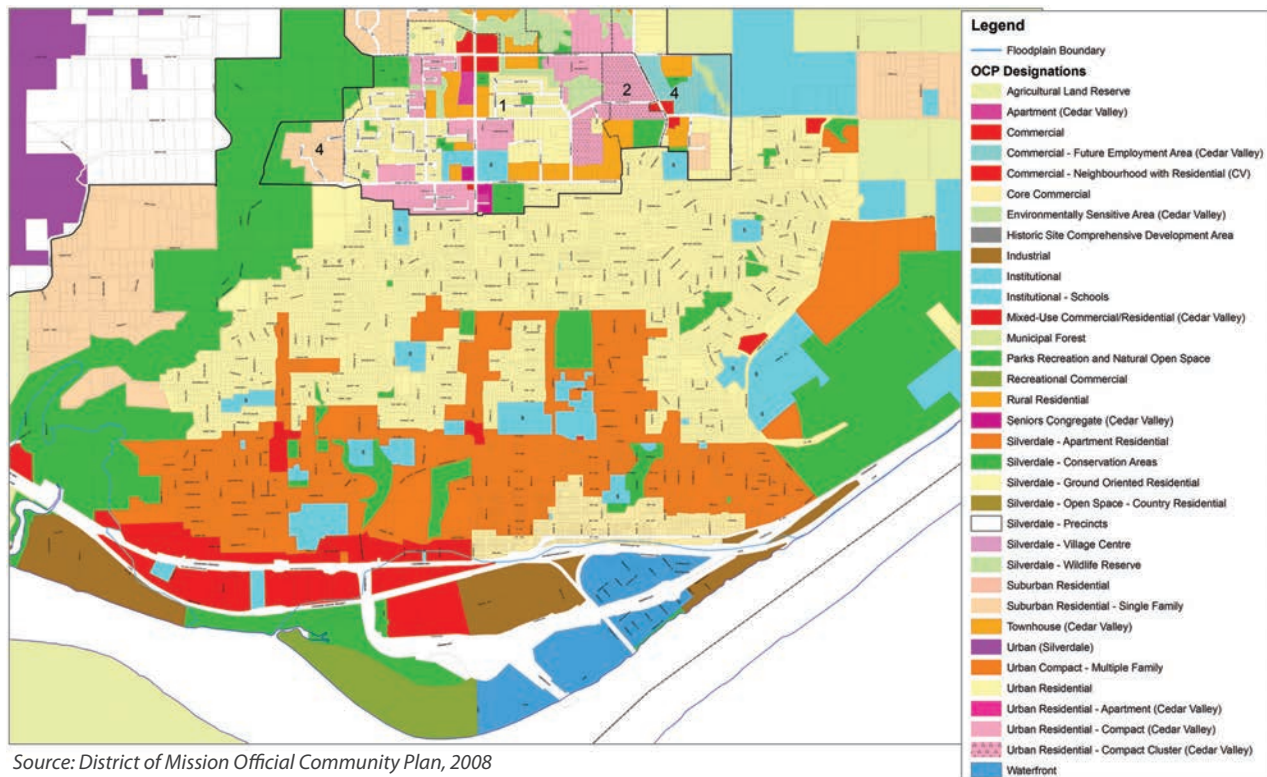
The population density within the urbanized area of Mission is expected to increase from around 20 – 30 people per hectare to 30 – 50 people per hectare. This increase in population, contained within existing urban boundaries, will bolster the relationship between land use and transit service. Growth in employment will mean that even more residents of Mission will be able to work and live in the same community, reducing trip distances and making high quality community transit service increasingly important.

Mission is planning both redevelopment of existing neighbourhoods and development of new, complete communities. Both provide an opportunity to create transit supportive land uses.

The District of Mission has identified the Downtown and Waterfront areas as having high potential for redevelopment and has planned new communities in Cedar Valley and Silverdale. The Future Land Use Map for the Urban/Infill Area presents a defined commercial centre for the District located in its historic downtown core and along Highway 7.

Higher density residential development is concentrated along the north-south corridors of Horne, Taulbut, Grand, Cedar and Hurd with the remaining community composition north of 7th Avenue being urban residential, defined as single family residential housing. The higher density corridors provide good opportunities for transit service.

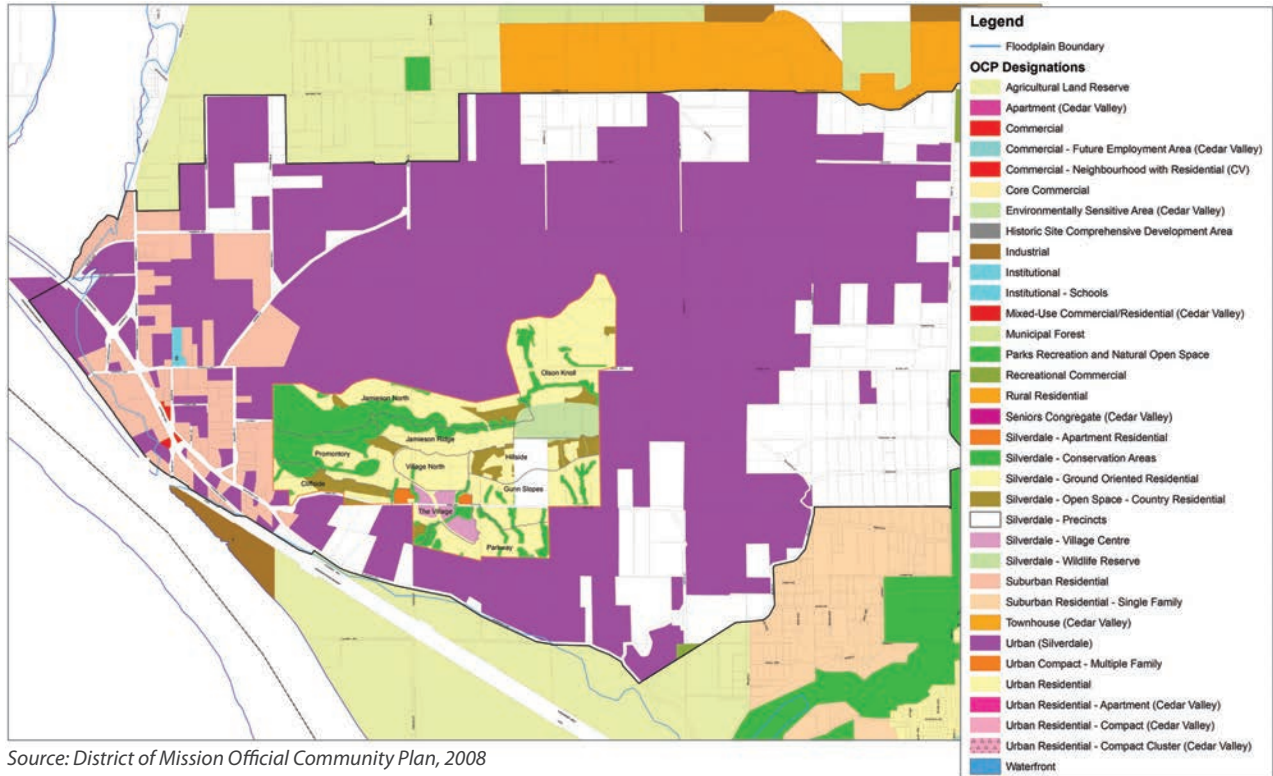
Mission Future Land Use



Source: District of Mission Official Community Plan, 2008

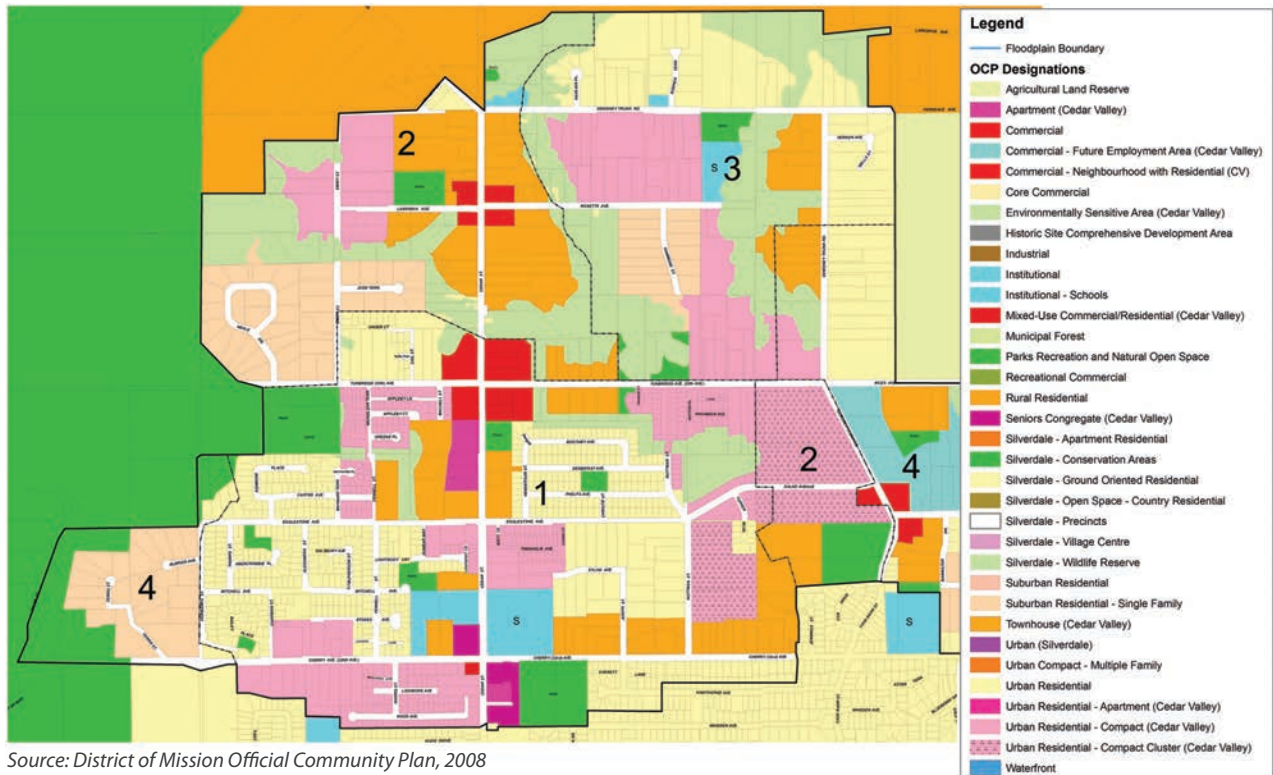
Mission is also planning for the new communities of Silverdale and Cedar Valley. The future land use maps for these areas show urban and suburban development, as well as mixed use and village land uses.

Silverdale Future Land Use



Source: District of Mission Official Community Plan, 2008

Cedar Valley Future Land Use



Source: District of Mission Official Community Plan, 2008

Land Use Challenges

Low density and single use areas of communities can make it difficult to provide attractive transit services.

For transit to be successful and services to be attractive, the link between land use decisions and transit services needs to be encouraged and supported. In this regard, the visions contained in the Regional Growth Strategy, Official Community Plans, *Provincial Transit Plan* and the Transit Future Plan need to be maintained and used to guide planning and decision making for growth patterns and new development.

Serving lower density residential areas.

The City of Abbotsford covers a large area of land, including some areas of lower density, single family residential development. Mission is also home to some lower density residential land. Transit service is most effective in higher density, mixed-use areas, where more residents and businesses are within walking distance of major collector and arterial roads and transit routes are direct. The Future Transit Network will need to balance service requirements for single family areas with the need for direct, efficient transit service.

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.

Developing the high density, mixed land use corridors that are essential for frequent or even rapid transit services.

Frequent and rapid transit services work best where many people, jobs, and services are located close to the transit corridor. To support transit, development should continue to be focused in the downtown areas of Mission and Abbotsford and along mixed-use corridors.

Mission's Official Community Plan includes transit-supportive policies. Together with the Transit Future Plan, these goals and policies will result in a transit system that serves local needs.

One of the nine goals summarized in Mission's OCP is to "enhance transportation choice through the development and enhancement of an integrated, multi-modal transportation system." Some of the key policy directions to achieve this goal include:

- Support a public transit system that provides a convenient alternative to the automobile
- Promote transit-supportive land use planning and development
- Involve BC Transit in the planning process for new urban areas, to ensure the future needs of public transit are accounted for in the design of the area
- Provide convenient, accessible and reliable transit service for the residents of Mission

Like Abbotsford, Mission has specific GHG reduction targets; the initiatives contained within this plan are designed to help achieve them. Mission's OCP includes an objective of reducing the District's community-wide GHG emissions by 20 per cent below 2007 levels by 2020.

Transportation

Regional Transportation and Infrastructure

There are two primary corridors that connect the region: Highway 1, which parallels the Fraser River to the South, and Highway 7, which runs along the North of the River. There are two opportunities to cross the river in the Fraser Valley. Highway 11 connects Mission and Abbotsford, and Highway 9 links Highway 1 and Highway 7 near the District of Kent.

Economic, social and educational connections with Metro Vancouver will continue to be a priority for communities of the Fraser Valley.

Over the last decade, the western areas of the Fraser Valley have continued to build strong connections with municipalities in eastern Metro Vancouver. The nature of these connections is different on the north and south sides of the Fraser River. North of the Fraser River, Mission has economic, social, and educational connections with the Northeast Sector of Metro Vancouver, including Maple Ridge and Pitt Meadows. South of the Fraser River, bi-directional travel between Abbotsford and the Langleys and Surrey has grown significantly over the past decade.

These relationships will continue to evolve as regional attractions in each of these communities grow. Communities south of the Fraser, in particular Langley and Surrey, are forecasted to support 1.2 million residents by 2036. This will increasingly put pressure on the transportation infrastructure connecting Metro Vancouver and the Fraser Valley. Inter-regional transit service will take on increasing importance as residents travel between Abbotsford and Langley/Surrey to work and play. The relationship between Mission and the Northeast Sector of Metro Vancouver will also grow over time as the population and the number of jobs in both regions grow.

Most trips generated by communities of the Fraser Valley start and end in the same municipality and nearly 60 per cent of residents in the Fraser Valley work in the same community where they live.

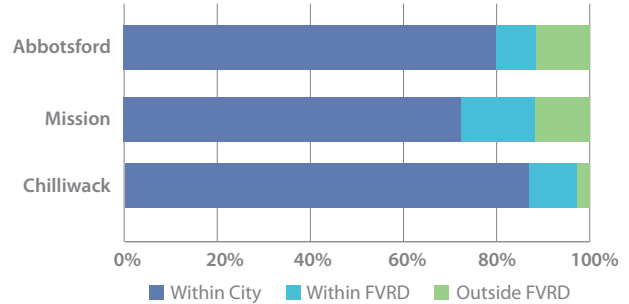
Building complete communities means providing jobs and services that residents can access locally. For the region as a whole, 92 per cent of all trips stayed within the FVRD. This travel includes commuting to work and school as well as trips for recreation, errands or shopping. On a more local level, Abbotsford and Chilliwack in particular had a high percentage of trips that stay within their communities, at 81 per cent and 87 per cent respectively. Trips made from the District of Mission were slightly less self-contained, with 71 per cent staying within its boundaries.

Trips to work make up more than a quarter of daily trips in the FVRD. Data from the 2006 Canada Census indicate that approximately 81 per cent of all residents of the FVRD work and live in the same community. This includes the 13 per cent of employed residents who work at home and do not have to travel to get to work.

Chilliwack is a highly self-contained community, with over two thirds of residents working within the city. Abbotsford and Mission also have a high percentage of residents working within the same municipality. In Abbotsford, 66 per cent of workers remain within the city and an additional 12 per cent work from home. Around 69 per cent of the workforce in the District of Mission live and work in Mission, with an additional 14 per cent working from home.

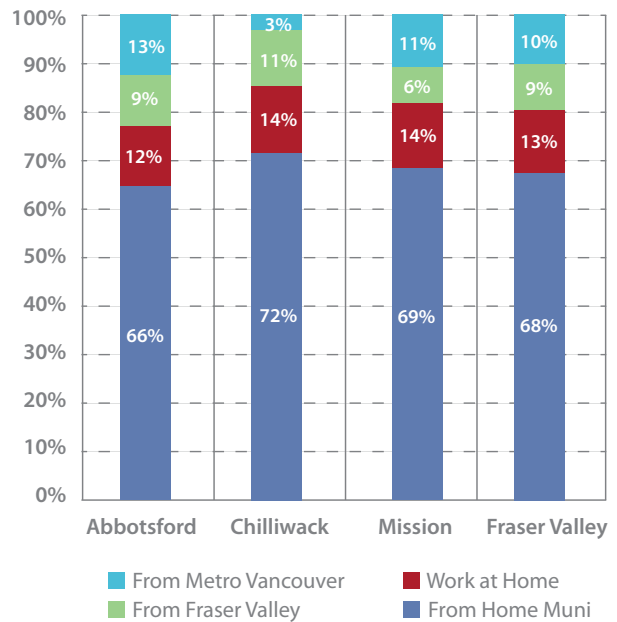
Encouraging cycling, walking and transit use for these local trips is a priority for creating a sustainable transportation future in the Fraser Valley.

Daily Trips from Abbotsford, Mission, and Chilliwack by Destination



Source: TransLink 2004 Trip Diary

Fraser Valley Residents Place of Work (2006)

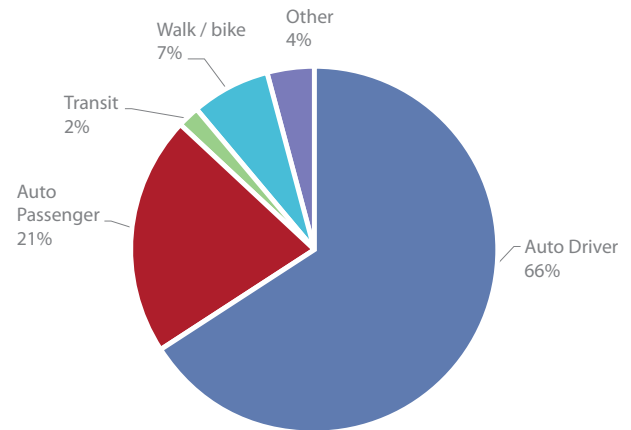


Source: Statistics Canada Census Data, Place of Work (2006)

Auto trips currently account for 87 per cent of all daily travel generated by Fraser Valley communities.

There are approximately 650,000 trips generated each day by the Fraser Valley. As expected, 87 per cent of those trips are by car (66 per cent as driver and 21 per cent as passenger) and 11 per cent are walk, bike and other modes of travel. Transit reportedly serves approximately 2 per cent of all daily trips in the region – a modest increase from previous survey periods. There is room for continued growth in the mode share for transit.

Daily Trips by Mode, Fraser Valley

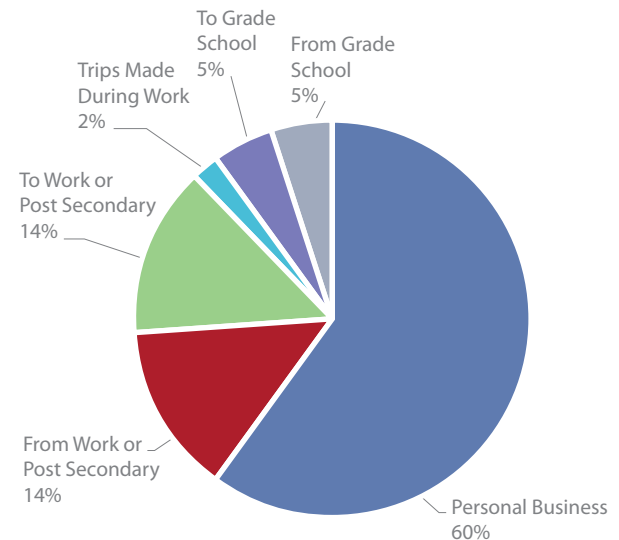


Source: 2008 Trip Diary Survey

Most daily travel in the region is for 'personal business,' while trips typically to fixed origins-destinations such as for work and school make up 40 per cent of all trips.

The region-wide survey also found that the main purpose of trips within the FVRD is for personal business, with the second largest category being commuter travel to and from places of work and post-secondary institutions. Each of these trip purposes is a different travel market for transit to serve. The routine trips to work and school are an important transit market and typically start and end around the same time five days a week. Frequent, fast and direct services to and from these schools and employment areas in the FVRD provides access to a market of 40 per cent of all daily trips. Less than two per cent of those trips use transit.

Proportion of Daily Trips by Purpose in Abbotsford, Mission, and Chilliwack



Source: 2004 Trip Diary Survey

The proportion of trips in the middle of the day is growing, supporting the need for attractive transit service throughout the day.

Approximately 38 per cent of daily trips in the Fraser Valley occur in the midday hours between 9:30 and 15:30. While the peak travel times are still in the morning and afternoon, the percentage of travel in the middle of the day has been increasing over time. Transit service between peak hours will be increasingly important if this trend continues.

Regional and inter-regional trips are another important component of travel in FVRD.

Regional and inter-regional trips require different transit service than local trips. Almost 20 per cent of daily trips originating in Abbotsford and 33 per cent of trips originating in Mission are destined for other communities. The figures on the following page provide a summary of regional and inter-regional trip patterns. Key themes include:

- The largest inter-regional or regional market is between Abbotsford and Metro Vancouver. The high growth rate in both jobs and population will increasingly put pressure on providing transportation choice.
- The next largest travel demand markets—with trips divided relatively equally between all three—are between Abbotsford – Mission, Mission – Metro Vancouver, and Abbotsford – Chilliwack
- Five per cent of trips leaving Chilliwack are destined for the eastern communities in Metro Vancouver.

Within the Fraser Valley, daily travel between Abbotsford and Chilliwack is significant.

Around 27,000 trips are made between Abbotsford and Chilliwack each day. A similar number of trips are made between Mission and Abbotsford, which is served by Route 31 - Valley Connector. It provides 15 minute peak period service, and is the fourth highest performing route in the system. However, since transit service between Abbotsford and Chilliwack is not available, most people must drive. Both the Strategic Review and the Chilliwack Regional Transit Future Plan identify regional transit service between Abbotsford and Chilliwack as a high priority to serve this significant travel market.

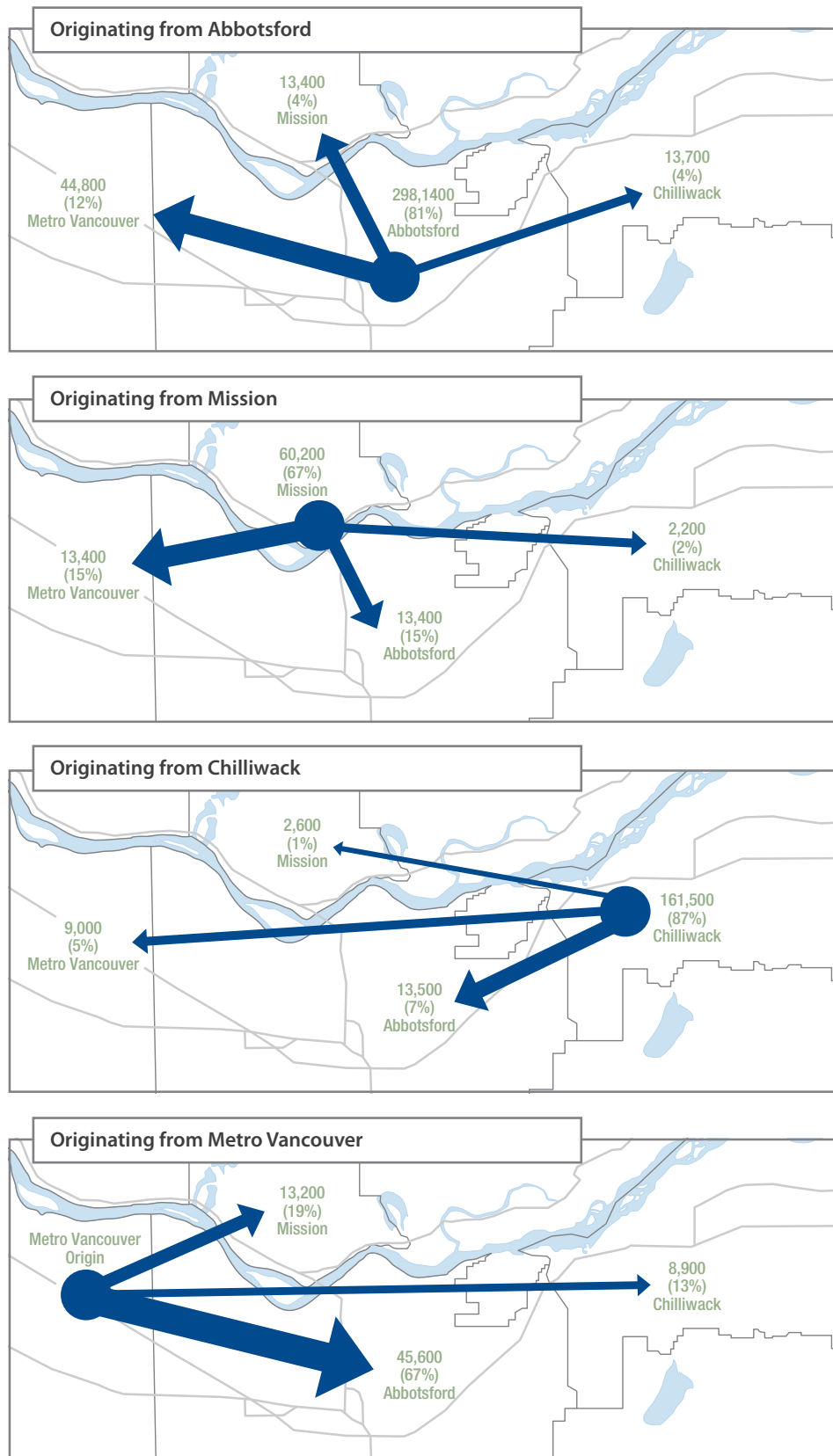
Inter-regional trips south of the Fraser River are primarily between Abbotsford and Surrey/Langley, while trips north of the river are between the Northeast Sector and Mission.

Around 15 per cent of daily trips generated by Mission are principally destined to areas of the Northeast Sector such as Haney Place in Maple Ridge, downtown Pitt Meadows as well as Port Kells in Surrey, Langley City Centre and Willowbrook, and Downtown Vancouver. Approximately 10 per cent of all daily trips generated from Abbotsford are destined primarily to communities south of the Fraser in Metro Vancouver. These key destinations include the Willowbrook Area, Langley City Centre, Gloucester Estates and Aldergrove in Langley, Port Kells and Guildford Town Centre in Surrey. Downtown Vancouver is also an important destination.

In addition to the inter-regional travel to Metro Vancouver, many entering the Fraser Valley each day are coming from communities to the west. According to the 2008 Trip Diary Survey, there are almost 70,000 trips per day that start in Metro Vancouver and end in the FVRD. Abbotsford is the most prominent FVRD destination for Metro Vancouver travelers, attracting 67 per cent of all daily trips.

Understanding these travel patterns and important destination nodes allows for the design of community, regional, and inter-regional transit systems that effectively serve key travel markets.

Trip Distribution Patterns¹



¹ Source: FVRD and TransLink - Fraser Valley Travel Patterns: Findings from the 2008 Trip Diary Survey

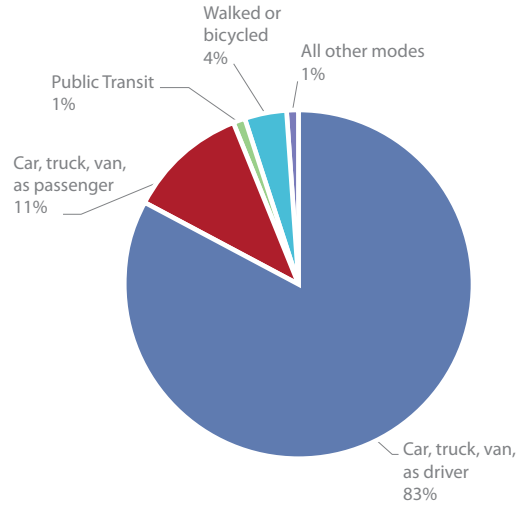
Abbotsford Transportation and Infrastructure

Highway 1 bisects Abbotsford and connects the city to Metro Vancouver to the west and the Fraser Valley to the east. Five interchanges link the City’s road network to the highway. One of these interchanges connects Highway 1 and Highway 11, which bisects the region into east and west segments and connects Abbotsford to Mission. Highway 11 is also Sumas Way and acts as a major north / south roadway within the City. Abbotsford is also served by a modified grid network, with six north / south arterials intersecting with six east-west arterials. South Fraser Way is the primary east-west corridor, serving as the commercial centre of Abbotsford.

Driving is the primary mode of transportation in Abbotsford, accounting for 83 per cent of trips to work. Only one per cent of commuting trips are via transit, while four per cent of commuting trips were made by walking or cycling. There is significant room for growth in the transit market for commuting trips in Abbotsford.

Regionally important destinations in Abbotsford include the Regional Hospital, Historic Downtown and South Fraser Way corridor. Other key destinations include, Seven Oaks Shopping Centre, Sumas Way, the University of the Fraser Valley, and the Airport.

Abbotsford Mode of Transportation to Work (2006)

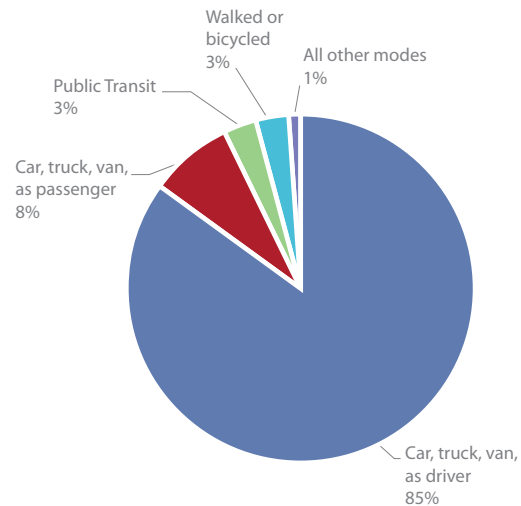


Mission Transportation and Infrastructure

Highway 7 runs east-west along the south side of Mission. The highway provides connectivity to Greater Vancouver via Maple Ridge and Pitt Meadows and also connects Mission to Hope. Mission has a grid network of municipal streets that provide circulation throughout the community, even on the hillsides north of the downtown area. Highway 11 connects to Highway 7 in Mission and provides access to Abbotsford via the Mission Bridge over the Fraser River.

Driving is also the primary mode of transportation in Mission, accounting for 85 per cent of all daily trips to work in 2006. The transit mode share for work trips from Mission is slightly higher than Abbotsford, with 3 per cent of Mission’s working population commuting by transit. Another 3 per cent of trips to work were made by walking or cycling. Overall, there is an expectation that the transit market share for travel within and outside the District of Mission will grow in future.

Abbotsford Mode of Transportation to Work (2006)



Key Mission destinations for Abbotsford residents include Downtown, the West Coast Express station, Mission Hills and the Junction Shopping Centre.

Transportation Challenges

Continued heavy demand for travel at peak times resulting in traffic congestion

High traffic volumes during morning and afternoon peak periods will continue to add delays for all vehicles, particularly between Abbotsford and Mission. Transit has the ability to move more people per traffic lane making the case for increased investment in transit priority versus the significant financial and physical space requirements of continued road expansion. The implementation of transit priority measures will help to improve the attractiveness of transit services by increasing transit vehicle speeds and reliability.

Encouraging transit use to access the West Coast Express

The West Coast Express provides rapid access to destinations in Greater Vancouver. As population and demand for this service grows, transit access from the surrounding area to the West Coast Express station will be increasingly important.

Investments in local, regional and inter-regional transit are needed to serve planned growth in the Fraser Valley.

The 'regional' scale employment, commercial, institutional and health services provided in Abbotsford, Mission and Chilliwack are creating more demand for inter-municipal and even inter-regional travel with communities to the west. Investments in expanding transit services need to be prioritized and coordinated between agencies to accommodate this growing need.

Supporting livable communities through transit

Transit service helps shape the health and livability of communities. Just as transit-supportive land use patterns support quality transit service, quality transit service supports strong communities. High quality transit service provides accessibility and connectivity to citizens who cannot or choose not to drive, travel options and choice for residents, and reduces vehicle traffic. Mixed use, higher density communities with transit are typically more walkable and have more eyes on the street.

Connecting Abbotsford and Mission to other regional and inter-regional centres

Abbotsford and Mission are regional centres and attract trips from the rest of the FVRD and from Metro Vancouver. Effective regional and inter-regional transit is required to serve these markets. Around 13,500 people travel in each direction between Chilliwack and Abbotsford per day; there is no option to travel by transit. Quality transit service provides accessibility and connectivity to citizens who cannot or choose not to drive, travel options and choice for residents, and reduces vehicle traffic. Mixed use, higher density communities with transit are typically more walkable and have more eyes on the street.

Transit Today

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

Conventional Transit System

The existing conventional transit system provides service within and between the City of Abbotsford and the District of Mission. The system also provides connections to Metro Vancouver via the West Coast Express with service between Mission and Downtown Vancouver, and Route - 21 Aldergrove which provides service between Abbotsford and Aldergrove. The Abbotsford - Mission transit system is comprised of twenty-three conventional routes; with Abbotsford served by sixteen routes, Mission by six, and one route that connects the two communities.

Abbotsford - Mission Annual Quick Facts	
Total Passenger Trips	2,400,000
Conventional Service hours	105,000
Passenger Trips per hour	22.6
Total Vehicles (excluding custom)	45
Number of routes	24

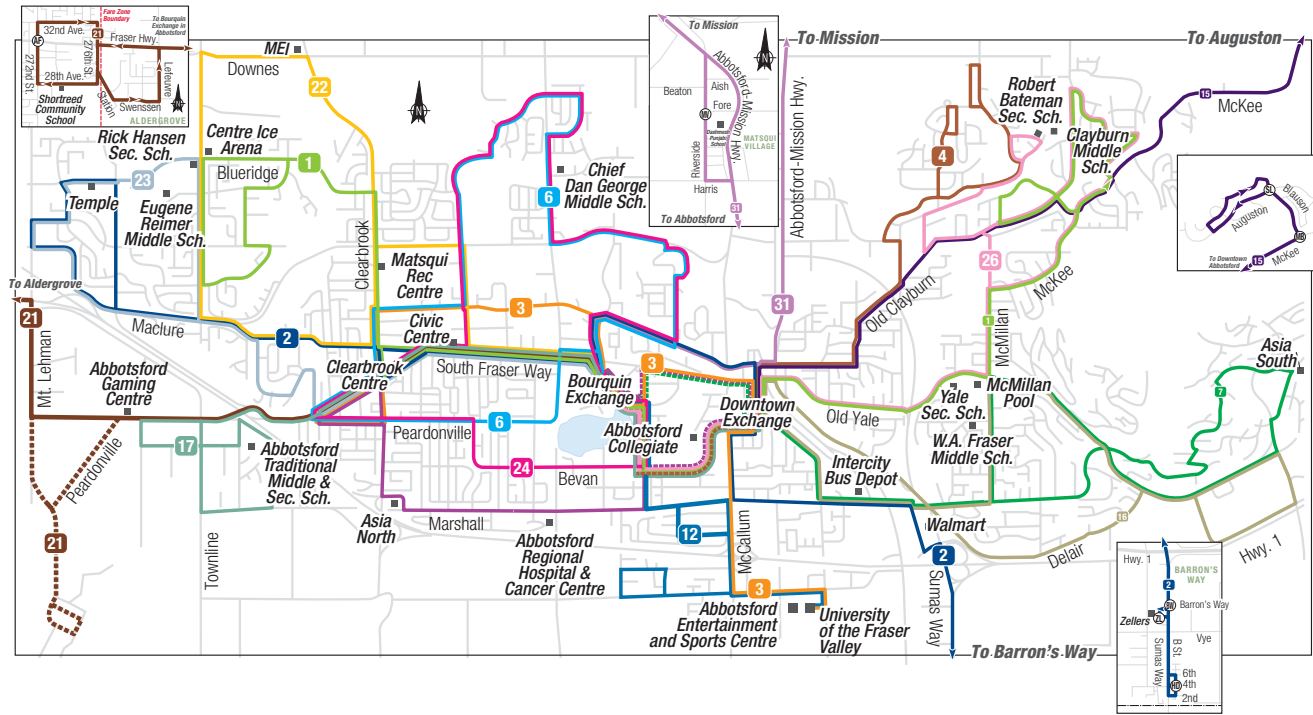
Local Service: Abbotsford

The City of Abbotsford is the largest travel market in the Fraser Valley given its population, employment and key destinations including the airport, Abbotsford Regional Hospital and Cancer Centre (ARHCC), University of the Fraser Valley (UFV), South Fraser Way and Sumas Way commercial districts.

The transit system in Abbotsford is comprised of sixteen conventional routes, three of which are GoLines, or routes designed to provide straight through, no transfer service from one side of Abbotsford to the other. Most of the other routes provide connections between various neighborhoods and the two transit exchanges, Bourquin and Downtown. The main transit corridors in the City are South Fraser Way, George Ferguson Way, McCallum and Clearbrook.

Providing 15 minute peak period service, the 1-2-3 GoLines operate in relatively dense areas and connect major destinations. The GoLines constitute the top three busiest routes within the system carrying more than half of all rides. However Route 12 – UFV – Bourquin Commuter carries the most people per service hour.

Abbotsford Transit System: January 2013



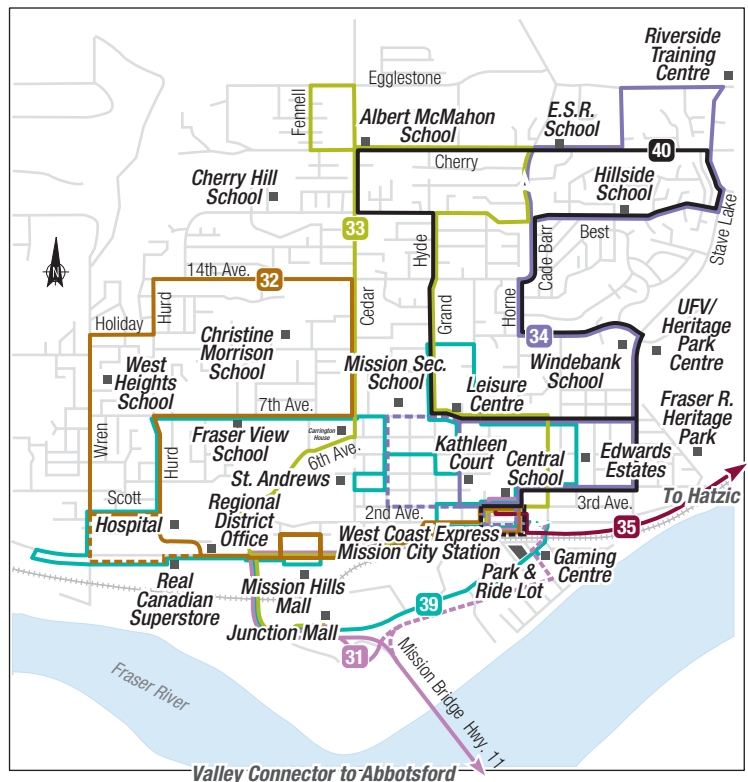
Service Frequencies and Hours of Service

Approximately 79,800 service hours were provided in Abbotsford in 2011-2012. Within Abbotsford, service operates seven days a week on routes 1 through 7, between 6:00 a.m. - 10:30 p.m. Routes 12 – 17 operate primarily Monday through Friday with more limited service, and routes 22, 23, 24 and 26 provide very limited service targeted towards secondary students. Sunday-level service is provided on statutory holidays for all routes.

Local Service: Mission

The transit system in Mission is comprised of six local routes, which provide access to major destinations such as the downtown core, the Mission hospital, Mission Hills Mall, Junction Mall, and the University of the Fraser Valley Heritage Park Centre campus. Regional connections are provided to Abbotsford on the Route 31 – Valley Connector and to Vancouver via the West Coast Express. The Mission system is designed as a “hub-and-spoke” system, meaning that the routes meet at a center point (the downtown exchange) and allow passengers to transfer to other routes before departing.

Mission Transit System, January 2013



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today
- Visions and Goals
- The Future
- Implementation Strategy
- Moving Forward

Service Frequencies and Hours of Service

Approximately 25,200 service hours were provided in Mission in 2011-2012. All routes begin and end at the Downtown Mission Exchange with routes 32, 33 and 34 operating every 30 minutes between 6:00 a.m. - 6:30 p.m. on weekdays and between 8:00 a.m. - 6:30 p.m. on Saturdays. Route 35 - Hatzic provides limited service to Hatzic Monday to Saturday, and Route 39 – Shopper Shuttle provides service between seniors' housing and shopping and medical destinations Monday to Saturday. Route 40 – East Mission Night is a one way loop that covers most of the area served by Routes 33 and 34. It offers limited evening service Monday - Saturday, and throughout the day on Sunday. Only routes 32 and 40 provide limited Sunday service, and transit service is not provided on statutory holidays.

Regional & Inter-Regional Service

Abbotsford-Mission

One route connects Abbotsford and Mission, Route 31 – Valley Connector, which operates between Downtown Mission, Matsqui Village, and Abbotsford's Bourquin and Downtown Exchanges. On weekdays, it offers limited stop service every 15 minutes in the peak periods, and every 30 minutes in off-peak times. Fifteen per cent of all trips that begin in Mission are destined for Abbotsford, and 4 per cent of all trips that begin in Abbotsford terminate in Mission. When combined, the actual demand between these two communities is the same as the demand between Chilliwack - Abbotsford, and Mission – Metro Vancouver.

Abbotsford-Aldergrove

In September 2008, a new service, Route 21 – Aldergrove Connector, between Abbotsford and Aldergrove in Langley was introduced. It carries an average of 22 people per service hour which is well above the minimum threshold of 12 rides/hour (as established in this plan). This service consists of eleven round trips each weekday and six round trips on Saturdays and Sundays. Passengers wishing to travel further west must transfer to TransLink service to connect with other parts of Langley and Metro Vancouver.

Mission – Metro Vancouver

The West Coast Express operates train and bus service five days a week (except on statutory holidays) between downtown Mission and downtown Vancouver. West Coast Express is an operating subsidiary of TransLink. Five trains operate in the westbound direction during the morning and return at the end of the day. TrainBus provides service to the same stations as the West Coast Express, departing Mission once in the late morning, and arriving Eastbound in Mission once in the late afternoon, and twice after the last train. The majority of riders boarding in Mission are from Mission (57 per cent) and 38 per cent are from Abbotsford².

To date, BC Transit does not provide service between Abbotsford and Chilliwack.

Transit Ridership: Abbotsford - Mission Transit

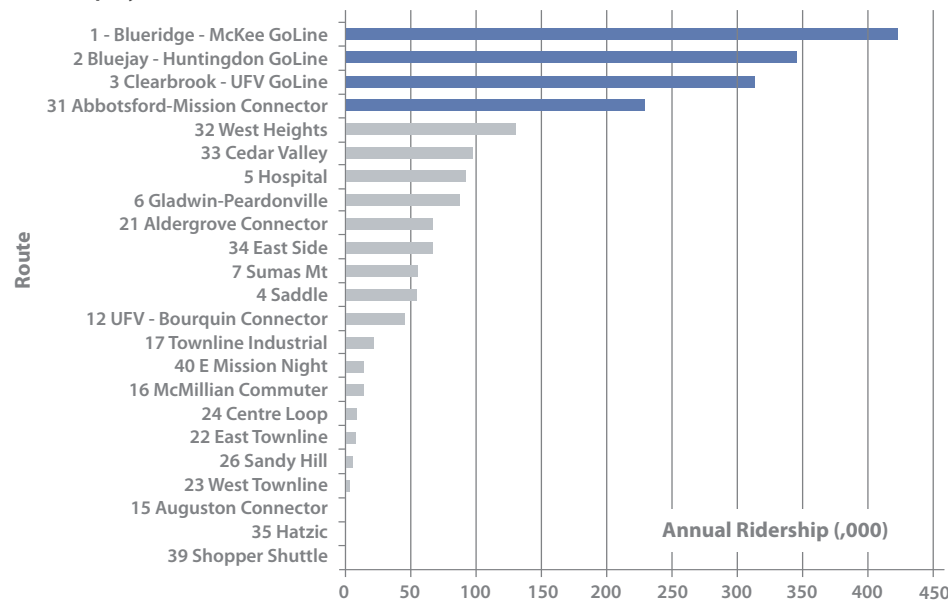
Since the inception of service in 1979 in Mission, and Abbotsford-Matsqui in 1986, transit ridership on the Abbotsford – Mission system has grown significantly from 93,000 in 1986 to more than 2.3 million in 2011/12. Ridership was largely stagnant until the introduction of service to Abbotsford-Matsqui, and then experienced steady growth from 1986 – 2000. Ridership flattened over the next five years, reflecting minimal service expansion or in some years, service reductions. Most recently (2005 – 2010), ridership has grown by nearly 1 million additional passengers and was accompanied by 27,000 additional hours of service. Even with this substantial increase, the percent of trips via transit for work commuters remains below two per cent of all trips.

Today, the Abbotsford – Mission system provides 105,000 conventional service hours annually, which translates to 0.6 hours per capita. The average for similar sized systems is 1 – 1.5 hours per capita which means Abbotsford and Mission have significantly less service than their peers.

The top three performing routes are the Abbotsford GoLines (Routes 1, 2, and 3) which combined carry more than half of the all rides system wide. They serve corridors of diverse and higher density development along South Fraser Way and George Ferguson Way that includes multi-family units and major destinations like downtown, Seven Oaks shopping centre, and the Civic Precinct. Route 31 - Valley Connector is the fourth highest ridership route, carrying 11 per cent of all trips. The top performing route in Mission, and the fifth best route system-wide is Route 32 - West Heights which carries seven per cent of the entire CFV system. Combined, these five routes carry more than two-thirds of all ridership.

While the routes with the most service carry the most people, they are not always the most efficient. For example, Route – 2 Bluejay – Huntingdon, the third highest ridership route only carries 19 rides per hour, whereas Route 12 – UFV – Bourquin Commuter is the 13th highest ridership route, but carries an average of 35 rides per hour.

Ridership by Route



Fares: Abbotsford and Mission Transit

The regular adult fare is \$2.25 which grants access to a trip on the Conventional system anywhere in the Abbotsford – Mission system, including service to Aldergrove. A wide variety of fare products are available including discounted monthly passes, day passes and tickets. Prior to the most recent fare increase in January 2013, fares were stagnant between 2008 - 2012. The regular adult fare was \$1.75

Conventional Transit Challenges

Frequency of service

Fifteen minute service is only offered in peak periods on routes that serve the primary corridors in Abbotsford. Traveling via transit on services that are less frequent than 15 minutes can be challenging and often time consuming if the connections are not timed. Increasing frequencies over the next 25 years will make transit more attractive and easier to use.

Directness of Service

During at least one portion of their trip, customers experience indirect routing as a result of service designed as one-way loops. While one-way loops provide access and mobility, they are not successful at attracting ridership. Decreasing the length of the transit trip is a key to success over the life of the plan.

Increasing the efficiency of the transit network.

Four of the twenty-four routes carry 63 per cent of riders, while the nine poorest performing routes carry only 2 per cent of the of all riders. Although the last figure is somewhat skewed due to limited service and commencement of routes in 2011, this still indicates opportunities for improved efficiencies.

The scale, mixture and density of land use in Abbotsford and Mission are not typically supportive of frequent and direct transit services.

Low density and suburban development patterns are difficult to effectively service with transit, and are not supportive of frequent transit service. The community cores of Abbotsford and Mission will need to be developed to support high levels of transit service in order to achieve the goals of this plan.

Improve inter-regional and regional connections

Thousands of trips are made every day between Abbotsford - Chilliwack and Abbotsford - Metro Vancouver. However, there is limited or no travel options via transit. Mixed use, higher density communities with transit are typically more walkable and have more eyes on the street.

Custom Transit

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. Custom service is directed towards providing eligible customers with access to their community, and does not share the conventional transit goal of increasing ridership.

Potential customers must apply to travel by handyDART. Applicants are designated as eligible if they have a disability that prevents them from using conventional transit independently. Factors considered in determining eligibility include:

- 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.

HandyDART buses follow scheduled, dependable patterns in the morning and afternoon peak periods primarily composed of subscription trips. Between 10 a.m. and 2 p.m. there is availability 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 participating taxi company. Abbotsford-Mission Taxi and Central Valley Taxi operate several wheelchair accessible minivans, which are used for this purpose.

Quick Facts³

Passenger Trips	110,300
Custom Service hours	24,800
Passenger Trips per hour	3.9
Custom Vehicles	17

Service Area and Hours of Operation

The handyDART service area is more vast than that of the conventional fixed-route transit system, providing service anywhere within the municipal boundaries of Abbotsford and Mission. Unlike the service area, the hours of operation are more limited than conventional transit. HandyDART operating hours are:

- Weekdays from 7:30 a.m. to 5:00 p.m.
- Wednesday evening from 5:30 p.m. to 10:00 p.m.
- Saturdays from 9:00 a.m. to 5:00 p.m.
- No service on Sundays

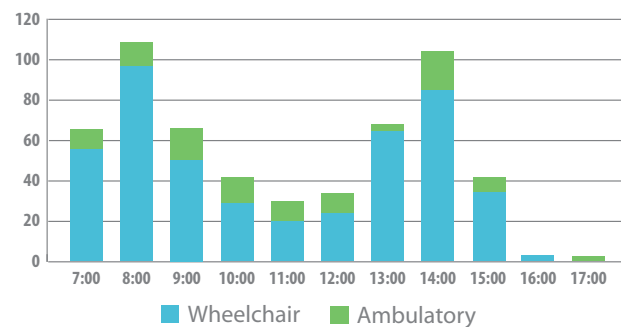
Ridership

Approximately 6,000 individuals are active registrants with custom transit, i.e. registered users who have scheduled a ride in the past 18 months. In 2011/12, there were a total of 61,900 ambulatory rides (registered handyDART users not using a wheelchair or scooter) and 12,800 wheelchair rides with an additional 1,800 attendants and 670 companions who assisted or accompanied these riders. Approximately 20 per cent of these rides were taxi supported; 8,600 being taxi saver rides (rides arranged by registered handyDART users using subsidized taxi saver coupons) with 6,300 being taxi supplement rides (rides dispatched by operator to taxi companies to supplement regular custom service). The handyDART system provides on average 3.9 rides per service hour, or 110,300 rides per annum.

Less than 400 trips that were requested during regular service hours were not provided because vehicles were booked to capacity. However, there were approximately 1,800 trips cancelled by the registrant within 2 hours of scheduled pick-up and 800 trips where the scheduled rider failed to appear on time. These late cancellations and “no shows” in turn have an impact on the ability of the system to serve all requested trips.

Ridership experiences significant peaks and troughs during the service day. An analysis of ridership conducted over two sample days in October 2010 revealed that even during the lowest demand hour of the day (11 a.m. to 12 noon), approximately 30 pick-ups were performed. During peak times of 8 a.m. and 2 p.m. more than 100 riders were picked up per hour. The results of the analysis are shown in the chart, below.

Mode of Transportation to Work (2006)



Fares

HandyDART charges its clients based upon a zone system as outlined in the table below:

One-way Trip	
	One Zone
Passenger	\$2.25
Escort	\$2.25
Attendants	No charge

Zone A: The City of Abbotsford

Zone B: The District of Mission

Zone C: Ruskin, Stave Falls and Hatzic

The actual cost per ride in 2011/2012 was \$17.31. This is more than three times that of Conventional transit (\$4.81).

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. Other communities have experienced positive results by conducting their registration process via interactive conversations or in-person interviews.

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.

Limited custom transit service availability

HandyDART transit hours of operation and days of the week are more limited than the conventional transit operating system. Conversely, the service area is much later. The hours of service availability and the service area should align with the conventional transit system.

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.

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.

Customer Infrastructure

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

Transit Stops

There are more than 600 bus stops in Abbotsford and Mission. Over half of all stops in Abbotsford have benches, while only 5 per cent provide shelter from the elements. In Mission more than one-quarter of the stops have benches and 5 per cent have shelters. In recent years, Abbotsford has dedicated resources to upgrading high activity stops to ensure they are fully accessible which includes a rumble, bright yellow strip at the curb, ramps and ample room to load/unload wheelchairs. Upgrading stops to include passenger information and other amenities should be prioritized over the life of this plan and should be focused on high activity stops and corridors.

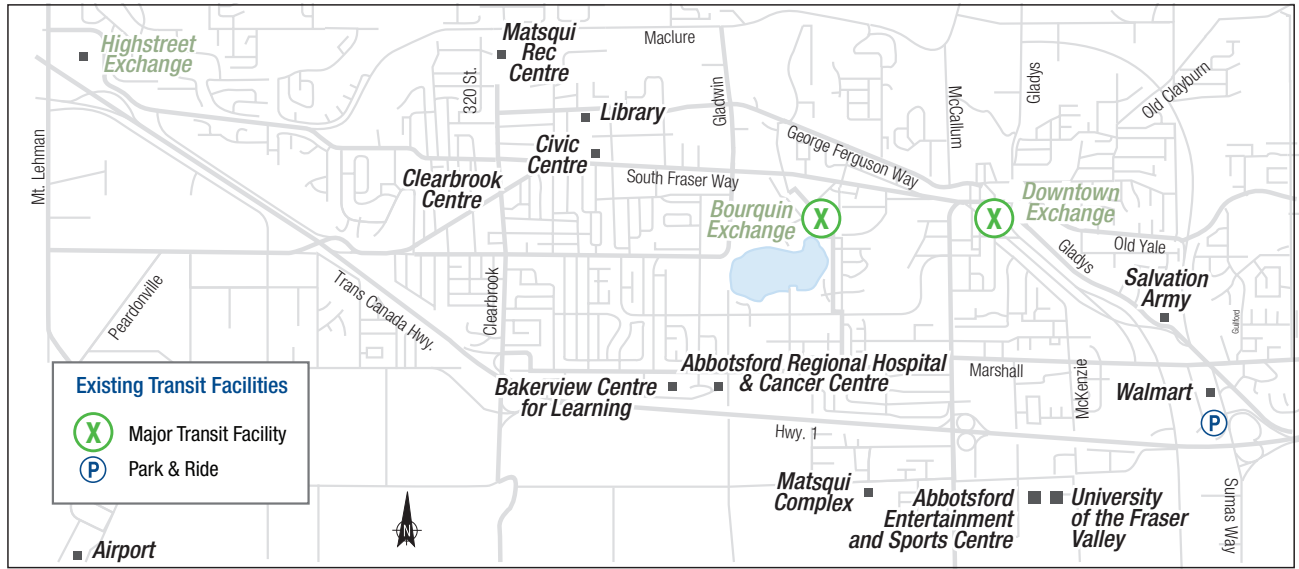
Accessibility

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 Abbotsford - Mission fleet is 100 per cent accessible.

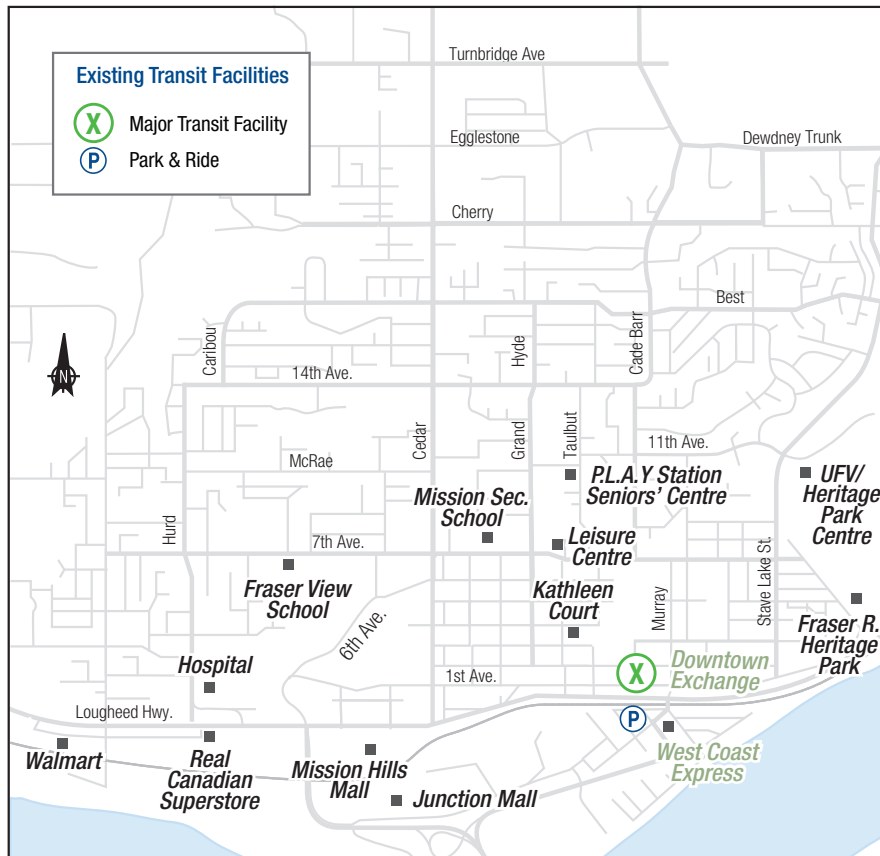
Transit Priority Measures

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. Transit travel time relative to the car has a significant impact on ridership and operating cost. Installing transit priority measures in areas of traffic congestion can provide transit with a distinct advantage and may reduce the cost for transit services. To date, there are no transit priority measures in use within the Abbotsford-Mission area.

Abbotsford Existing Transit Facilities



Mission Existing Transit Facilities



Transit Exchanges

Transit exchanges facilitate transfers between bus routes and are typically located within the activity centres of the community, such as downtown or 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. At a minimum, transit exchanges should provide weather protection, seating, transit route and schedule information, lighting, and cycling facilities.

There are three exchanges in Abbotsford and Mission. One is located in Mission serving as the hub for all Mission routes, and two located in Abbotsford. They are listed below:

- Abbotsford Bourquin Exchange, located on Bourquin Crescent West and Mill Lake Road
- Abbotsford Downtown Exchange, located on Montrose Avenue and South Fraser Way
- Mission Downtown Exchange, located on 2nd Ave and Horne

	Bourquin	Abbotsford Downtown	Mission Downtown
Capacity (# of Single bays) ⁴	6	7	5.5
Number of routes that serve the exchange	15	9	7

In Abbotsford, 64 per cent of routes that serve Bourquin also serve downtown, and 78 per cent of routes that serve downtown also serve Bourquin. These exchanges which support prominent areas of the City are approximately 2km apart.



⁴ Number of bays excludes lay over bays.

Operations and Maintenance Centre

The existing O&M centre was built in 2001 and is located at 1225 Riverside Road on 1.06 hectares of land leased from the City of Abbotsford. The property is bound on the three sides by a fish-bearing creek that feeds into the province's largest trout hatchery. The site was built to accommodate parking for 58 buses (40 heavy duty and 18 light duty buses), but as of February 2012 there were 38 heavy duty buses, 7 medium duty buses and 17 light duty buses stored on site, for a total fleet of 62. Prior to expansion of any service, the capacity of the facility must be expanded.

The O&M Centre includes four maintenance bays and administration office space. Two of the maintenance bays are open floor services bays, both equipped with wireless four-post hoists. The third bay has a service pit and is also used for general engine servicing. The fourth bay was originally designed as a wash bay, but in order to accommodate increasing maintenance requirements it has been converted to allow for light servicing, as well as engine, undercarriage and oily parts washing. The building was originally designed to allow for the addition of a fifth bay on the west side, but this would only be possible through the relocation of the fueling island and waste oil storage.



Benchmarking the Existing Transit System

The existing Abbotsford – Mission transit system was compared to other communities of similar size across Canada as outlined in the table below. The Abbotsford - Mission system supports approximately 105,000 hours of service, or 0.6 hours per capita⁵, which is lower than service levels in similar sized Canadian communities. The modest level of service hours contributes to the relatively low level of transit ridership in Abbotsford-Mission. However, rides per service hour in Abbotsford-Mission are very reasonable relative to other communities, suggesting an average level of productivity.

Performance Guidelines for Abbotsford – Mission and Similarly Sized Cities or Areas⁶

	Population	Annual service hours	Vehicles	Annual ridership	Hours per capita	Rides per capita	Rides per hour
Abbotsford & Mission, BC ⁷	182,000	105,000	45	2,361,000	0.6	13	23
Barrie, ON	141,000	148,000	40	2,631,000	1.0	19	18
Burlington, ON	174,000	151,000	52	1,960,000	0.9	11	13
Guelph, ON	120,000	246,000	65	6,158,000	2.1	51	25
Kelowna, BC	125,000	177,000	65	4,763,000	1.4	38	27
Kingston, ON	120,000	160,000	51	3,479,000	1.3	29	22
Nanaimo Region, BC	149,000	104,000	43	2,614,000	0.7	18	25
Oakville, ON	180,000	211,000	89	2,633,000	1.2	15	12
Regina, SK	207,000	292,000	108	7,080,000	1.4	34	24
Sherbrooke, QC	155,000	231,000	83	7,684,000	1.5	50	33
Saint John, NB	122,000	119,000	60	2,683,000	1.0	22	23

⁵ Based upon a population of 182,000 (Abbotsford = 139,000 + Mission = 43,000)

⁶ Source: CUTA (2010) Canadian Transit Fact Book: 2010 Operating Data

⁷ 2011/12 year end actuals



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today**
- Visions and Goals
- The Future
- Implementation Strategy
- Moving Forward

Vision and Goals

Vision Statement

The Abbotsford-Mission transit system provides increasingly viable and effective travel options for many who live, work, and play in Abbotsford and Mission. It is enhanced for existing customers and is attractive and convenient for new customers. The system's resources and network are aligned with the future travel markets that have developed due to population and employment growth. More and more people chose transit to meet their transportation needs.

Goals

Mode choice and ridership are affected by every aspect of service, from design, to the perception of transit, to technology. The goals of this plan address these factors and more, with a focus on ensuring the future transit system complements and supports land use.

The goals were developed specific to the future of transit in Abbotsford and Mission by incorporating feedback from the first phase of public consultation, and referencing local and provincial objectives



Goal 1 - Transit supports and enhances economic development by integrating with land use

1.1 Transit service helps drive and sustain economic development

- a. Transit routes link people to jobs and commercial services

1.2 Transit supports sustainable urban form

- a. Establish a clear link between existing and future land use plans and transit service plans
- b. Connect major centres, neighbourhood centres, and other key areas designated in the Official Community Plans with rapid, frequent or express transit services
- c. Mixed use and medium and high density development is concentrated along primary transit corridors (rapid and frequent)
- d. Local area and neighbourhood plans should be developed to create transit supportive neighbourhoods in locations that the Transit Future Plan identifies as hubs of transit service or priority corridors

1.3 Development proposals support and accommodate transit infrastructure and operations

- a. Development applications along transit routes include transit-supportive infrastructure, amenities and services
- b. Incentives and rewards are considered for development applications that include transit supportive services and infrastructure

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

- a. Local parking strategies encourage transit use



Goal 2 - Transit is an attractive transportation choice by being reliable, safe, convenient, accessible and integrated with other transportation modes

2.1 Transit is fast and direct

- a. Along priority corridors and key congestion points, implement transit priority measures such as exclusive transit lanes, queue jumpers, High Occupancy Vehicle lanes, bus and bicycle shared lanes, traffic signal priority, etc.
- b. Stop spacing is appropriate for the type of service provided
- c. Reduce the amount of deviations on transit routes

2.2 Transit is safe

- a. Design and operate transit infrastructure and services to ensure customers and employees are safe and secure using CPTED (Crime Prevention Through Environmental Design) principles
- b. Operators work in a safe and secure environment, and are respected by customers

2.3 Transit is convenient

- a. Increase frequency on primary corridors to a level where passengers are able to use transit without consulting a timetable (every 15 minutes or better)
- b. Increase transit service span (hours of operation)
- c. Create a network that effectively serves neighbourhoods and provides strong connectivity to popular cross town destinations
- d. Increase transit amenities along all bus routes including benches, shelters, transit information and way-finding
- e. Provide useful amenities such as wireless internet, electrical outlets on board buses and at transit exchanges, to provide passengers with options to make riding on and waiting for transit useful and productive
- f. Incorporate a mix of uses at transit exchanges, bus stops and on board buses to provide passengers access to commercial and other services

2.4 Transit is modern and attractive

- a. Design, install and maintain modern, accessible, sleek shelters and other customer amenities
- b. Ensure transit fleet and maintenance procedures contribute to a comfortable and clean on-board experience



2.5 Transit is accessible

- a. Continuously increase the number of buses, bus stops and other infrastructure that are universally accessible
- b. Snow removal is prioritized along transit routes

2.6 Transit is integrated with the transportation network

- a. Encourage and create high quality pedestrian and cycling links to transit stops and stations
- b. Provide bicycle storage at appropriate stations, stops, and on transit vehicles
- c. Establish a clear link between existing and future transportation and transit plans

Goal 3 - Transit is efficient and cost effective

3.1 Transit maintains or improves efficiency

- a. Maintain or improve rides per service hour

3.2 Improve efficiency by matching service vehicles to demand

3.3 Ensure investment decisions achieve the long term objectives and strategies of the Transit Future Plan and Abbotsford and Mission Official Community Plans

3.4 Improve operational efficiencies and tailor service to existing and future customers by collecting and analyzing transit performance data

- a. Identify transit performance measures, set incremental targets for improvement and monitor progress on a regular basis

3.5 Implement alternative funding strategies to secure sustainable funding sources

Goal 4 - Excellent customer service and communication improves the image of transit.

4.1 Transit operators are excellent customer service agents

- a. Operators are friendly and contribute to a positive customer experience and in turn are respected by riders
- b. Drivers are knowledgeable about the system
- c. Improve customer service training for operators
- d. Prioritize excellent customer service skills during hiring process for operators

4.2 Transit is advertised and promoted to increase ridership

- a. Diverse and creative marketing campaigns attract new riders, e.g., integrate the arts (painting, poetry, drawing etc.) with transit
- b. Increase public awareness of the importance and financial, health, social and environmental benefits of transit

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

- a. Increase the number of way-finding material along bus routes
- b. Implement new technology for transit, including real time information displays

4.4 Fare products are easily attainable and tailored to various market groups

- a. Explore opportunities to expand fare products that cater to large scale target markets such as the U-PASS initiative

Goal 5 - Service contributes to environmental sustainability

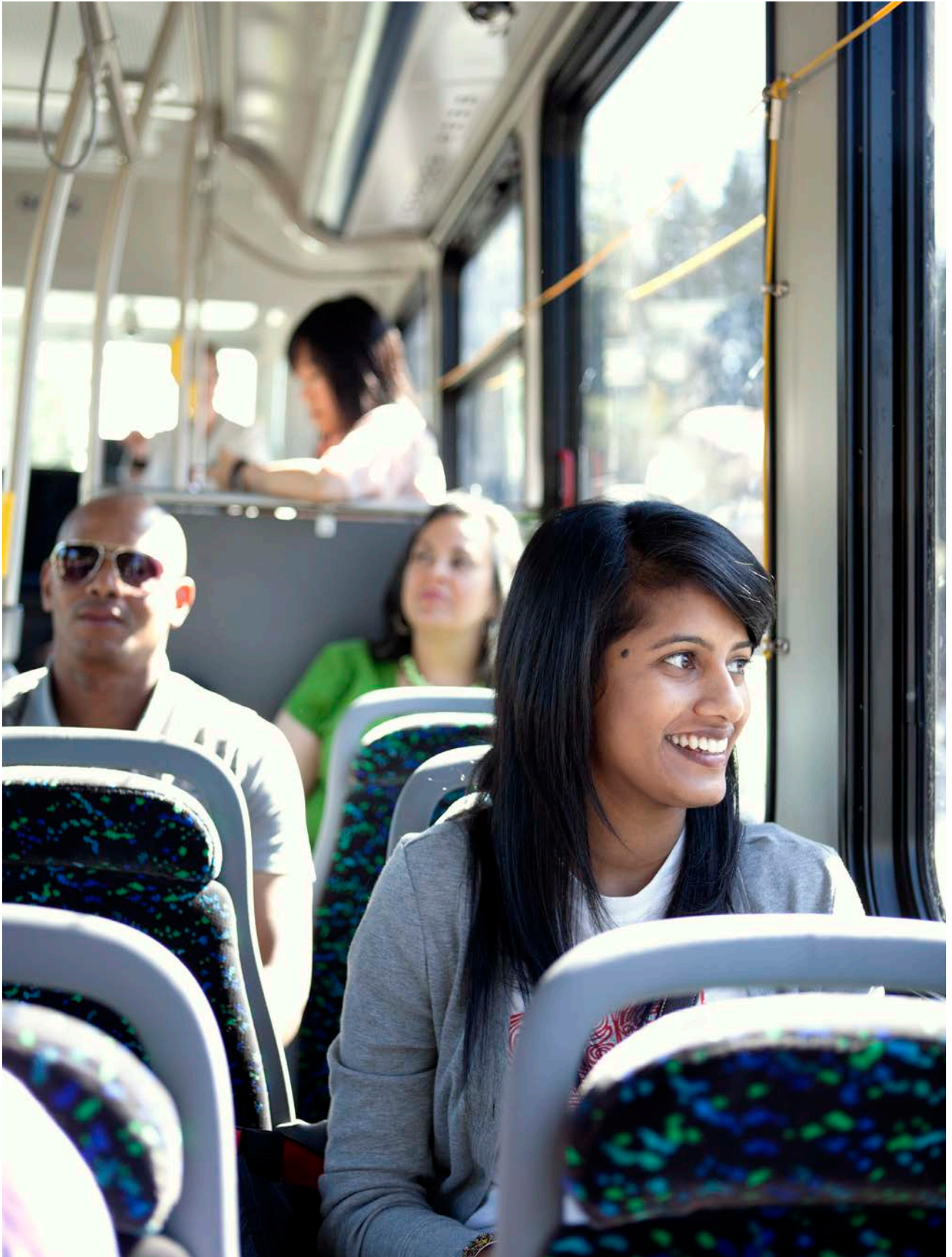
5.1 Transit helps meet provincial, regional and municipal greenhouse gas reduction targets

- 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
- b. Monitor and reduce bus fleet emissions

5.2 Transit promotes healthy living by increasing walking, cycling and transit trips

- a. Integration with the active network promotes walking and cycling to and from transit stops

5.3 Transit encourages and supports more walkable and compact land use patterns that reduce energy consumption and greenhouse gas (GHG) production



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today
- Visions and Goals**
- The Future
- Implementation Strategy
- Moving Forward

Performance Guidelines

System Level

Performance guidelines are quantifiable measures against which the transit system can be evaluated against its peers and against historical performance. These guidelines help identify potential issues and areas where the system can be improved to better meet the area's transit needs. Provided below are the guidelines against which the whole system should be evaluated. Tailored guidelines by route type are subsequently provided.

Performance Criteria	Target Threshold	Minimum Threshold
Passenger trips per service hour	35	12
Passenger trips per service kilometre	1.5	0.5
Cost per passenger trip	\$2.50	\$7.00
Cost recovery	35%	15%
Passengers trips per capita	30	10

Rapid and Frequent Transit Network

Expectations of the future Rapid Transit Network (RTN) and Frequent Transit Network (FTN) differ from that of the other service types in Abbotsford and Mission. These services are designed to support the most dense and diverse areas of the community, and transport the majority of riders. These routes are easy to understand by having simple structures and consistent time intervals between trips. Because none of the existing routes meet the definition of a RTN or FTN (15 minute service, 15 hours per day, 7 days per week), initially, routes that have 15 minute service in the peak periods qualify under this category and are subject to the following criteria.

	Target Threshold	Minimum Threshold
Boardings per service hour	35	25
Boardings per service km	1.5	1.0
Cost recovery	35%	25%



Local Transit Network

The Local Transit Network (LTN) is designed to provide connections to the RTN and FTN, and to provide service to residential areas of the community. These routes serve less dense and less mixed-use areas of the community, and often have lower levels of service than the FTN. They may be slightly less direct in exchange for providing coverage to a neighborhood or to meet the needs of specific users, such as seniors. Because of these factors, they are not expected to perform to the same standards.

	Target Threshold	Minimum Threshold
Boardings per service hour	25	12
Boardings per service km	1.0	0.5
Cost recovery	25%	15%

Ridership Target

Setting a ridership target is a critical component of the Transit Future Plan, as it is an effective way to measure progress towards achieving the goals of the communities and to ensure that the plan is implemented as intended.

The transit ridership target established by Abbotsford and Mission is to reach **15 million passenger trips in 2036**. Transit ridership growth will need to increase more than six-fold from 2.3 million annual passengers over the next 25 years. Based on current trends, this should translate to a shift from 2 per cent of all travelers choosing transit to 8 per cent. This is an ambitious target, but recognizing that ridership is below average today, and the anticipated boom in population, it is achievable with investment and transit-supportive land use development.

Increasing ridership should not be accomplished at the expense of other transit goals such as providing mobility and accessibility, but instead the system should seek balance. Existing service focuses 82 per cent of service hours on routes that are designed to carry as many passengers as possible (future FTN corridors), and 18 per cent on routes that are designed to connect outlying or lower density neighborhoods with the rest of the transit system (LTN corridors). **Over the life of the plan, no more than 20 per cent of service hours should be allocated to routes designed to provide mobility and coverage.** These routes should still be designed to meet the Local Transit Network (LTN) minimum thresholds described above.

The Future

To achieve the ridership targets of the Transit Future Plan, the transit network must align with future land use plans, ensuring riders can get where they want to go. The future networks are designed to improve directness, reliability and to better match transit service to demand.

Service Layers

The Transit Future network is comprised of five layers of transit service. Together, the different layers of service create a comprehensive transit network to best meet the existing and future needs of Abbotsford and Mission. They are designed to facilitate the efficient and effective movement of people to meaningful destinations. The five layers are described below:

Rapid Transit

Rapid Transit service is designed to move high volumes of passengers between major destinations along key transportation corridors. Services are very frequent (15 minutes or better) and stop less often than traditional transit services. Together, investments in Rapid Transit infrastructure, technology, vehicles, and service levels greatly increase system performance. To improve travel time and reliability, Rapid Transit utilizes an exclusive or semi-exclusive right-of-way to eliminate or significantly reduce the impact of general traffic on transit vehicles. Rapid services may use high capacity transit vehicle technologies such as light rail and bus rapid transit vehicles. Other investments required along the corridor include premium transit stations, off-board ticketing, and typically corridor branding.

Frequent Transit

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

The Local Transit Network (LTN) is designed to connect neighborhoods to local destinations and to Rapid and Frequent 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, and in some cases, smaller transit vehicles can be utilized to better match passenger demand and operating conditions on local roads.

Targeted Transit

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:

- Express service: a direct, limited stop route between destinations, usually designed for work and school commuters that share common start times and locations.
- Dial-a-Ride or para-transit: on-demand service with a predefined service area designed to provide access to transit service in low density areas that cannot support fixed-route service.
- Custom/handyDART: door-to-door services for customers unable to use the conventional service

Inter-Regional and Regional Transit

Inter-Regional service is designed to connect communities across Regional District boundaries (e.g., Abbotsford to Surrey). Regional services are designed to connect communities beyond the designated Transit Service Area, but within a Regional District (e.g., Chilliwack to Abbotsford). Both of these are point-to-point services, operating with zero or very few stops between communities, and usually travel on highways, offering a fast service that is competitive with the automobile. Due to a longer than average trip duration, amenities onboard should focus on customer comfort and other premium amenities such as wireless internet.

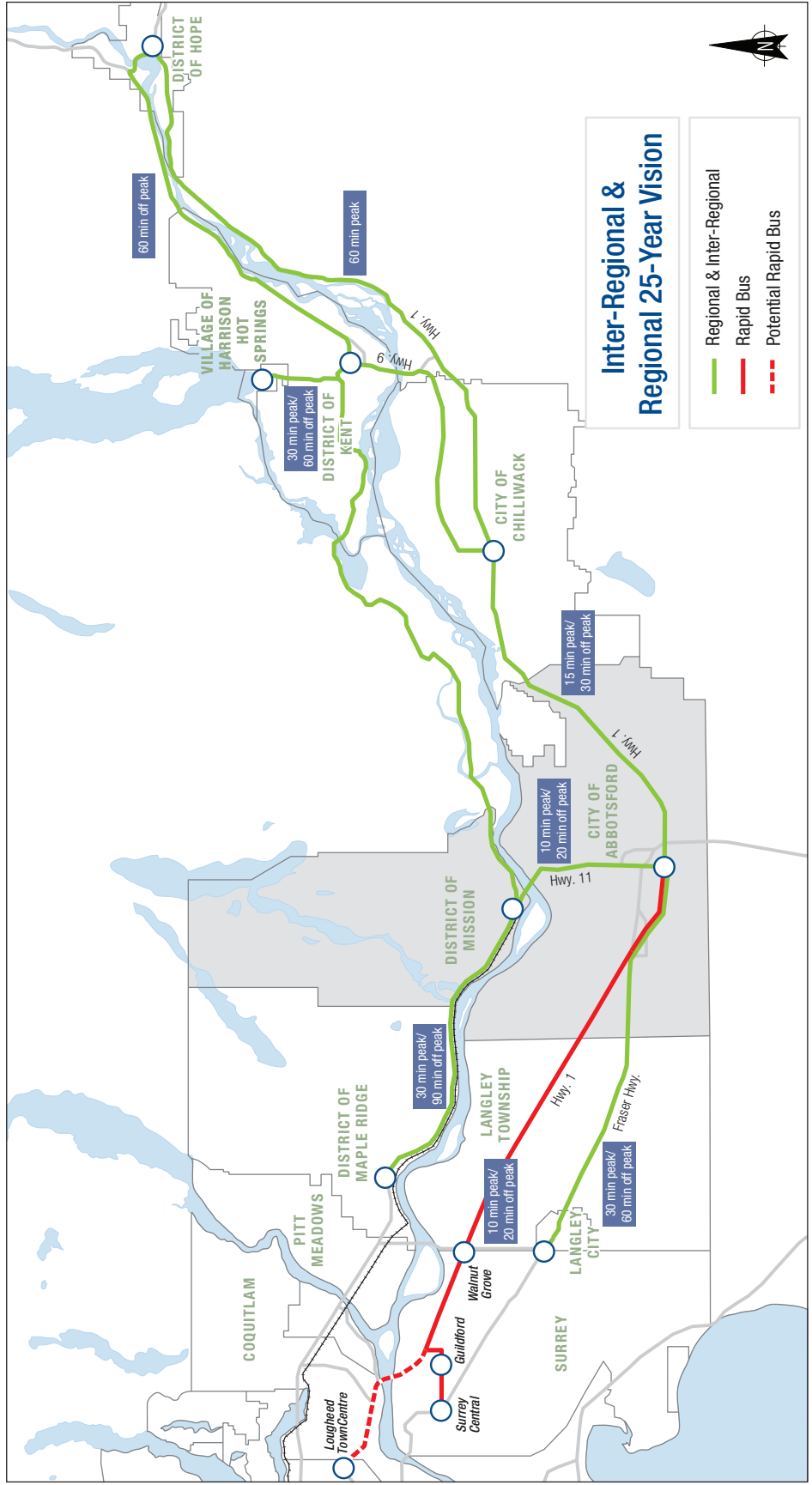
	Rapid	Frequent	Local	Targeted	Inter-Regional & Regional
Land use	High density mixed land use at key nodes	High to medium density along corridors	Medium to low density	Varies depending on service	Nodal development along corridor
Vehicle Type	High capacity bus, street car/tram, light rail	Standard or high capacity bus or street car/tram	Standard or small bus	Standard or small transit bus, van, taxi, commuter rail vehicle	Highway coach
Service Frequency	15 minutes or better between 7am-10pm, 7 days a week	15 minutes or better between 7am-10pm, 7 days a week	As required	Varies depending on service	As required
Service Span	5am – 1am, 7 days per week, extended based on demand	5am – 1am, 7 days per week, extended based on demand	6am-12am, 5-7 days per week, extended based on demand	Varies depending on service	Varies depending on demand
Stop Interval	Limited stops at key locations. Stops are typically spaced 800m to 2km apart	Frequent stops along a corridor, 500m apart or less	250m - 500m	Varies depending on service	Limited stops at key locations. Closed door service in-between destinations
Facilities and Amenities	Rapid Transit stations <ul style="list-style-type: none"> • level door boarding • off-board fare payment • real time information • bike storage • quality customer information • may include Park-n-Ride • investment in pedestrian infrastructure along corridor and near stations 	Local stops <ul style="list-style-type: none"> • quality customer amenities at stops Select major stops with enhanced amenities <ul style="list-style-type: none"> • level door boarding • off-board fare payment • real time customer information • bike storage 	Local stops <ul style="list-style-type: none"> • quality customer amenities at stops • enhanced amenities around major stops 	Varies depending on service	Major stops with enhanced amenities <ul style="list-style-type: none"> • Park & Ride • bike storage • may include real time information • quality customer amenities Local stops <ul style="list-style-type: none"> • quality customer amenities at stops
Signal Priority	Transit is given signal priority over other traffic at intersections along the full corridor	Transit is given signal priority over other traffic at key intersections along the corridor	At key delay points only	Only if part of a Rapid or Frequent corridor	At key delay points only
Lane Priority	Transit vehicles are separated from other traffic in an exclusive (Exclusive Corridor) or semi exclusive (Priority Corridor) right-of-way to avoid congestion	By-pass lanes at key areas of congestion, HOV lanes, peak hours bus lanes	No lanes	Only if part of a Rapid or Frequent corridor	Only if part of a Rapid or Frequent corridor

Inter-Regional and Regional Transit Future Network

Developed through an inter-regional and regional planning workshop, the Inter-Regional and Regional Transit Future Network features RapidBus service between Abbotsford and Surrey Central, with connections to Langley and Lougheed TownCentre. It also provides direct service along the most popular corridors between Abbotsford - Langley, Abbotsford - Chilliwack and Abbotsford - Mission. Through a series of connections, residents can travel to any community in the Fraser Valley and into Metro Vancouver. Service levels are designed to match travel demand and forecasted population and employment patterns.

Three distinct types of service make up the inter-regional and regional routes and are described below:

- **RapidBus** – Fast, direct service with extremely limited stops. High level of transit priority provided on entire corridor, and a high level of customer amenities provided. Service levels of 10 minutes or better in the peak. This service is designated for the Highway 1 corridor between Abbotsford, Surrey Central and Lougheed.
- **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 or highway express coaches may be used. This service is designated for all routes except the red RapidBus and the corridor connecting Hope, Harrison, Agassiz and Chilliwack.
- **Paratransit (flexroute)** – Scheduled service travelling mainly along a route but 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 the route connecting Hope, Harrison, Agassiz and Chilliwack.



Future Resources

The projected resources (fleet and operating hours) required to achieve the 2036 Inter-Regional and Regional Network were calculated by route, type of service, and prescribed service levels. Travel speed was estimated based on corridor specific traits and projections, and where required transit priority measures were assumed to be in place to maintain trip time. Other resources, such as exchanges (new or upgrades), Park & Rides, stations and transit priority infrastructure are required and need to be integrated into the local transit networks. More detail is included in the following section. Provided below is the total annual service hours and fleet required to achieve the Inter-Regional and Regional Vision.

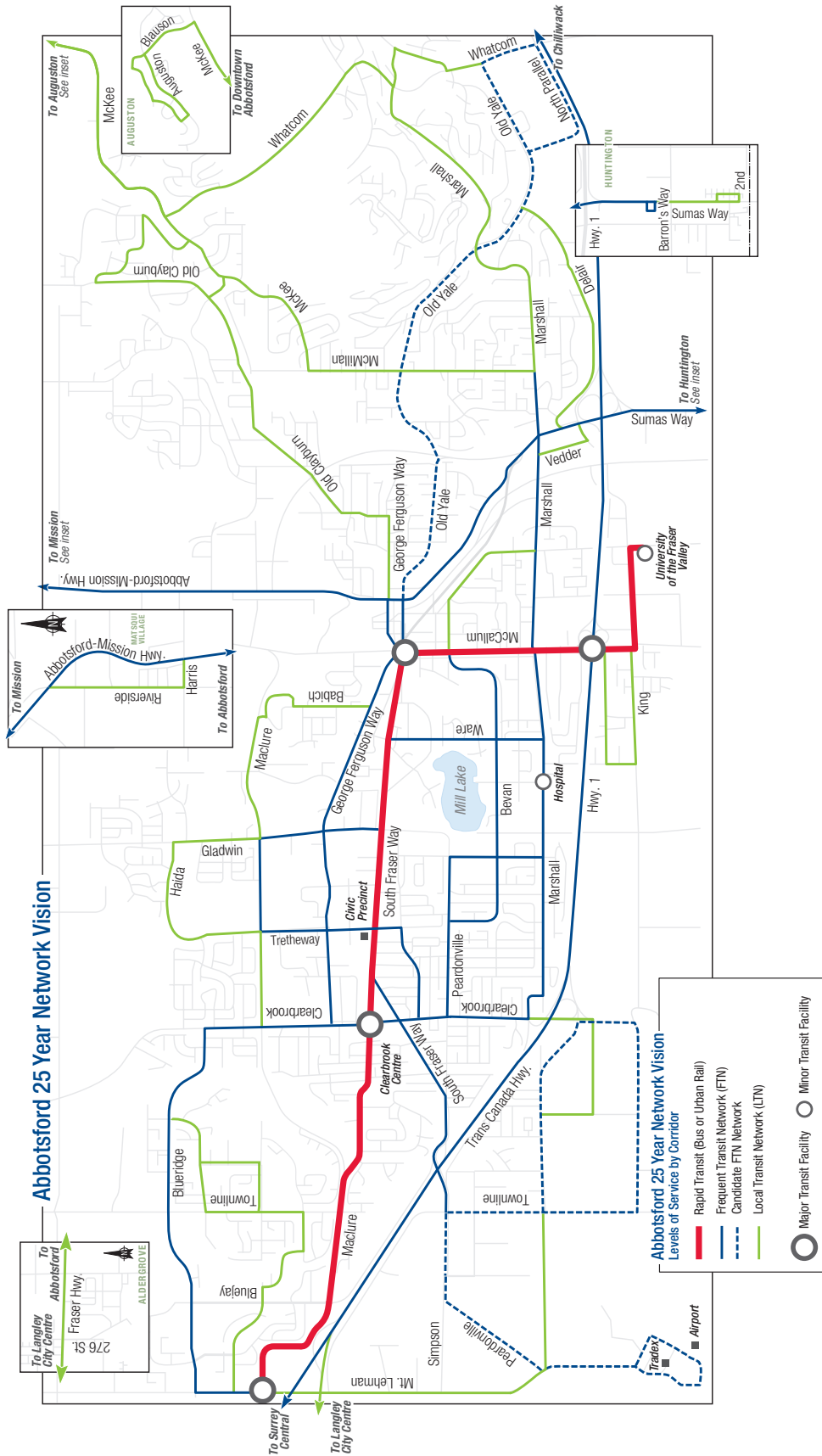
Fleet and Service Hours by Route

Service Type		Route Length (km)	Total Annual Hours	# of Buses
RapidBus	RapidBus Highway 1 Abbotsford - Surrey Central	47	34,000	13
Highway Express	Abbotsford - Mission	15	27,000	10
	Chilliwack - Harrison	34	17,000	7
	Abbotsford - Chilliwack	34	15,000	6
	Abbotsford - Langley	30	14,000	6
	Chilliwack - Hope	57	13,000	4
	Mission - Maple Ridge	33	12,000	5
Paratransit	Chilliwack - Agassiz - Hope	62	9,000	5
	Mission - Kent	52	7,000	3
Total			148,000	59

Abbotsford Transit Future Network

The Transit Future Network (found on the following page) is a package of four service levels designed to achieve the goals of the plan, and specifically to provide:

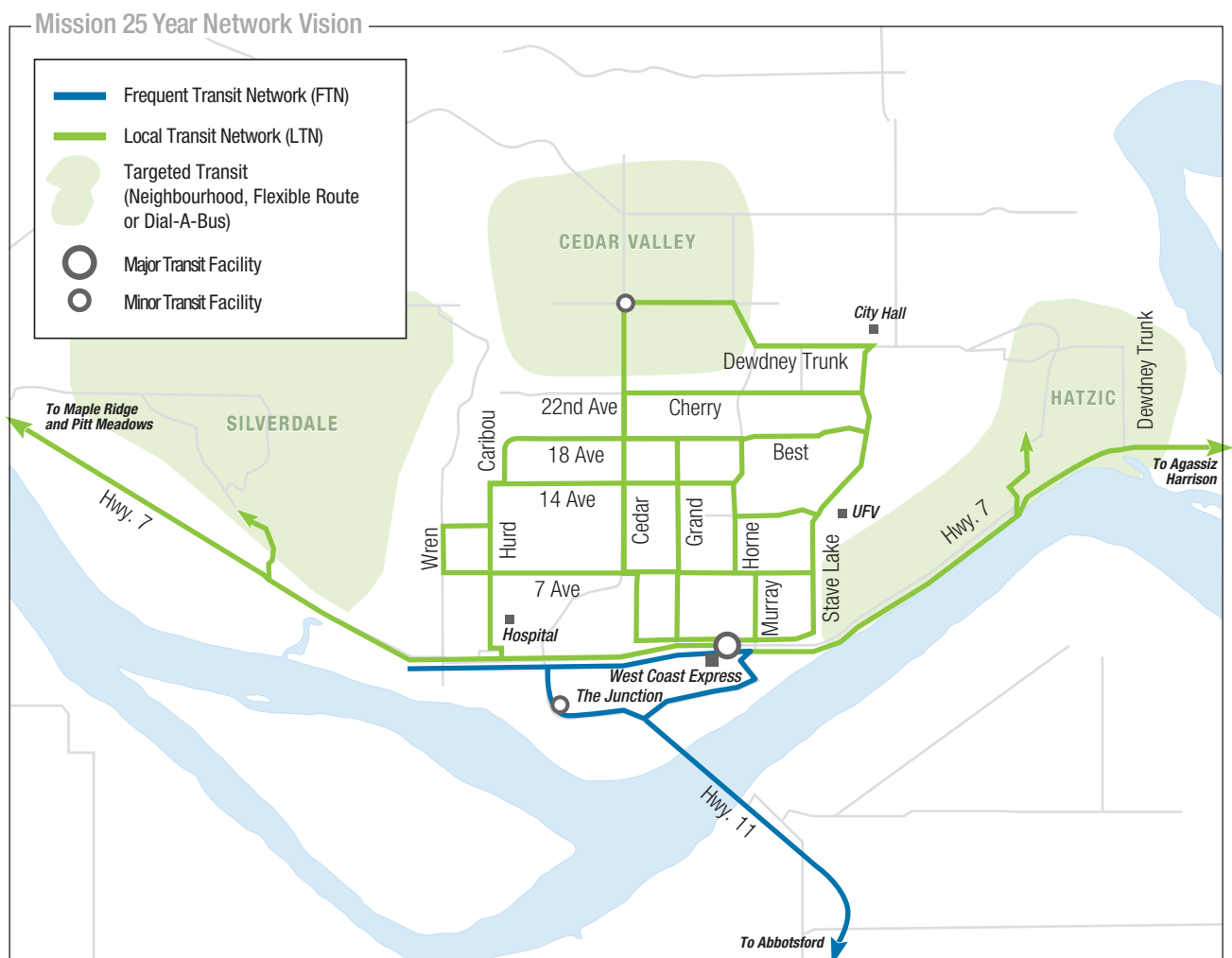
- Frequent, fast service along the primary corridors of South Fraser Way and McCallum through exclusive Rapid Transit service
- Direct trips through a Frequent Transit grid network that allows for spontaneous transfers on primary corridors
- Frequent Transit service to the Hospital and the University of Fraser Valley
- Potential frequent transit service to the Peardonville and Marshall industrial areas (West Abbotsford) to match potential future job markets
- Direct connections to the University of Fraser Valley Mission and Chilliwack campuses



Mission Transit Future Network

The Transit Future Network for Mission is made up of three service layers, frequent, local, and targeted service. The Mission Transit Future Network specifically provides:

- Frequent transit service connecting downtown, the West Coast Express, the Junction Shopping Centre, Mission Hills shopping centre, future waterfront development and the commercial district along Highway 7
- Frequent transit connection between Abbotsford and Mission
- Strong grid network throughout the community to allow for direct trips during 15 minute peak service
- Direct service to the Hospital, the Municipal Hall, Cedar Valley Centre and the University of Fraser Valley
- Targeted transit providing connections from the lower density neighbourhoods of Hatzic, Cedar Valley and Silverdale into Mission.



Abbotsford – Mission Future Resources

In order to reach **15 million rides in 25 years**, to achieve the **mode share target of 8 percent**, and to fully implement the Transit Future network, significant transit operating and capital investment is required. Defined in this section are the service hours, fleet and major infrastructure required to fulfill the 25-year Transit Future network.

Future Service Hour Requirements

The forecast for the total service hours⁸ needed to serve Abbotsford and Mission in 2036 was calculated by each service type (Rapid, Frequent, Local, Targeted, Inter-regional and Regional), and by assigning their corresponding service levels and service spans for each day of the week. Generally, the network is based on minimum service levels, as described below. However, in some cases the frequency and service span exceed the minimum standard (e.g., the Rapid corridor may have 5 minute frequency in peak periods, whereas the minimum is 15 minute frequency).

Service Type	Minimum Frequency	Minimum Service Span	Minimum Service Days
Rapid	15 minute	7am – 10pm	7 days/week
Frequent	15 minute	7am – 10pm	7 days/week
Local	30 minute	7am – 7pm	5 days/week

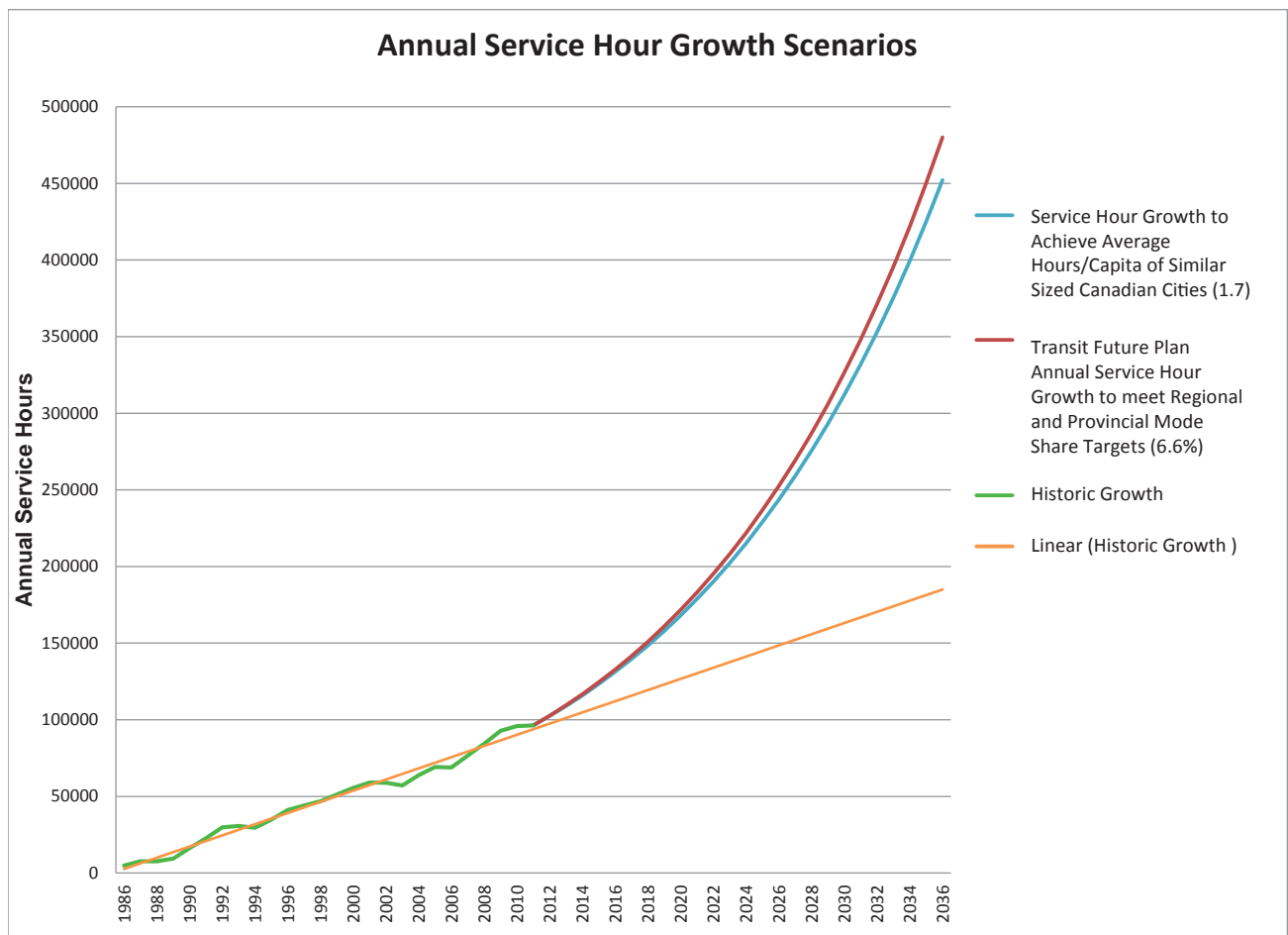
As shown in the table below, conventional service hours are projected to quintuple over the next 25 years from 105,000 to approximately 480,000. This will triple the service hours per capita, increasing from 0.6 today, to 1.8 in 2036. Historical trends indicate that these projections are ambitious but reasonable and in line with what is projected for similarly sized B.C. communities. Because the system was in its infancy in 1987, the annual percent growth in service hours over the past 25 years (13 per cent) is greater than what is projected (7 per cent), but the actual increase in annual service hours is much steeper. Over the past twenty five years, approximately 3,800 hours were added annually, while over the next 25-years, approximately 15,000 hours will need to be added annually to fully implement the Transit Future network.

Custom transit service hours are anticipated to grow at a much slower rate than the past 25 years (6.4 per cent annually), and slower than the Conventional system. The Custom transit service hour forecast is projected at a 3.5 per cent growth rate, which will more than double service in 25 years. The forecast was determined based on demographic and population trends, land use plans and assumes that the registration process is refined to best match the customer with the appropriate service.

Annual Service Hours

Year	Conventional Hours			Custom Hours	Total
	Abbotsford	Mission	Abbotsford-Mission	Abbotsford-Mission	Abbotsford-Mission
1987	6,700	900	7,600	5,300	12,900
2011	79,800	25,200	105,000	24,800	129,800
2026	244,000	81,000	325,000	41,500	366,500
2036	360,000	120,000	480,000	58,500	538,500

As shown in the graph below, maintaining historical growth rates will perpetuate the below average service hours per capita. However, achieving the Transit Future Plan targets will allow Mission-Abbotsford to catch up to their peers, achieving just over 1.7 hours per capita.



Future Fleet Requirements

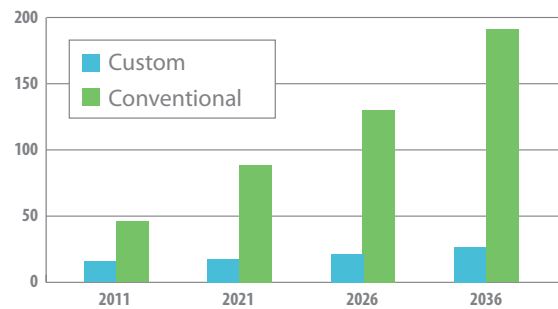
To deliver the service in 2036 as described above, the conventional fleet will quadruple. This translates to an increase from 45 to 190 vehicles over the 25 year period.

The maximum fleet required is determined by the period of time with the most service on the road. Today, the fleet intensive requirements are during the peak periods, when service frequencies are at their highest. Much of the future service expansion will occur outside peak periods, including weekday middays, evenings and weekends. This explains why service hours are projected to quintuple, while fleet required to deliver the service will only increase by 260 per cent in 2036 (spare vehicle requirements are not included).

However, travel time is another factor in determining fleet size. This plan assumes congestion will increase on certain corridors, increasing the time it takes to complete each trip, and thus requiring more vehicles at any given time. However, it also assumes that a moderate level of transit priority will be implemented to lessen the negative impact congestion has on transit.

To achieve the goals of this plan; specifically, to better match vehicle type to demand and service, a more diversified fleet will be required. The plan calls for the following types of vehicles:

Fleet Requirements



Fleet Composition

	Capacity	Service type
High Capacity	35 or more seats, 95 passengers with standees	Rapid, Express, Frequent
Heavy Duty	30 or more seats, 70 passengers with standees	Rapid, Express, Frequent
Medium Duty	Fewer than 25 seats, 40 passengers with standees	Local, Targeted
Light Duty	Fewer than 20 seats, no standees	Local, Custom



Benchmarking

The Abbotsford and Mission transit system was compared to other transit systems in communities with similar population sizes in Canada and the United States. Other important factors such as land use, density, economic development patterns and demographic makeup were also considered. Comparisons were done for both 2011 and the projected population in 2036. This exercise aided in setting future service levels and ridership expectations, helping to ensure the plan is both visionary and attainable.

The measurements used to compare communities include hours per capita, passenger trips per hour and passenger trips per capita. Hours per capita depicts how much transit service is provided in the community based on population size. Combined with fleet composition, and boarding/alighting activity along the route, it correlates to rides per capita as it establishes the maximum capacity the system can carry.

Rides per hour is one way to measure efficiency. It shows, on average, the number of passengers using the system per service hour. A service hour is the total time each bus spends providing service, including laying over and dead head time. Finally, rides per capita measures the amount of ridership in each community in proportion to the population size. Again, it is limited by the amount of service provided and vehicle type, but also can be indicative of land use, demographics, service design, and other factors.

Abbotsford

2011

Certain transit factors for communities the size of Abbotsford today (between 100,000 – 170,000) were gathered and reviewed. The analysis concluded that Abbotsford's service levels are drastically lower than the Canadian average, as is its ridership. However, proportionately Abbotsford carries just as many riders as communities with much higher levels of service. This is proven by the fact that Abbotsford has slightly higher rides per hour than the Canadian average. This information suggests that in order for ridership to increase, service needs to increase, and recognizing that Abbotsford has about half that of its peers, it could support a doubling of service in the short term.

The chart below displays ridership and service hour information for select Canadian communities, in addition to the average for US and Canadian cities of a similar size.

Comparison of Transit Systems between 120,000 – 180,000

	Population ¹⁰	Service Hours	Passengers	Hours/ Capita	Rides/ Hour	Rides/ Capita
Abbotsford	141,741	79,800	1,730,000	0.6	21.7	12.2
US cities average	139,165	103,080	1,267,688	0.7	12.3	9.1
Canadian cities average	132,511	139,541	3,250,506	1.1	23.3	24.5
Guelph, ON	120,000	246,019	6,111,557	2.1	24.8	50.9
Kelowna, BC	125,300	177,358	4,763,139	1.4	26.9	38
Sherbrooke, QC	152,027	225,581	7,638,575	1.5	50.2	50.2

Guelph, ON, located approximately 90km to the West of Toronto, has the highest rides and service hours per capita in this population group, and Sherbrooke, QC, located 150km east of Montreal has the same rides/capita with less service on the road than Guelph. Abbotsford and BC Transit should look to the strategies, policies and land use patterns in these communities as examples of how to create a transit-supportive environment and culture.

2036

The same exercise was completed for communities that are approximately the size today, that Abbotsford is projected to be in 2036 (209,732). This information is used to assist in the establishment of future service levels, and helps to ensure the future network is feasible and realistic, while still being ambitious. However, because there are very few Canadian cities in the 210,000 population range, the analysis shown below included slightly larger systems like London, ON, Halifax, NS and Victoria, BC. Including these cities raised the average hours per capita to be nearly identical as that required for Abbotsford in 2036. This puts additional emphasis on Abbotsford to make smart, transit-oriented land use decisions to help achieve the ridership projections.

Comparisons of Transit Systems between 200,000 – 310,000

	Population ¹¹	Service Hours	Passengers	Hours/ Capita	Rides/ Hour	Rides/ Capita
Abbotsford in 2036	209,732	360,000	12,300,000	1.7	34.2	58.7
US cities average	210,514	147,253	2,169,443	0.7	14.7	10.3
Canadian cities average	308,720	504,575	17,602,097	1.6	34.9	57.0
Saskatoon, SK	218,900	362,255	11,720,366	1.7	32.4	53.5
Gatineau, QC	262,391	464,800	18,379,477	1.8	39.5	70.0

Saskatoon and Gatineau were selected as examples to follow because they have the most service and ridership per capita. While Gatineau is a suburb of the large metropolitan city of Ottawa, and may not be a direct comparison, Saskatoon is a University town like Abbotsford and may provide insights applicable to Abbotsford.

¹⁰ Data from CUTA 2009 Canadian Transit Fact Book, except Abbotsford. Population numbers presented are defined as "Service Area Population": or the population living within the built-up urban and rural area of the municipality receiving regular transit service. This results in slightly inflated numbers.

¹¹ See footnote 2.

Mission

2011

The same analysis was conducted for Mission. Data from communities the size of Mission today (between 40,000 – 55,000) was gathered and analyzed. The analysis proved that Mission also has less service and lower ridership than its Canadian peers, but it is more efficient as measured by rides per hour. This suggests that Mission may be able to support an immediate increase in service, but is not in need of a doubling of service.

Comparisons of Transit Systems between 40,000 – 55,000

	Population ¹²	Service Hours	Passengers	Hours/ Capita	Rides/ Hour	Rides/ Capita
Mission	44,019	25,200	546,216	0.6	21.7	12.4
US cities average	52,849	52,333	828,442	1.0	15.8	15.7
Canadian cities average	47,073	35,668	765,604	0.8	21.5	16.3
Comox Valley, BC	45,700	25,599	600,128	0.6	23.4	13.1
Timmins, ON	44,500	41,922	973,764	0.9	23.2	21.9

Compared to similarly sized BC communities, like Comox Valley, Mission has the average amount of service, with slightly less ridership. However, Timmins, ON is very similar in size and community composition. It has nearly twice the amount of service as Mission, and maintains the same level of efficiency as measured by rides per hour. Mission and BC Transit should strive to maintain or increase this ratio as service levels are increased.



¹² Data from CUTA 2009 Canadian Transit Fact Book. Except Abbotsford, population numbers presented are defined as “Service Area Population”: or the population living within the built-up urban and rural area of the municipality receiving regular transit service. This results in slightly inflated numbers.

2036

The same exercise was completed for communities that are approximately the size today, that Mission is projected to be in 2036 (64,475). This information is used to assist in the establishment of future service levels, and helps to ensure the future network is feasible and realistic, while still being slightly aggressive. The analysis concluded that the hours needed to implement the 2036 Transit Future network are aggressive, but the ridership projection is not. However, included in the total service hours are the Inter-Regional and Regional Transit services. If these were removed (neither Prince George nor Kamloops have these services), the hours per capita would be reduced to 1.5.

Comparisons of Transit Systems between 60,000 – 80,000

	Population ¹³	Service Hours	Passengers	Hours/ Capita	Rides/ hour	Rides/ capita
Mission in 2036	64,475	120,000	2,600,000	1.9	21.7	40.3
US cities average	65,032	51,808	520,897	0.8	10.1	8.0
Canadian cities average	78,673	94,372	2,229,392	1.2	23.6	28.3
Prince George, BC	60,100	63,547	1,943,921	1.1	30.6	32.3
Kamloops, BC	76,000	99,913	3,469,666	1.3	34.7	45.7

As shown above, the average hours per capita is 1.2 for similarly sized Canadian cities, which is double the existing service levels in Mission. Prince George and Kamloops have higher than average ridership with Kamloops at nearly 3.5M annual passengers.

Abbotsford – Mission Transit in 2036

In 2036, the Abbotsford - Mission conventional transit system will be vibrant, efficient and supportive of transit-oriented land use. Modern vehicles, cutting edge technology, and smart marketing will have changed the perception of transit, making it a premier mode of transportation. Residents and visitors will be able to travel to their local neighbourhood centre, to major destinations like hospitals and employment centres, and they will be able to visit their friends in other Fraser Valley and Metro Vancouver communities via transit.

A summary of the requirements for the system, and for Abbotsford and Mission separately is provided below.

	2011	2036	Abbotsford 2036	Mission 2036
Fleet	45	190	140	50
Service hours	105,000	480,000	360,000	120,000
Ridership	2,300,000	14,900,000	12,300,000	2,600,000
Hours per capita	0.6	1.75	1.72	1.86
Rides per capita	12.25	54.3	58.7	40.3
Rides per hour	23.6	31.0	34.2	21.7



Executive Summary

Introduction

Participation

Setting the Scene

Transit Today

Visions and Goals

The Future

Implementation Strategy

Moving Forward

Transit Infrastructure

Implementing the Transit Future network requires investments in transit infrastructure such as customer facilities, exchanges, and transit priority measures.

Customer Facilities

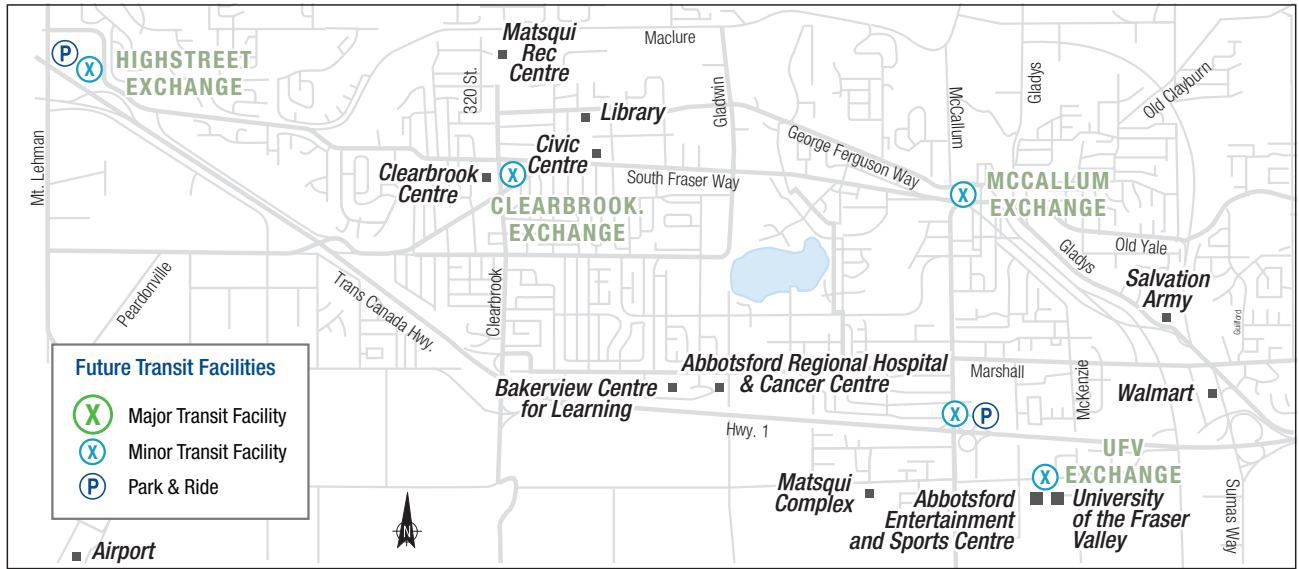
Restructuring the transit network presents opportunities for new and upgraded customer facilities such as future Rapid Transit stations and Park & Rides. In addition to new exchanges, Park & Rides provide access into the Rapid, Frequent and Inter-Regional and Regional Transit networks for the lower density neighbourhoods where transit services may not exist or are very infrequent. Modern, technologically advanced transit stations along the Rapid Transit corridor will help improve the image of transit and attract new riders. Future facilities are identified on the map shown below.

Exchanges

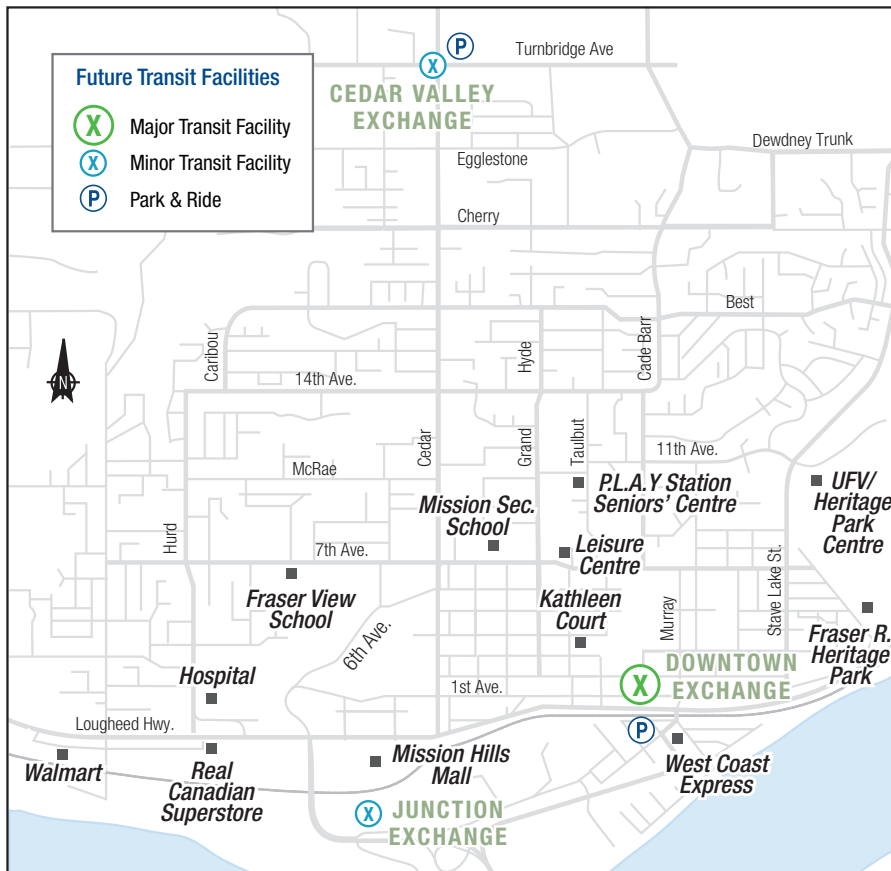
To support the Transit Future network, several transit exchanges, both major and minor are required for customers to make connections between routes, provide space for vehicles to layover, and for drivers to take a break. Depending on the particular requirements, road design and surrounding land use, an exchange can range from pullouts along the side of the road, to a segregated facility with amenities like washrooms and bicycle storage. A minor exchange requires four or fewer bays, and a major exchange requires 5 – 8 bays. The exchanges are demonstrated as grey circles on the Transit Future maps, and are also described below. The locations are general recommendations based on the transit network, and may adjust depending on land requirements, availability and implementation.

Community	Exchange Name	General Location	Capacity	Park & Ride
Mission	Downtown Mission	Downtown Mission/WCE station	8	yes
Mission	The Junction	The Junction shopping centre	3	
Mission	Cedar Valley	Cedar Valley town centre	3	yes
Abbotsford	High St	Highway 1 and Mt Lehman	5	Yes
Abbotsford	Clearbrook	Clearbrook and South Fraser Way	5	
Abbotsford	McCallum North / Downtown	McCallum and South Fraser Way/McDougall	5	
Abbotsford	McCallum South	McCallum and Highway 1	5	Yes
Abbotsford	University of the Fraser Valley	U District	3	
Abbotsford	Abbotsford Hospital	Marshall and Gladwin	3	

Abbotsford Future Transit Facilities



Mission Future Transit Facilities



Transit Priority

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 the successful “Yield to the Bus” regulations and signage), operational (such as retiming traffic signals to respect the large number of passengers on transit vehicles compared to private vehicles), or physical (such as exclusive transit ways, queue jumper lanes and signal priority).

As congestion increases, it will be critical to give transit priority over general traffic to attract greater numbers of passengers and to achieve the Transit Future goals of reliability, attractive service and cost effectiveness. Transit priority investments improve reliability by reducing the effect that daily changes in congestion have on transit travel times. Savings in transit travel times can reduce the number of service hours and fleet required to operate service.

A more detailed review of forecasted traffic volumes on Rapid and Frequent Transit corridors should be completed to prioritize investment and to determine the most appropriate treatment by corridor.

Operations and Maintenance Center

The existing facility was constructed eleven years ago and has reached capacity. It was designed to provide parking for forty conventional and eighteen custom vehicles. It also has four maintenance bays and office space for administration, dispatch and a driver’s lounge. The four-bay maintenance area is at maximum capacity for the number of buses presently operating out of the facility. A typical ratio is one bay for every twelve buses. With the existing fleet at 62 (including custom vehicles), the existing ration is one bay for every sixteen buses. Fleet expansion is not an option until increased capacity is obtained.

Transit Amenities

The Transit Future plan requires investment in stations on the Rapid Transit corridor and at major stops on the Frequent Transit Network. Investments in customer amenities should be directed to those stops with the most activity. Transit stops with lower levels of passenger activity should at a minimum meet accessibility guidelines with a bench available for seating.



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today
- Visions and Goals
- The Future**
- Implementation Strategy
- Moving Forward

Implementation Strategy

The implementation strategy guides the creation of the Transit Future network by establishing priorities and service strategies for each community in sequential order. It is a strategy, providing direction on the transformation of key transit routes and major infrastructure locations. The implementation strategy does not prescribe every detail, which allows it to be flexible and applicable even under shifting dynamics, growth projections and land use decisions. Areas requiring further research and analysis are also identified.

An effective implementation strategy for transit in Abbotsford and Mission must enhance the experience for existing customers, be attractive and convenient for new customers, and be aligned with future travel markets as a result of population and employment growth. The implementation strategy was informed by travel data and transit system performance data collected through The Strategic Review of the Transit in the Fraser Valley (SRTFV) and updated information from the Regional Growth Strategy and transit revenue data. It was also informed by demographic information and future land use plans.

Quick Wins

Numerous projects and initiatives can be started immediately with relatively few impediments. Some require funding while others items are nearly cost neutral. Initiating this plan immediately with these 'Quick Wins' develops momentum and will begin to achieve the plan's ambitious targets.

Improve Efficiency and Reliability

- Conduct a system-wide efficiency review. Using the performance guidelines established in this plan, collect, analyze and recommend service adjustments to improve routes or route segments that are under performing. Ensure operator feedback is included in this review. The results of the review may include increases or decreases in service, changes in routing, or elimination or addition of routes.
- As part of the system-wide efficiency review, conduct an operational review to fine tune the schedule to best match the printed time table to actual trip running times. For instance, in Mission, Routes 32 and 33 are known to consistently not meet the printed timetable.
- Identify opportunities to better match vehicle type to demand
- Review and improve the maintenance schedule with the goal of decreasing the per cent of vehicles not in service due to breakdowns.

Improve Customer Information and Customer Service

- Increase the availability and improve the functionality of schedule information and Riders Guides.
- Introduce stop-level schedule and fare information at major transit stops and high activity areas.
- Improve advertising and promotion to increase brand awareness and ridership.

Meet Additional West Coast Express Arrival and Departure Times

- Add trips to the Route 31 – Valley Connector, and key Mission and Abbotsford routes so passengers can access West Coast Express trips with minimal transfer time to/from local transit connections.

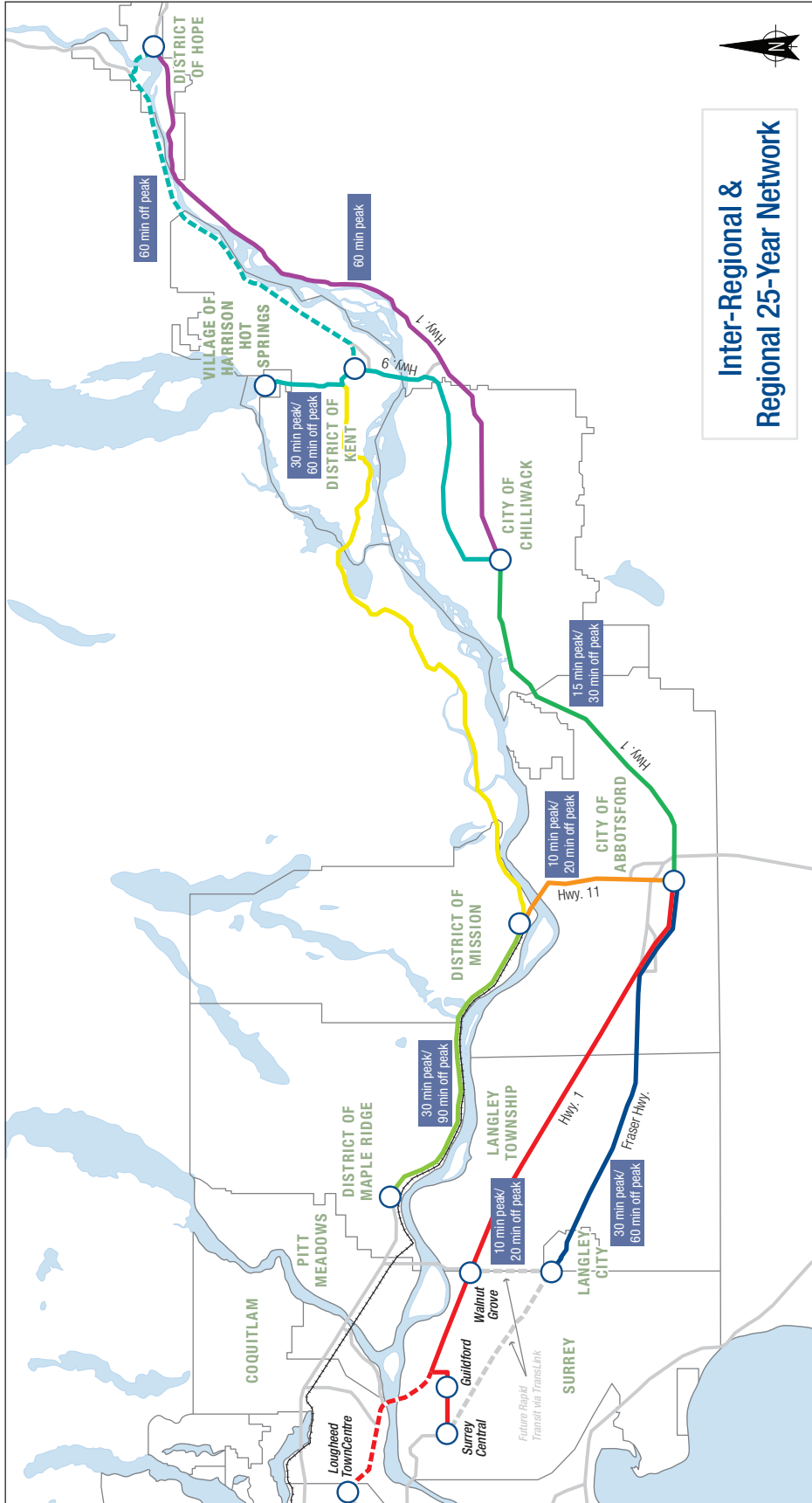
Inter-Regional & Regional Network Priorities

Operations and Maintenance Centre Capacity

Crucial for the implementation of both Abbotsford and Mission priorities, the plan identifies an immediate need for increased capacity at the transit operations and maintenance facility. As indicated earlier in the plan, the existing facility has exceeded operational capacity which prohibits the ability to expand service in the near term. In order to serve the community for the next 25-years, the new or expanded facility should be able to accommodate a fleet of 220 transit vehicles. A study will be required to identify the functional requirements as well as to evaluate potential locations and ultimately recommend the preferred option. Partnership opportunities to share a new facility with School District 34 (Abbotsford) or other municipal functions should be explored.

Establish the Transit Future Plan Inter-Regional and Regional Network structure

The Regional Network Priorities section of the plan prioritizes each service that composes the Inter-Regional and Regional Vision. In the cases where a route already exists, its inclusion in this list translates to an increase in service. For new routes, service levels would be dictated by budgets at the time of implementation. Much discussion and resolution of all the challenges must occur before many of these routes are implemented, and in some cases these discussions should commence immediately. Listed below is the priority implementation strategy as agreed by all local and regional stakeholder participants at the Regional Planning Workshop. It has been divided into two categories to delineate services that directly impact Mission and Abbotsford.



**Inter-Regional &
Regional 25-Year Network**

Abbotsford – Mission Services

1. Abbotsford – Mission
2. Abbotsford – Surrey Central via Highway 1
3. Abbotsford – Chilliwack
4. Mission – Maple Ridge
5. Abbotsford – Langley via Fraser Highway

Other Regional & Inter-Regional Services

6. Chilliwack – Agassiz-Harrison
7. Chilliwack – Agassiz-Hope
8. Chilliwack – Hope

Most of these services operate primarily on the highway and the trip is longer than 20 minutes. Consideration should be given to a specialized fleet that prioritizes passengers' comfort and provides other amenities such as wireless internet.

Transit Service Levels

Twenty-five year service levels are displayed below. However, in many cases initial service implementation may occur at lower levels of service. Also, provided below are suggested introductory levels of service that target the commuter and student markets. Service frequencies should be increased based on ridership demand.

Service	Introductory Service Levels	2036 Service Levels
Abbotsford - Surrey Central	30 peak/60 base	10 peak/20 base
Abbotsford - Langley	60 peak	30 peak/60 base
Mission - Maple Ridge	45 peak	30 peak/90 base
Abbotsford - Mission	15 peak/30 base	10 peak/20 base
Abbotsford - Chilliwack	30 peak/60 base	15 peak/30 base
Chilliwack - Harrison	60 peak/60 base	30 peak/60 base
Chilliwack - Hope	60 peak	60 peak
Chilliwack - Agassiz - Hope	60 peak/60 base	60 peak/60 base

Abbotsford to Metro Vancouver via Highway 1

Travel between Abbotsford and Metro Vancouver is the highest in the Valley, with more than three times the demand between Mission and Abbotsford. This service is designed to directly connect into the RapidBus service connecting Walnut Grove and Surrey directly to Sky Train. Unlike the service along the Fraser Highway, the connection along Highway 1 is designed to be competitive with the automobile by offering limited stops within the communities and closed door service along Highway 1. As congestion continues to grow on Highway 1, appropriate transit priority measures should be identified and implemented to ensure the service is attractive and efficient.

Abbotsford Chilliwack Express (ACE)

The ability to travel throughout the Fraser Valley is limited by a gap in transit service between Abbotsford and Chilliwack. Travel demand between these two communities is the same as demand between Abbotsford and Mission, which are connected by 80 weekday trips on the Route 31 - Valley Connector. Implementing service along Highway 1 to Chilliwack will vastly improve regional connections and help to reduce congestion along this corridor. This service is in high demand particularly by those needing to access medical facilities and by students traveling between the University of Fraser Valley campuses (a petition was received from the UFV Student Union in 2012 requesting that this service be implemented immediately). ACE will truly be an express service, by closing its doors along Highway 1, only stopping at select locations in each community. This will be an attractive alternative to the private auto by being competitive in travel time.

Implement Transit Trip Planning

Implementing online transit trip planning provides several options to travel by transit based on the given origin and destination. Transit trip planning makes traveling by transit much easier by removing the need to discern a printed schedule, and replace it with a personalized itinerary.

Increase Custom Transit Availability and Hours of Operation

Refining the registration process to build awareness and usage of the fully accessible conventional system for those people with a disability able to use it would in turn ensure that specialized handyDART hours are available for those unable to travel on conventional services. When demand still exceeds supply, additional capacity during peak periods should be added, in addition to the expansion of hours of operation to match those available on most conventional transit services. Providing service on Sundays should be a top priority.

International Connections

Coordinate schedules between Route 2 – Huntingdon/Blue Jay and Whatcom Transportation Authority's Route 71x – Everson/Nooksack/Sumas to improve international travel.

Abbotsford Priorities

The implementation strategy for Abbotsford is comprised of three phases, each of which increasingly transforms the system from today into the 25-year Network Vision. Each phase represents major leaps in investment and may need to be implemented in subsections. While minor adjustments and expansions of service can occur in the immediate future, the Operations and Maintenance Centre must be expanded to accommodate additional fleet. Additionally, the following transit facilities specific to Abbotsford are required prior to the full implementation of Phase One. Given their significance to the implementation of the plan, the establishment of these facilities in Abbotsford should be given a high priority.

Establish the Critical Transit Facilities

Establish the McCallum Exchange

The Abbotsford Network Vision eliminates the need for an exchange along Bourquin Road and replaces it with an exchange in the vicinity of McCallum Road and South Fraser Way. This new exchange will be the primary hub for transfers to the Rapid and other Frequent Transit lines from East Abbotsford and Mission. A study should be initiated to determine the role of the Bourquin exchange property in the future, and the best suited location for the new exchange. It should also identify the specific needs in the immediate, medium and long term time horizons.

Introduce the McCallum Park and Ride

During the upgrading of the McCallum interchange, space was allocated for a future Park & Ride. With the introduction of the Rapid Line and the connectors between Chilliwack and Metro Vancouver, the ability to Park & Ride at this location will be critical. Starting the process to upgrade this space will allow for the opening of the Park & Ride and the new Inter-Regional and Regional services to align.

Establish the Clearbrook Exchange

The intersection of Clearbrook Road and South Fraser Way is and will continue to be a high activity area for transit riders. Facilities should be upgraded and include amenities associated with the rapid line. A study should be initiated immediately to determine the best suited location and to identify the specific needs in the immediate, medium and long term time horizons.

Phase One: Short Term

Establish the Transit Future Plan network structure

With the introduction of the new McCallum Exchange, existing services can be realigned to begin to form the Rapid Line along McCallum Road and South Fraser Way, and the first Frequent Transit line along George Ferguson Way. These corridors bisect the most dense areas of Abbotsford and connect major destinations such as the University of Fraser Valley, Highstreet, and the Civic Precinct. Establishing the routes prior to investing in infrastructure improvements will build ridership and acclimatize riders and businesses to the service.

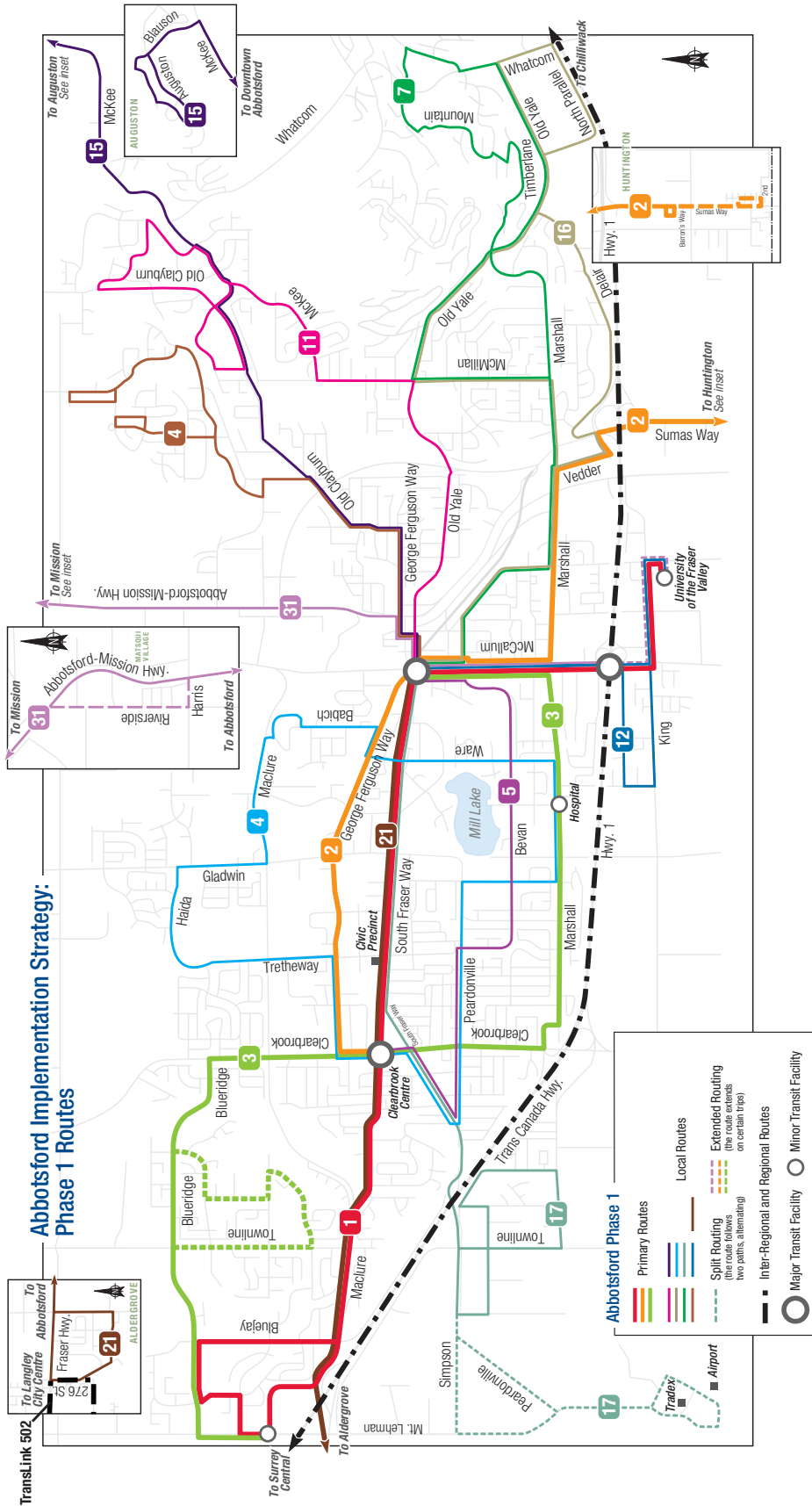
Ensuring a strong connection to the Abbotsford Regional Hospital is the next priority. The Frequent Transit line along Clearbrook Road and Marshall Road provides direct, high level service with easy connections from the East and the West.

Transit Future Service Levels

Service	Frequency (minutes)	Hours of Service
1 South Fraser Rapid Line	15 peak/30 base	6:00 a.m. to 10:45 p.m.
2 George Ferguson	15 peak/30 base	6:15 a.m. to 11:00 p.m.
3 Clearbrook	15 peak/30 base	6:00 a.m. to 10:45 p.m.
4 Mid-town circulator	30 peak/60 base	6:00 a.m. to 10:45 p.m.
5 Bevan	30 peak/30 base	6:30 a.m. to 10:00 p.m.
11 McKee	15 peak/30 base	6:00 a.m. to 10:45 p.m.

Estimate of additional transit system annualized hours and vehicles

Service Improvement	Fleet	Annual Service Hours
Establishing the Transit Future Network	2	2,500



Transit Service Levels

Phase One does not necessitate an increase in service levels in order to create the Transit Future Network. However, in order to build ridership and reach the goals established in this plan, higher levels of service on the primary corridors are required. Investing in the Rapid and Frequent lines are top priority, but connections to these routes must also be prioritized. Completion of Phase One achieves 15 minute frequency on the Rapid and George Ferguson routes all day, every weekday.

Transit Future Service Levels

Service	Frequency (minutes)	Hours of Service
1 South Fraser Rapid Line	15 peak/15 base	6:00 a.m. to 11:00 p.m.
2 George Ferguson	15 peak/15 base	6:00 a.m. to 11:00 p.m.
11 McKee	30 peak/60 base	6:00 a.m. to 10:00 p.m.
21 Aldergrove	85 peak/85 base	6:00 a.m. to 7:00 p.m.
31 Valley Connector	15 peak/30 base	5:30 a.m. to 11:00 p.m.
Abbotsford - Chilliwack Express	40 peak/80 base	6:00 a.m. to 10:00 p.m.
Abbotsford - Surrey Central	60 peak/60 base	5:30 a.m. to 9:00 p.m.

Estimate of additional transit system annualized hours and vehicles

Service Improvement	Fleet	Annual Service Hours
Establishing the Transit Future Network	13	33,000

Rapid Transit Phase One

Planning for a Rapid Transit line involves coordinated land use, transportation and transit planning. Starting a study early in the process will confirm the corridor, and review and analyze transportation and travel demand forecasts to better determine phasing opportunities. It will also enable value added partnerships if the corridor experiences redevelopment. The result will be a well-planned corridor where land use and transit are integrated and support each other.

Phase Two: Medium Term

Highstreet Terminal

Phase two completes the build out of the Transit Future Network by creating a terminal on the West end of the Rapid line at the High Street development proposed for the corner of Mt. Lehman and Highway 1. Highstreet is envisioned to be a densified suburban development that combines mixed use destinations in 600,000 square feet. It is to be anchored by Walmart, Cineplex VIP Cinema and London Drugs. Early planning should include an integrated bus terminal that has priority access over the automobile.

Complete the Frequent Transit Network

The addition of the Sumas-Gladys and Blueridge lines completes the FTN network. This network is designed to provide direct travel by creating as close to a grid system as possible given the existing street network. Riders will be able to make spontaneous transfers with minimal waiting time. The FTN also supports the increase in mixed-use density described in Abbotsford's Official Community Plan.

Rapid Transit Phase Two

With the introduction of the Highstreet Terminal, the phasing recommendations of the Rapid Transit Phase One Study can be implemented, and an official opening of the line ceremony can be held. Service levels along the corridor should meet the RTN definition (15 minute service, 15 hours per day, 7 days per week). Stop spacing should be infrequent to aid in a quick travel time, and station locations should be deliberate to match major destinations along the corridor. Depending on the recommendations of Phase One, branding and transit priority options should be explored.

Estimate of additional transit system annualized hours

Service	Frequency (minutes)	Hours of Service
1 South Fraser Rapid Line	15 peak/15 base	6:00 a.m. to 11:00 p.m.
2 George Ferguson	15 peak/15 base	6:00 a.m. to 11:00 p.m.
3 Clearbrook	15 peak/15 base	6:00 a.m. to 11:00 p.m.
4 Mid-town circulator	15 peak/15 base	6:00 a.m. to 11:00 p.m.
5 Bevan	15 peak/30 base	6:00 a.m. to 11:00 p.m.
21 Aldergrove	85 peak/ 85 base	6:00 a.m. to 7:00 p.m.
31 Valley Connector	15 peak/15 base	5:30 a.m. to 11:00 p.m.
Abbotsford - Chilliwack Express	20 peak/40 base	6:00 a.m. to 10:00 p.m.
Abbotsford - Surrey Central	30 peak/60 base	5:30 a.m. to 9:00 p.m.

East Abbotsford Study

Development east of downtown Abbotsford is largely low-density residential with pockets of medium density or commercial nodes. Serving this growing area effectively and efficiently is a challenge. Recognizing there will be much change over the next 10 years, this plan calls for a study to specifically review travel patterns originating and terminating in East Abbotsford. The result will be a transit strategy that supports this type of land use and meets the needs of residents.

Identify and implement transit priority opportunities with short implementation timelines

The cost of operating the existing transit system will increase as travel speeds decrease due to congestion. Corridors of concern and the appropriate transit priority measures need to be identified and then implemented. Short term priority measures may include High Occupancy Vehicle lanes, signal priority, queue jumper lanes, and building select portions of transit ways.

The successful implementation of transit priority measures on future RTN and FTN corridors will increase operational efficiency and help to build the future transit market, which will support business cases for capital improvements in the future. Specifically, opportunities along South Fraser Way, McCallum Road and Highway 1 should be explored and analyzed in the short term.

Phase Three: Long Term

YXX-Industrial Study

Land within the area identified as the YXX-Industrial Study Area is an important site for future growth in the City. The City of Abbotsford expects to see considerable growth of employment opportunities and economic activity that takes advantage of the close proximity to the international airport, the Trans-Canada Highway and an international border crossing.

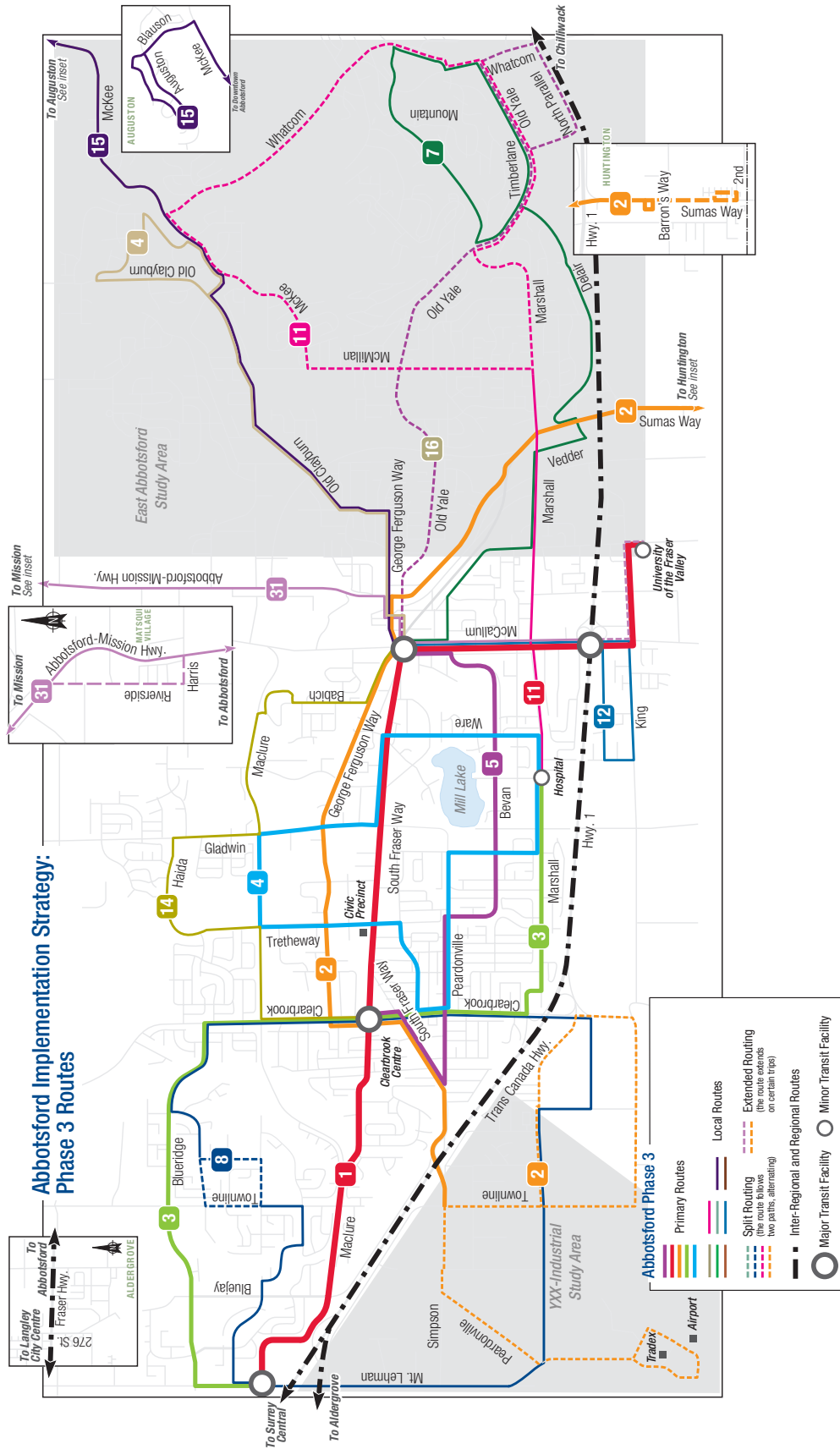
The Abbotsford International Airport itself has been identified as a key economic driver. Extensive land use planning work has been completed for the airport lands, and as much as \$30 million have been spent recently on runway and terminal building improvements.

A study is needed for the YXX-Industrial area to determine a service plan that is tailored to the unique needs of this budding economic growth area.

Increase service levels on FTN corridors (as required)

The FTN service level standard is every 15 minutes, 15 hours per day, 7 days per week. Investments in FTN service levels should be made in the following milestones:

1. Monday to Friday 7:00 a.m. – 10:00 p.m.
2. Saturday 7:00 a.m. – 7:00 p.m.
3. Sunday 7:00 a.m. – 7:00 p.m.
4. Saturday 7:00 a.m. – 10:00 p.m.
5. Sunday 7:00 a.m. – 10:00 p.m.



Mission Priorities

Establish or Upgrade Key Transit Infrastructure

Similar to Abbotsford, increased capacity is required at the Operations and Maintenance Centre prior to any increase in service. The Mission transit exchange is not as pressing as upgrading the Abbotsford Exchanges, but it should still be given priority in the short term.

Mission Transit Exchange Review

The Mission Network Vision identifies the continued need for an exchange in the downtown/West Coast Express station vicinity. However, a more thorough review is required to refine the location and requirements for the immediate, medium and long term time horizons. Ensuring that it provides connections both regionally and locally and is located in an area that is a destination in and of itself will ensure a successful, safe exchange over the life of this plan.

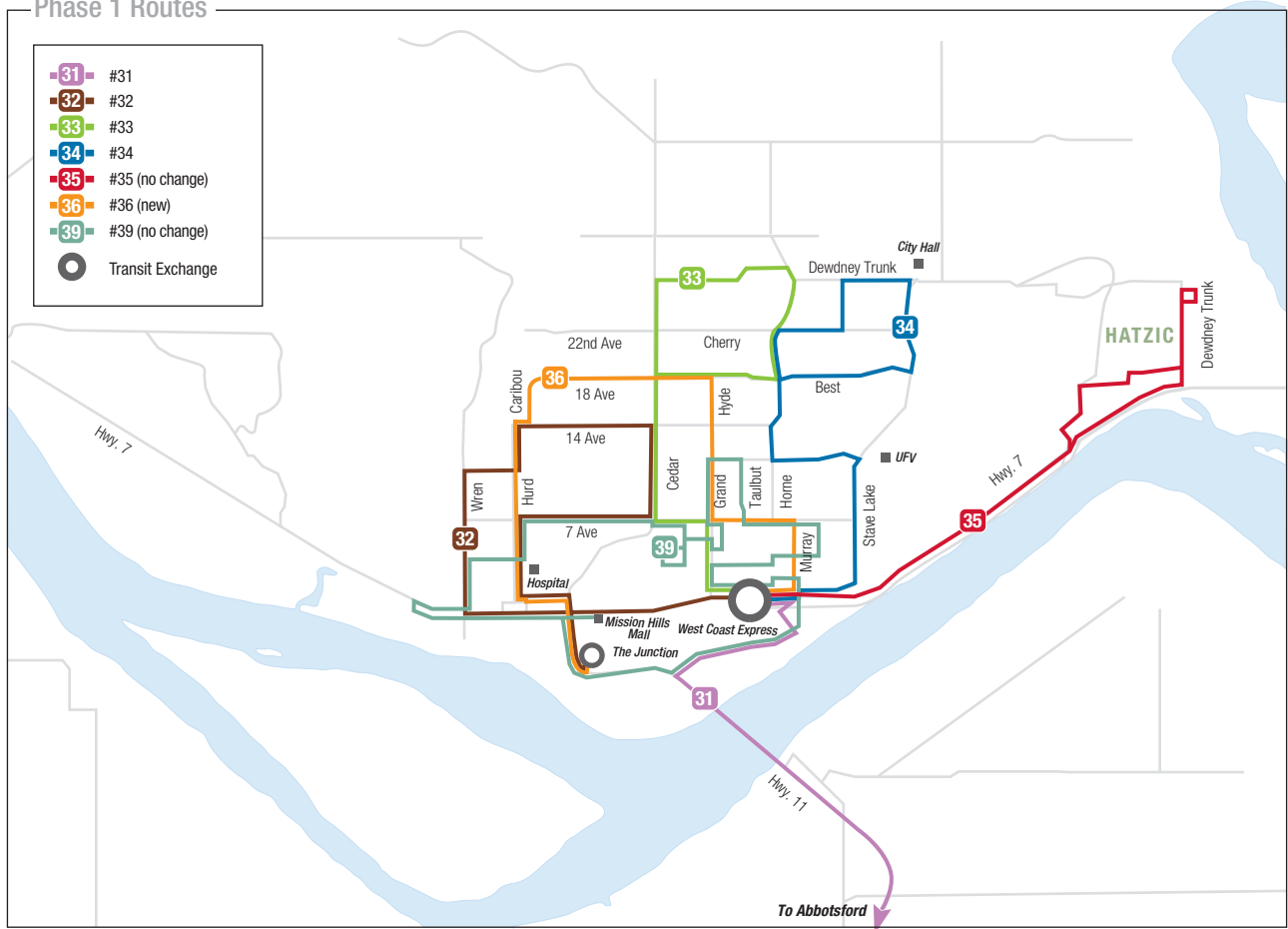
Phase One: Short Term

Phase One of network evolution focuses on streamlining services in Mission to create more two-way service along corridors rather than loops. The existing network is primarily composed of large one-way loops which have the benefit of providing good coverage but which create longer trips for passengers. In addition to making trips more direct, two-way service makes the system easier to understand and more dependable by reducing the number of “limited service” trips and ensuring each route does the same thing every trip. One example of this is to remove the night service special routing and replace it by extending the service day on the primary routes into the evening.

Keeping the service levels constant, but adjusting the routes to create Phase One requires approximately 13,000 hours.

Mission Implementation Strategy:

Phase 1 Routes



Transit Future Service Levels

Service	Frequency (minutes)	Hours of Service
31 Valley Connector	15 peak/30 base	6:30 a.m. to 11:00 p.m.
32 West Heights	30 peak/30 base	6:00 a.m. to 10:30 p.m.
33 Cedar Valley	30 peak/30 base	6:00 a.m. to 6:30 p.m.
34 East Side	30 peak/30 base	6:00 a.m. to 6:30 p.m.
35 Hatzic	6 trips	7:30 a.m. to 6:00 p.m.
36 Grand	30 peak/30 base	6:00 a.m. to 6:30 p.m.
39 Shoppers Shuttle	60 peak/60 base	9:00 a.m. to 7:00 p.m.
40 Night/Sunday	60 base	7:00 p.m. to 10:00 p.m.

Estimate of additional transit system annualized hours and vehicles

Service Improvement	Fleet	Annual Service Hours
Establishing the Transit Future Network	5	13,000

Other network priorities:

- Sunday service: Provide Sunday service on all Mission routes
- Holiday service: Provide Sunday level of service on holidays
- Evening service: Extend weekday and Saturday service until 10:30 p.m. on routes 33, 34 and 36, replacing Route 40
- Improve weekend service to Hatzic

Estimate of additional transit system annualized hours and vehicles

Service Improvement	Fleet	Annual Service Hours
Other network priorities	2	4,000



Phase Two: Medium – Long Term

Establish the Transit Future Plan Network Structure

As service levels increase to every fifteen minutes in the peak periods, creating the Transit Future Network becomes possible. This network is designed to achieve two objectives:

1. In the peak travel periods, provide 15 minute service on the primary routes, and align them to form a grid network. This service design reduces transfer times and allows riders to travel as directly as possible via L-shaped movements. Increasing ridership from the commuter and student markets is the goal.
2. In the off-peak, service frequency will be less than 15 minutes due to the lower density neighborhood design that comprises most of Mission. Spontaneous transferring becomes less desirable as the transfer time grows, thus the network is designed as a hub and spoke system, focusing transfers at the downtown/WCE exchange. Recognizing most of the business and commercial destinations are along Highway 7, a circulator is designed to provide access to these popular locations.

Targeted Transit

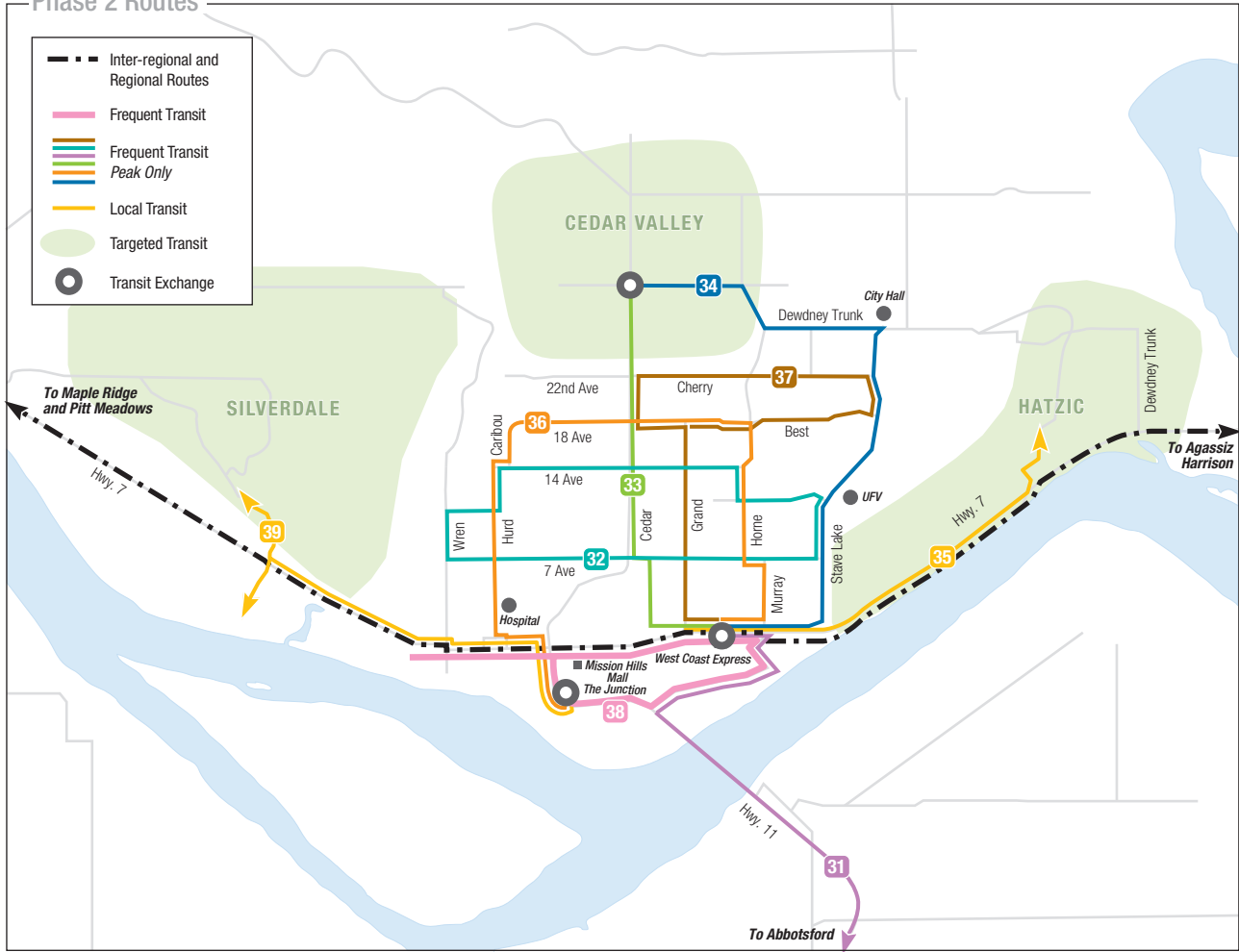
Three areas of Mission are identified as long term growing neighborhoods, including Hatzic, Cedar Valley and Silverdale. Recognizing these communities are lower density and some distance from downtown Mission, the most effective means of providing service may not be traditional fixed route service. Prior to instituting or increasing service if it already exists to these communities, all options of service type should be explored including zone dial-a-ride, taxi-cab, and community shuttle.

Increase service (as required)

Increase service as demand warrants on the primary routes within Mission. Attention should be paid to weekend and evening service once the peak periods reach fifteen minute frequency.

Mission Implementation Strategy:

Phase 2 Routes



Ongoing Initiatives

The following initiatives are aspects of the Transit Future Plan that require continuous effort throughout the life of the plan.

Enhance Custom Transit Service

The plan forecasts an increase in the custom fleet from 17 to 30 vehicles, and an increase in service hours from 24,800 to 58,500 in 2036. In order to best serve members of the community that rely on this service, a series of improvements are outlined below:

- Expand handyDART services to align the hours and days of operation with the conventional system
- Increase the availability of trips for those not able to use conventional services by refining the registration process
- Increase service availability to allow customers to plan casual trips throughout the entire service day

Address Existing Service Needs

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

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

Develop the Local Transit Network (LTN)

The LTN is designed to connect neighbourhoods to local destinations and to the RTN and FTN. For this reason, a comprehensive LTN throughout the region is critical for the creation of livable communities and for the success of the RTN and FTN. Some LTN service changes and improvements will be aligned with RTN and FTN projects as the transit network evolves. Other LTN projects will be the result of targeted local planning initiatives that will focus on the specific needs of an individual community or corridor and its residents.

Match Vehicle Type to Local Demand

Establishing the RTN and FTN and complementing Local Transit Network (LTN) routes will present opportunities to utilize smaller vehicle types for LTN services that can increase efficiency and reduce capital costs.

An example of a smaller vehicle type is the Vicinity, a 27.5 foot vehicle BC Transit is trialing. 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

The improvement of customer information helps to assist existing customers to navigate the transit system and makes it easier for new customers to access the transit system for the first time. The following customer information tools are of particular interest:

- Online trip planner, such as Google Transit
- Real-time customer information
- Corridor and vehicle branding standards for RTN and FTN corridors
- Additional transit information at the stop level

Improve Transit Facilities

Continued improvement and maintenance of transit facilities and on-street customer amenities are important for the continued operation and future growth of the transit system. Some improvements that have been identified are:

- Ensure that transit stops are spaced along a corridor at an appropriate interval between 300m – 500m. In some locations, transit stops are spaced closer together leading to slower transit trips and higher transit stop maintenance costs. Transit and transportation projects should include a review of stop locations before infrastructure investments are made
- Invest in on-street customer amenities such as street 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 customer markets (e.g., along a new RTN corridor)

Make Transit More Accessible

Transit in Abbotsford and Mission should strive to be accessible to all. With the mobility requirements of an aging population there will be an increasing need for more accessible transit solutions. Accessibility 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



- Executive Summary
- Introduction
- Participation
- Setting the Scene
- Transit Today
- Visions and Goals
- The Future
- Implementation Strategy**
- Moving Forward

Moving Forward

Funding the Plan

Today, the Abbotsford - Mission system is funded through a combination of provincial funding, local property tax, passenger fares and advertising revenue. Given the significant increase in transit investment expected over the coming decades, the way in which transit is and will be funded needs to be examined.

One of the priorities in *BC Transit's 25 year Strategic Plan* is to “develop stable and predictable revenue sources.” The proposed actions to achieve this priority are:

- 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 improvements for conveying transit system budget information to local governments, such as the provision of multi-year budgets aligned to municipal calendar years
- Continue to confirm the Provincial Government’s BC Bus Pass program pricing (an annual pass program for lower income seniors and people with disabilities)
- Implement new partnerships and revenue opportunities
- Seek to revise legislation, policies and procedures to encourage profitable commercial use of BC Transit assets and resources for reinvestment to further transit service objectives
- Explore opportunities to offset BC Transit costs by leveraging BC Transit expertise and scope with other organizations (for example, synergies with other local transportation providers, BC Transit fleet procurement expertise or bulk fuel contracts)
- Continue to support local governments to offset costs by identifying and creating local transit funding partnership with other agencies

BC Transit has heard from local government that continuously increasing property tax to fund the local share of transit projects and operations – particularly for major capital investments – is a challenge. Reducing the local share funded through property taxes could be achievable through alternative funding sources, which are explored in the accompanying document titled, “Transit Future Plan Funding Strategies.” Highlighted below are a few alternative sources of revenue which are elaborated in the attached document. These options may require legislative changes and/or provincial government approval.

Local Fuel Tax

A tax on fuel could be collected at the pump at all gas stations in the region to help fund transit. A transit tax is levied on fuel in Greater Victoria and Metro Vancouver to help fund transit services.

Community Pass

Each household could receive an annual transit pass in return for paying a fraction of the cost of a regular annual pass through their property tax bill.

Parking Tax

A parking tax could be used to offset transit costs. This measure also acts as an incentive to decrease parking demand, which in turn can make transit more attractive.

Capital Reserve

A portion of property taxes could be put aside each year to build a capital reserve for transit infrastructure.

Vehicle Levy

An annual vehicle levy could be collected when vehicle insurance is renewed.

Implementing the Plan

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

Once the Transit Future Plan is approved, the first step towards implementation is to develop a detailed 3-year service plan which relies on passenger and operational data. This plan will help guide BC Transit's 3-year budgeting process which is designed to inform the local government budget development, and BC Transit's provincial budget submission.

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

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



Keys to Success

BC Transit will work with the City of Abbotsford and the District of Mission to begin 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 continuous dialogue between these partners, and consultation with the public and the operating company, to ensure strong links between:

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

How will BC Transit use this plan?

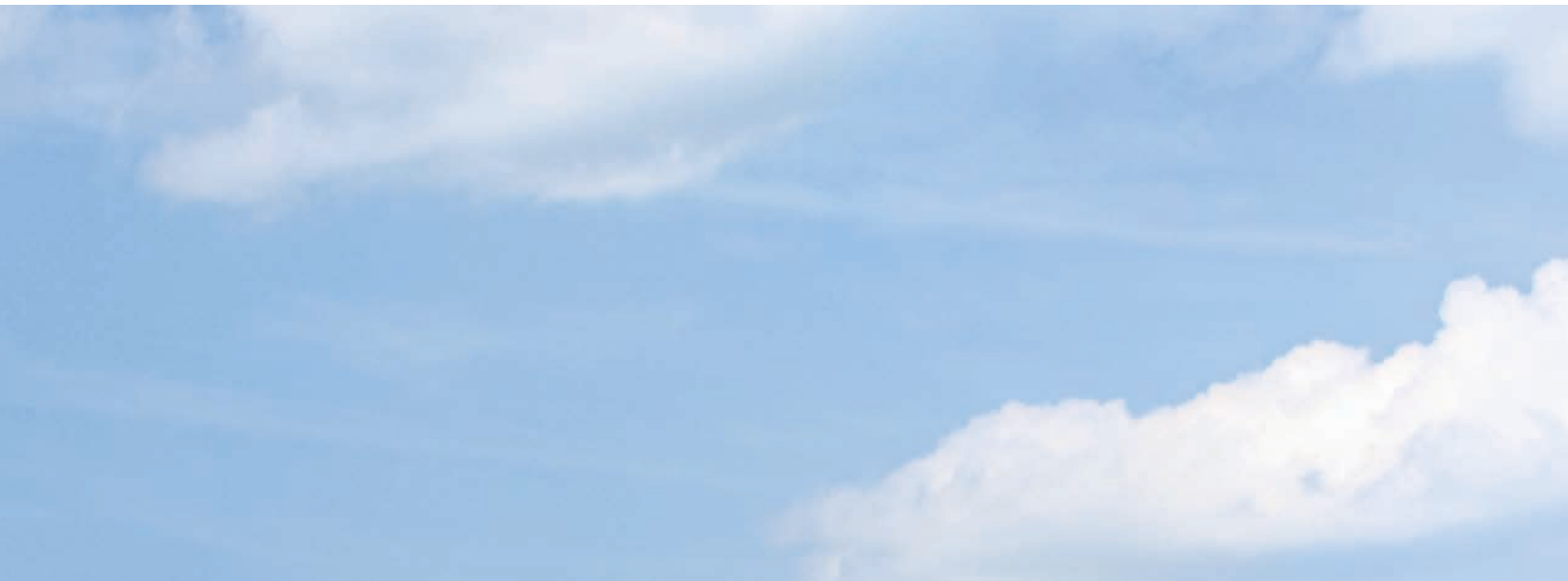
- As a tool to communicate the vision for transit to partners, stakeholders, and the public
- To identify where and in what order key transit investments will occur
- To strategically move projects through the capital planning process
- To inform the three year service planning process
- To work with 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 our partners to succeed?

- Ensure that as local plans are updated future transit plans are integrated with land use plans and transportation plans.
- Integrate and consider the Transit Future Plan network when developing sustainable transportation infrastructure plans and projects. For example, a pedestrian and cycling infrastructure project on a transit corridor could improve access to transit by providing or improving sidewalks
- Integrate and consider the Transit Future Plan network when developing local corridor plans or any road infrastructure projects. For example, incorporating transit priority measures with an intersection upgrade project
- Ensure that local and major development proposals and projects are received and reviewed by BC Transit and support the Transit Future Plan
- Implement travel demand management strategies that encourage shifting automobile trips to transit such as implementing high occupancy vehicle lanes, transit priority measures, marketing, restructuring parking fares, and reducing parking availability/requirements in areas well served by transit
- Support and encourage transit oriented development and work with BC Transit to explore incentives to attract high density and mixed use development to areas well served by transit
- Develop dependable and stable funding sources on the local level to support increases in transit investment



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







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