New Westminster Master Transportation Plan





NEW WESTMINSTER

URBAN SYSTEMS

May 2015 V3

New Westminster



Master Transportation Plan



FINAL REPORT

May 2015

Acknowledgements

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CITY HALL

Message from the Mayor and Council



This Master Transportation Plan will guide our decision-making for transportation over the next 30 years and beyond. The Plan responds to the needs of all modes of transportation, including walking, cycling, public transit, goods movement, and vehicles. These multimodal improvements are important in ensuring that transportation investments work towards achieving the City's strategic goals, making the best use of our tax dollars and helping shift our travels towards a more sustainable future.

New Westminster City Council would like to thank everyone that took part in the development of this important plan.





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1 Setting The Stage

1.1 Purpose and Content of the Plan

1.2 Why Focus on Transportation?

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1.4 Communication and Engagement





Joshua David from Lord Kelvin Elementary School
First Place winner for Environmental Poster Award Presentations - June 14, 2010



The city of New Westminster is a vibrant and rapidly growing community located in the heart of Metro Vancouver. As the oldest incorporated municipality in British Columbia, we are one of the most well-established communities in the region and in the Province, with a compact land area, fine-grained grid street network, high residential and employment densities, and historic neighbourhoods which make New Westminster one of the most livable communities in Metro Vancouver.

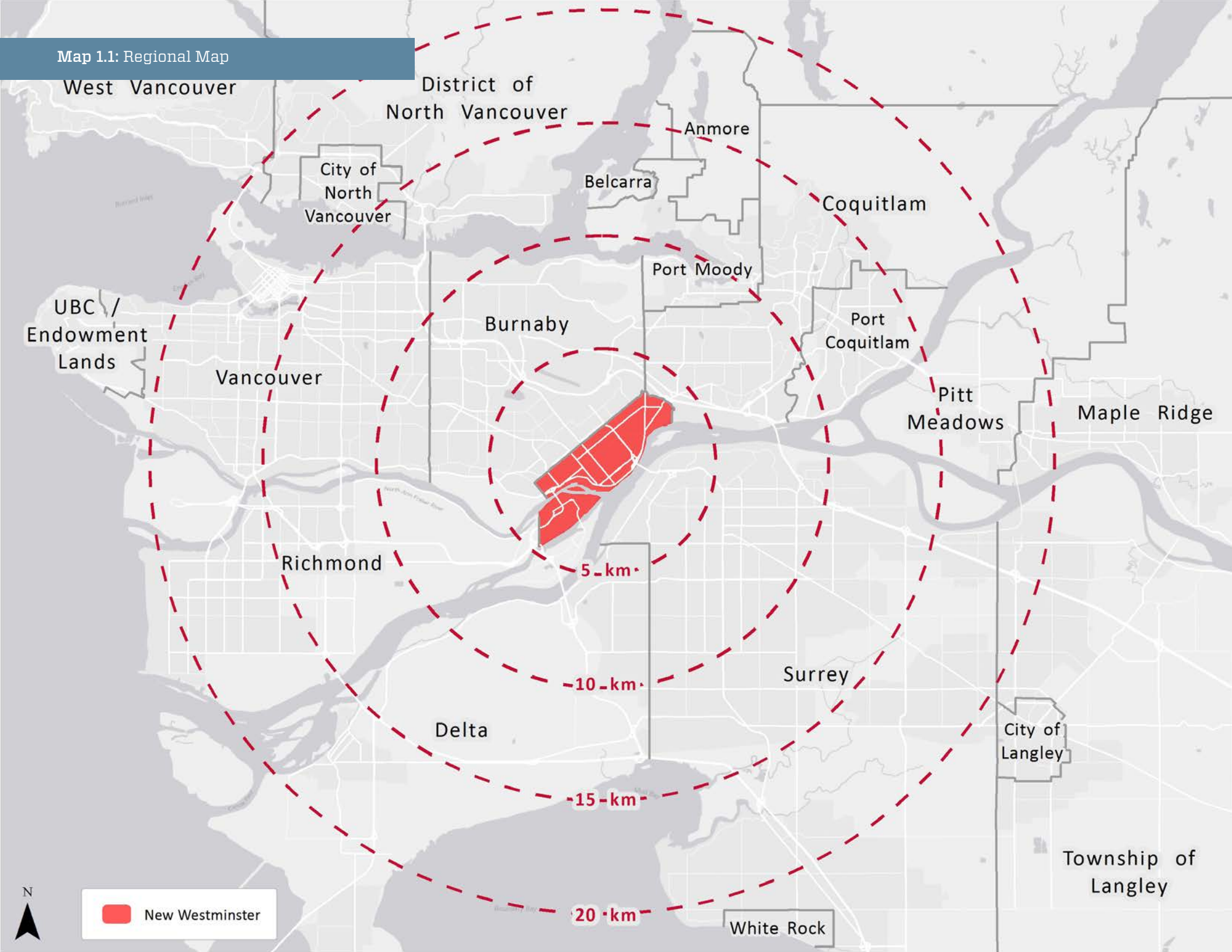
The city and surrounding communities are growing rapidly. In fact, our population is expected to grow from 67,000 to 100,000 residents by 2041, bringing nearly 40,000 more residents to the city over the next 30 years. Local jobs will also grow from 31,000 today to 47,000 by 2041. While this local growth will put pressures on our transportation network, the forecasted growth in neighbouring communities such as Coquitlam, Burnaby and Surrey will add even more significant pressures on New Westminster's transportation system. A balanced and sustainable transportation system is needed to manage increased growth locally and regionally.

Located at the heart of the Metro Vancouver region, New Westminster has always played a vital role as a major urban centre and as a major crossroads for transportation modes that support British Columbia's economy. New Westminster has long been the home of many institutions that are integral to the region, including Douglas College, the Justice Institute, the Law Courts and Fraser Health Authority's largest hospital. For many years, the Pattullo Bridge and the Fraser River Rail Bridge were the only fixed connections between the Burrard Peninsula and communities south of the Fraser River, including the Interurban passenger line that served Surrey and the Fraser Valley. Today, New Westminster continues to provide key regional transportation connections, with two rapid transit lines and five stations, the highest number of stations per capita in Metro Vancouver.

These dual roles are as important now as they were when the city was founded, with the Downtown designated as a Regional City Centre in Metro Vancouver's Regional Growth Strategy and the city continuing to serve as a major transportation hub, located at a confluence of highways, transit lines, marine routes, greenways and truck routes. When not properly balanced, these roles conflict with the impacts of transportation, affecting the livability and economic viability of this compact, mixed-use and high density community and creating traffic congestion. These significant traffic delays affect a broad range of goals that are considered to be important both locally, regionally, provincially and nationally, including road safety, air quality, public health, natural resource depletion, and job creation.

To help address these and other challenges, and to move the city towards becoming an even more livable, vibrant, and sustainable community, the City has developed the Master Transportation Plan (MTP) to shape transportation infrastructure and programming investments over the next 25 years and beyond. This Master Transportation Plan outlines a clear vision of a multi-modal transportation system and directions that work towards achieving the City's aspirations and community goals.

Map 1.1: Regional Map



1.1 Purpose and Content of the Plan

The city's previous Long-Range Transportation Study was developed in 1998 and recommended transportation improvements for all modes over 20 years. Since the Long-Range Transportation Study, there have been a number of significant changes to land use patterns and the transportation network in New Westminster and the surrounding region that have necessitated a new and refreshed Master Transportation Plan. There is also a recognized need to promote a balanced, multi-modal transportation system to manage increased growth locally and regionally.

The Master Transportation Plan provides long-term direction that will guide transportation policies, priorities and investments within each element of the transportation network over the next 25 years, including:

- Creating a walkable community that ensures ***walking*** is a safe, convenient and universally accessible way to get around the city.
- Making ***cycling*** a comfortable and attractive way to move throughout the city for people of all ages and abilities.
- Providing attractive and convenient ***transit*** for trips within the city and region.
- ***Managing local and regional travel*** through the city, including regional goods movement.
- Creating a network of ***great streets*** that are vibrant destinations in and of themselves
- Preserving ***neighbourhood livability*** by reducing the negative impacts of vehicle traffic through neighbourhood traffic calming while encouraging walking and cycling.
- Ensuring ***supportive programs and policies*** are in place to encourage walking, cycling, and transit, and to reduce the need to travel by automobile.

Beyond the transportation system, the Master Transportation Plan provides principles for creating more transit oriented and walkable communities. In doing so, the Plan supports developing land use strategies that will help reduce the overall demand for vehicle travel within and through the city; making sustainable travel modes more viable for more trips, to more places, and for more residents; and supporting the City's aspirations for economic development and preservation of the quality of life of New Westminster residents.

Ultimately, the Plan is City Council's commitment to:

- Provide the ***leadership*** needed to support a sustainable future as influenced by transportation choices.
- ***Invest in and prioritize sustainable transportation modes*** that are consistent with the directions and priorities of the Plan.
- Balance the quality of life of New Westminster residents with the City's important economic role within the region by ***managing travel within and through New Westminster***.

- ***Integrate transportation policy with other initiatives*** as identified through other plans, policies and initiatives.

- ***Communicate clearly*** to the residents and businesses in New Westminster the transportation priorities for the city.

For the Master Transportation Plan to be successful, the City will need to work with both public and private sector partners. In the established parts of the city, the Plan will be used as a guide to work with residents, businesses and institutions on transportation improvements to enhance mobility choices and to support quality of life in New Westminster. For new developments and growth areas, the Master Transportation Plan will be used to inform land use and transportation choices to reduce future travel demand and encourage more sustainable travel choices.

The Plan is separated into **five parts**:

Part 1 ***Setting the Stage*** highlights the overall purpose, process, and community involvement that has taken place to develop the Plan.

Part 2 ***Community Context*** describes the factors that have influenced the Plan, including connections to other plans, policies and initiatives, regional context, land use and demographic trends, travel patterns, and what we heard through public input.

Part 3 ***Shaping the Future*** summarizes the overarching vision for the City's transportation system and describes the City's commitment toward increasing mode share for sustainable travel including walking, cycling and transit.

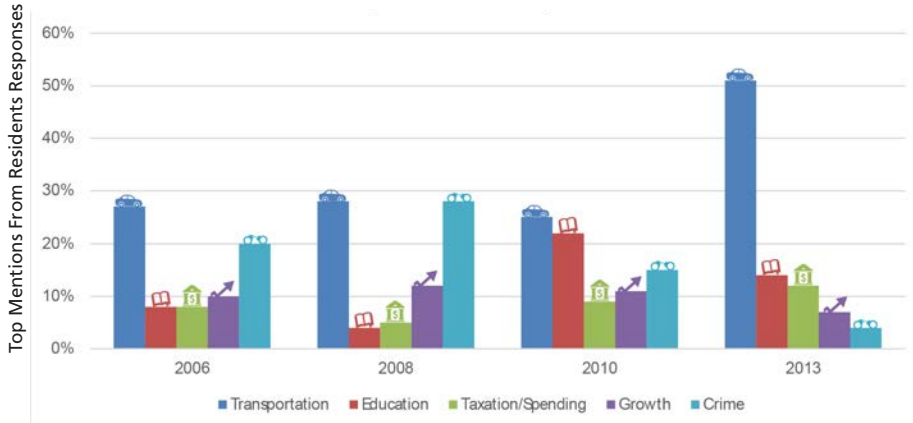
Part 4 ***Strategies, Policies and Actions*** describes the long-term plans for each mode and area of transportation that will support sustainable growth and transportation choices.

Part 5 ***Moving Forward*** prioritizes the plans, policies, and projects that the City should implement over the short, medium and long-term and includes a monitoring strategy.

1.2 Why Focus on Transportation?

Transportation is consistently identified as one of the most important issues facing New Westminster residents. The City's 2013 Ipsos Reid Citizen Satisfaction Survey found that, although the large majority of residents are very happy with the quality of life in New Westminster, over half (51%) of residents identified transportation as the biggest area of concern facing the community, a significant increase since 2006.

◆ Top of Mind Community Issues Among New Westminster Residents.
Source: 2013 Ipsos Reid Citizen Satisfaction Survey



Key transportation issues identified by residents include regional through traffic, congestion, pedestrian safety, lack of cycling facilities, transit access and service, volume of regional truck and vehicle traffic, vehicular safety, as well as air quality, noise, and liveability issues.

Current land use patterns in New Westminster present transportation opportunities and challenges. The grid road network in much of the city provides high connectivity, and many parts of the built environment are well-suited to supporting sustainable travel modes. For example, there are several clusters of medium-high density residential development and mixed-use commercial nodes throughout the community, as well as notable pockets of transit-oriented development around the SkyTrain stations. However, industrial and waterfront lands that are isolated by railways, highways and steep grades, regional high-volume traffic routes, and automobile-oriented neighbourhoods, particularly in the Queensborough area, all present significant land use and transportation challenges.

The City of New Westminster recognizes that transportation plays a significant role in the development of healthy communities, as transportation policies, plans and infrastructure are a fundamental part of the impact of the built environment on residents' health. Transportation can impact community health in a number of ways, including:

- **Road Traffic Injuries:** High automobile speeds and traffic volumes all contribute to traffic-related injuries and deaths for pedestrians, cyclists and motorists. Safe road design can improve safety and address citizens' perception of safety.

- **Physical Activity, Obesity and Chronic Disease:** Transportation and urban planning policies can effectively encourage physical activity. With more active transportation and transit options, people can be more active. Being more physically active can improve health and reduce rates of obesity, chronic disease, and premature death.

- **Air Quality:** Vehicles produce traffic-related air pollutants and Greenhouse Gas (GHG) emissions, which can negatively impact public health and quality of life.

- **Noise:** Road traffic is the biggest cause of noise in many cities, which can exacerbate stress levels, increase blood pressure, cause sleep disturbance and negatively affect mental health.

- **Equity:** Affordable and equitable transit service can enable residents of all incomes and abilities to access necessary services and supports (i.e. employment, education, health care, public and social services, and healthy food) that are critical components to health.

- **Social Cohesion & Inclusion:** Cycling, walking, and transit have been shown to stimulate physical activity, which leads to increased social interaction and cohesion. Social inclusion can lead to greater cohesiveness and result in positive outcomes such as better health and increased participation in community life.

Lastly, managing the impacts of transportation can help create more liveable, vibrant, and safe neighbourhoods, and help to support a high quality of life for New Westminster residents. This is important for all residents of New Westminster, and particularly for vulnerable groups such as children, youth, and seniors. Factors such as high traffic speeds, traffic volumes, and inadequate pedestrian and cycling infrastructure can deter these groups from walking or cycling to and from their destinations. It is important that transportation infrastructure allows seniors to be mobile in their community without a vehicle, and attracts children and youth to sustainable modes of transportation early in their lives, as there is opportunity to continue walking and cycling behaviours into adulthood. It is also important that vehicle-based GHG emissions and air quality impacts from the transportation system are mitigated in order to reduce health impacts on residents.

1.3 Study Process

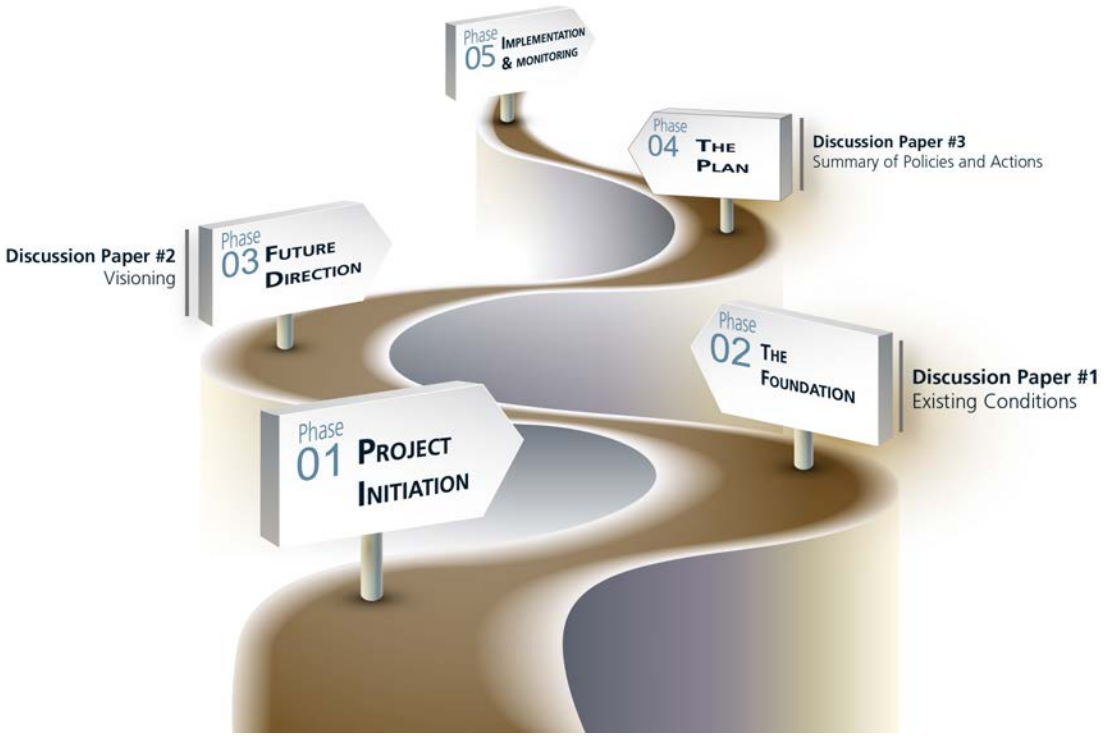
Over the past few years, the City has been working closely with the community to develop a comprehensive plan that will serve as the overall guide for planning and implementing transportation improvements in New Westminster for the next 25 years and beyond. The development of the Plan evolved through a **five phase process** with check-in points that allowed for opportunities to connect with community stakeholders, the general public, other agencies, and Council. Throughout the process, the Plan was guided by a Master Transportation Plan Advisory Committee made up of public and agency stakeholders.

The five-phase process moved from discussions about the issues and challenges facing the City today and in the long-term through to more in-depth conversations about the vision for the transportation system and specific targets that demonstrate commitments towards sustainable modes of transportation. These aspirations formed the foundation for the collaborative process to identify and develop transportation policies and actions for the long-term to be considered with the public and other agencies.

The evolution of the process is documented in three separate Discussion Papers that were used to assist the dialogue with stakeholders and provide opportunity for feedback, and more importantly, to shape the next stage of the process.

This Plan reflects the input, feedback and directions received during the entire process, providing a clear picture of the City's transportation vision.

◆ Study Process ◆





1.4 Communication and Engagement

The Master Transportation Plan has been developed with the broad participation of the New Westminster community to make sure that it addresses current transportation issues, and reflects the values and interests of residents and key stakeholders. Throughout the course of the Plan, there were several opportunities for stakeholder and public input through various forums, including public workshops, open houses, surveys, city committee engagement, and Council meetings.

Communications and Engagement



An **Advisory Committee** made up of residents, businesses, community members, City staff and other public and agency stakeholders helped develop the Plan. The Master Transportation Plan Advisory Committee included resident representatives from a number of City committees and commissions; external agencies including the New Westminster School District, TransLink, the Ministry of Transportation and Infrastructure, Metro Vancouver, Royal City Taxi, ICBC, Transport Canada, Port Metro Vancouver; and City staff from a variety of departments.

Advisory Committee Membership



The general public was invited to provide feedback through four rounds of **open houses** held at various locations throughout the city. This included open houses in January and February 2012 to present existing transportation conditions; open houses in May 2012 to present the draft vision, goals and objectives of the Plan; open houses in April 2014 to present the draft policies and actions; and open houses in June 2014 to present the final plan.

Surveys and questionnaires were used at key points throughout the process. The first survey was available between October and December 2011. A second survey was available in April 2014. A third survey was available in June 2014. Overall, over 300 survey responses were received throughout the study.

Through each of these forums, the City was able to get feedback and comments from hundreds of New Westminster citizens at key points throughout the process.





2 Community Profile

2.1 Integrating with Other Plans

2.2 Regional Context

2.3 Community Context


S314
GMC
CE 2200

2.1 Integrating with Other Plans

The Master Transportation Plan is guided by, and supports, the aspirations of other City policies and plans, and also takes into consideration regional and provincial plans.

At the highest level, the City's 1998 **Official Community Plan (OCP)** establishes the long-term vision for the future growth and development of New Westminster. The OCP outlines issues, goals, policies, and priorities related to the following twelve themes to manage growth through to the year 2020:

- Population & Growth Management
- Community & Social Issues
- Housing
- Parks & Open Space
- Environment & The Riverfront
- Heritage & Neighbourhood Character
- Commercial Revitalization & The Economy
- Industrial Activity & The Economy
- Urban Design
- Institutional Facilities & Community Services
- Transportation
- Sewer, Water & Waste Utilities

Land Use and Transportation Integration

The integration of land use and transportation is one of the Master Transportation Plan's six goals. The management of land use and development plays a critical role in the attractiveness of sustainable transportation modes in New Westminster. The MTP's focus on sustainable travel works in accord with City's Official Community Plan (OCP), which promotes complete, compact neighbourhoods with excellent walking, cycling and transit networks and reasonable levels of access for private and goods movement vehicles. The MTP also reflects one of the five goals of the Metro Vancouver Regional Growth Strategy, which is support for the sustainable transportation choices of walking, cycling and transit through coordination of land use and transportation.

A walkable city is a good proxy for a city that is complete, compact and supportive of sustainable transportation modes. In general, a high level of walking indicates good land use practices, i.e., there are a number of destinations in close proximity, there is appropriate pedestrian infrastructure in place and a comfortable environment for walking.

Along with walking, cycling is another proxy for a city that is complete, compact and supportive of sustainable transportation modes. A high number of cyclists reflects having destinations in close proximity and routes that are both safe and comfortable for cycling.

While New Westminster has a relatively high number of pedestrians and cyclists, transit has a significantly greater potential for shaping land use. There is a very clear relationship between the economic viability of transit and land use: higher density and a greater mix of uses supports a broader range of transit services and higher frequency. There has traditionally been a "chicken-and-

egg" relationship between transit and land use… does more transit draw more density or does density draw transit? The answer is both.

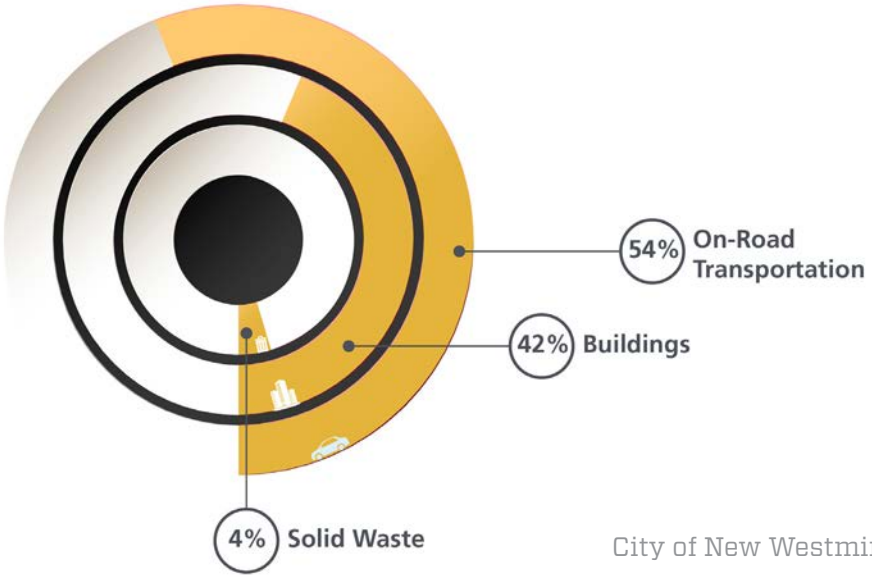
In addition to the OCP, New Westminster has developed plans to guide growth and development at the neighbourhood level, including the **Downtown Community Plan** and **Queensborough Community Plan**, as well as **Neighbourhood Plans** for Lower Twelfth Street, Brunette Creek, Brow of the Hill, North Arm North, Glenbrooke South, and Connaught Heights. Neighbourhood plans for residential areas (such as Brow of the Hill and Lower Twelfth Street) typically support pedestrian and cycling amenities and crossings while minimizing through-traffic through traffic calming measures. For industrial areas (such as Brunette Creek), the primary transportation focus is on efficient goods and people movement through roads and rail, and providing sidewalks, and transit access within these areas. The Downtown Community Plan, with a more prominent mixed-use presence, focuses on prioritizing people movement and pedestrian-friendly neighbourhood design, reducing external traffic using Downtown streets, road network connectivity, and parking management.

The City has developed a **Community Energy and Emissions Plan** (CEEP), which concentrates on conserving energy through focused actions in the areas of transportation, buildings, and solid waste. Transportation is responsible for over half (54%) of the City's GHG emissions, with over two-thirds (71%) of transportation-related GHG emissions emitted from passenger cars, light trucks, vans, and single occupancy vehicles. As such, the CEEP contains actions to tackle transportation-related GHG emissions, including the promotion of sustainable transportation. The CEEP specifically targets areas for transportation initiatives, such as emphasizing cycling in Queensborough, Uptown, the West End, and the waterfront; increased transit usage in higher density areas; and pedestrian mobility improvements in major commercial (Downtown) and institutional areas (such as Douglas College). The CEEP also supports development around frequent transit corridors.

In addition, New Westminster is part of the **Healthier Community Partnership Committee**, which is a partnership between Fraser Health, the New Westminster School District, and the City that is intended to improve the health of the citizens of New Westminster based on the premise that many health issues can be best resolved through community-based initiatives. It is also intended to move the focus of 'health' from treatment to healthy living, wellness and prevention. A key goal of New Westminster's OCP is to promote the City as a healthy community, reinforcing the need for 'healthier' transportation system and policies. Integrating a health focus into the Master Transportation Plan aligns both the OCP and the Healthy Community Initiative.

◆ Greenhouse Gas Emissions by Sector ◆

Source: Community Energy and Emissions Inventory



2.2 Regional Context

The City's transportation system is influenced by decisions and directions from neighbouring municipalities and other levels of government, including TransLink, Metro Vancouver, and the Province, as described below.

Metro Vancouver's Regional Growth Strategy (RGS), adopted in July 2011, provides a land use framework for managing long-range growth in the region to 2040. It aims to promote livability and sustainability by concentrating growth into urban centres and other transit-accessible locations, protecting green space, industrial and agricultural lands. The RGS also supports sustainable transportation choices in Metro Vancouver and recognizes that the region's road, transit, rail and waterway networks play a vital role in shaping development, connecting the region's communities and providing vital goods movement networks and recommends strategically investing in transit infrastructure.

The **Ministry of Transportation and Infrastructure** (MOTI) maintains the highway network throughout the Metro Vancouver region and elsewhere in the Province.

TransLink is responsible for planning, financing and managing transportation modes and services in the Metro Vancouver region, including the Major Road Network (MRN), truck routes, and transit service. TransLink's transit services are delivered through various operating companies, including Coast Mountain Bus Company (CMBC) and BC Rapid Transit Corporation (BCRTC). TransLink also owns and maintains several facilities in the region, including the Pattullo Bridge, Knight Street Bridge, Golden Ears Bridge, Westham Island Bridge, Canada Line bicycle and pedestrian bridge, and the BC Parkway.

TransLink's **Regional Transportation Strategy** (RTS) Strategic Framework, adopted in August 2013, sets out the vision, goals, principles, strategies and key initiatives to accommodate one million more people expected to live in the region by 2045, along with the resulting growth in demand on the transportation system. The RTS brings together strategies on investing in system expansion, managing demand, and coordinating land use in order to ensure that transportation decisions are affordable and that communities are livable with prosperous businesses, safe streets, clean air and thriving natural environments.

The two main targets of the RTS are:

1. Reduce average driving distances by 33%.

2. Make half our trips by walking, cycling and transit.

These targets are set to help the region reach the shared vision as one of the best places in the world to live because our transportation needs are met in a way that simultaneously improves the health of our communities, economy, and environment.

The City of New Westminster is identified within Metro Vancouver's Regional Growth Strategy as a Regional City Centre, and is characterized as a regional hub due to its multiple transit connections and significant access to the Major Road Network. As such, New Westminster is a major destination and thoroughfare in the region. With major road, bridge, and transit infrastructure projects on the horizon, New Westminster will continue to have a critical role in the regional transportation setting.

The City is responsible for all roads within its boundaries with the exception of provincial highways. The City's transportation system includes the following key features.

- **Roads.** Many major transportation corridors critical to moving people and goods throughout Metro Vancouver are located in New Westminster. Highway 91A, the Queensborough Bridge, Stewardson Way (west of Sixth Avenue) and Brunette Avenue (north of Braid Street) are all part of the Provincial Highway network under the jurisdiction of MOTI.

  Royal Avenue, Tenth Avenue, McBride Boulevard, East Columbia Street, Boyd Street, Derwent Way, Stewardson Way, and Brunette Avenue are all major arterial routes forming part of TransLink's Major Road Network (MRN). The MRN is a network of approximately 600 km of road that facilitates the safe and efficient movement of people and goods across the region. It connects the provincial highway system with the local road network, and some corridors also serve cyclists and pedestrians. New Westminster is located in close proximity to other major routes such as Highway 1 (Trans Canada Highway), Highway 91, Marine Way, Kingsway and Canada Way.

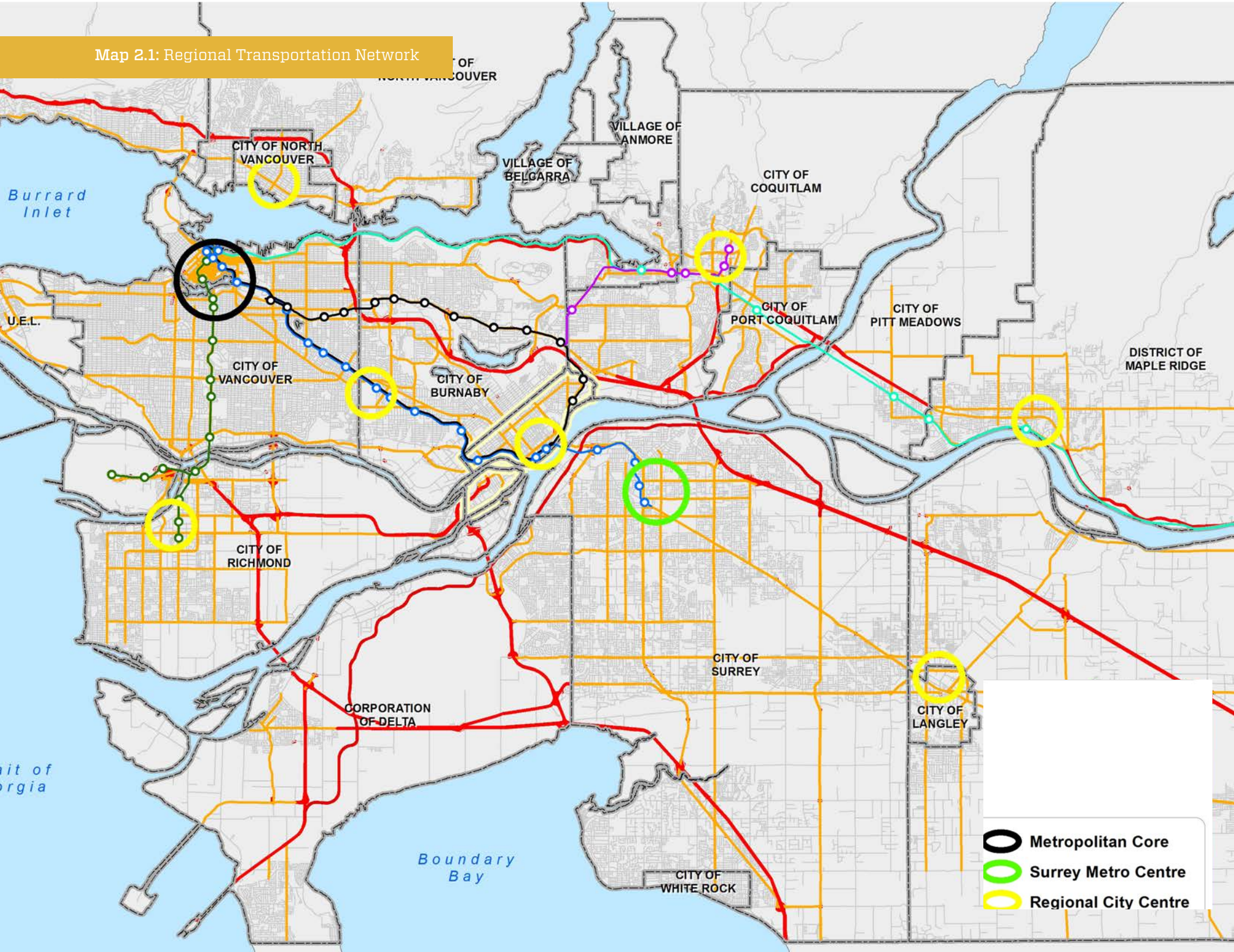
- **Bridges.** The two major bridges, Pattullo Bridge and Queensborough Bridge, facilitate movement across the Fraser River to the surrounding municipalities of Delta, Richmond, and Surrey. Pattullo Bridge is under TransLink's jurisdiction, while the Queensborough Bridge is under MOTI's jurisdiction.

- **Goods Movement.** The movement of goods and services in the city and throughout Metro Vancouver supports the local and regional economy. Trucks travel on provincial highways, MRN corridors, and designated truck routes in New Westminster. The City has a Truck Route Bylaw regulating the use of heavy vehicles throughout the City, including designated truck routes. Goods are also transported through rail and water routes in the region.

- **Transit.** New Westminster's transit system is largely based on rapid rail transit (SkyTrain) and bus service to local and regional destinations. SkyTrain's Expo Line has been in place for 25 years in New Westminster, connecting the City to Surrey, Burnaby and Vancouver. The addition of the Millennium Line in 2002 opened up further transit connections to Coquitlam and Burnaby. The Evergreen Line, which begins service in 2016, will provide additional connections to Burnaby, Port Moody, and Port Coquitlam. The City is a major hub in the entire regional transit network.

- **Rail.** New Westminster has active rail lines along the north shore of the Fraser River as well as in Queensborough. Canadian Pacific Railway, Southern Railway of BC, Burlington Northern Santa Fe, and the Canadian National Railway operate in the City, with rail spurs connecting the lines to the regional and North American rail network. Rail enables goods movement between key industrial areas in the region and supports Port Metro Vancouver operations, including marine terminals and intermodal facilities.

Map 2.1: Regional Transportation Network



Regional growth and development has resulted in major transportation investments to facilitate better traffic flow between communities south and north of the Fraser, including:

- New Port Mann Bridge
- Highway 1 improvements
- South Fraser Perimeter Road
- George Massey Tunnel replacement (planned)
- Pattullo Bridge replacement (planned)

While regional infrastructure projects and growth create positive economic benefits for New Westminster, regional traffic routing through the city's constrained street network results in significant delays and congestion. As traffic impacts ripple into local streets and neighbourhoods, community livability is eroded. Some of these impacts include compromised road safety, air pollution, noise, vibration and residents' inability to connect efficiently to local destinations.



2.3 Community Context

New Westminster has always been a compact, mixed use, high density community located in close proximity to the transportation infrastructure that nourished the local, regional, provincial, and national economy, including roads, bridges, rivers and railways. New Westminster's waterfront and downtown have been transformed as traditional heavy industries have been replaced by transit-oriented developments and a services-based economy.

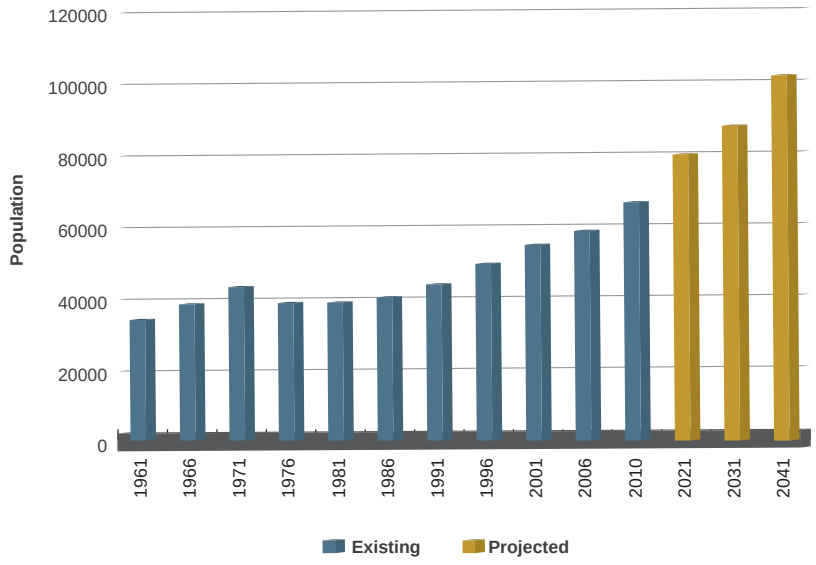
New Westminster, situated strategically in the heart of the Metro Vancouver region, has a critical role in the regional transportation setting. Due to its geographical position and connections to the transportation network, New Westminster has become a major thoroughfare for regional traffic, which will likely continue as communities surrounding the city rapidly grow.

This section summarizes key features of the community that shape transportation investments today and into the future.

- **A Growing Community:** The City has grown significantly over the past several decades, doubling in size over the past forty years from approximately 33,650 residents in 1961 to approximately 67,000 residents today. Significant growth is expected to continue over the next 30 years, with nearly 40,000 new residents projected by 2041 – bringing the City's population over 100,000 residents. In addition, long-term employment growth is projected to outpace population growth, with 47,000 jobs expected in the City by 2041, double the 23,500 jobs in the City today. With more jobs and people locating to New Westminster, the transportation network will need to accommodate more and diverse travel needs.

Historic and Projected Population Growth in New Westminster (1961-2041)

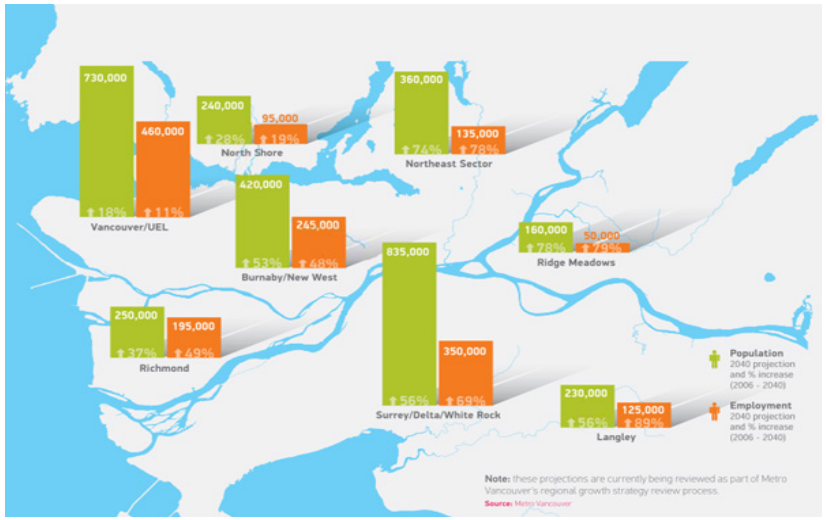
Source: BC Stats, Regional Transportation Model



- **Significant Growth Around the City:** In addition to rapid growth within the City, even more significant growth is forecasted in surrounding communities, particularly Surrey, Coquitlam, Richmond and Burnaby. To put New Westminster's planned population growth of 40,000 new residents into context, the four communities that are directly on New Westminster's edge – Surrey, Coquitlam, Burnaby and Richmond – are expected to bring nearly 600,000 new residents by 2041, fifteen times New Westminster's residential growth. As a result, growth in surrounding communities will place even greater pressures on the City's transportation system.

◆ Population Growth ◆

Source: Metro Vancouver



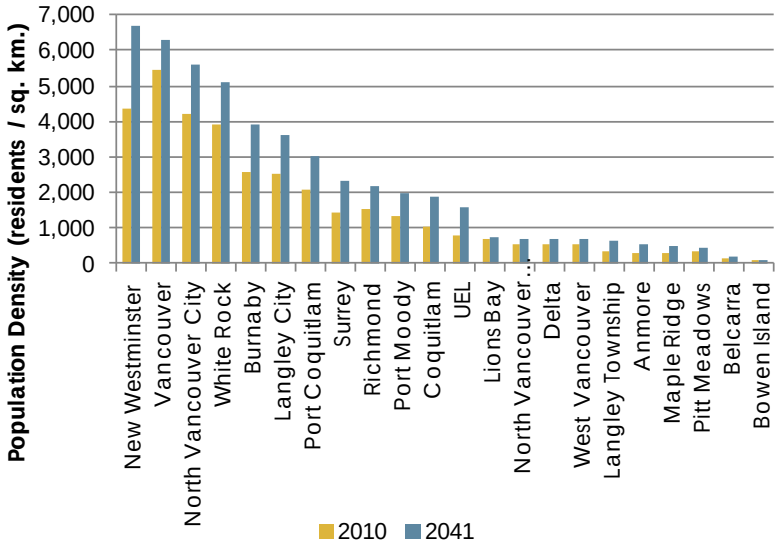
Growth:

- New Westminster +40,000
- Surrey +268,000
- Coquitlam +100,000
- Burnaby +130,000
- Richmond +90,000

- **A Dense Community:** With a land area of approximately 15 km², New Westminster has one of the highest levels of residential density in Metro Vancouver, with a current population density of approximately 4,350 people per km², significantly higher than the average density across Metro Vancouver of approximately 1,170 people per km². New Westminster is projected to have the highest population density in Metro Vancouver by 2041.

◆ Current and Projected Population Densities in Metro Vancouver (2010 - 2041)

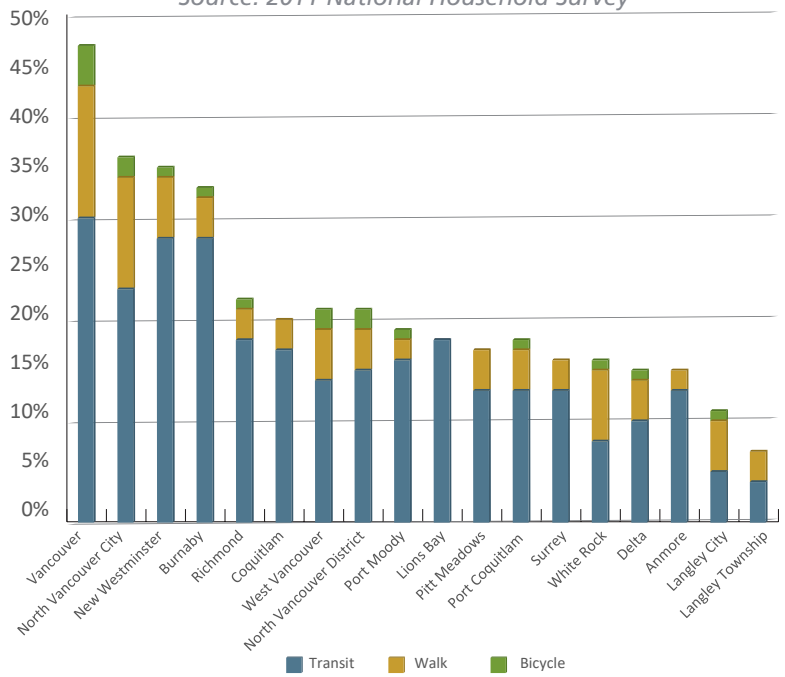
Source: Metro Vancouver Regional Transportation Model



The City is well-positioned to move towards an even more sustainable, multi-modal transportation system. Currently, over a third (35%) of all trips to work made by New Westminster residents are made by walking, cycling or transit. This is among the highest proportion of trips made by sustainable transportation among all municipalities in Metro Vancouver. There is room to further shift the mix of trips made in New Westminster to more walking, cycling and transit trips. With a fine-grained street grid network, well-connected road network, sidewalks on most streets, high population and densities throughout the City, and some of the highest levels of transit service in the entire region, New Westminster is well positioned to promote walking, cycling and transit.

◆ Sustainable Transportation Mode Share in Metro Vancouver ◆

Source: 2011 National Household Survey

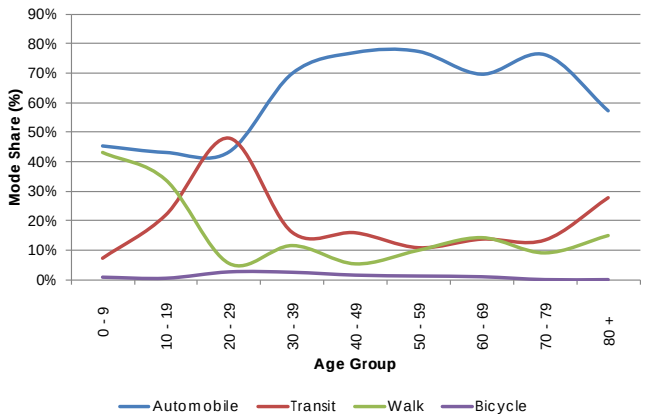


The benefits of long-term transportation planning go far beyond simply encouraging public transit, bicycle routes and pedestrian facilities. In fact, transportation can be viewed as a foundational element in achieving community goals and objectives related to the environment, economy, and health. The Master Transportation Plan seeks to guide the City in developing its transportation system to achieve broader community aspirations, including developing complete communities, supporting compact urban growth, transportation choices and social equity, promoting better public health, air quality, and ensuring a vibrant local economy.

- **A Young Community:** New Westminster is home to a significant youth population, as approximately a quarter (25%) of New Westminster's population is 24 years of age or under, although this is lower than the regional average of approximately 30%. This segment of the population is particularly important to focus on for travel demand, as youth often are reliant upon transit, walking, cycling and carpooling. Attracting youth to sustainable modes of transportation early in their lives, there is a considerable opportunity to continue these trends into adulthood, although the declining share of the youth population may present challenges in the future. Over half of all trips made by people under age 29 in New Westminster are made by walking and transit, while the mode share of walking and transit trips decreases significantly for people aged 30 and over, with a corresponding increase in vehicle use. However, although the number of youth aged 24 years and under will increase slightly in New Westminster by 2041, this age group will represent only about 20% of the total population by 2041.

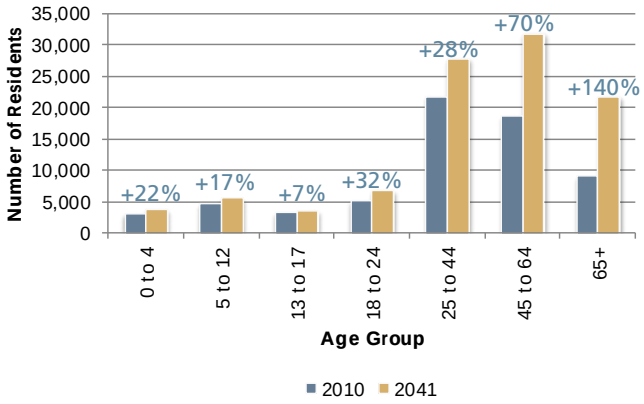
Mode Share of All Trips By Age Group for Trips Originating in New Westminster

Source: 2008 Regional Trip Diary Survey



Current and Future Population by Age Group

Source: Regional Transportation Model

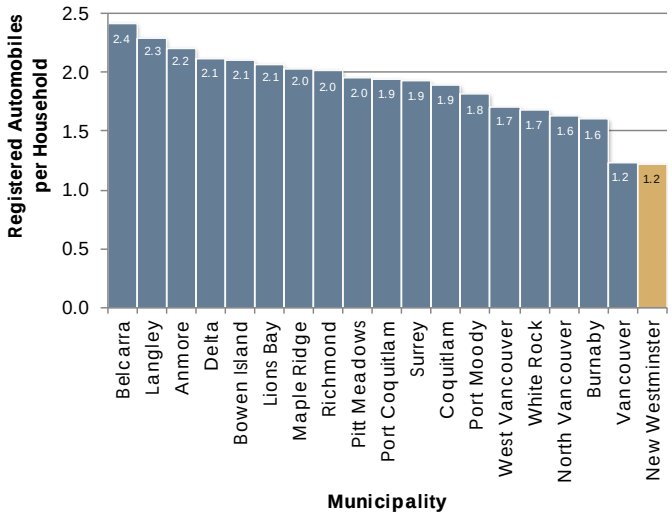


- **An Aging Community:** Approximately 14% of the City's residents are aged 65 and over, with an additional 11% in their pre-retirement years (55 – 64 years old). Seniors aged 65 and over are projected to be the fastest growing age group over the next thirty years. As the population ages, travel behaviour will change considerably as older groups create new and varied transportation needs for the City. For example, seniors tend to travel more during the mid-day and are also more reliant on transit services as compared to people in the labour force who travel mostly for commuting purpose. Seniors also need accessible, safe, and well-connected transit and active transportation infrastructure to move freely around their communities without a vehicle. While driving continues to be the main form of transportation for most age groups, both walking and transit use increases among seniors, particularly those aged 70 and above.

- **Low Reliance on the Automobile:** In 2006, there were approximately 33,000 automobiles registered in New Westminster, equivalent to approximately 1.21 registered automobiles per New Westminster household. This number drops to only 0.7 automobiles per household in the Downtown near SkyTrain stations, demonstrating the influence of Transit Oriented Development. New Westminster has the lowest rate of automobile ownership in Metro Vancouver, and is significantly lower than the regional average of 1.65 automobiles per household throughout Metro Vancouver. Further, in contrast to the patterns of increasing automobile ownership across the region, auto ownership per household has been declining slightly since 1996 in New Westminster.

Registered Automobiles per Household in Metro Vancouver communities (2006)

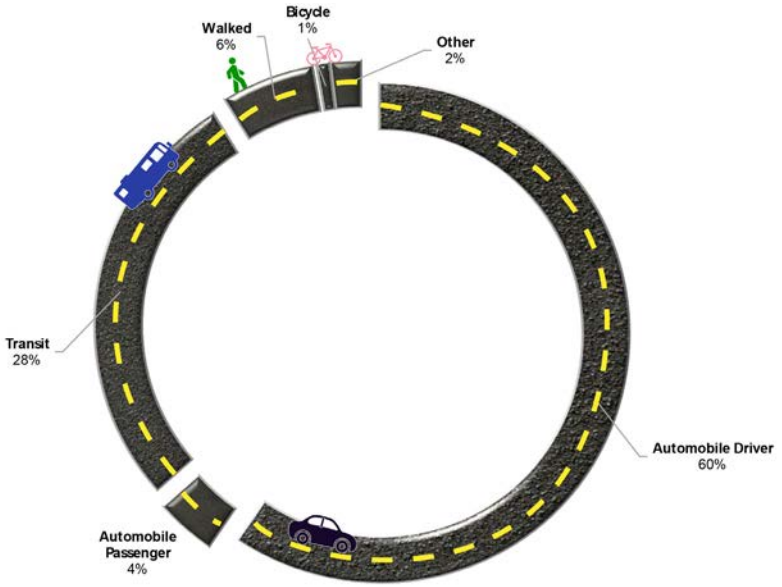
Source: BC Stats, ICBC



- **Relatively High Use of Sustainable Modes of Transportation:** Approximately 65% of New Westminster residents commute to work by private car, which is below the Metro Vancouver average of 80%. Over a quarter (27%) of New Westminster residents commute on public transit, which is significantly higher than the regional average of 16%. The share of people taking transit increases when looking at the Downtown core, where approximately 36% of Downtown residents use transit to get to work. Altogether, 7% of New Westminster residents walk (6%) or bike (1%) to work.

Mode Share of Trips to Work in New Westminster

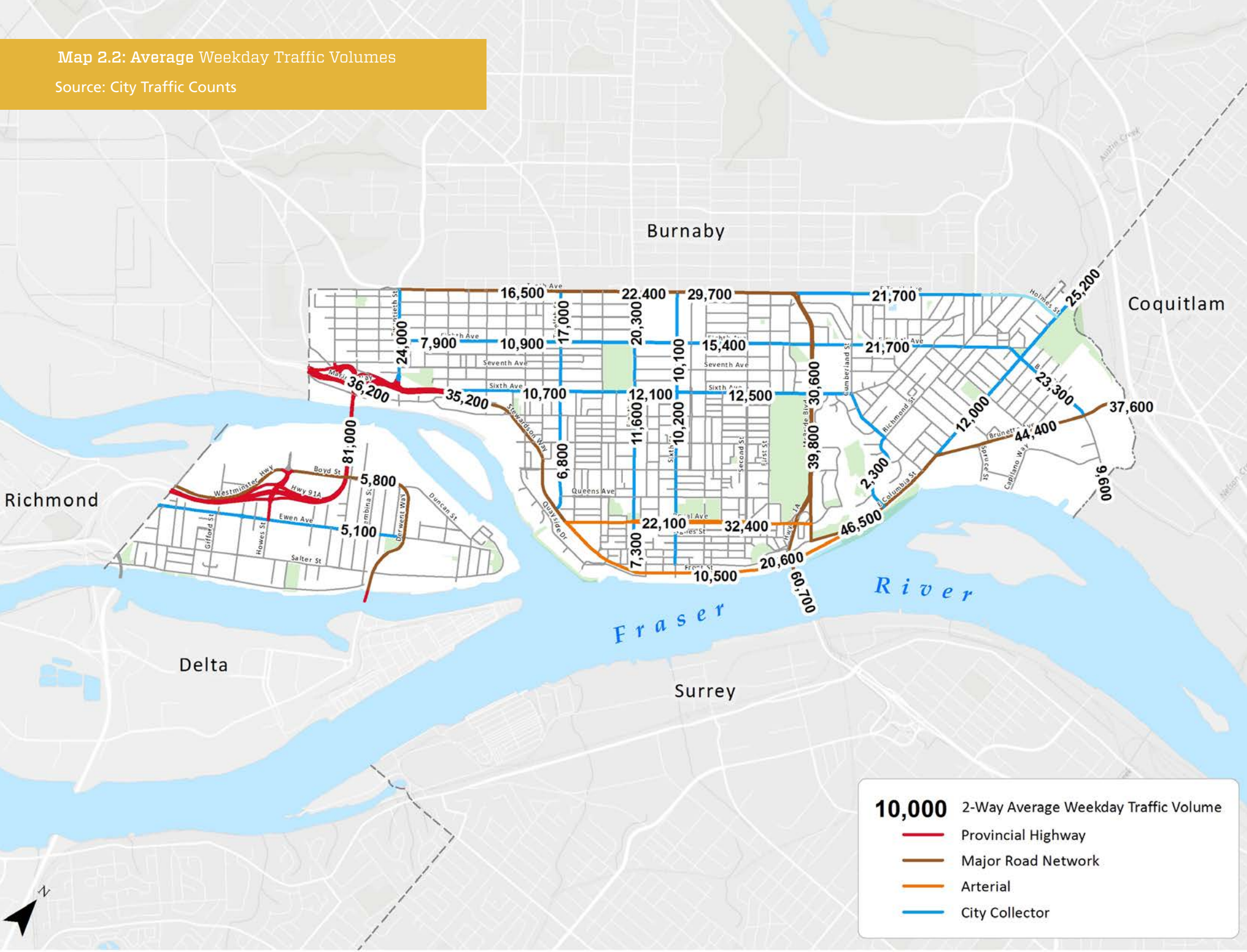
Source: 2006 Census



- **Significant Amount of Traffic Uses New Westminster Roads:** A significant amount of local and regional traffic uses New Westminster's roads on a daily basis. Some of the corridors with the highest weekly daily traffic volumes include East Columbia Street and Brunette Avenue (45,000 vehicles per day), Stewardson Way (35,000 vehicles per day), McBride Boulevard (30,000 – 40,000 vehicles per day), Tenth Avenue (20,000 – 30,000 vehicles per day), and Royal Avenue (20,000 – 30,000 vehicles per day). In addition, the Queensborough Bridge carries approximately 88,000 vehicles per day and the Pattullo Bridge carries approximately 75,000 vehicles per day. With population and employment growth in the City and surrounding communities, these corridors will face increasing pressures in the future.

Map 2.2: Average Weekday Traffic Volumes

Source: City Traffic Counts




centre of the city
Uptown
centre of the city
Uptown
Canada Trust
STARBUCKS COFFEE
YIANNI'S

- **Regional Goods Movement Through the City:** Goods movement once had substantially lower traffic volumes and primarily served local industries that supported local jobs. However, much of the city's industrial base has relocated and the majority of the present goods movement no longer has an origin or destination within the city. We have seen dramatic growth in the trans-shipment of bulk goods and containers through the city and the region, which serves the economies of other parts of Canada and its overseas trading partners, often with little value added to the shipped product within either the city or the region.

  Much of this non-intraregional goods movement should be transported by rail or on the provincial highway network. However, in the late 1990's, the Province downloaded the provincial highways within the city to New Westminster, resulting in these city streets taking on the role of interregional goods movement highways.







3 Shaping the Future

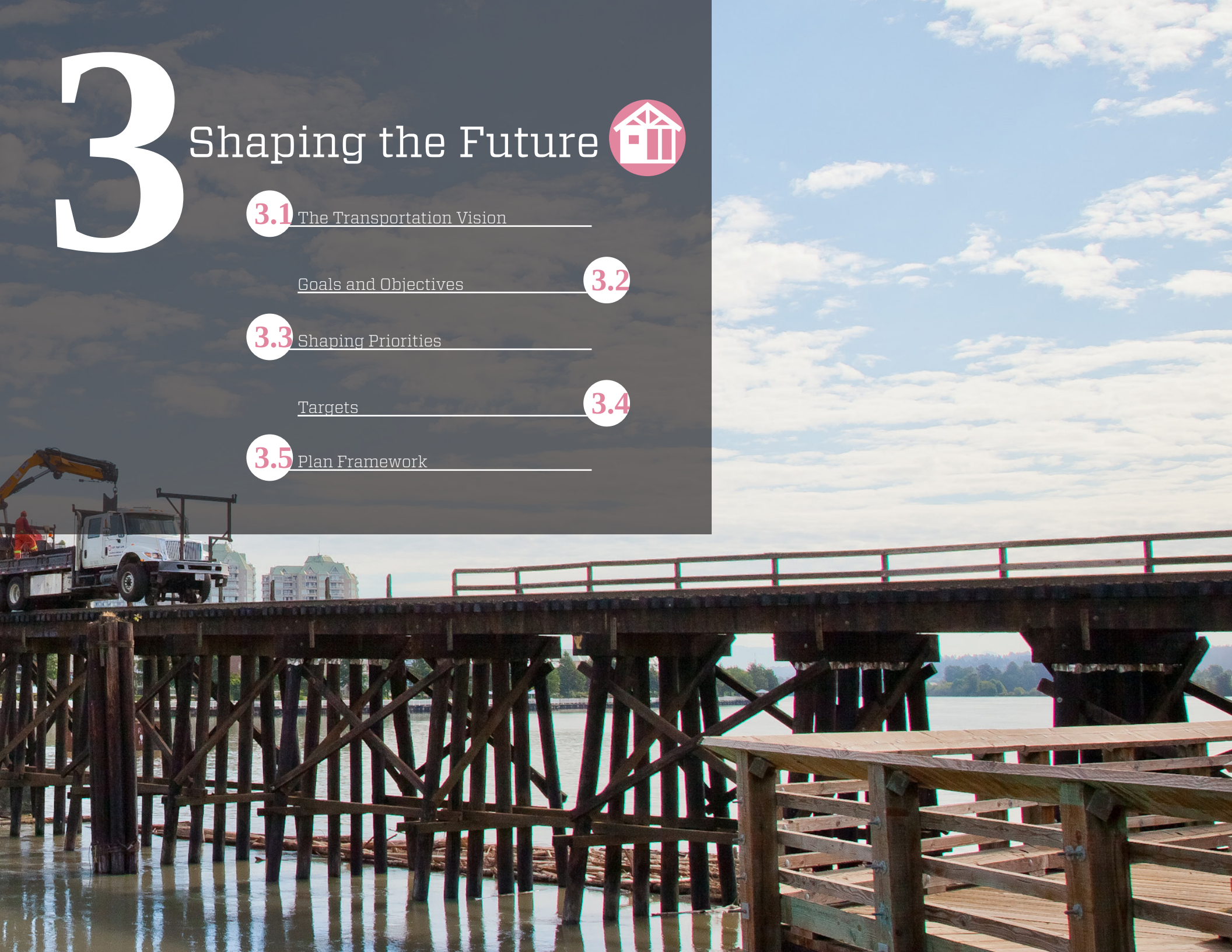
3.1 The Transportation Vision

3.2 Goals and Objectives

3.3 Shaping Priorities

3.4 Targets

3.5 Plan Framework



Vision



THE VISION

New Westminster's ***multi-modal*** transportation system will support the development of a ***compact, sustainable*** and ***resilient community***, maintaining the city's role as an important historic centre and economic hub within the region, while ensuring that New Westminster's diverse neighbourhoods are ***healthy, active, livable*** and ***vibrant***.

City of New Westminster

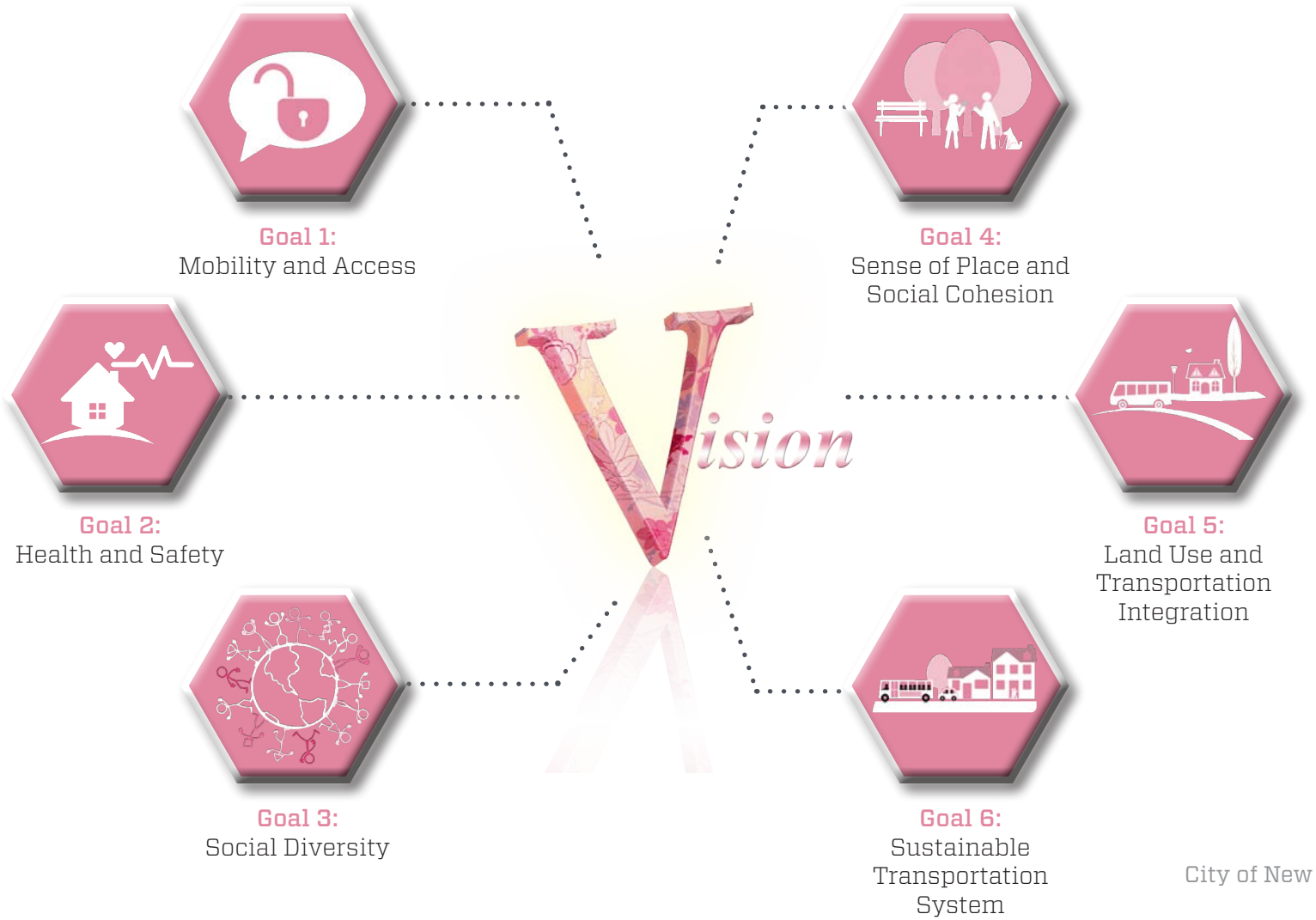
3.1 The Transportation Vision

The Master Transportation Plan presents a long-term vision that supports the City's aspirations in the OCP, 2012 – 2014 Strategic Plan, and Envision 2032, the City's sustainability framework. These plans emphasize compact, safe, and livable neighbourhoods that support a vibrant mixture of functions and activities. The vision was developed from input received from residents and stakeholders and emphasizes New Westminster's place as a historic, well-established and vibrant community, with a transportation system of regional significance.



3.2 Goals and Objectives

Six overarching goals have been developed to provide clear direction for the achievement of the Vision identified. The Master Transportation Plan goals are intended to guide and measure the success of the Plan, and each include a series of supporting objectives.



Goal 1: Mobility and Access

To provide residents, employees and visitors with convenient access to their needs.

- 1.1 Manage the safe and efficient movement of people and goods within New Westminster and between New Westminster and neighbouring municipalities
- 1.2 Address barriers to walking, cycling, transit and ride share within the community
- 1.3 Provide support systems – policies, facilities, services and programs – to encourage opportunities for walking, cycling, and using transit

Goal 2: Health and Safety

To support and promote a healthy and safe community.

- 2.1 Promote active and healthy living by encouraging walking and cycling for commuter or recreational purposes
- 2.2 Develop a transportation system that reduces air, land, water, noise, vibration and visual pollution
- 2.3 Improve the safety of the transportation network for all road users

Goal 3: Social Diversity



To support the diverse social needs of the city.

3.1 Provide access to affordable transportation choices

3.2 Promote modes of transportation and programming that support mobility for children and youth

3.3 Serve transportation needs for persons of all abilities

Goal 4: Sense of Place and Social Cohesion



To create high quality streets and places that provide a strong sense of place and strengthen social connections.

4.1 Create community places within the right-of-way in key activity areas that support walking, cycling, and social interactions

4.2 Create 'great streets' and 'great transportation nodes' that capture the energy and reflect the cultural, social, environmental characteristics of New Westminster

4.3 Provide transportation systems that connect the city's diverse neighbourhoods

Goal 5: Land Use and Transportation Integration



To direct density and growth to compact, attractive, neighbourhoods, with a mixture of housing types and commercial areas that support transit, walking and cycling.

5.1 Support higher densities around SkyTrain Stations and along Frequent Transit Network corridors

5.2 Encourage businesses in close proximity to rapid transit stations and the Frequent Transit Network

5.3 Develop communities where residents can work, live and access services, entertainment and recreation without the need for automobile travel

Goal 6: Sustainable Transportation System



To manage the impacts of the transportation system.

6.1 Prioritize walking, cycling, transit, carpooling, and goods movement over the single occupant vehicle

6.2 Work with other agencies and neighbourhing communities to provide multi-modal connections between New Westminster's neighbourhoods and to neighbouring municipalities and regional destinations

6.3 Work with other agencies to encourage alternative modes of goods movement, including water and rail, and to develop alternative corridors outside of the city for the movement of goods not destined to the city

6.4 Manage the impacts of traffic moving through the city by limiting motor vehicle capacity while supporting local access and mobility

6.5 Support transportation demand management initiatives which promote shifts to sustainable transportation and a reduction in single occupancy vehicle trips

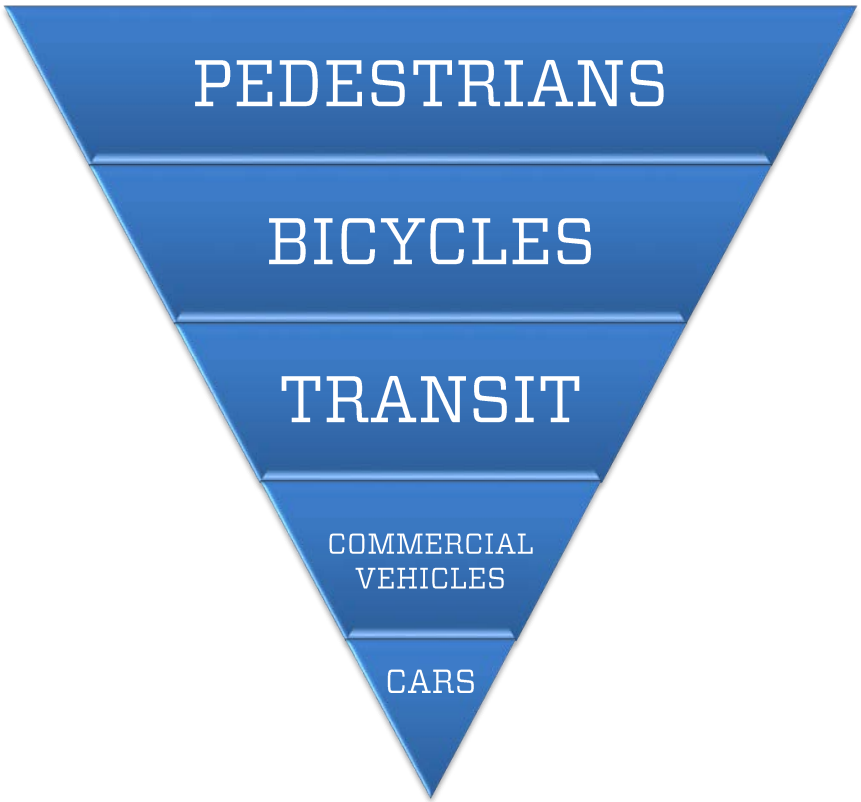
3.3 Shaping Priorities

Development of a transportation hierarchy can help identify priorities and resolve trade-offs when they occur. The City's transportation priorities reflect a hierarchy of transportation modes that can be considered in the decision-making process. In setting a transportation hierarchy, the City will ensure that all road users, particularly vulnerable road users, are considered first when any transportation improvements are being considered.

Many other communities have used similar hierarchies to promote shifts in transportation patterns and choices over time. The hierarchy does not imply that any one mode will always be prioritized over another, but rather that the needs of each mode should be explicitly considered in the order presented as part of the decision making process.

The hierarchy of modes shown below considers the needs of pedestrians, including those using mobility aids such as wheelchairs and scooters, cyclists, public transit, ride share and goods and services movements before that of private automobiles. This is consistent with the Plan's Vision and an over-arching goal of creating a more sustainable transportation system. By considering needs of these users first, it is hoped that future transportation plans, programs and projects will provide better, safer and more convenient solutions and encourage over time more people to walk, bike and take transit.

Transportation Hierarchy



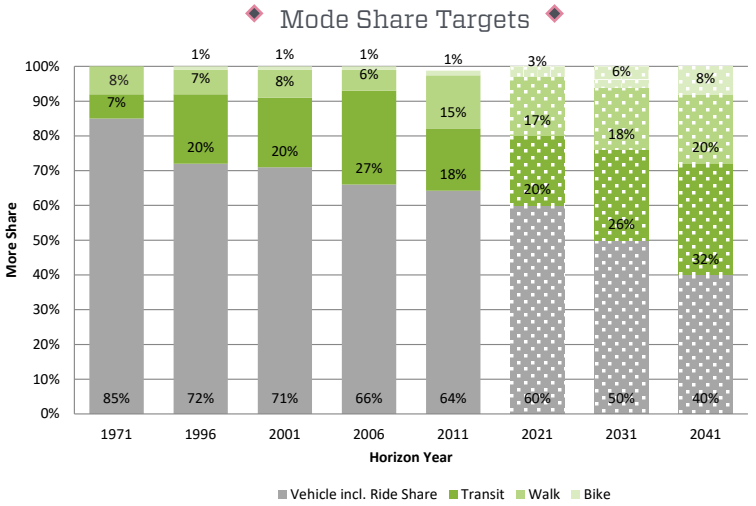
In addition to a vision and goals, targets are also a critical component of a transportation plan. They provide an effective way to measure progress over time towards achieving goals and objectives. Targets are a critical tool for the City to use into the future to monitor the results of policies and actions that have been implemented. They will help to ensure that the Plan is implemented as intended, and to determine whether the Plan is achieving its goals. The Plan includes four targets as described below.

Target 1: Increase Sustainable Transportation

One of the most critical targets for the Master Transportation Plan is to redistribute mode share, or the percentage of trips made by each mode of transportation. This target indicates much more than simply how people are choosing to travel. Among other things, changes in mode share are an indicator of how attractive the city is for walking, cycling and using transit; how integrated the city's transportation system is with land use patterns and how well the transportation system is helping to achieve the City's vision of multi-modal transportation. It is also an indication of how investments in alternative modes can shift the amount of driving in support of a healthier and more vibrant community.

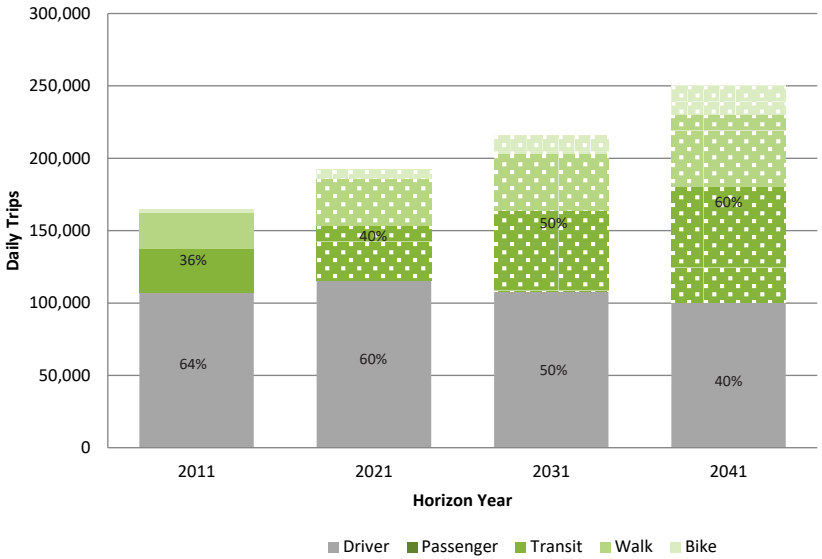
The City of New Westminster has established an ambitious goal for local transportation trips so that by 2031, half of all local trips are made by walking, cycling, and transit increasing to 60 by 2041, an increase of 25% from today's sustainable transportation mode share. This target implies that future growth in local transportation trips in New Westminster occurs through more walking, cycling, and transit trips, with walking and transit experiencing the largest increases by 2041. The target also implies that city-generated vehicle trips will remain stable over time, with future 2041 vehicle volumes remaining unchanged from the levels seen today. Ensuring that the number of city-generated vehicle trips stays unchanged between today and 2041 will require many of the city's future residents to use transit, walking and cycling to travel through transit-oriented development and the promotion of active transportation.

These mode share targets represent a significant and bold step for the City. Currently, there are approximately 167,000 local trips made by New Westminster residents per day and, if current trends were to continue, this would increase to 250,000 daily trips by 2041. If mode share targets are achieved, the number of locally-generated automobile trips will remain relatively stable by 2041 at approximately 100,000 daily trips, while the number of sustainable trips made by walking, cycling and transit will increase by nearly 100,000 daily trips from 2011 levels as shown below.



An increase in the mode share from 35% to 60% by 2041 is a significant increase for the City, but reflects historic trends. In fact, the mode share for sustainable forms of transportation in New Westminster has been steadily increasing since 1996, from 28% in 1996 to 35% in 2011. These targets continue these trends forward, but will require significant additional investments in walking, cycling and transit in New Westminster and regionally to achieve these figures.

2041 New Westminster Number of Daily Trips by Mode



Target 2: No Additional Increase in Regional Through Traffic

While New Westminster will support a reasonable amount of regional traffic and goods movement via the Major Road Network and other key corridors, this target emphasizes the need to limit the amount of traffic with no local trip origin or destination passing through the city. Maintaining a check on the growth of regional car trips is consistent with TransLink's Regional Transportation Strategy. Achieving no net increase in through-traffic will require the City to work closely with other municipalities and jurisdictions to ensure that external municipal and regional road projects do not add to traffic levels within New Westminster and that the residents and employees of these communities have attractive alternatives to driving. In order to limit through truck traffic, the City will update the truck route network and work with TransLink and the province to ensure that the trans-shipment of goods through the region is undertaken on rail or provincial highways, not local streets.

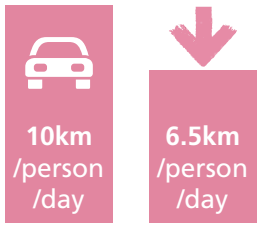
Target 3: Reduce Distance Driven

Reducing the distance we drive is also an important factor in reducing GHG emissions, air pollution, and fuel consumption.

In 2011, it was estimated that New Westminster residents drove, on average, approximately 10 km per day per person. The shift towards more sustainable land use patterns, where residents are able to live, work, study and play closer together will make walking, cycling and transit more viable. In cases where people do need to drive, their trips will be shorter and overall travel by car will be reduced. Consistent with TransLink targets, the City's target is to reduce the average distance travelled by car by one third to approximately 6.5 km per person per day by 2041.

Distance Driven Target

Shorter Trips = Less Driving



Fewer future driving trips per capita over shorter distances will help reduce traffic growth

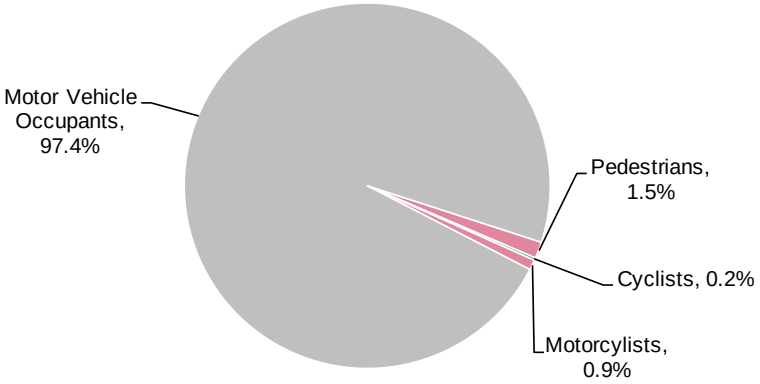
Target 4: Increase Safety

The Master Transportation Plan seeks to improve road safety – particularly among vulnerable road users such as pedestrians, bicyclists, and motorcyclists. Over the five year period from 2006 to 2010, there were a total of approximately 10,100 reported collisions involving motor vehicles – or about 2,020 per year. Of these, the vast majority (99.9%) resulted in only property damage or injuries. However, although fatalities only accounted for 0.1% of collisions, there were 11 fatal collisions over this period, or an average of 2.2 fatalities per year. In addition, vulnerable road users are particularly likely to be involved in a fatal collision. Although pedestrians, cyclists and motorcyclists were only involved in less than 3% of all reported collisions over this period, they accounted for nearly three quarters (72.7%) of all fatalities.

The Master Transportation Plan places a special emphasis on improving safety, a theme which is interwoven throughout all components of the Plan. The City will work closely with all its partners to examine the location and contributing factors of collisions, and identify steps to improve road safety in New Westminster through a combination of engineering, enforcement, and education measures, with specific emphasis on safety measures for vulnerable road users. The target is that there will be no traffic-related fatalities or serious injuries most years.

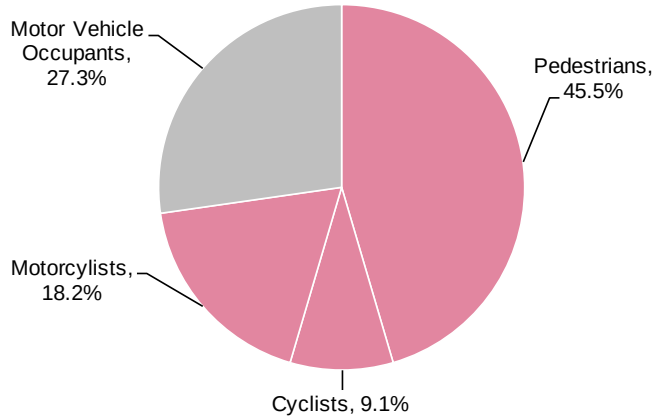
Total Collisions In New Westminster By Road User

Source: ICBC Collision Data (2006-2010)



Total Collisions Resulting in Fatalities In New Westminster By Road User
(11 Incidents)

Source: ICBC Collision Data (2006-2010)



3.5 Plan Framework

In order to achieve the vision, goals, and targets, the Master Transportation Plan provides a comprehensive direction for New Westminster's overall transportation system, and follows four overarching themes with supporting directions as shown below.

1 PRIORITIZE SUSTAINABLE TRANSPORTATION

Directions:

- *Create a **WALKABLE** community*
- *Create **BICYCLE FACILITIES** that are safe, attractive & convenient*
- *Create sustainable **TRANSIT***

2 CREATE GREAT STREETS AND PLACES

Directions:

- *Network of **GREAT STREETS***
- *Liveable **NEIGHBOURHOODS***

3 MANAGE THE TRANSPORTATION SYSTEM

Directions:

- *Manage **LOCAL AND REGIONAL TRAVEL***
- *Manage **GOODS MOVEMENT***

4 SUPPORT SYSTEMS

Directions:

- ***SUPPORTIVE PROGRAMS AND POLICIES***

For each of these themes and directions, the Master Transportation Plan includes a series of Policy statements, and more specific Actions, which provide specific direction on how to achieve the various components of each policy. The Policies and Actions for each mode of transportation are strongly inter-related with the Policies and Actions of other modes, to ensure that transportation system improvements in New Westminster are seamless, and that the community's overall transportation vision is achieved.




PEDESTRIAN
WAY



4 Strategies, Policies and Actions

4.1 A Walkable City

Comfortable Cycling Facilities 4.2

4.3 Attractive and Convenient Transit

Great Street 4.4

4.5 Managed Roads

Managing Goods Movement 4.6

4.7 Livable Neighbourhoods

Supporting Programs and Policies 4.8




glide
pace
tramp
stride
circuit
promenade
gimp
stroll
carriage
peregrination
walk
saunter
turn
jaunt
ramble
carriage
march
tour
parade
tread
step
hike
traipse
stretch
gimp
circuit
hike
stroll
airing
schlepp
pace
stride
promenade
perambulation
march
peregrination
carriage

4.1 A Walkable City



Walking is the most fundamental form of transportation, as it is a part of every trip, whether that trip is made by bicycle, transit or car. If suitable conditions exist within a community – such as having a complete sidewalk network that connects major destinations to where people live, work, shop, learn and play – walking can be a convenient alternative to the automobile for shorter trips of up to a kilometre, which is less than a 15-minute walk. Promoting walking reduces automobile dependence and GHG emissions, improves public health outcomes, and creates more liveable and vibrant communities.

Promoting walking is one of the top priorities of the Master Transportation Plan. Many features of New Westminster already put the city in a good position to reach this target, including that walking is a popular mode of transportation locally, and that there is a well-established fine-grained street grid, with many areas of it tailored to support pedestrians. There is an established network of 255 km of sidewalks throughout the community in addition to a network of off-street trails and pathways that further enhance the pedestrian network. Most notable of these are the Central Valley Greenway and BC Parkway, both of which are multi-use pathways that connect residents in the cities of Vancouver, Burnaby, and New Westminster. There are many pedestrian-friendly areas of New Westminster that provide pleasant walking experiences due to the diversity and density of land uses, small block sizes, continuous sidewalks, streetscaping, interesting store fronts, and slow-moving traffic.

While pedestrians enjoy high connectivity throughout the downtown and surrounding residential neighbourhoods, there still remain gaps in the walking network due to barriers presented by the SkyTrain and rail lines, busy traffic corridors, steep grades, and a lack of pedestrian facilities on major routes and narrow streets. The strategies within this chapter seek to address these barriers and gaps, and to provide more safe, convenient, and comfortable walking environments throughout New Westminster.

The focus of the City's efforts to create a walkable city will be on making walking a safe, comfortable, accessible and pleasant mobility choice for people of all ages and abilities, be they residents or visitors.



Walking Policy 1A Enhance the Pedestrian Network

The City of New Westminster has an extensive sidewalk network. In fact, nearly three quarters of all streets in the city have a sidewalk on one or both sides of the street. However, there are still several areas in New Westminster that have no sidewalk, which can create connectivity and accessibility issues for pedestrians. This policy area focuses on enhancing the sidewalk network throughout the city by filling in gaps in the sidewalk network, improving existing sidewalks, and encouraging other pedestrian connections, including pathways and laneways.

In order to enhance the sidewalk network, one of the key areas of focus is on **providing sidewalks where current gaps exist**. Filling in sidewalk network gaps are to be prioritized in areas that are known pedestrian generators including: streets that are located adjacent to or near schools, SkyTrain stations, parks, within the downtown core and other centres that have high pedestrian activity, including commercial centres.

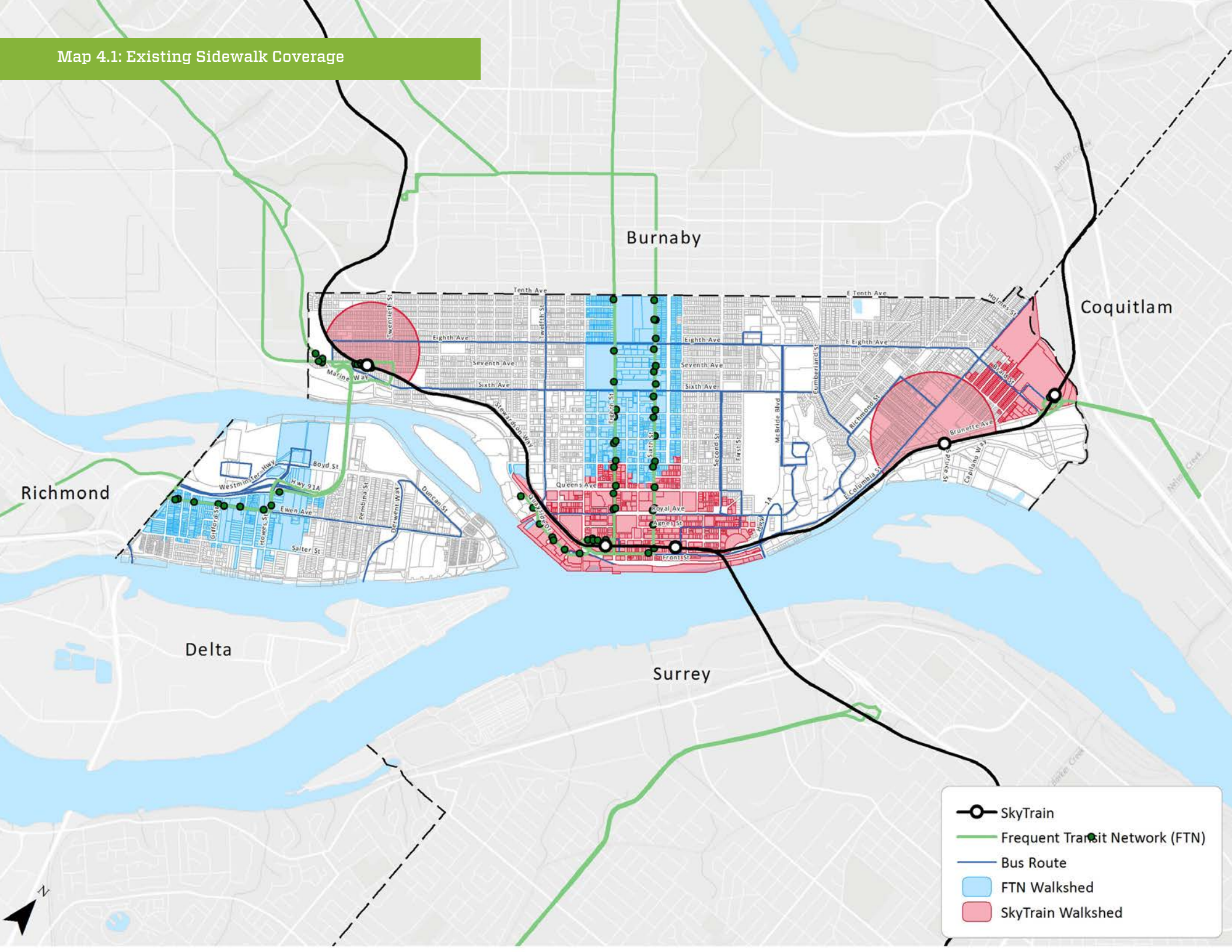
Another key focus is to **enhance existing sidewalks** in priority areas to improve pedestrian comfort. For example, some sidewalks are uncomfortable to travel on. This can limit pedestrian connectivity and comfort. Actions to enhance these areas can include:

- Enhanced sidewalk maintenance;
- Repaving;
- Improved quality (surfacing);
- Sidewalk widening;
- Increased accessibility;
- Providing boulevards or buffers between pedestrians and vehicles; and
- Removing any clear width obstructions.

Ultimately, the aim of addressing sidewalk network gaps and improving existing sidewalks is to create a safe, comfortable and attractive walking environment on all of the city's streets.



Map 4.1: Existing Sidewalk Coverage





Walking Policy 1B Create Great Places and Destinations

A number of urban design features can make high pedestrian activity areas more attractive and interesting. These treatments can even help create destinations in and of themselves and create lively, vibrant, pedestrian-oriented streetscapes. Pocket parks and plazas, enhanced landscaping, public art, street trees, litter and recycling bins, benches, curb extensions, weather protection, and pedestrian-scale street lighting are examples of good public realm features. While installing these features are important to creating great places, it is also important to ensure that they do not narrow the width of the sidewalk and impede safety and accessibility.

Some potential urban design features that can be considered in these areas include:

- **Laneway redesign.** Laneways can be converted into high activity spaces that welcome pedestrians by providing safe pedestrian alternatives to city streets. They can also be designed to stimulate business activity with patios, seating, and other design elements such as public art, lighting, and planters. The laneways can provide a network of walkways linking specific neighbourhoods and districts.

- **Parklets, plazas** and other **gathering spaces** located throughout the city can provide spaces for people to gather, create unique destinations, and add to the overall character and visual appeal of the city. Pedestrians can stop, take a break, and enjoy facilities offered, particularly when travelling on the city's steep hills. These spaces can help create vibrant pockets and streets, and can create unique areas throughout the city.

- Due to the presence of **steep hills** in New Westminster, walking can be a challenge. A number of pedestrian treatments can help mitigate some of the impacts that hills have on pedestrians. Providing safe and accessible public places to rest, providing stairways with hand railings, keeping key routes free of snow and ice the in winter, and identifying pedestrian shortcuts can all make walking steep routes more comfortable. An initiative that could also help mitigate the issue of hills could be a free shuttle to transport people between Downtown and Uptown.

- **Pedestrian design features** such as public art, artistic benches, community art projects, and community based design initiatives can be used to help showcase the neighbourhoods in New Westminster, as well as the local and historical context of the city. A tool to facilitate this process is the city's public art policy, adopted in 2012, which guides the acquisition and installation of art in municipally-owned public spaces, and is intended to create a sense of enhanced civic pride and identity.

- Increased **sidewalk width** to make walking more comfortable and accessible for all, particularly in high activity areas.

- **Boulevards** between the sidewalk and the roadway to provide a buffer between pedestrians and moving vehicles. This treatment is recommended for routes connecting to community pedestrian generators where walking activity is concentrated.

Walking Policy 1B. . .

- **Pedestrian amenities** that improve the attractiveness and comfort of pedestrian environments can include planters, garbage cans, public toilets and benches. These amenities are typically outside of the travelled portion of the sidewalk, and are essential to creating environments within commercial areas that are comfortable and interesting for pedestrians. Wayfinding and pedestrian-scale signage to identify pedestrian routes, key destinations, and access to public transit can help create a navigable pedestrian environment.

- **Street trees** should be incorporated into all sidewalks, as street trees can play an important role in increasing pedestrian comfort and safety. This is particularly important for streets with high pedestrian demand or where parking does not provide a buffer between the road and sidewalk. Street trees also help with air quality, reduce the urban heat island effect and provide shade in the summer.

- **Weather protection** to provide more comfortable conditions for pedestrians in New Westminster. Providing continuous protection from rain (which can extend to snow and sun protection) along key pedestrian routes can create more inviting and useable outdoor spaces year round.

Some general guidance on where these place-making features can be implemented in New Westminster are found below.

Table 4.1: Place-Making Location Guidelines

	Great Streets	Commercial Centres	Multi-family Residential	Schools	City-wide
Laneways	●	●			
Parklets and Plazas	●	●		●	
Topography Treatments					●
Increased Sidewalk Width	●	●	●	●	
Pedestrian Design Features	●	●	●	●	
Boulevards	●	●	●	●	
Pedestrian Amenities					●
Weather Protection	●	●			



Visual Summary | Place-Making Features



PARKLETS / PLAZAS Outdoor spaces such as parklets and plazas create designated places for people to rest, socialize and put their eyes on the street. These spaces also add to the overall vibrancy of the street and can infuse the street with a sense of place and liveliness.



WIDE SIDEWALKS can allow for a more comfortable walking experience, they can help provide individuals with mobility aid or buggies more space. Wider sidewalks can create opportunities for more furnishings and greenery, and support more opportunities for stopping, resting, and interacting with a space.



BOULEVARDS can help create a more pedestrian friendly environment by providing an additional buffer between pedestrians and vehicles. They can be made up of grass or other plant materials such as flowers or rain gardens. They can enhance the design of a street and provide additional comfort.



WEATHER PROTECTION / AWNINGS can create a more enjoyable experience for pedestrians and provide protection from environmental elements such as rain, sun and snow. Awnings in front of businesses can provide covered areas for pedestrians to walk or wait under to stay protected.



PEDESTRIAN AMENITIES Pedestrian amenities can be placed along streets on medians, sidewalks, and on existing curb extensions. They can include features such as planters, posters, benches and trash bins that provide a more inviting, inclusive and dynamic environment for pedestrians.



GATEWAY FEATURES located at key intersections and entry points to the City or specific neighbourhoods can help to designate space, provide a sense of arrival, and provide wayfinding. Gateway features can include distinct signage, landscaping, public art, and pedestrian amenities.

Walking Policy 1C Improve Pedestrian Safety and Accessibility

Providing a safe and accessible pedestrian system is not just about developing sidewalk infrastructure and pathways. A quality walking experience is linked to accessibility, sidewalk quality, and pedestrian safety and visibility features. There are a number of features that can enhance pedestrian accessibility and safety, while encouraging walkability for all residents, including residents with different physical and cognitive abilities and vulnerable users such as children and seniors. Considerations include curb letdowns, narrower crossings, tactile pavers, accessible (and audible) pedestrian signals, enhanced crossings, unique and distinct pavement markings, and pedestrian countdown timers as described below:

- **Curb letdowns** allow wheelchair users to safely exit and enter the sidewalk. A preference is for letdowns that line up directly with crosswalks, where possible, in order to avoid pedestrians and wheelchair users having to enter an intersection to access the crosswalk.

- **Narrower crossings** facilitated by curb extensions and median islands can aid in pedestrian movement by improving visibility and reducing crossing distances.

- Apply principles of **Universal Design**. Accessible pedestrian signals at signalized intersections are increasingly being used and desired in areas with high pedestrian activity, in order to assist pedestrians with disabilities. Accessible signals communicate when to walk or not walk in non-visual formats, such as through audible tones, speech messages, or vibrating surfaces. The use of braille on pedestrian signals can also enhance the accessibility of intersection crossings. Accessible signals can provide a higher degree of confidence to pedestrians crossing major streets and generally receive positive support among all age groups.

- **Countdown timers** can be provided at all major intersections to provide timing information to all users, as well as longer pedestrian phases to allow pedestrians of differing abilities a longer time to cross the street. Leading pedestrian signals can also improve safety when crossing the intersection. Large intersections that are multiple travel lanes wide, such as the intersection of Royal Avenue and Eighth Street, would benefit from these features to enhance the safety of pedestrians.

- **Marked crossings** can enhance the visibility and safety of crossing pedestrians. The crosswalks while meeting standards can be marked with decorative colour designs to create a visually appealing facility and make them stand out visually to motorists. Key streets identified that would benefit from marked crossings include Tenth Avenue, Eighth Avenue, Sixth Avenue, Second Street, Ash Street, and Fifth Avenue.

- **Enhanced pedestrian crossings** including special crosswalks and pedestrian half signals, where warranted.

- Ensure sidewalks and entrances to pedestrian crossings **remain free from obstructions**, in order to allow people of all abilities to safely navigate the sidewalk clear width and access the crossing area.

Walking Policy 1C. . .

- **Street lighting** can ensure pedestrian comfort as well as safety and security at all times of day. Lighting should be a priority at crosswalks, to make pedestrians visible to motorists during the evening hours. Street lighting can also be designed to support a particular theme for a given area.



Walking Policy 1D Enhance the Waterfront

New Westminster is a waterfront community, and the Fraser River is a key destination and feature of the city that should be properly connected. Providing a continuous connection along the waterfront, with easily accessible routes to nearby neighbourhoods and waterfront amenities, is an important focus of this plan. Enhancing the New Westminster waterfront also supports the 'Experience the Fraser' vision to connect communities, parks, and natural features along the Fraser River.

The advantage of building more enhanced water connections is that shoreline areas tend to provide a relatively flat route and the existing waterfront amenities are a popular destination for both pedestrians and cyclists for leisure, recreation and transportation. Enhancing access points to the waterfront is a challenge due to the need to cross rail tracks and major roads, as the steep grades also deter pedestrian and cyclists.

The City recently developed the Westminster Pier Park, which has opened up a significant section of the waterfront immediately southeast of Downtown. Currently accessible from Begbie Street, future planning includes the provision of more access points such as Sixth Street and Fourth Street (under construction). Future planning should also include provision of a more continuous waterfront link in New Westminster along the shore of the Fraser River, connecting between Sapperton and Downtown. In addition, the City should continue to develop the Queensborough to Quayside Pedestrian / Cyclist crossing and the Queensborough Perimeter Trail to promote active transportation and to further connect different areas of Queensborough. Pathway extensions and amenities can make these waterfront connections more convenient, enjoyable, and accessible for pedestrians throughout New Westminster's neighbourhoods.





DETAILED POLICIES AND ACTIONS

Policy 1A - Enhance the Pedestrian Network
Actions

- 1A.1: Refine the existing sidewalk prioritization process to identify priority sidewalk improvements to fill in gaps in the sidewalk network shown in Map 4.1 based on pedestrian demand, pedestrian safety, connection to skytrain / transit, network gaps and anticipated needs.
- 1A.2: Prioritize sidewalk improvements, including both new sidewalks and enhancements to existing sidewalks, in areas with high concentrations of vulnerable road users (children, youth and seniors) including areas around schools, parks, community centres and seniors' facilities.
- 1A.3: Identify opportunities for enhanced pedestrian connections within and between parks, to commercial / institutional amenities and throughout the city.
- 1A.4: Improve the environment for pedestrians along narrow streets, and lanes. These are often the shortest walking path in Downtown. Maintain essential functions in laneways such as loading, parking, fire access and services.

Policy 1B - Create Great Places and Destinations
Actions

- 1B.1: Create and implement design guidelines that encourage developers to provide amenities to enhance the pedestrian environment, including appropriate building setbacks and weather protection such as canopies or awnings.
- 1B.2: Construct landscaped features such as curb extensions and sidewalk boulevards to improve the safety, comfort and visual appeal of the pedestrian environment.
- 1B.3: Work with local businesses, business associations and community members to consider opportunities for public gathering spaces, such as parklets and plazas, along Great Streets and other neighbourhood centres.
- 1B.4: Encourage the creation of outdoor patio seating at cafes and restaurants on Great Streets to create a more vibrant streetscape, while maintaining sidewalk clear zones for pedestrian movement including wheelchairs and other mobility aids.

Policy 1C - Improve Pedestrian Safety and Accessibility
Actions

- 1C.1: Where appropriate, consider reducing pedestrian crossing distances through the use of curb extensions and median islands.
- 1C.2: Provide pedestrian-scale street lighting in and around key walking destinations and crosswalks to support pedestrian visibility day and night. Transition to white light sources, particularly at crossing locations, which make pedestrians more visible.
- 1C.3: Work towards all sidewalks in the city having a minimum clear width of 1.8 metres, with an enhanced sidewalk clear width of at least 3.0 metres on Great Streets and other areas with high pedestrian activity.

Policy 1C - Improve Pedestrian Safety and Accessibility
Actions

- 1C.4: Ensure the travelling portion of sidewalks ("sidewalk clear zones") remain free of obstructions.
- 1C.5: Continue to carry out and update collision reviews every five years. The reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions and costs. Work towards a road network where pedestrian fatalities and serious injuries are exceedingly rare.
- 1C.6: Apply Crime Prevention Through Environmental Design (CPTED) principles of streetscape design to improve pedestrian safety.
- 1C.7: Develop design standards that recognize the diverse needs of pedestrians, including sidewalk clear zone width, benches, and enhanced pedestrian crossings such as reduced crossing distances and modified pedestrian signal timing.
- 1C.8: Ensure there is adequate street space for accessibility challenged drivers and passengers to load, stop and park.
- 1C.9: Consider using parking payment-in-lieu funds and voluntary amenity contributions to fund new amenities.
- 1C.10: Work with agencies such as the Integrated Road Safety Unit, New Westminster Police Department, and Bylaw Officers to enhance traffic enforcement to improve pedestrian safety.
- 1C.11: Consider pedestrian improvements as part of all street capital projects, and significant developments that install and upgrade sidewalks, boulevards, streetscape and crossing facilities as opportunities arise.
- 1C.12: Continue to install missing curb letdowns and upgrade older letdowns to current design standards. Develop a process for prioritizing curb let downs improvements. Aim to have curb let downs at all city street intersections by 2020.
- 1C.13: Continue to install accessible pedestrian signals city-wide through on-going replacement programs, at locations prioritized in consultation with stakeholder groups representing seniors and individuals with differing physical or visual abilities.
- 1C.14: Continue to maintain and rehabilitate sidewalks and pathways so they are free of trip hazards, debris and clutter (i.e., sandwich boards); use smooth materials and designs that are comfortable for users of strollers, wheelchairs, or other mobility aids.
- 1C.15: Improve and enforce measures to maintain accessibility around construction zones and special events.

... DETAILED POLICIES AND ACTIONS

Policy 1D - Enhance the Waterfront
Actions

- 1D.1: Work with agencies and organizations such as TransLink and Metro Vancouver to advance regional trails and inter-municipal connectivity, with a focus on acquiring and developing a complete, continuous waterfront pathway for pedestrians and cyclists along the Fraser River, including a continuous loop around Queensborough.
- 1D.2: Work to seamlessly integrate the downtown and the waterfront by improving pedestrian connections at key locations, including Fourth Street, Begbie Street, Sixth Street, McInnes overpass and Eighth Street at Hyack Square.
- 1D.3: Construct a bicycle and pedestrian connection between the Queensborough and Quayside Neighbourhoods.
- 1D.4: Enhance waterfront amenities by providing a greater diversity of destinations and pedestrian amenities including benches, water fountains, art, historical references, wayfinding, signage and playground areas.
- 1D.5: Work with agencies and organizations such as TransLink and Metro Vancouver to advance regional trail and inter-municipal connectivity, with a focus on the waterfront and the creation of a continuous waterfront greenway from Queensborough to Sapperton.




cycle
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bicycle
burn rubber
tailgate
fire up
lean on it
actuate
step on it
cycle
speed
run
burn up the road
bike
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tool
manage
wheel
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propel
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transport
direct
roll
tailgate
bear down
step on the gas
cycle
bicycle
tool
mobilize
run
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dash
steer
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direct
run
handle
burn rubber
fly
travel
guide
ride
coast
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bike
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make sparks fly
fly
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make sparks fly
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4.2 Comfortable Cycling Facilities



Cycling is an important and growing mobility option in New Westminster for both commuting and recreational purposes. Today in New Westminster, cycling accounts for approximately 1% of trips, with the majority of bicycle trips staying within city boundaries and averaging 5 km or less in length. Encouraging more people to take short, local trips by bicycle will require developing a safe and comprehensive bicycle network in New Westminster, with infrastructure and programs that help cycling become more time-competitive with other modes, particularly for short-to-moderate distances. If cycling is a more attractive and viable transportation choice, this can encourage healthier lifestyles, reduced pollution and GHG emissions, and more cost-effective infrastructure investments.

New Westminster's existing cycling network is based on a system of bikeways and greenways that criss-cross the city, including the BC Parkway, Central Valley Greenway, Brunette-Fraser Regional Greenway, Crosstown Greenway and the London/Dublin Greenway. Gaps in the network, such as missing links to key destination areas, and areas with steep topography present a challenge to cyclists. However, the existing bicycle infrastructure and the rise in popularity of cycling in New Westminster positions the City to expand and improve upon the existing network to increase the attractiveness of cycling in the city.

The Master Transportation Plan includes three cycling policies that are designed to provide cycling facilities and programs to make cycling comfortable for people of all ages and abilities.



Cycling Policy 2A Develop a Complete Bicycle Network

In order to make cycling a safe, comfortable, and enjoyable transportation option for people of all ages and abilities, the Master Transportation Plan recommends developing and implementing a complete bicycle network that would connect with all key destinations throughout the city and place all residents within short distance of a bicycle route. The long-term bicycle network plan is shown in **Map 4.2**. Principles that have guided the development of the bicycle network plan are described below.

- **A Dense Network.** The long-term bicycle network plan ensures that bicycle routes are regularly spaced to ensure residents are within a reasonable distance to access a route. A complete bicycle network in New Westminster is envisioned as one that ideally places all residents and businesses within 500 metres (or four-to-five blocks) of a primary or secondary bicycle route that will connect to major destinations throughout the city and region.

- **A Connected Network.** It is critical that bicycle routes are direct and provide connections to key destinations, to promote a convenient experience and to support bicycle travel times that are competitive with automobiles. Recognizing this, the bicycle network promotes connections to commercial areas, SkyTrain stations, schools, parks, community facilities such as libraries and community centres, and hospitals. The design of the network also integrates the on-street bicycle network with the off-street bicycle network where possible, including significant regional routes such as the BC Parkway and Central Valley Greenway, and incorporates bicycle connections to adjacent municipalities.

- **A Network Hierarchy.** The long-term bicycle plan includes a network of primary and secondary routes. This includes both existing and planned bicycle routes, and improvements that could also be considered along existing routes to make them more comfortable. Primary routes are important local and regionally serving bicycle routes that are intended be comfortable for all ages and abilities, as described in the following section. Primary routes include London Street, Fourth Avenue, Seventh Avenue, BC Parkway, Central Valley Greenway, First Street, Second Street, Tenth Street, Ewen Avenue, and Wood Street. Secondary routes are also identified to complement the Primary Routes and fill in gaps in the network.

- **Part of a Regional Network.** The bicycle network in New Westminster is part of a regional network. As such, the plan identifies existing and planned connections to other municipalities, including Burnaby, Coquitlam, and Richmond to ensure New Westminster works with its neighbours to develop a seamless bicycle network across municipal boundaries.

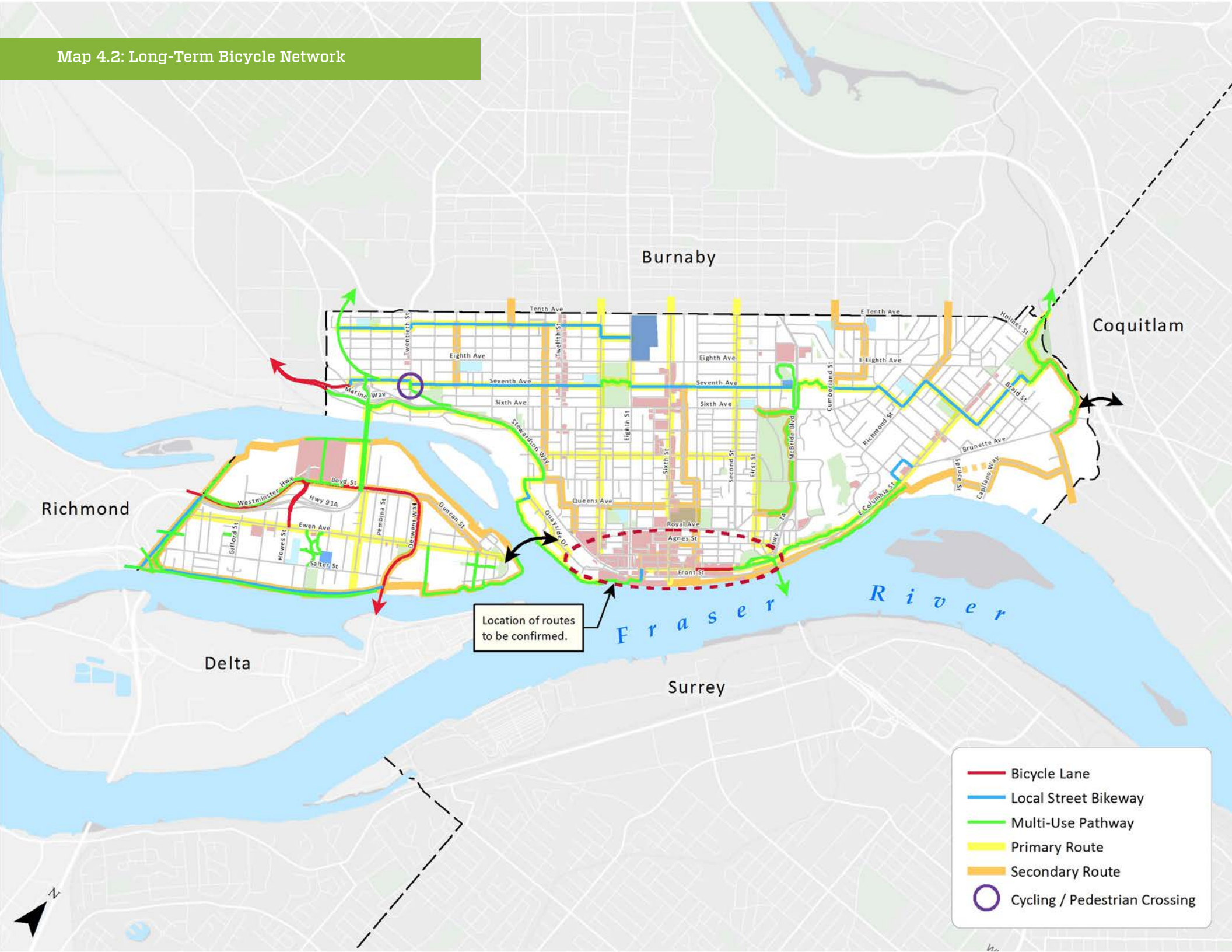
Cycling Policy 2A. . .

- **A Navigable Network.** While most residents know how to travel through the city by car, it may not be obvious which routes are the best by bicycle. For both experienced and inexperienced cyclists, signage can help riders to find the best routes that match their cycling abilities and comfort levels and to find new routes as they become more confident. Bicycle route signage can also highlight for drivers and other road users where they should expect to see greater concentrations of cyclists.




Central Valley
Greenway
Columbia St.

Map 4.2: Long-Term Bicycle Network



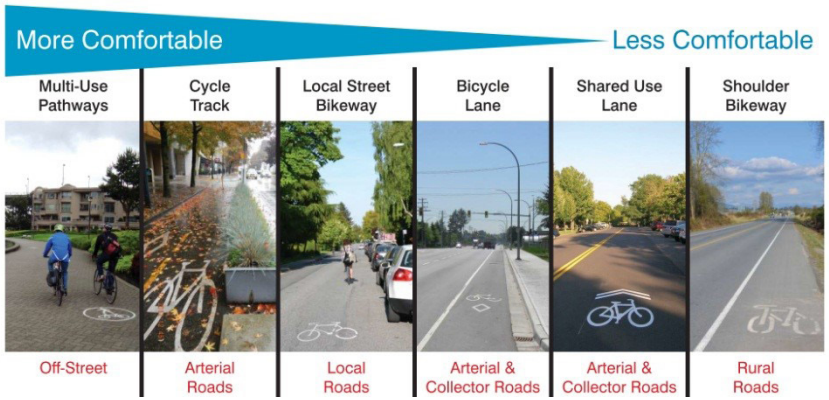

CHURCH ST.
ROYAL CITY
ROYAL CITY TRAVELLERS
SPRINT

CYCLING POLICY 2B PROVIDE SAFE AND COMFORTABLE BICYCLE FACILITIES

The long-term bicycle plan focuses on providing bicycle facilities that are comfortable for people of all ages and abilities, particularly on Primary Routes. There are a number of different corridor treatments that the City can consider for different contexts. These facilities have varying levels of appeal for different users. Bicycle facilities that are physically separated from motor vehicle traffic such as off-street pathways and cycle tracks, are generally the most comfortable but expensive, while the least comfortable facilities are those on busier roads with limited separation from high volume and high speed traffic. Different facilities perform better in different situations and form a toolbox to select from as the cycling networks is developed.

The recommended bicycle network focuses on a Bicycle Network that is comfortable for people of all ages and abilities, and is regularly cleaned and maintained according to use. The primary bicycle routes will focus on using bicycle facilities that are separated from traffic and/or are in low-volume and low-speed traffic environments, including off-street pathways, local street bikeways, cycle tracks and buffered bicycle lanes, all of which are known to provide a higher level of real and perceived safety and comfort for cyclists of all abilities. A core route of comfortable facilities can encourage more bicycle ridership and increase perceived and actual safety within the City's bicycle network.

A complete bicycle network must also have safe crossings in place, to minimize potential conflicts with motor vehicles. The City and TransLink have identified several challenging locations for cyclists where extra caution is currently required, including the intersections of Columbia Street at McBride Boulevard, East Columbia Street at Brunette Avenue, Braid Street at Brunette Avenue, the Queensborough Bridge Interchange and 3rd Avenue, and the Quayside Connection. The type of cycling crossing treatment can vary, and the city will prioritize challenging crossings.



Visual Summary Bicycle Facility Types



MULTI-USE PATHWAYS are physically separated from streets, typically away from the road right-of-way and designed to support cyclists, pedestrians, and other non-motorized users. Multi-use pathways can also reduce exposure to traffic related air pollutants.



CYCLE TRACKS are bicycle only facilities that are physically separated from vehicle travel lanes but still located within the street. Cycle tracks can be one or two-way and combine the experience of an off-street path with the on-street infrastructure of a conventional bicycle lane.



BICYCLE LANES are lanes designated by painted markings and signage for the exclusive use of bicycles.



SHOULDER BIKEWAYS, or paved shoulders, are typically found on streets without curb and gutter, with shoulders wide enough for shared bicycle/pedestrian travel. Shoulder bikeways often, but not always, include signage alerting motorists to expect bicycle travel along the roadway.



WIDE SHARED USE LANES provide additional width for cyclists and vehicles to share the outer lane of a roadway; currently used on many on-street bicycle routes in New Westminster.



LOCAL STREET BIKEWAYS are local streets with low vehicle speeds and volumes in which cyclists share the same space with vehicles. They often include traffic calming measures to keep speeds low, and improvements at major road crossings to help cyclists cross safely.

Visual Summary Bicycle Crossing Types



COLOURED CONFLICT ZONE MARKINGS can be used at intersections, driveways, merge areas, and other conflict zones to raise visibility of cyclists and to highlight areas of potential conflicts.



DASHED BICYCLE LANE MARKINGS through intersections serve to position cyclists appropriately as they traverse the intersection, and to alert motorists of the potential presence of cyclists in the intersection.



BICYCLE BOXES can be used at signalized intersections to provide cyclists an opportunity to position themselves ahead of queued vehicles, and to proceed through the intersection when the signals turn green in advance of vehicles.



CROSSBIKES or crossrides, are pavement markings that indicate a crossing zone in which a cyclist does not need to dismount. These pavement markings may be combined with a pedestrian crosswalk or may be used to indicate a separate bicycle crossing.



TWO-STAGE MEDIAN CROSSINGS, or refuge islands, are positioned in the middle of the roadway, allowing cyclists to cross the road in two stages instead of one. The median refuge islands provides cyclists (and pedestrians) the ability to safely wait in the middle of the road, before making the second stage of their crossing. This allows cyclists to deal with one direction of traffic flow at a time.



ENHANCED BICYCLE SIGNAL CROSSINGS can include full signals or pedestrian and bicycle activated signals which can be activated by a cyclists using a range of technologies, such as bicycle loop detectors, bicycle pushbuttons, or video detection at traffic signals. Dedicated bicycle signal heads can also be considered.

Visual Summary Making Cycling More Convenient



SHORT-TERM BICYCLE PARKING is designed to enable cyclists to conveniently lock up their bicycle for a few minutes or a few hours. Short-term bicycle parking may be located in the public right-of-way, on the sidewalk zone or on-street. Many destinations and businesses can attract cyclists by offering convenient short-term bicycle parking options, including commercial and recreation centres, shopping areas, restaurants, and schools.



SECURE LONG-TERM BICYCLE PARKING is designed to accommodate cyclists who need to park for longer durations, and is often provided in a type of enclosure to provide a higher level of security than short-term racks. Purpose-built structures can be provided that provide a secure cage or room with a large capacity for storing many bicycles.



BIKESHARE programs offer access to bicycles for short-distance trips, and can be an attractive option to casual riders and visitors to try cycling in New Westminster.



BICYCLE CORRALS typically occupy one or two on-street parking spaces. Bicycle corrals can improve the walking environment by removing bicycles from busy sidewalks, and encourage cycling to high activity areas.



WAYFINDING AND SIGNAGE assists cyclists by providing information on the best route to take to get to community destinations. It is important that wayfinding and signage provides directions to major destinations at a glance, so cyclists don't have to stop to find their way.



TRANSIT INTEGRATION Providing bicycle racks on buses can allow cyclists to make longer trips, and can solve the 'last mile' problem for riders who would like to quickly access destinations further away from the bus stop.

Cycling Policy 2C Make Cycling Convenient

Support programs and integration strategies can be effective in increasing awareness and making cycling a more attractive and convenient mode of transportation. Certain approaches that can make cycling a more convenient option in New Westminster include bicycle parking supply and development requirements, end-of-trip facilities, bicycle-transit integration, and public bicycle sharing and e-bike incentives, as described below.

- **Enhanced Bicycle Parking.** Recognizing that the fear of bicycle theft or vandalism is a significant deterrent to cycling, it is important to provide safe and secure on-street bicycle parking at key locations throughout the city as a significant means of encouraging cycling. The City of New Westminster's Zoning Bylaw includes long and short-term bicycle parking requirements for all buildings. However, the City should also play a leadership role in providing adequate and regularly spaced bicycle parking within the public right-of-way.



The City can work with businesses to provide regularly spaced and sheltered bicycle parking in the public right-of-way on all Great Streets and other commercial areas, schools, community centers, and other important destinations.

The City should also develop a bicycle corral program to provide in-street bicycle parking as an alternative to bicycle racks on sidewalks, and support TransLink in providing secure bicycle parking areas at SkyTrain stations.

- **Develop a retrofit program to provide bicycle facilities in existing buildings.** The bicycle parking requirements in the City's Zoning Bylaw only apply to bicycle parking in new developments, and do not apply to existing buildings. The City will develop a program to encourage existing business owners to retrofit their buildings to provide bicycle parking.

- **Require end-of-trip facilities.** Providing end-of-trip facilities such as showers and clothing lockers at workplaces is a critical component to making cycling convenient for employees, particularly for bicycle commuters who have a long commute or who require professional clothing attire. The City has explored amending its Zoning Bylaw to require end-of-trip facilities such as showers and clothing lockers. There remain challenges to incorporating these facilities as a bylaw requirement. The City will continue to work with building owners to provide these amenities.

- **Enhance bicycle-transit integration.** Currently bicycles are supported on buses through carrying racks on the front, and are only allowed on SkyTrain during off-peak hours. Addressing these capacity issues can make bicycle-transit integration more attractive, and can facilitate longer cycling trips through the use of transit. The City can work with TransLink to improve bicycle-transit integration by creating safe and comfortable routes to transit stations and exchanges, provide safe bicycle storage at transit hubs, and increasing carrying capacity of bicycles on buses and SkyTrain.

- **Public Bicycle Share (PBS)** can enhance the ease and convenience of cycling in a community. The City can work with other agencies to determine the feasibility of implementing a public bike sharing program in New Westminster. There are a number of factors to consider in a feasibility study for a public bike share program, such as population density, demographics, mixture of land use, completion of the bicycle route network, current bicycle use, bicycle culture, and partnering opportunities with other agencies or the private sector. The City should work with TransLink and other partner municipalities to explore the feasibility of extending PBS programs, being considered by other municipalities, to New Westminster, focusing primarily on SkyTrain Stations and connections between the Downtown and Uptown. A short-term option is that the City could operate a "bicycle lend-it library" to gauge community interest/need for a shared bicycle system. This could involve having a few electric and/or regular bicycles available at City Hall (or other locations) for residents to rent. A bicycle library can promote bicycle ridership and support those who otherwise do not have access to a bicycle.

- **Electric bike incentive program.** The City could work with retailers and local business associations to develop a rebate program to provide incentive for residents to purchase electric bikes.





DETAILED POLICIES AND ACTIONS

Policy 2A - Develop a Complete, Connected Bicycle Network
Actions

- 2A.1: Complete the long-term bicycle network.
- 2A.2: Re-allocate road space from general traffic and/or motor vehicle parking to provide bicycle facilities where appropriate.
- 2A.3: Consider bicycle route improvements as part of all major street capital projects (including new streets and improvements to existing streets). Install and upgrade routes as opportunities arise.
- 2A.4: Continue to work with adjacent municipalities and other partners to ensure seamless cycling connections across municipal boundaries.
- 2A.5: Design new and review existing routes on a whole-route basis, producing a complete study with necessary link and intersection improvements.
- 2A.6: Continue to carry out and update collision reviews every five years. The reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions, and costs.

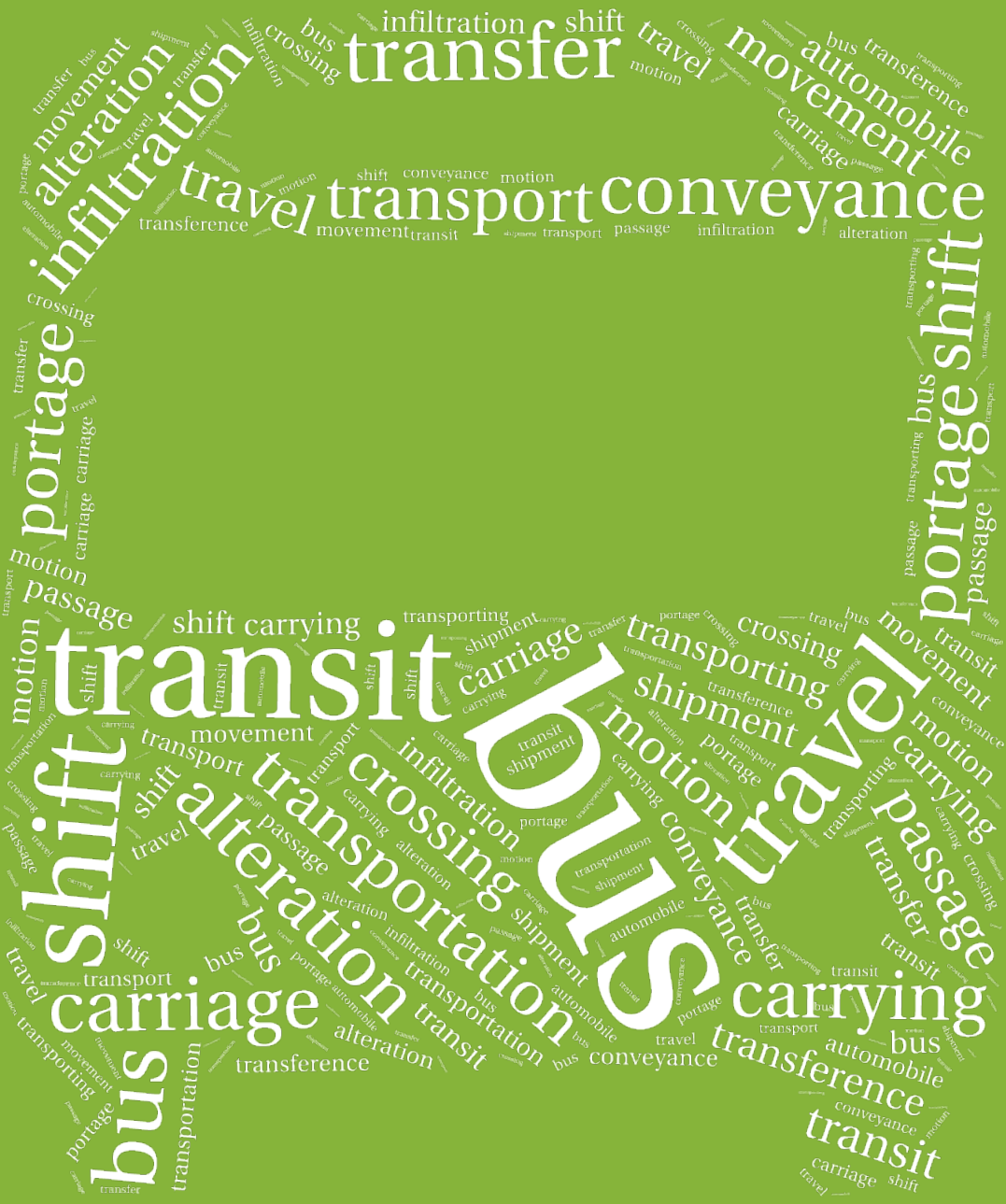
Policy 2B - Provide Safe and Comfortable Bicycle Facilities
Actions

- 2B.1: Develop a Primary and Secondary Bicycle Network that is comfortable for people of all ages and abilities by encouraging the provision off-street pathways, physically separated bicycle lanes, and local street bikeways.
- 2B.2: Prioritize cyclist movements on Primary Routes to give cyclists greater priority at intersections.
- 2B.3: Develop and implement maintenance and cleaning guidelines for primary bicycle routes, prioritizing routes with high ridership.
- 2B.4: Improve and enforce measures to maintain safe cycling access around construction zones and during special events.
- 2B.5: Design the bicycle network in consideration of the gradients of the route.

... DETAILED POLICIES AND ACTIONS

Policy 2C - Make Cycling Convenient
Actions

- 2C.1: Provide convenient and regularly spaced bicycle parking within the public right-of-way on all Great Streets and other key locations, including commercial areas, schools, community centres and other important destinations.
- 2C.2: Consider bicycle "corrals" (in-street bicycle parking) and work with local businesses to identify locations for bicycle corrals as an alternative to bicycle racks on sidewalks.
- 2C.3: Support TransLink in improving bicycle parking areas at 22nd Street, New Westminster, Columbia, Sapperton and Braid SkyTrain stations.
- 2C.4: Install sheltered bicycle parking in areas of high bicycle parking demand.
- 2C.5: Develop a retrofit program to encourage building owners to provide bicycle facilities in existing buildings.
- 2C.6: Support measures to expand the on-board carrying capacity of bicycles on public transit vehicles.


bus
transit
shift
travel
transfer
transport
conveyance
carriage
transportation
alteration
infiltration
portage
crossing
movement
transference
transporting
shipment
carrying
passage
motion
automobile
bus
shift carrying

4.3 Attractive and Convenient Transit



Convenient and attractive public transit is critical to creating a vibrant and sustainable community. Public transit can offer competitive travel times compared to the automobile and reduce the environmental and community impacts of transportation.

Transit service in New Westminster, and throughout the Metro Vancouver region, is planned and funded by TransLink and operated by various subsidiary companies. Decisions about fares, routes, and service levels are all made through TransLink and based on TransLink's guidelines and service plans. City staff works with TransLink on matters influencing current and future services as they affect the community. In this regard, the Master Transportation Plan provides the City with an opportunity to examine the role of transit within a multi-modal framework and to develop a transit service that complements land use patterns and other community aspirations. Preferred directions and priorities can be used as input to guide the Area Transit Planning process and other TransLink projects.

New Westminster is one of the best served municipalities in the region for transit service, as TransLink operates more than twenty bus routes, two SkyTrain lines and five SkyTrain stations within the city. As a result, New Westminster has one of the highest transit mode shares in Metro Vancouver, with approximately 28% of trips to work by New Westminster residents being made on public transit.

While the City experiences transit service levels and usage that are almost unequaled throughout the region, there are still opportunities to enhance transit services and facilities to make it a more attractive transportation option. Higher quality and more convenient transit connections can effectively shift people from the automobile on to transit, and can result in a more balanced and sustainable transportation system. The benefits of more transit use in New Westminster include economic efficiency and safety, reducing pollution, and traffic congestion. Lastly, it is important that efforts to increase transit use in New Westminster also focus on transit improvements to attract more public transit use region-wide.

Recognizing these factors, the Master Transportation Plan includes seven policies focused on making transit more attractive and convenient.



TRANSIT POLICY 3A ENHANCE TRANSIT SERVICE FREQUENCY

TransLink has established a Frequent Transit Network (FTN) throughout the Metro Vancouver region, including New Westminster. The FTN is a network of corridors where transit service runs at least every 15 minutes in both directions throughout the day and into the evening, every day of the week. People traveling along FTN corridors can expect convenient, reliable, easy-to-use services that are frequent enough that they do not need to refer to a schedule.

Infrequent or unreliable transit service can be a major reason why some people choose not to take transit. By increasing transit frequency throughout the day, the transit system also becomes more time-competitive with automobile travel and attracts more riders.

Existing FTN corridors in New Westminster include Sixth Street and Eighth Street as well as Westminster Highway, Boundary Road and Ewen Avenue east of Howes Street in Queensborough. However, a growing population along with increasing travel demands between New Westminster and other municipalities will continue to place pressure on the transit system over time. This policy area focuses on actions to improve transit service frequency throughout the City, including identifying additional FTN corridors throughout the City, providing even more frequent service on existing FTN corridors, and enhancing service on other local and neighbourhood transit services. Key transit service frequency enhancements are shown in **Map 4.3** and include:

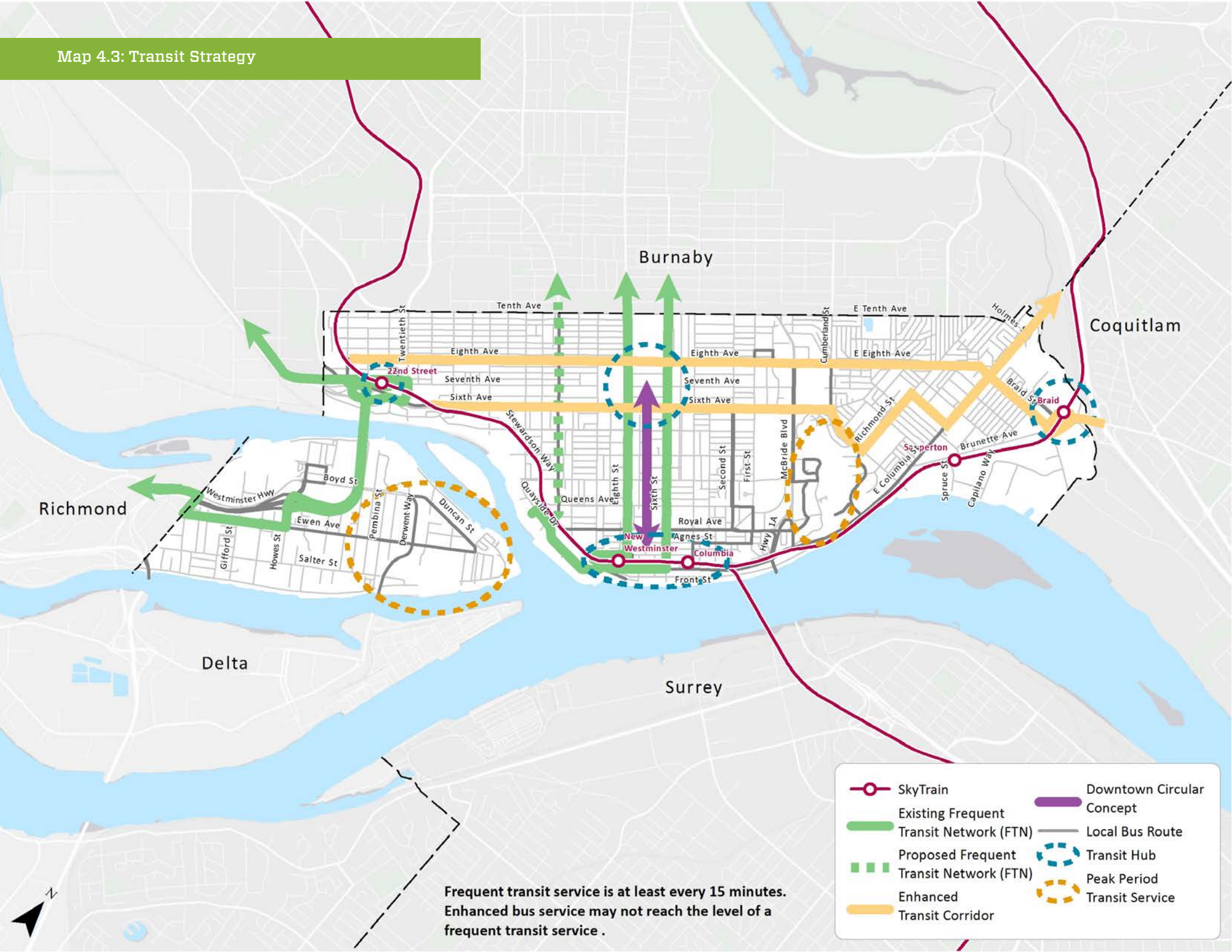
- Establishing an **additional Frequent Transit Network (FTN) route** on Twelfth Street, as Twelfth Street is an important spine in New Westminster connecting the Quayside, West End, Moody Park, and Brow of the Hill neighbourhoods, as well as providing an important connection into Burnaby's Kingsway commercial corridor and the Edmonds and Metrotown Town Centres.

- Providing **additional frequent transit service on existing FTN corridors**, such as Sixth Street and Eighth Street. These two corridors currently provide critical FTN connections locally and regionally, and provide direct links to SkyTrain stations. However, 15-minute frequency on these important corridors is not an attractive enough level of service to generate the full ridership potential along these corridors. It is recommended that Sixth Street and Eighth Street have even higher levels of transit service, aspiring to transit service levels of at least five minutes in both directions throughout the day.

- **Enhance transit corridors** with improved service frequency on key east-west corridors throughout the city, including Eighth Avenue, Sixth Avenue, and East Columbia Street. These corridors may have services levels similar to FTN corridors, particularly during peak periods.

- **Enhanced Peak period transit service** in key areas of the city, including Queensborough, Fraserview and Victoria Hill

Map 4.3: Transit Strategy



Transit Policy 3B Improve Transit Connections Between Uptown and Downtown

Uptown and Downtown are the city's most prominent commercial, retail and entertainment nodes. Integrated with residential developments and neighbourhoods, these areas are vibrant and attractive. Recognizing that the potential for future growth in these areas could attract more residents, employees, employers, and visitors, there could be an even greater need to provide more transportation connections between the services and amenities of Downtown and Uptown. Improved transit connections would also mitigate some of the impact the City's topography has on transportation between these two areas.

One of the actions of the City's Downtown Community Plan is to explore the feasibility of a shuttle connecting Downtown and Uptown. This shuttle service could be operated by the City, the Business Improvement Association, and/or other partners. Downtown shuttle services have been implemented in a number of communities throughout North America.



Transit Policy 3C Implement Transit Priority Treatments

Treatments that offer transit vehicles priority over other vehicles and minimize delays can effectively make transit service a more attractive travel option within the city. Establishing transit priority measures in New Westminster requires working with TransLink to review areas of delay where transit priority would be most beneficial and developing a framework for transit priority planning. Transit priority measures improve transit service delivery, and result in more transit use, reduced GHG emissions, and a more sustainable and balanced transportation system.

Transit priority treatments are recommended along existing and proposed FTN corridors and Enhanced Transit Corridors. Where delays and congestion exist today or are anticipated to get worse in future, the City will work with TransLink to examine opportunities for priority treatments that reduce delays to bus services. These transit priority treatments include, but are not limited to signal coordination, bus bulges, intersection queue jumpers and dedicated bus lanes. Although these treatments can impact motor vehicles, they are key to supporting long-term transit ridership by prioritizing transit. Transit priority treatments will be explored specifically for Sixth Street, Eighth Street, Twelfth Street, Sixth Avenue, Eighth Avenue, Columbia Street, and East Columbia Street.



TRANSIT POLICY 3D DEVELOP TRANSIT ORIENTED COMMUNITIES

Land use is a strong influence on transit service and ridership, and New Westminster supports a high proportion of residents, jobs, and amenities within close proximity to SkyTrain stations and transit services. Currently, many of New Westminster's residents and employees are located within 400 metres – or a five minute walk - of transit service, with the majority actually located within 200 metres, which represents only a two or three minute walk to SkyTrain or a bus stop. In addition, with a high level of transit service already existing within New Westminster, the City has a strategic opportunity to integrate land use and transit by developing Transit Oriented Communities in and around key transit nodes and corridors. The focus of Transit Oriented Communities is to place residential and commercial development in close proximity to transit service, allowing people to drive less and walk, cycle and take transit more. In addition, people who are given the option to walk, cycle and take transit over driving can improve their health by leading a more active lifestyle and avoiding chronic illnesses.

Developing Transit Oriented Communities around SkyTrain Stations Areas and along Frequent Transit Corridors will help support TransLink and Metro Vancouver plans and policies, including the Regional Transportation Strategy and Metro Vancouver 2040. TransLink has developed guidelines for developing Transit Oriented Communities, which focuses on the "6 D's": high **density**, **diverse** and mixed use **destinations**, short travel **distances**, **demand** management measures, and people-friendly urban **design**. These features can place more people and jobs in proximity to high frequency transit service, mitigating the demand for driving while increasing transit ridership. To do so, there are a number of nodes and corridors that are, or have significant potential to become more transit oriented communities, as summarized below:

1. **SkyTrain Station Areas** include areas within a ten-minute walking distance of SkyTrain Stations that have high potential to be more transit-oriented. There are four distinct SkyTrain Station Areas identified in New Westminster, each which would merit a comprehensive review and a plan developed in the future.

2. **Frequent Transit Corridors** are high-quality, mixed-use areas intended to accommodate new development. There are four distinct Frequent Transit Corridors in New Westminster identified as having the potential to become strong Transit Oriented Communities, and each will require a comprehensive plan in the future.

   - Sixth Street is part of the FTN Network and is identified as a Great Street. As a result of the transit frequency and pedestrian enhancements that emerged from the Walkable City and Uptown Beautification Programs, Sixth Street has significant potential for intensification as both a Pedestrian and Transit Priority Street.

   - Eighth Street is also part of the FTN Network and is identified as a Great Street. Eighth Street connects to Canada Way and regional facilities such as Burnaby City Hall, the Trans-Canada Highway, and BCIT and has a consistent 30 metre right-of-way, which would allow a four-lane cross-section from Downtown to Burnaby border to become a Transit Priority Street with potential transit priority measures (i.e. bus lanes, queue jumpers, etc.).

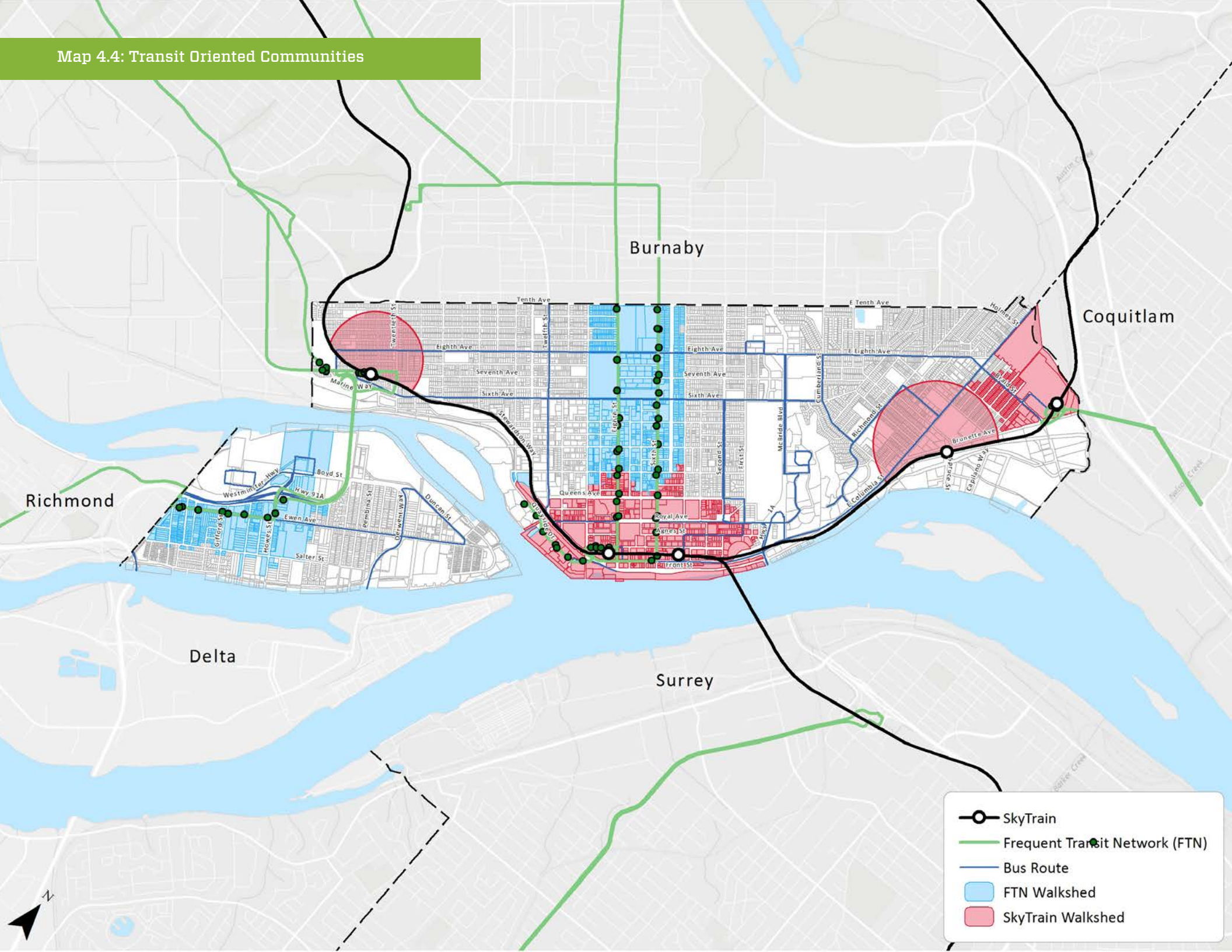
- Twelfth Street is currently a major transit route that has been identified as a future FTN corridor. Twelfth Street connects with major regional destinations as it extends to Kingsway in Burnaby, including the Edmonds and Metrotown Town Centres.

- East Columbia Street is not part of the FTN, but is served by several bus routes and serves an important regional function, and is located adjacent to the Sapperton / Brewery District SkyTrain Station.

3. **Peak Period Transit Corridors** are areas with medium and high-density residential uses, with important commercial destinations. These are areas where there is potential to increase and promote transit, including Ewen Avenue, and McBride Boulevard area which includes the Glenbrooke, Fraserview and Victoria Hill neighbourhoods.



Map 4.4: Transit Oriented Communities





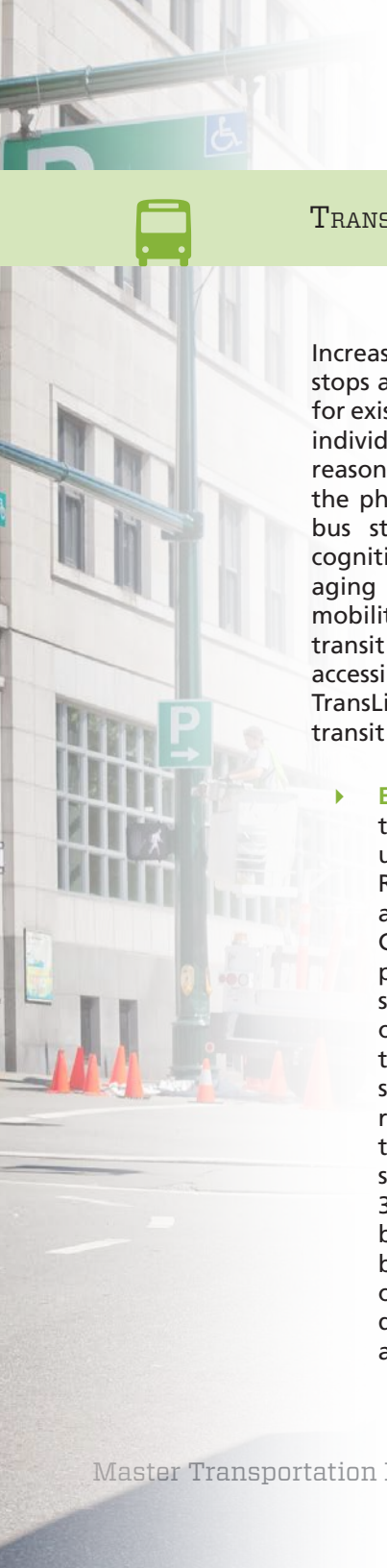
Transit Policy 3E Provide Excellent Customer Facilities and Information

The attractiveness of transit is based not only on transit services, but also on passenger facilities and information provided at transit exchanges, SkyTrain stations and bus stops. Improving customer facilities and information at bus stops is something that both the City and TransLink can play a role in, for both SkyTrain and bus stops. Improving customer facilities can include adding or improving shelters, benches and trash bins, as well as system maps, real-time information, and wayfinding information. In the long-term, the City should strive to provide shelter, seating, lighting and customer information at all bus stops and SkyTrain stations in New Westminster.




SkyTrain
STOP
Ki Sushi
Customer Parking


Handy DART
T525
HandyDART
T-525
3657 KV
proudly operated by
MVT Canadian Bus
TRANS LINK
www.translink.bc.ca
POLICE



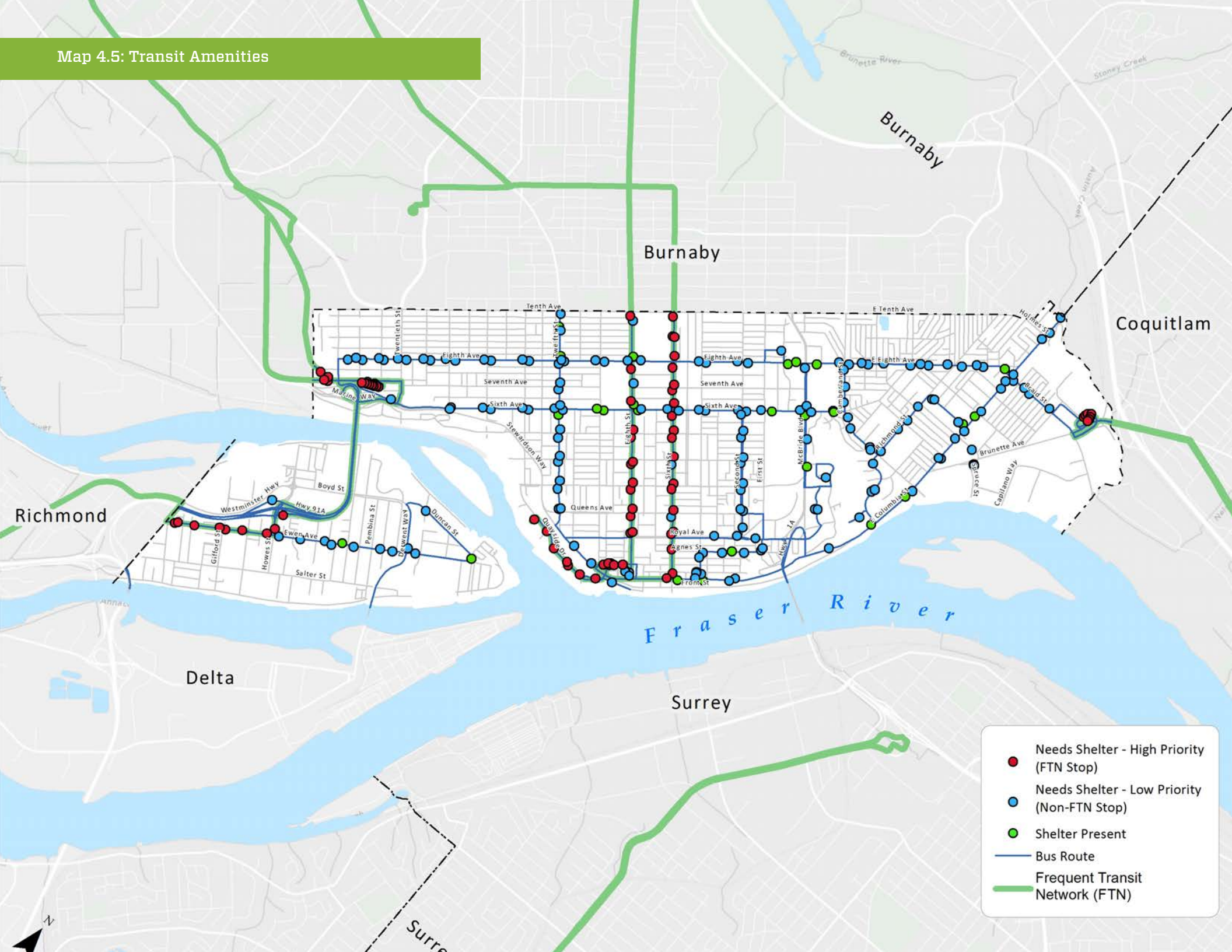
Transit Policy 3F Improve Safety and Accessibility of Transit

Increased safety and accessibility measures around transit stops and exchanges can serve to enhance transit service for existing customers and attract new riders. Today, many individuals experience barriers to using transit for various reasons, such as perceptions of safety around bus stops, the physical challenges of the system (such as accessing bus stops and transit exchanges), and experiencing cognitive difficulties getting around on transit. With an aging population, the number of people with differing mobility will increase and there is a need to improve transit accessibility, including ensuring all bus stops are accessible and that information and resources from TransLink's Access Transit Program are readily available to transit users in New Westminster.

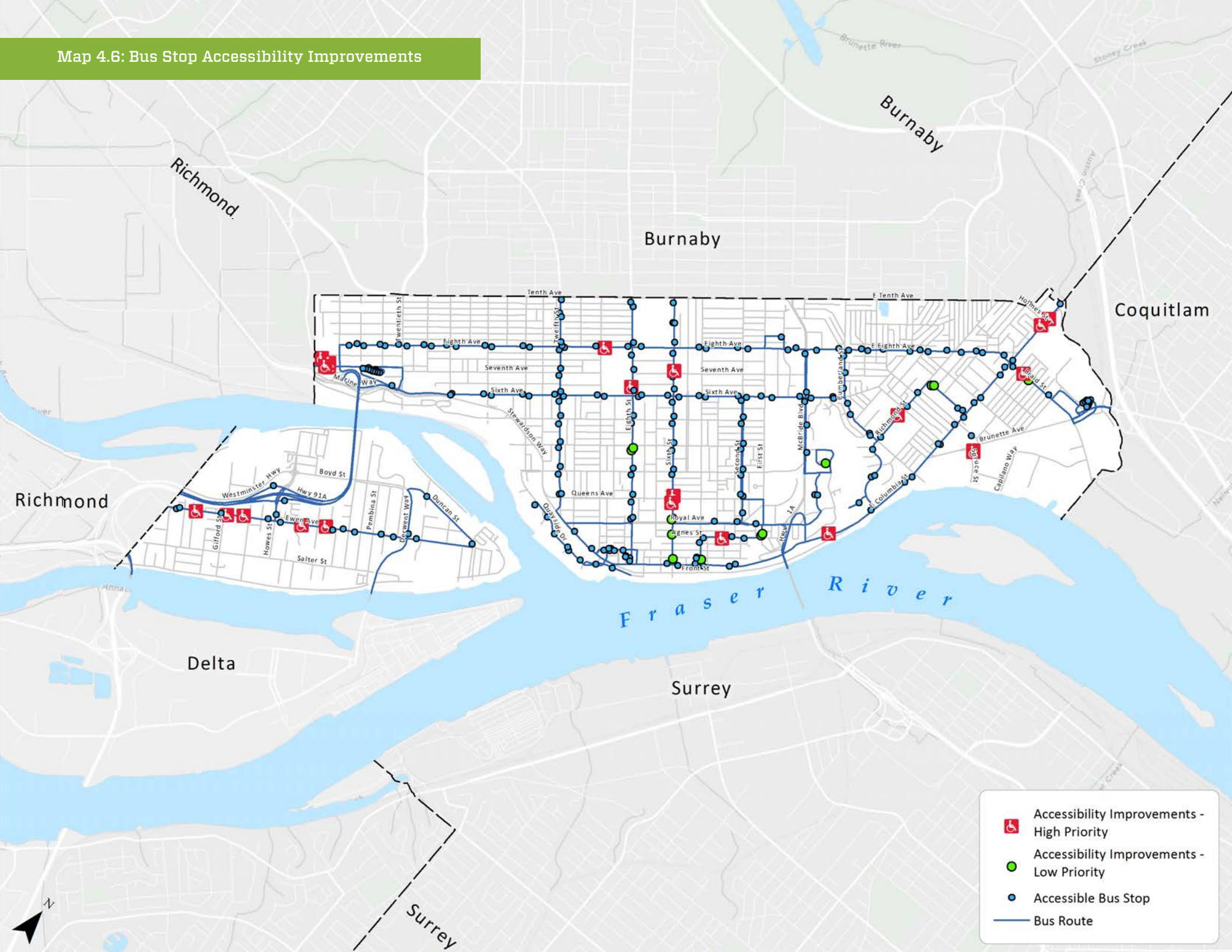
- **Enhance Accessibility.** A universally accessible transit system is important to allow all transit users access to the entire transit network. Recognizing this, the City strives to have 100% accessible bus stops, where feasible. Through the City's Accessible Transit Stop Program, significant progress has already been made to improve bus stop accessibility, with 83% of local bus stops (as of March 2014) considered accessible by TransLink– the second highest proportion of accessible bus stops in Metro Vancouver. Approximately 39 of the remaining non-accessible bus stops have potential to be made accessible, while11 do not due to steep grades. The City's target is to ensure these 39 remaining bus stops are made fully accessible by 2016 to meet the goal of having 100% of all bus stops accessible, where feasible. Access Transit offers a variety of services to ensure people with differing abilities, seniors, and new immigrants are comfortable and confident when using public transit. The City can also play a role by providing information to residents about these TransLink programs and their offerings.

- **Enhance Safety Measures.** To help ensure the safety and comfort of passengers and increase transit ridership, the City should work with TransLink to improve safety and security at and around bus stops and main transit exchanges, including the five SkyTrain stations.

Map 4.5: Transit Amenities



Map 4.6: Bus Stop Accessibility Improvements



Transit Policy 3G Promote Region-Wide Transit Improvements

The success of attracting more people to use transit in New Westminster is inherently linked to the effectiveness of the regional transit system. Encouraging more residents and visitors in New Westminster to take transit requires region-wide transit improvements and projects that enhance the appeal and convenience of using transit for local and regional trips. In addition, with rapid growth in many of the communities surrounding New Westminster, it is important to support coordinated transit initiatives with neighbouring municipalities and beyond to ensure that there are incentives and support for people to use transit region-wide as they travel to and through New Westminster.

The City should strongly support other important regional projects that will connect with New Westminster's SkyTrain and bus connections, including the Evergreen Line, which is currently under construction, as well as planned rapid transit projects in Surrey and along the Broadway corridor in Vancouver. These improvements will help to attract more riders to the transit system in Metro Vancouver, which will further serve to increase public transit use in New Westminster. Further, supporting travel demand management (TDM) measures including financial incentives to reduce automobile use and promote transit use will result in more people using transit to and through New Westminster.



DETAILED POLICIES AND ACTIONS

Policy 3A - Enhance Transit Service Frequency
Actions

- 3A.1: Work with TransLink to add Twelfth Street to the Frequent Transit Network (FTN).
- 3A.2: Work with TransLink to provide more frequent service along Sixth and Eighth Streets throughout the day.
- 3A.3: Maintain Westminster Highway, Boundary Road and Ewen Avenue west of Howes Street in Queensborough as important, regionally-serving FTN corridors.
- 3A.4: Work with TransLink to provide enhanced local transit services on key east-west corridors throughout the City, including Sixth Avenue, Eighth Avenue and East Columbia Street, with a focus on increasing peak period service.
- 3A.5: Work with TransLink to improve peak period transit service in Queensborough, Fraserview and Victoria Hill.
- 3A.6: Support TransLink in providing a greater level of coverage and service to neighbourhoods throughout New Westminster.

Policy 3B - Improve Transit Connections Between Uptown and Downtown
Actions

- 3B.1: Continue to explore an affordable shuttle service that would provide residents and visitors with improved transit service between Downtown and Uptown.

Policy 3C - Implement Transit Priority Treatments
Actions

- 3C.1: Work in partnership with TransLink to review transit reliability and identify where delays are occurring.
- 3C.2: Work in partnership with TransLink to develop a list of potential transit priority measures and priorities.

... DETAILED POLICIES AND ACTIONS

Policy 3C - Implement Transit Priority Treatments
Actions

- 3C.3: Work in partnership with TransLink to strategically implement transit priority measures.

Policy 3D - Develop Transit Oriented Communities
Actions

- 3D.1: Consider TransLink's Transit Oriented Communities guidelines and other relevant best management practices in the development of plans for SkyTrain station areas and Frequent Transit Network corridors.
- 3D.2: Work with TransLink to develop and implement a Compass Card program that enables developers to provide ongoing transit pass subsidies in support of reducing parking requirements.
- 3D.3: Apply TransLink resources to accelerate the development of pedestrian and bicycle facilities that facilitate access to transit routes in employment and residential areas.
- 3D.4: Through City land-use planning processes, explore the potential for developing transit oriented neighbourhoods at appropriate locations in the community.

Policy 3E - Provide Excellent Customer Facilities and Information
Actions

- 3E.1: Develop a plan to prioritize and install transit shelters throughout the City, with a target of having 75% of all feasible stops provided with adequate weather protection and seating by 2020.
- 3E.2: Work with TransLink to provide stairs and an elevator or accessible ramp from the Sapperton Station to the Braid Industrial Area to improve access to employment and waterfront greenways.
- 3E.3: Work with TransLink to ensure bus route and system maps or route schedules are readily available and accessible for transit users at bus stops and at SkyTrain stations.
- 3E.4: Work with Translink to support real-time information at transit stops along Frequent Transit Network corridors.
- 3E.5: Support TransLink's SkyTrain Station and Exchange Improvements Program to upgrade existing stations and exchanges in order to accommodate increasing passenger volumes, meet accessibility commitments and improve the customer experience. Prioritize improvements at Columbia Station in order to accommodate future demand from the Evergreen Line and Surrey Rapid Transit lines.

Policy 3F - Improve Safety and Accessibility of Transit
Actions

- 3F.1: Retrofit all remaining inaccessible bus stops in the city where feasible to provide 100% accessible transit stops in the City by 2016 where physically possible.
- 3F.2: Work with TransLink to improve safety and security at SkyTrain stations.
- 3F.3: Work with TransLink to improve interchange facilities for pedestrians and cyclists, including better bicycle-transit integration at SkyTrain stations, bicycle parking options, and complete sidewalks around FTN corridors and SkyTrain stations.
- 3F.4: Work with TransLink to improve service integration between transit nodes and taxi services, especially for passengers with special needs.

Policy 3G - Promote Region-Wide Transit Improvements
Actions

- 3G.1: Support rapid transit improvements and projects throughout the Metro Vancouver region that can enhance the use of the SkyTrain and other transit services and reduce automobile-dependency across the region, including the Evergreen, Surrey Rapid Transit, and Broadway Rapid Transit Lines.
- 3G.2: Support travel demand management measures in respect of financial disincentives for automobile use, such as fuel tax, carbon tax, and road pricing schemes that can actively encourage more people to use transit throughout the region.


benches
site
scenery
lighting
street
landscape
spectacle
setting
display
view
location
blackout
background
sidewalk
backdrop
seascape
pedestrian
representation
place



4.4 Great Streets

Great Streets require planning and design that goes beyond the typical street function of supporting through traffic. Planning and designing Great Streets means providing characteristics that make streets destinations – places for people to be, instead of places to move through. There are a number of qualities that have been identified that can create a Great Street. While not all streets would necessarily have all these characteristics, some qualities often associated with Great Streets may include:

- **Street definition,** where there are boundaries, walls or other features that communicate where the edges of the streets are. These edges can focus attention within the street.
- **Physical comfort,** which can include features such as wide sidewalks, boulevards providing separation from traffic, and canopies or awnings providing weather protection.
- **Places for people to walk with leisure,** where people can see each other and encourage street activities, and have an opportunity to meet others and socialize.
- **Qualities that engage the eyes,** including physical characteristics such as colour, architecture, trees, and sunlight that encourage people to look around at the environment.
- **Transparency,** primarily in the form of street-level windows, making the street more visible and safe, and engaging pedestrians in various activities along the street.

Street Definition



Transparency



Comfortable

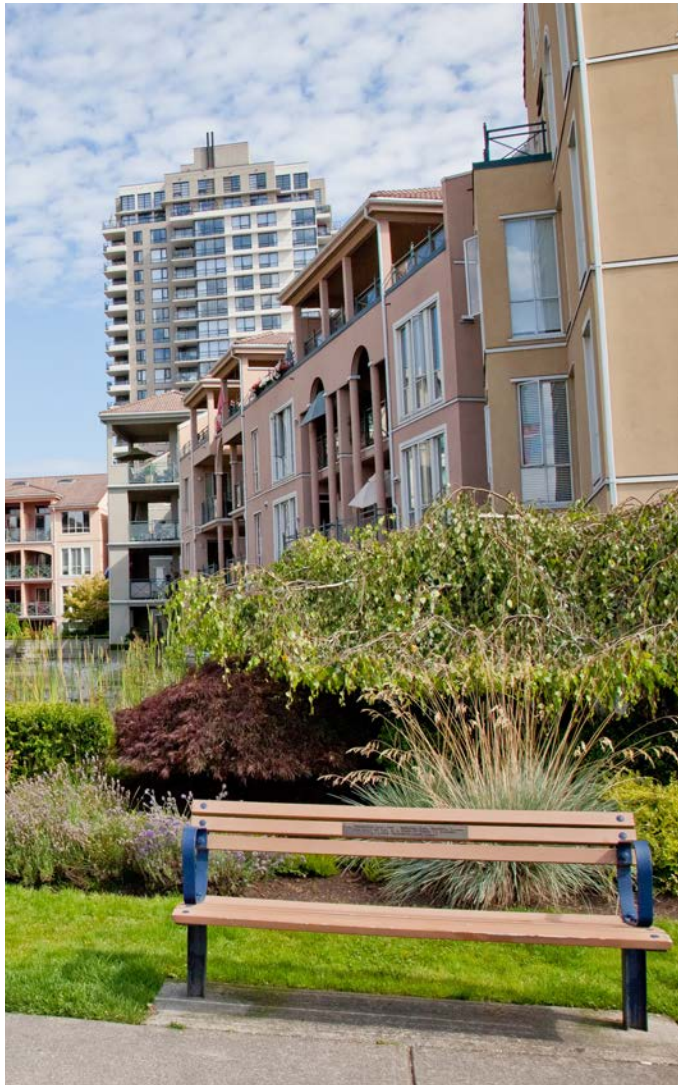


Qualities that Engage the Eyes

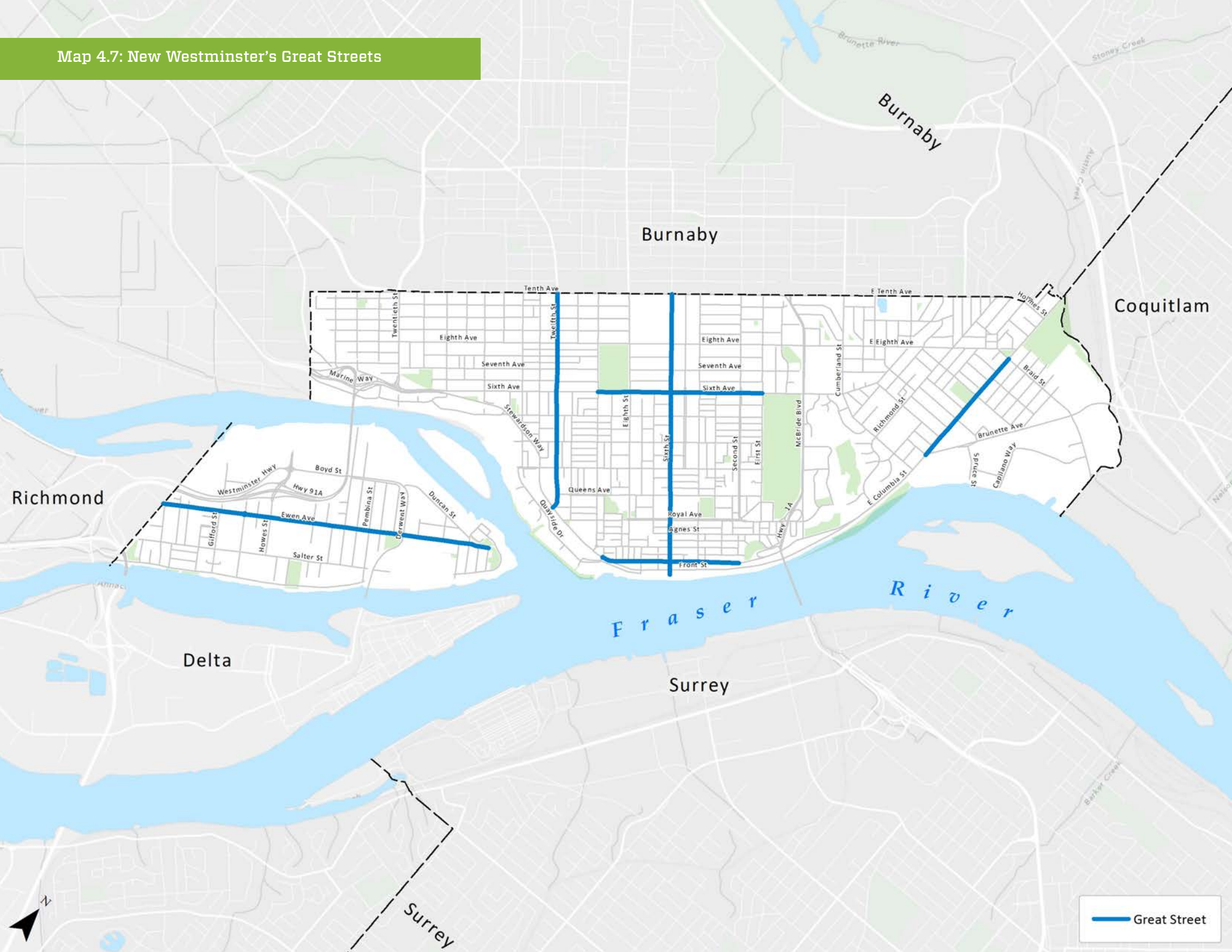


The Master Transportation Plan identifies six corridors as Great Streets: Twelfth Street, Sixth Street, Sixth Avenue, Columbia Street, East Columbia Street, and Ewen Avenue. Developing these streets into Great Streets means getting the most out of the street corridors, and providing some of these Great Streets qualities within the existing public right-of-way to make them more versatile corridors where residents and visitors to New Westminster can play, celebrate, socialize, exercise, and also travel through.

Right now, the balance in some of these corridors is in favour of automobiles, and making these areas Great Streets means ensuring that walking, cycling, and transit are more accessible and attractive forms of transportation, striking a better transportation balance. The Great Streets framework in the Master Transportation Plan not only sets out policies and actions to enhance these six specific corridors, but complement other chapters of the plan, which also provide policies and actions for roads and goods movement, transit, walking, cycling, and neighbourhoods that further support the vision of developing Great Streets throughout New Westminster.



Map 4.7: New Westminster's Great Streets





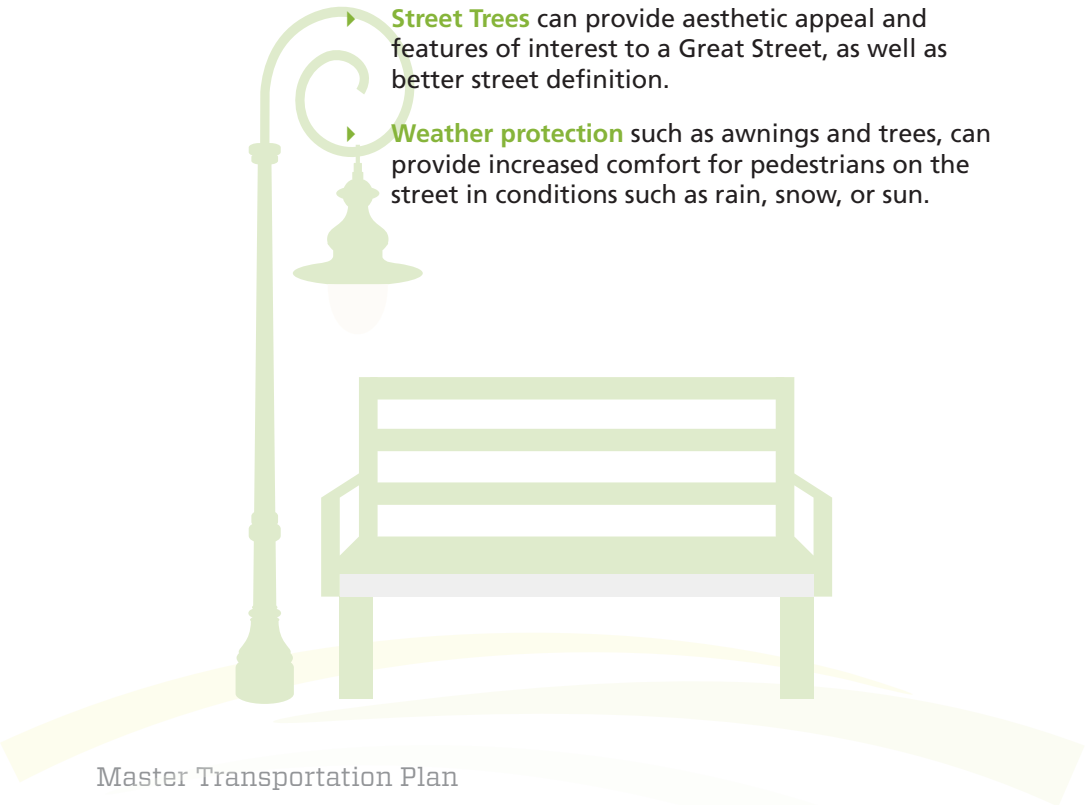
Great Streets Policy 4A Support the Development of Great Streets

The approach to Great Streets within the Master Transportation Plan is to focus policies and action areas on enhancing the six New Westminster corridors of Twelfth Street, Sixth Street, Sixth Avenue, Columbia Street, East Columbia Street and Ewen Avenue. These policies and actions are intended to help when making planning and development decisions with the aim to make the corridors more vibrant and amenable to supporting local trips by sustainable modes, and to de-emphasize motor vehicle travel. New Westminster's Great Streets will become focal points of the city, with a concentration of services and amenities that support surrounding neighbourhoods and residents. The policies and actions intend to build upon and enhance the existing characteristics within the right-of-way, in order to incorporate more Great Streets qualities, and to make these more attractive and comfortable places to visit, shop, socialize, and recreate. In particular, some infrastructure improvements that can contribute to Great Streets include:

- **Wider sidewalks.** Providing width to allow people to comfortably walk at their own pace, stop, and socialize in these public spaces is important to creating more vibrant streets.
- **Nodes of Activity** attract and keep people within an area, making it more active day and night. This can include commercial and retail areas, restaurant districts, public open spaces, or playgrounds.
- **Places to rest,** such as benches, allow people to rest, wait, socialize and observe street life directly on the street and contribute to street activity.
- **Pedestrian oriented lighting** can enhance the appeal of walking on a street after dark, as good lighting increases visibility, aesthetic quality and perceived safety.
- **Curb extensions** can increase the attraction and comfort of walking in an area, providing reduced crossing distances and increased pedestrian visibility. Plantings within curb extensions can also have aesthetic benefits.
- **Boulevards** can improve the pedestrian appeal of an area, providing better street definition and separation between the sidewalk and vehicles, as well providing a calmer traffic environment.
- **Bicycle parking** at key locations along streets can encourage more cyclists to shop, and visit an area, enhancing street activity. Custom bicycle parking can also provide a public art element to the streetscape.

- **Bus stop amenities,** such as shelters and benches can attract more people to use transit and can result in more patrons for shops, and generally more activity.
- **Public art** provides items of visual interest for passerbys, with the ability to also engage street users in their surroundings.
- **Wayfinding** can help people to navigate through a Great Street by pointing out key destinations, improving the convenience of travelling on a Great Street by all modes.
- **Street Trees** can provide aesthetic appeal and features of interest to a Great Street, as well as better street definition.
- **Weather protection** such as awnings and trees, can provide increased comfort for pedestrians on the street in conditions such as rain, snow, or sun.

This section begins with a description of the existing conditions of each Great Street, and is followed by a summary table describing the suggested priority areas for improving Great Streets qualities along each corridor.



A. Sixth Street (Tenth Avenue to Waterfront)

Sixth Street is an important north-south connection linking the Downtown and Uptown areas, with several commercial services and amenities located at key points along the corridor. In particular, enhancements can focus on Sixth Street in Uptown (between Fourth Avenue and Eighth Avenue), and Downtown (between Royal Avenue and the waterfront), as the main centres for much of the commercial and retail activity in the city. Sixth Street is often identified as one of the more pedestrian-friendly areas of New Westminster, as it provides pleasant walking experiences due to the diversity and density of land uses, small blocks, frequent intersections and crossings, continuous sidewalks, streetscaping, interesting store fronts, and slow-moving traffic. In addition, the area around Sixth Avenue and Sixth Street is also a significant node of transit activity. There are also high levels of transit activity and interchange between both the Sixth Street and Eighth Street corridors. Sixth Street is an important corridor for vehicles, transit, pedestrians, and cyclists, and building on these existing qualities can make Sixth Street a more effective connector between two centres.

The physical characteristics of Sixth Street today are as follows:

Table 4.2: Physical Characteristics of Sixth Street

Road & Right-of-Way Characteristics	• Classified as a City Collector • One travel lane in each direction, and on-street parking • Pavement width between 15m-17m • Right of Way width between 20m-22m • Peak traffic volumes between 500-700 vehicles/hour
Pedestrian Facilities	• Sidewalks generally on both sides, with widths typically between 1.5m to 3m
Cycling Facilities	• Bike racks
Transit	• Served by Route 106 (New Westminster Station / Metrotown Station), frequency ever 10-15 minutes daytime, 15-30 minutes late evenings and weekends • High transit activity along corridor, very high at Sixth Street & Sixth Ave • Almost all bus stops are accessible • Few passenger amenities available at stops, a few shelters

Sixth Street...

In order to emphasize Sixth Street's multi-modal role as a Great Street, the long-term improvement strategies recommended for Sixth Street include the following features, which should be examined further to confirm location-specific treatments and suitability:

- Review the **crosswalk** locations along Sixth Street to ensure there are frequent opportunities for pedestrians to cross safely.
- Consider **curb extensions** at major intersections and crosswalks, where feasible, to shorten the pedestrian crossing distances across Sixth Street itself and across intersecting streets. The design of curb extensions should be consistent with the provision of bicycle lanes on Sixth Street.
- Provide **accessible curb ramps with tactile strips** at all major intersections and at all marked crosswalks along Sixth Street.
- Consider feasibility of bicycle facilities, including parking protected bicycle lanes.
- Provide regularly spaced **bicycle parking** throughout the corridor.
- Work with local businesses to install pedestrian amenities such as **parklets, bicycle corrals, planters, and street banners**.
- Consider features such as **pedestrian refuge islands** within intersections to shorten pedestrian crossing distances at major intersections such as Royal Avenue.
- Implement more place-making features such as **public plazas**, such as the plaza at Sixth Street and Hamilton Street.
- Provide **benches** at frequent intervals along the corridor to allow people to sit and relax, and also to provide rest opportunities for seniors and people with disabilities.
- Consider installing **gateway features** at the intersection of Sixth Avenue and Sixth Street and at entry points to the community such as Sixth Street and Tenth Avenue, including placemaking features, pedestrian amenities, and customized district street signs.
- Provide **wayfinding and signage** between Uptown and Downtown and beyond to the waterfront, including cycling wayfinding signage and pedestrian information signage.
- Provide **bus stop amenities**, such as shelters and benches at all bus stops.
- Ensure all **bus stops are accessible**.
- Consider **transit priority measures** at intersections experiencing congestion and delays.

B. Sixth Avenue (Sharpe Street to First Street)

The Sixth Avenue segment identified as a Great Street is a key east-west connector that links Queens Park in the east to New Westminster's West End neighbourhood. Several major community and civic destinations are located along Sixth Avenue, including Moody Park, the Public Library, Royal City Centre shopping mall, as well as other commercial and retail uses. Sixth Avenue is an important east-west corridor for transit and pedestrians especially, and enhancing the area can further enhance the vibrancy of the corridor.

The physical characteristics of Sixth Avenue today are as follows:

Table 4.3: Physical Characteristics of Sixth Avenue

Road & Right-of-Way Characteristics	• Classified as a City Collector, • One travel lane in each direction, with parking on each side • Pavement width between 12m-14m • Right of Way width between 18m-20m • Peak traffic volumes approximately 1,000 vehicles/hour • Significant delays and queues (LOS F) at the intersections at Twelfth Street and Eighth Street
Pedestrian Facilities	• Sidewalks generally on both sides, with widths typically between 1.4m to 1.7m
Cycling Facilities	• Bike racks
Transit	• Served by route 154/155 with frequency every 20-30 minutes; 30-60 minutes late evening and weekends • Some bus stops with shelters and benches • Most bus stops are accessible

Sixth Avenue...

In order to emphasize Sixth Avenue's multi-modal role as a Great Street, the long-term improvement strategies recommended for Sixth Avenue include the following features, which should be examined further to confirm location-specific treatments and suitability:

- Consider installing **gateway features** at the intersection of Sixth Avenue and Sixth Street, including placemaking features, pedestrian amenities, and customized district street signs.
- Provide **wider sidewalks** in the commercial stretch between Fifth Street and Eighth Street.
- Ensure that **traffic signal equipment** is appropriate. Consider installing or upgrading pedestrian pushbuttons, bicycle push buttons and countdown timers where appropriate.
- Consider additional **pedestrian crosswalks** where warranted, particularly in the western end of the corridor.
- Consider **curb extensions** at intersections within commercial nodes and other key activity areas and at all marked crosswalks.
- Provide more **places to rest**, such as benches and pocket plazas.
- Provide **wayfinding and signage** to direct road users to destinations such as Sixth Street, Moody Park, Royal City Centre.
- Provide **accessible curb ramps with tactile strips** at all major intersections and at all marked crosswalks along Sixth Avenue.
- Provide regularly spaced **bicycle parking** in the commercial stretch between Fifth Street and Eighth Street and adjacent to Moody Park.
- Consider **transit priority measures** at intersections experiencing congestion and delays, including Eighth Street and Twelfth Street.
- Provide **bus stop amenities**, such as shelters and benches at all bus stops.
- Ensure **all bus stops are accessible**.





C. Twelfth Street (Tenth Avenue to Stewardson Way)

Twelfth Street is a key corridor that connects the West End and Moody Park neighbourhoods to Downtown and Brow of the Hill. Twelfth Street supports smaller neighbourhood-scale retail and commercial businesses along its length, with pockets of walkable and pedestrian-oriented development. Twelfth Street also supports significant medium-higher density residential developments and connects them to the service and commercial areas on the western edge of Downtown. With these characteristics, Twelfth Street has the potential to support key activity nodes along its length.

The physical characteristics of Twelfth Street today are as follows:

Table 4.4: Physical Characteristics of Twelfth Street

Road & Right-of-Way Characteristics	• Classified as a City Collector • One travel lane in each direction, parking on each side • Traffic volumes range between 500 vehicles per hour (south end) to 1,100 vehicles per hour (north end) • Delays and traffic queues at intersections with Sixth Avenue, Eighth Avenue, and Tenth Avenue • Pavement width generally between 12-14.5m • Right of Way typically 20m – 23m
Pedestrian Facilities	• Sidewalk width 3-4m generally on both sides, with narrower segments 1.6-2.5m
Cycling Facilities	• None present
Transit	• Served by route 112 (New Westminster Station / Edmonds Station) • Frequency of every 15 minutes during the day, 15-30 minutes in evenings • Accessible Bus stops (primarily in north end of corridor), inaccessible bus stops primarily in the south • Generally few passenger amenities available at stops

Twelfth Street...

In order to establish more Great Streets qualities within Twelfth Street, the long-term improvement strategies recommended for Twelfth Street include the following features, which should be examined further to confirm location-specific treatments and suitability:

- **Widened sidewalks** adjacent to the commercial nodes along the corridor.
- Provision of **street trees** between the sidewalk and roadway as development occurs.
- Provision of a **gateway feature** at Twelfth and Tenth Streets, to define this entry point to the City and to welcome visitors.
- Ensure that **traffic signal equipment** is appropriate, consider installing or upgrading pedestrian pushbuttons, bicycle push buttons and countdown timers where appropriate.
- Provide **accessible curb ramps with tactile strips** at all major intersections and at all marked crosswalks along Twelfth Street.
- Provide **curb extensions** at intersections within commercial nodes and at all marked crosswalks.
- Provide frequent **pedestrian crossings**, potentially with a crosswalk at each block within commercial areas.
- Ensure that regularly spaced **bicycle parking** is available throughout commercial nodes.
- Work with **local businesses** to install street features such as parklets, bicycle corrals, planters, and street banners.
- Consider **transit priority measures** at intersections experiencing congestion and delays, including Sixth Avenue, Eighth Avenue, and Tenth Avenue.
- Provide **bus stop amenities**, such as shelters and benches at all bus stops.
- Ensure **all bus stops are accessible**.

D. Columbia Street

Columbia Street is the historic centre and commercial and economic hub for New Westminster. Today, Columbia Street is a collection of historic commercial and mixed-use buildings that carry forward an important and valued legacy, with many retaining a character of small-scale, individually-owned stores. Having been through boom and busts, Columbia Street today is still the retail corridor of New Westminster, and the Downtown Plan seeks to retain the mixed-use land uses (commercial and residential) as well as the important retail functions along the street. Columbia Street is also an important Downtown bicycle route, as well as a key transit destination due to the presence of the Columbia and New Westminster SkyTrain stations. Higher density, mixed use developments are envisioned around the precincts of these stations in order to bring people closer to the strategic transit connections. Columbia Street is the main pedestrian corridor of Downtown, and the Downtown Plan seeks to build on this through promoting retail, entertainment uses, well-designed storefronts, signage, landscaping, sidewalk cafes, and public art.

The physical characteristics of Columbia Street today are as follows:

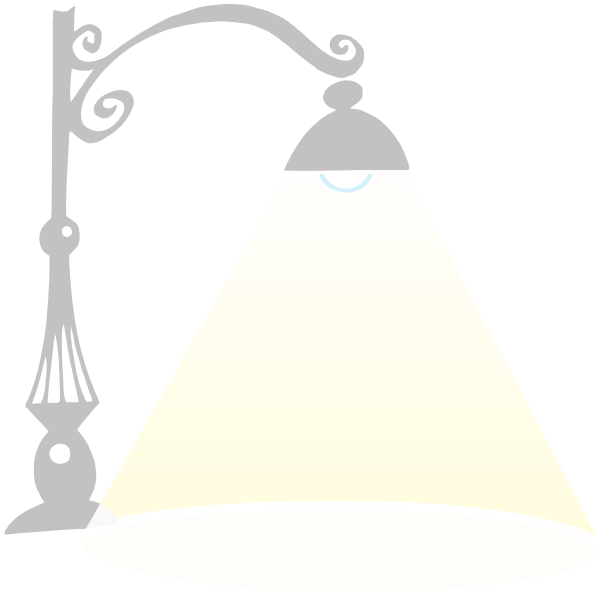
Table 4.5: Physical Characteristics of Columbia Street

Road & Right-of-Way Characteristics	• Classified as a Neighbourhood Collector • One travel lane in each direction, on-street parking both sides • Right-of-way varies between 30.5m -32 m • Road pavement width varies between 17.5m-22m, though does narrow to 13-14m at intersections with curb extensions • Peak traffic volumes range between 1,100 vehicles/hour (western end) and 1,600 vehicles/hour (eastern end, closer to Pattullo)
Pedestrian Facilities	• Sidewalks present on both sides of the street • Sidewalks generally wider on the north side, between 4m-6m • Sidewalks on south side are narrower, between 1.6m – 2m • Many curb extensions are present
Cycling Facilities	• Bicycle lanes present on both sides of the street • Generally a gentle slope
Transit	• Served by Community Shuttle C9 Route, which runs every 30 minutes • Transit exchanges at New Westminster Station (highest activity exchange) and Columbia Station • Generally few passenger amenities available at stops

Columbia Street...

Columbia Street is New Westminster's signature Downtown street and already has many Great Street features already in place that make it a multi-modal, walkable and bikeable environment. To further build on these existing Great Streets qualities, some long-term improvement strategies recommended for Columbia Street include the following features, which should be examined further to confirm location-specific treatments and suitability:

- **Enhance signage and wayfinding** to direct road users to key features and destinations, including the waterfront and destinations on cross-streets (i.e. Sixth Street).
- Encourage streetscape elements such as **public art, banners, bicycle parking, and planters** that highlight New Westminster's heritage and history.
- Ensure that **traffic signal equipment** is appropriate. Consider installing or upgrading pedestrian pushbuttons, bicycle push buttons and countdown timers where appropriate.
- Provide **parklets and bicycle corrals** along Columbia Street, as well as on cross-streets.
- Ensure that regularly spaced **bicycle parking** is available throughout the corridor.
- Provide safe and comfortable **connections to the waterfront**.
- Consider bicycle lanes over the long-term to provide a two-way **physically separated bicycle lane** on the south side of the street between the sidewalk and angled parking.
- Consider bicycle **conflict zone markings** at intersections with major streets.
- Support **community events** that promote walking and cycling on Columbia Street. This can include street closures and festivals, such as ciclovias and markets.
- Provide **accessible curb ramps with tactile strips** at all major intersections and at all marked crosswalks along Columbia Street.



E. East Columbia Street

East Columbia, between Cumberland and Braid Street, is a key north-south connector between New Westminster and the City of Coquitlam, and is an important artery for the Sapperton neighbourhood of New Westminster. With recent and planned growth and development in the Sapperton area, East Columbia will continue to serve an important commercial, institutional (Royal Columbian Hospital) and retail function for residents and employees in the area. Many residents living within the adjacent neighbourhoods are currently situated a short walking distance from the businesses and services along East Columbia, and many are also within close proximity to the Sapperton SkyTrain station. East Columbia also supports significant vehicle traffic, as it is a collector street. This segment of East Columbia Street is also currently part of the municipal truck route (limited hours), though the Master Transportation Plan Goods Movement policies and actions seek to remove this truck route designation. The section of east Columbia Street south of Brunette Avenue it is designated as part of the Major Road Network.

The physical characteristics of East Columbia Street today are as follows:

Table 4.6: Physical Characteristics of East Columbia Street

Road & Right-of-Way Characteristics	• Classified as a City Collector • One travel lane in each direction, on-street parking • Right of way is approximately between 20-23m wide • Road pavement width varies between 13m – 17m • Peak traffic volumes approximately 1,000 vehicles per hour in both directions • Traffic delays and queues experienced at the Brunette Avenue intersection (LOS F)
Pedestrian Facilities	• Sidewalks vary in width between 1.6m to more than 3.0m • No sidewalks are present between Cumberland to Brunette Avenue • Many curb extensions are present
Cycling Facilities	• Bicycle lane present on both sides
Transit	• Served by Community Shuttle C9 Route (New Westminster Station – Lougheed Station), which runs every 30 minutes throughout the day • Bus stops are located near intersections with Cumberland Street, Keary Street, and Hospital Street • Some bus stops are accessible • In general, there are no amenities (benches or shelters) at the bus stops

East Columbia Street...

In order to establish more Great Streets qualities within East Columbia Street, the long-term improvement strategies recommended for East Columbia Street include the following features, which should be examined further to confirm location-specific treatments and suitability:

- Provide continuous high-quality cycling connections by **extending the Central Valley Greenway** through the Brunette Avenue intersection to connect cyclists with the existing bicycle lanes. This may require road improvements at this intersection in order to accommodate a multi-use path.
- Incorporate the use of **conflict zone markings** where bicycle facilities intersect with major roads and activity areas. This can include markings at the locations of Brunette Avenue turn lane onto East Columbia Street, driveways of the Royal Columbian Hospital, Keary Street, and Sherbrooke Street.
- Consider options over the long-term to provide **physically separated bicycle lanes** between the sidewalk and parking lanes.
- Provide more **bicycle parking** at key activity areas along East Columbia, including commercial areas between Sherbrooke Street and Braid Street, the Brewery District, Sapperton Park, and Royal Columbian Hospital.
- Enhance **bicycle wayfinding** at the north end of East Columbia Street where cyclists must connect with other bicycle routes.
- Ensure that **traffic signal equipment** is appropriate, consider installing or upgrading pedestrian pushbuttons, bicycle push buttons and countdown timers where appropriate.
- Work with businesses and local groups to establish **parklets** within the commercial areas between Sherbrooke Street and Braid Street.
- Provide frequent **pedestrian crossings** on East Columbia Street near the Royal Columbian Hospital, Brewery District, Sapperton Park, and between Sherbrooke and Braid Streets.
- Provide **accessible curb ramps with tactile strips** at all major intersections and at all marked crosswalks along East Columbia Street.
- **Gateway features** at the north end of East Columbia, welcoming people to New Westminster and the Sapperton district.
- Consider **transit priority measures** at intersections experiencing congestion and delays, including Brunette Avenue and Braid Street.
- Provide **bus stop amenities**, such as shelters and benches at all bus stops.
- Ensure **all bus stops are accessible**.

F. Ewen Avenue

Ewen Avenue is the main east-west corridor that runs the length of Queensborough. It is the community's central spine, connecting residential areas to shops, schools, and recreation areas. Ewen Avenue also provides a key link for residents connecting to the Highway, the Queensborough Bridge, and the rest of the city. Historically a rural low-density and industrial area of New Westminster, Queensborough has developed in recent years to support more medium-density residential developments. Future developments throughout the community will further situate Ewen Avenue as an important mobility corridor in Queensborough, expanding the need for it to function as a Great Street that supports walking, cycling, and transit, in addition to vehicle travel.

The physical characteristics of Ewen Avenue today are as follows:

Table 4.7: Physical Characteristics of Ewen Avenue

Road & Right-of-Way Characteristics	• Classified as a City Collector • One travel lane in each direction, parking on both sides • Right of Way is generally 30m wide • Pavement width between 9-13m in the west • Pavement width narrows to between 7-9m in the east • AM peak traffic approximately volumes 300 / hour
Pedestrian Facilities	• Primarily one sidewalk, located on the south side of the street (sidewalks on both sides east of Dawe Street to Jardine Street) • Sidewalks generally between 1.3m – 1.9m wide
Cycling Facilities	• No cycling facilities present
Transit	• Served by Route 410, frequency every 15 minutes during the day; 15-30 minute headways in the evenings • Route C99 provides daytime service only, every 60 minutes • Route 104 provides service every 15-30 minutes daytime, 30-60 minute headways in evenings/weekends • Generally few passenger amenities available at stops

Ewen Avenue...

In order to enhance Ewen Avenue's Great Streets qualities as it develops, the long-term improvement strategies recommended for Ewen Avenue include the following features, which should be examined further to confirm location-specific treatments and suitability:

- Implement a **multi-use pathway** to accommodate pedestrians and cyclists.
- Enhance **pedestrian amenities**, such as lighting, benches, planters, wider sidewalks around key residential/commercial activity nodes, primarily at Howe Street, Duncan Street, and Derwent Way
- Provide frequent **pedestrian crossings**, potentially with a crosswalk at each block within commercial areas.
- Consider **bicycle crossing** measures at the intersections of bicycle routes and greenways, such as bicycle pushbuttons and/or conflict zone markings at the intersections with Derwent Way, Howes Street, and Johnston Street.
- Introduce **placemaking and public space** features at key activity nodes, such as pocket public plazas, public art, and arrival features.
- As the area develops, provide **accessibility features**, such as curb letdowns at all four corners of major intersections, and accessible bus stops.
- Provide **bus stop amenities**, such as shelters, benches and garbage cans.

DETAILED POLICIES AND ACTIONS

Policy 4A
Actions

- 4A.1: Strive to implement walking, cycling, transit and place-making qualities as development occurs and as part of street revitalization efforts to enhance usage of Great Streets.

- 4A.2: Increase building setback through regulatory bylaws to expand pedestrian activity space





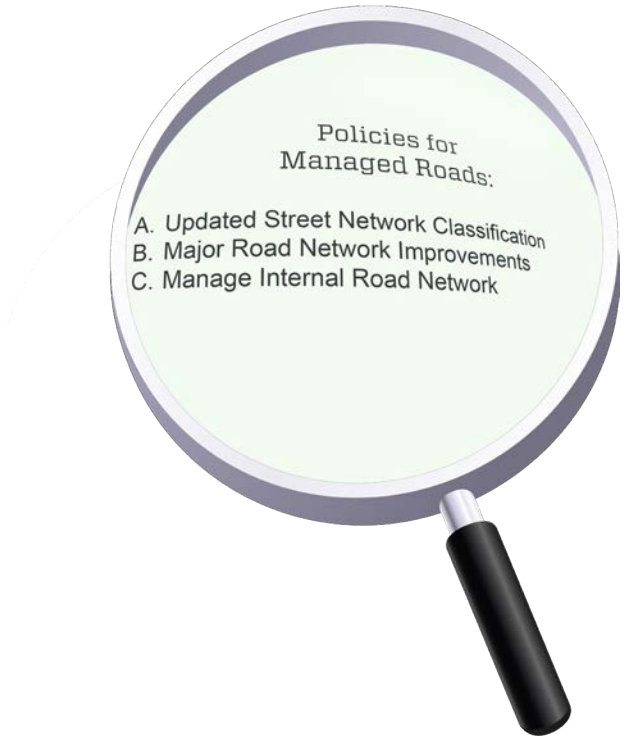
4.5 Managed Roads



Although New Westminster has a relatively high mode share for sustainable modes of transportation, travel by private vehicle is still the primary mode of transportation, accounting for 65% of all trips made by New Westminster residents. While travel by car provides residents with an efficient way to access destinations throughout the city and the region, our dependence on cars impacts our health, our economy, and our environment. The Master Transportation Plan seeks to reduce future travel reliance on the personal vehicle by making sustainable transportation options such as walking, cycling and transit attractive alternatives for more trips. The Master Transportation Plan recognizes that the car will still be part of the city's transportation mix in the future, but the Plan seeks to limit the increase in both local and regional trips made by car in New Westminster. In fact, the Plan's targets aim to limit future growth in vehicle trips, with a target for no net increase in local or regional traffic by automobile. Instead, the growth in travel within the city and region is designed to be accommodated by other modes of transportation.

Regional and city road network changes will have implications for local traffic movements in and through New Westminster and are important considerations for long-term planning of the city's road network. As significant through-traffic impedes local traffic movements and impacts neighbourhood livability, the Master Transportation Plan sets out measures to preserve local access and mobility, while maintaining the principle of no net increase to road network capacity. This includes developing a road network hierarchy that supports local movements by all road users between New Westminster's neighbourhoods, Great Streets and other key destinations. The Master Transportation Plan also sets out to direct through traffic to major roads on the periphery of the city (i.e. Tenth Avenue, East Columbia Street, Brunette Avenue, Stewardson Way) as well as to other primary roads (i.e. McBride Boulevard). This will shift goods movement and regional through-traffic to routes more appropriate for that purpose.

New Westminster's street network supports not only vehicles, but also provides mobility for all modes of travel including general purpose traffic, goods movement, and transit, walking and cycling. New Westminster's street network is classified according to a hierarchy based on function, traffic service, land access, traffic volumes.



- **Provincial Highways**, which are under the jurisdiction of the Ministry of Transportation & Infrastructure and are intended to provide for regional travel. The primary role of highways is to move traffic with minimal interruption from traffic controls and with restrictions on property access. The primary Provincial Highway through New Westminster is Highway 91A, which provides a connection between the Queensborough Bridge and Alex Fraser Bridge. In addition, although not within New Westminster's boundaries, Highway 1 runs adjacent to the City of New Westminster.

- **Arterial Roads**, which are intended for longer-distance regional mobility from one part of the city to another and throughout the region and which provide limited access to individual parcels. There are two categories of arterial roads, including:

  - **Major Road Network**, which is jointly managed and operated by TransLink and the City and includes Derwent Way, Boyd Street, McBride Boulevard, Royal Avenue, Stewardson Way, Front Street, East Columbia Street (Brunette Avenue to McBride Boulevard), Brunette Avenue, Tenth Avenue, and the Pattullo Bridge. Direct access to individual parcel is restricted (with the exception of pre-existing accesses); and

  - **City Arterials**, which are intended for longer distance local and regional mobility and includes Front Street.

- **Collector Roads**, which are intended to connect traffic from local roads to arterial roads and which place equal importance on traffic movement and access to properties.

- **Local Roads**, which are not intended for through travel and which provide a high level of access to individual properties.

Table 4.8: Roadway Classifications in New Westminster

Classification	Description
Major Road Network / City Arterial	Road with a width of 20-30m between abutting property lines intended to be used for traffic mobility having limited access to abutting properties.
City Collector / Neighbourhood Collector	A street of minimum width of 20m between abutting property lines, intended to provide access to abutting properties. Also services to collect and distribute traffic between arterial and local streets.
Local	A street of a minimum width of 16.5m to 20m between abutting property lines. Intended to be used primarily for access to abutting residential parcels rather than for through or commercial traffic.
Laneway / Narrow Street	A narrow road which provides secondary vehicular access to any abutting parcel so that the parcel may be serviced or reached by vehicles using that laneway. Width is generally 6-10m.

Managed Roads Policy 5A Updated Street Network Classification

The City's street classification system guides the City's short- and long-term decisions regarding the configuration and design of roads and supporting facilities, as well as relationships with adjacent land uses. Currently in New Westminster, there are some cases where the existing street classification neither reflects the current traffic operations or planned role and function of a given roadway. The Master Transportation Plan provides updated street classifications for some roadways in order to better reflect their existing function and conditions and long-term role and function. The update to the City's street classifications aligns with recent community documents, primarily the Downtown Community Plan and Queensborough Community Plan. From a network perspective, updating the street classifications also allows the City to establish design principles for the typical form and function of the street network on a city-wide basis.

Like design standards for roads and other municipal infrastructure, a classification system represents the typical form and function for each class and are meant only as guidelines. For existing urban streets in New Westminster, changes to the street classification are intended to better reflect their current function and will not heavily influence shift in traffic volumes as it is today. The typical characteristics of each type of roadway are shown in **Table 4.9**, although there may be some variations in the actual characteristics of certain roadways.

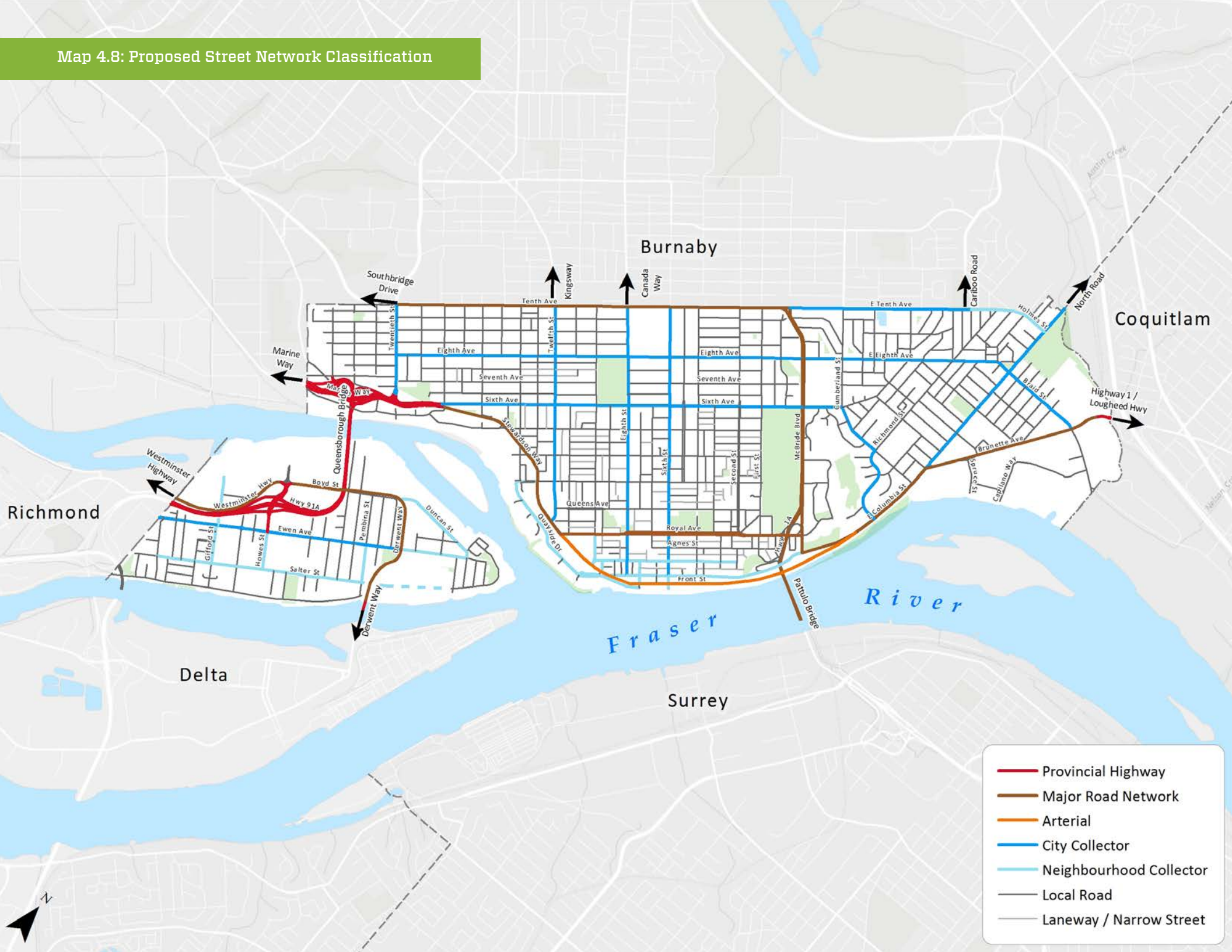
The recommended updated street network classification is shown in **Map 4.8**, and includes the following changes:

- Eighth Street from local road to city collector
- Tenth Avenue between Twentieth Street and Twelfth Street to become part of the Major Road Network. Making this consistent with the MRN classification to the East and West.
- East Tenth Avenue between McBride Boulevard and Cariboo Road from local road to city collector **
- Howes Street from local road to neighbourhood collector *
- Salter Street from local road to neighbourhood collector *
- Gifford Street from local road to neighbourhood collector *
- Twelfth Street from arterial to city collector
- East Columbia Street from arterial to city collector
- Braid Street from Brunette Avenue to Coquitlam Border from collector to local road

*Consistent with the Queensborough Community Plan

** Consistent with the City of Burnaby Road Classification

Map 4.8: Proposed Street Network Classification




COLUMBIA ST.
8TH ST.
SIDEWALK DETOUR
57

Managed Roads Policy 4A. . .

Table 4.9: Detailed Characteristics of Roads

	General Purpose Travel Lanes	Access management	Traffic and connectivity	Priority	Pedestrian Facilities	Cycling Facilities	Transit	Daily Volumes	Parking	Goods Movement
Major Road Network	4	Rigid access control	Regional traffic connecting to major destinations and corridors	People and Goods Movement	Sidewalks on both sides, Boulevard	Separated path Aspirational / recommended	Frequent or Regular	>10,000	Not permitted	Permitted
City Arterial	2-4	Limited	Cross-town traffic connecting to major destinations	Transit, Vehicles	Sidewalk on both sides	Bike lanes or separate path	Frequent	5,000 to 20,000	Metered/ restricted	Only permitted on designated routes
City Collector**	2	Some limitations	Cross-town traffic connecting to arterials	Pedestrians, Bicycles, Vehicles, Transit	Sidewalk on both sides	Bike lanes, bicycle parking	Frequent or Regular	<8,000	Metered/ restricted	Only permitted on designated routes
Neighbourhood Collector	2	Some limitations	Neighbourhood traffic connecting to arterials	Local Vehicles, Pedestrian, Bicycles	Sidewalk on both sides	Bicycle lanes or local street bikeway	Regular	<6,000	Permitted	Not Permitted, local deliveries only
Local Road	2	No limitations	Local traffic connecting to individual properties and collectors	Local Vehicles, Pedestrian, Bicycles	Sidewalk on both sides	Local street bikeway	N/A	<1,000 *	Permitted	Not Permitted, local deliveries only
Laneway	1	No limitations	Local traffic connecting to properties and collectors	Vehicles, Pedestrian, Bicycles	Shared Road	Shared Road	N/A	<500	Permitted	Not Permitted, local deliveries only

* May be higher on multi family streets
** Some city collectors are varying daily volumes above the specified number on this table

Managed Roads Policy 5B Major Road Network Improvements

A key focus of managing the road network is to not add any net capacity, but instead to focus on improvements that address safety for vehicles, pedestrians and cyclists, and facilitate transit services. The City of New Westminster places a high priority on traffic safety and these actions are aimed at reducing the number of collisions particularly collisions resulting in injuries or fatalities.

It is important that long-term planning and investments in the road network direct regional through-traffic to key Major Road Network (MRN) routes within New Westminster. Currently the city has several roads designated as MRN routes and directing traffic to these corridors for regional through traffic will reduce the traffic impacts on the rest of the city.

As noted in previous sections, improving road safety is a key priority in the plan. Based on collision data, the City will prioritize improvements at locations with higher collision frequencies or collisions rates, or a higher number of collisions involving pedestrians or cyclists.

Managed Roads Policy 5C Manage Internal Road Network

Minimizing direct individual access along MRN, City arterials and busy City collectors improve road safety by reducing conflicts between driveway vehicles and other road users on the front street (i.e., vehicles, bicycles, pedestrians, scooters, etc.) and also enhance the streetscape.

Queensborough community is one of fastest growth communities in the City. A new Queensborough Community Plan was adopted in 2014. An updated community-level transportation plan for Queensborough will identify transportation investment needs to support the new community plan.

As noted in previous sections, improving road safety is a key priority in the plan. Based on collision data and consultation with the Insurance Corporation of BC (ICBC), the City will prioritize improvements at locations with higher collision frequencies or collisions rates, or a higher number of collisions involving pedestrians or cyclists.



Policy 5A - Updated Street Network Classification
Actions

- 5A.1: Update the City's design standards to reflect multi-modal guidelines

Policy 5B - Major Road Network Improvements
Actions

- 5B.1: Direct regional traffic to the Major Road Network and discourage regional traffic from using New Westminster's internal road network
- 5B.2: Make improvements to the Major Road Network to reflect regional traffic volumes and composition while minimizing impacts on the internal road network to encourage through traffic onto the most appropriate routes.
- 5B.3: Apply the principle of no net increase to general purpose traffic within the city to the road network, other than for safety and for accommodating walking, cycling, and transit

Policy 5C - Manage Internal Road Network
Actions

- 5C.1: Work towards a road network where serious injuries and fatalities are exceedingly rare. Continue to carry out and update collision reviews every five years. These reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions and cost
- 5C.2: Minimize driveways on busy Arterial and Collector Corridors; especially through the land development process or capital infrastructure improvements
- 5C.3: Update the Queensborough Community Transportation Plan


roads
truck
shipment
carrying
goods
mover
carting
carrier
transportation
passage
transport
conveying
movement
vehicle
hauling
transferring
freightage
transfer
truckage
roads
truck
transfer
freightage
hauling



4.6 Managing Goods Movement

The movement of goods and services within New Westminster and throughout the surrounding region is essential for the success of the local and regional economy. Goods are moved along provincial highways, the region's Major Road Network, other designated truck routes in municipal traffic bylaws and rail corridors. While New Westminster's central geographic position and proximity to regional routes and gateways provides strategic advantages, it also means that the city accommodates significant truck and rail traffic en route to other destinations. This activity often results in residents having to contend with noise and air pollution, safety concerns and increased congestion and delays. Mitigating the negative impacts is critical to ensure community livability and long-term health and wellness of residents. A balance must be struck to ensure that there is sufficient access and mobility on the city streets for residents, businesses and emergency service and the transport of goods.

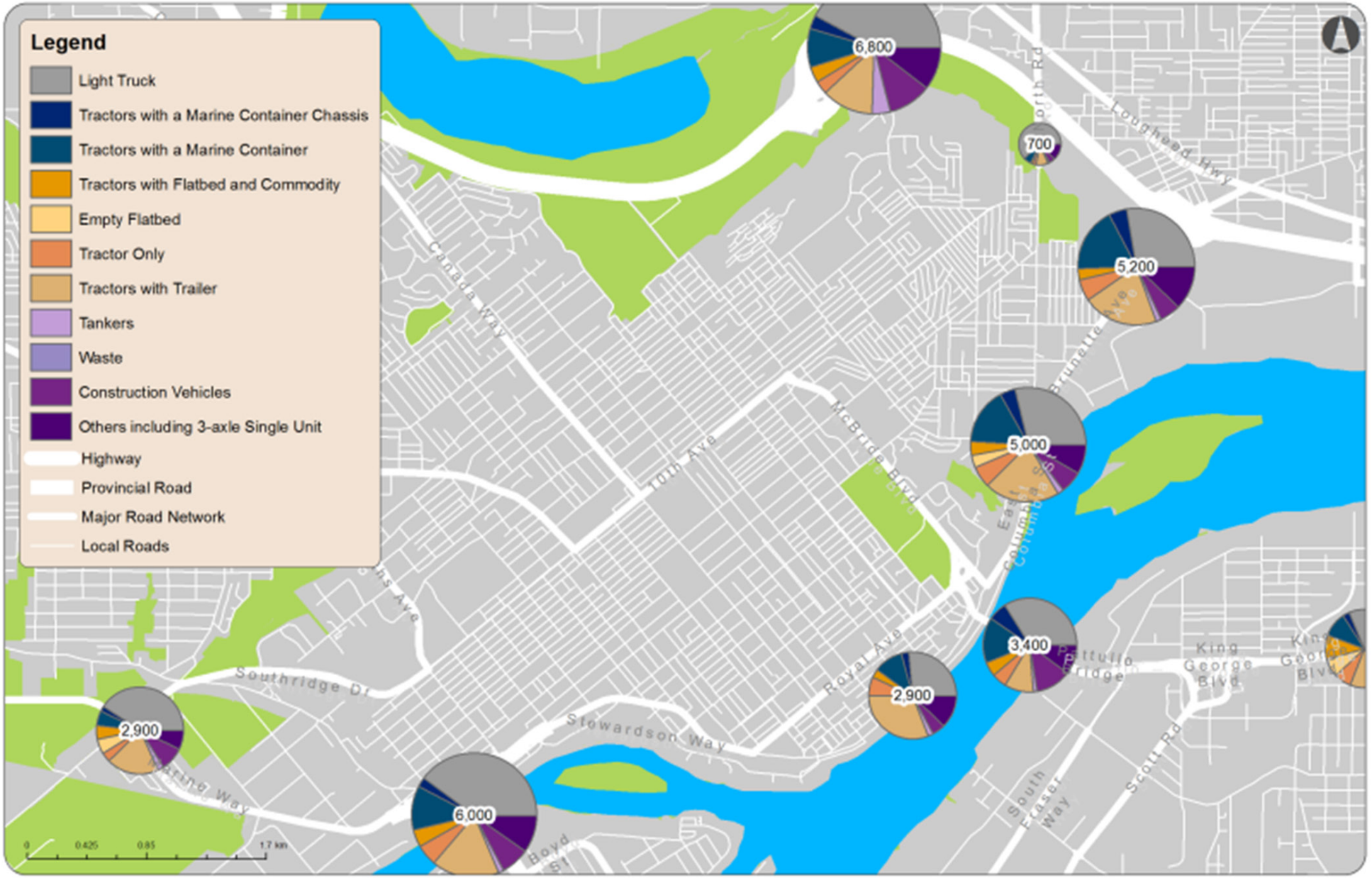
Freight movements, unlike commuter travel, are heterogeneous with complex systems and many different stakeholders and destinations. **Map 4.9**[1] illustrates the various types of trucks observed on major truck corridors.

There are four primary types of goods movement in the Metro Vancouver region:

1. Asia-Pacific Gateway (import/export bulk and containers)
2. Cascade Border (lumber, food, agricultural, manufactured, others - US)
3. Inter-Regional (Metro Vancouver and BC/Canada)
4. Regional Metro Vancouver (local delivery/fuel, construction, waste, general trucking, etc.)

[1] Halcrow (CH2M Hill) 2013

Map 4.9: Truck Volumes & Classifications



TransLink has been given regulatory authority under Provincial legislation (South Coast British Columbia Transportation Authority Act 1998) to oversee the region's truck route network and to approve or reject any proposed changes that may impact goods movement on the street network within the Metro Vancouver area. Therefore, any request by municipalities to remove a truck route or implement time restriction for trucks must be approved by TransLink. This generally also requires support of affected stakeholders such as neighbouring cities and the transport industry. Overall, municipalities must work with TransLink, each other and other agencies when seeking changes to the truck route network. **Map 4.10** shows the regional goods movement network.

In response to the community concerns regarding the noise, air, visual, safety impacts associated with truck traffic, a 2013 technical study examined truck movements through New Westminster and the potential impacts of removing individual road segments from the truck route network. The characteristics of truck movement derived from this study[2] and a detailed truck original-destination license plate survey[3] are as follows:

- **Vehicle Classification:** In general, the largest group of truck traffic within New Westminster can be classified as 'regional', indicating transport in sub sectors including fuel, waste, construction and general trucking with an origin and destination within the Metro Vancouver region. A significant portion of regional goods movement is associated with international trade, connecting the four deep sea terminals (e.g. Vanterm, Centerm, Deltaport, and Fraser Surrey Docks) with major intermodal facilities and warehouse distribution centres.

- **Distribution of Through Truck Trips:** As New Westminster borders several neighbouring municipalities (Burnaby, Coquitlam, Surrey, and Richmond), there are a number of prominent road entry/exit points, or 'gateways' where trucks enter and exit the city. A June 2013 license plate survey[3] examined the origin and destination of truck travel patterns along the city's perimeter.

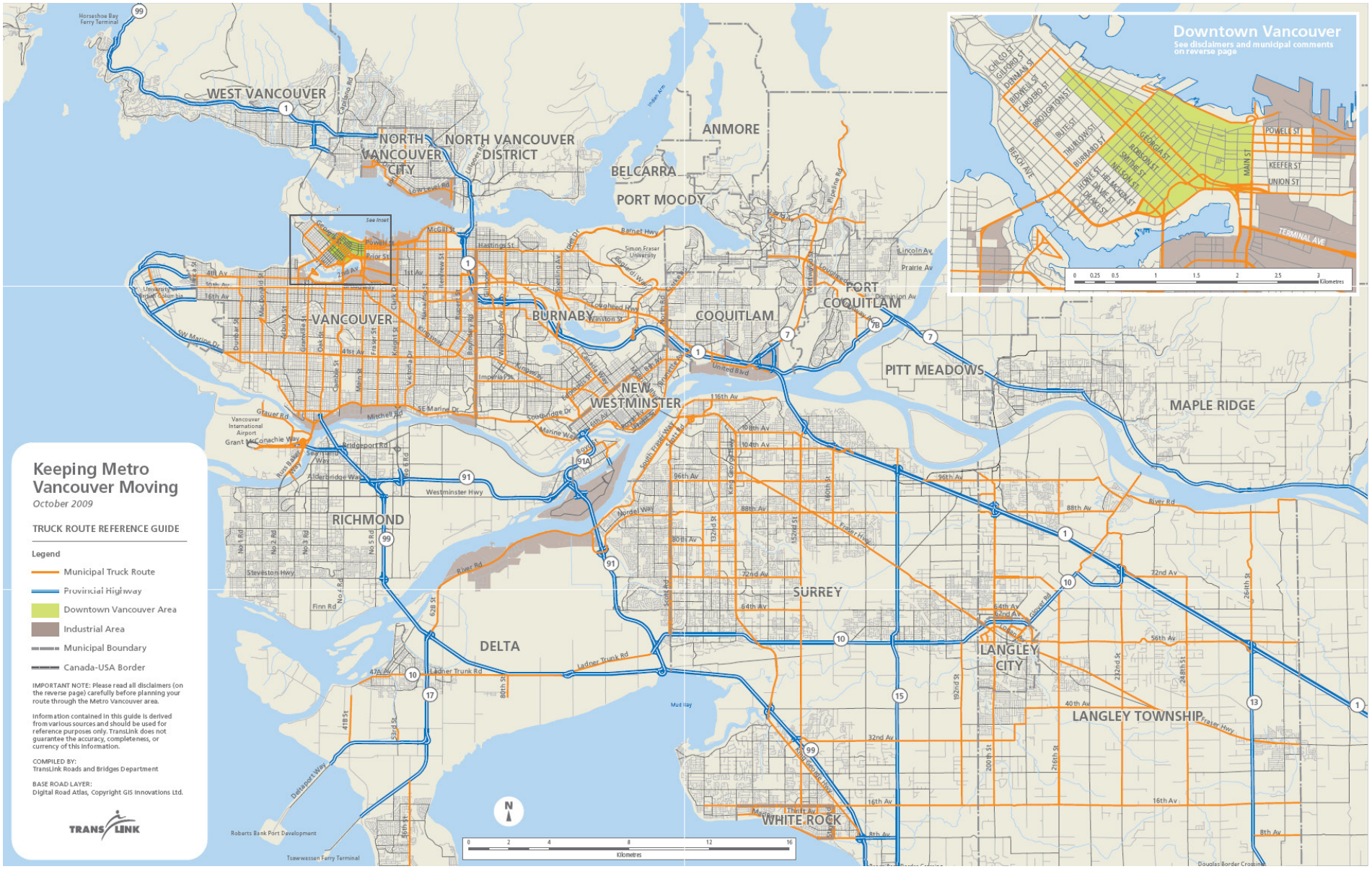
- **East-West Truck Travel:** The survey found that the largest through truck movement is eastbound originating from the city's western gateway (coming from Queensborough Bridge and Marine Way onto Stewardson Way) destined for the eastern gateway (Brunette Avenue/Highway 1) with 48% during AM (6:00-10:00) and 44% PM (12:00-16:00) peak periods. The proportions of eastbound trucks destined for Pattullo Bridge southbound are 27% AM and 33% PM. Overall, approximately 50% of the eastbound truck traffic entering at Stewardson Way travels through the entire city to the eastern exits (Brunette Avenue Interchange at Highway 1 and E. Columbia Street/ North Road) and approximately 30% exits midway at Pattullo Bridge.

The second largest movement of truck trips is in the reverse (westbound) direction: from New Westminster's eastern gateway (Brunette Interchange at Highway 1) to the westerly exits (Queensborough Bridge/Marine Way) with 37% AM and 40% PM peak periods. The proportions of westbound trucks destined for Pattullo Bridge southbound are 21% AM and 22% PM. Overall, approximately 40% of the westbound truck traffic entering the city at the Brunette/Highway 1 Interchange travels through the entire city to access Queensborough Bridge or Marine Way and approximately 22% exits midway at Pattullo Bridge.

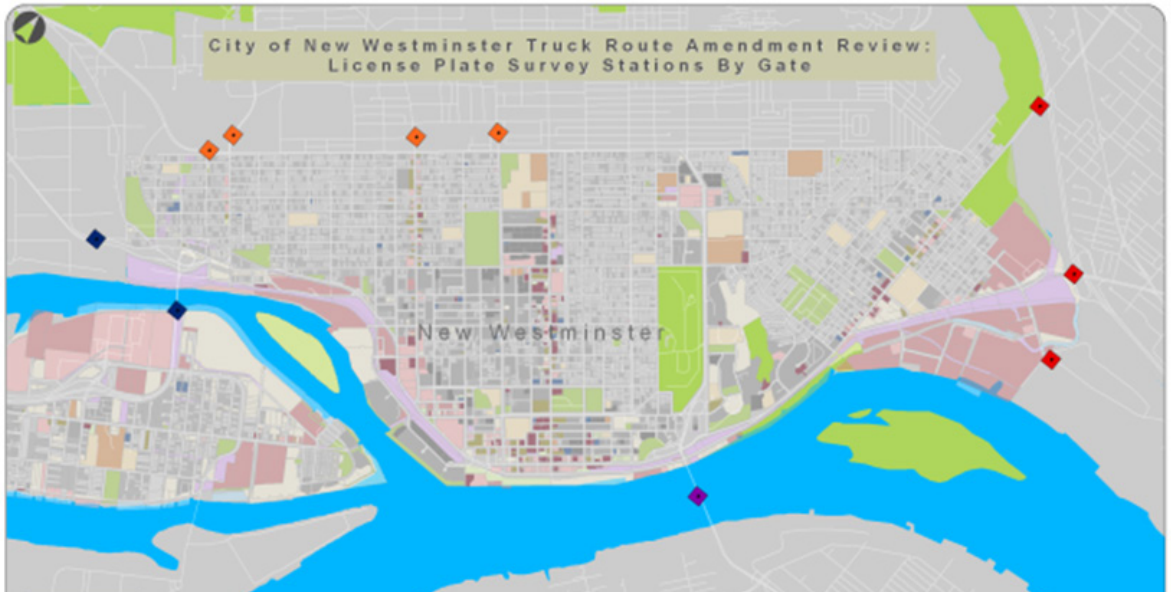
[2] New Westminster Truck Route Amendment Review 2013, developed by Halcrow/CH2M Hill

[3] TransLink "Draft Pattullo Bridge Project – Truck Origin-Destination Survey Overview" – Delcan September 2013

Map 4.10: Regional Goods Movement Network



New Westminster Exit/Entry Gateways



North-South Truck Travel: The majority of mid-day trucks entering New Westminster through the city's 'northern gate' (trucks entering from north of Tenth Avenue) are destined for within New Westminster itself, indicating that this gateway accepts the highest proportion of internal-bound truck traffic.

For trucks entering New Westminster from the Pattullo Bridge (the 'southern gateway'), approximately 20% (AM & PM) to 33% (mid-day) have a destination within the city. Approximately 33% (AM) and 23% (PM) of trucks entering the city from the Pattullo Bridge are external trips travelling north on McBride Boulevard, 15% (AM) and 28% (PM) are leaving the city to the west (i.e. via Stewardson Way) and 33% (AM) and 28% (PM) are destined eastward towards E. Columbia Street/North Road or Brunette Interchange (most likely to access Highway 1).

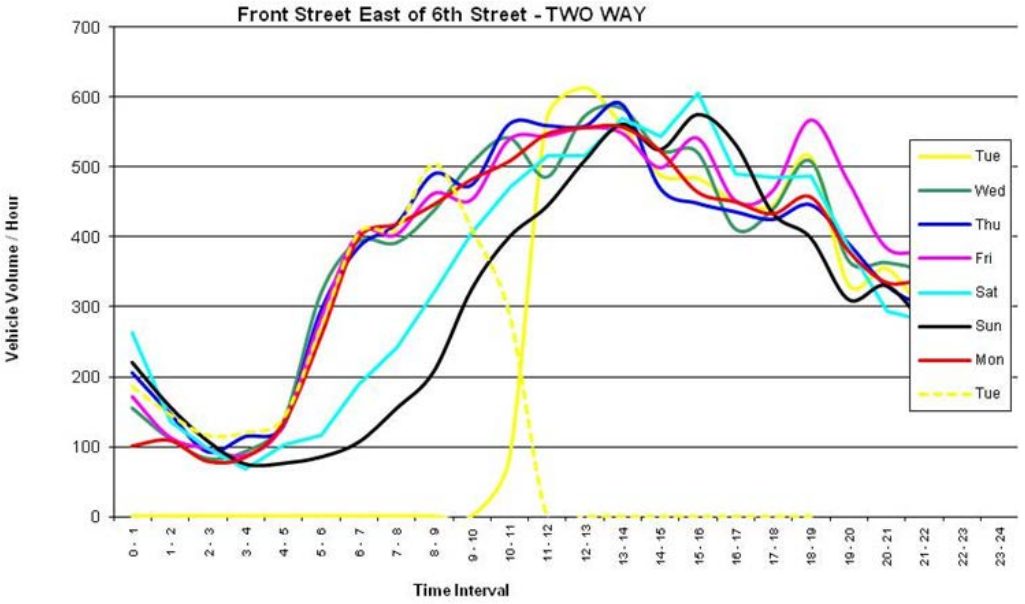
For external truck traffic heading southbound on Pattullo Bridge (the 'southern gateway') to Surrey, approximately 36% (AM) and 22% (PM) are coming from the west via Stewardson Way. A large portion of these trucks are coming from Queensborough Bridge, likely originating from Richmond, Queensborough and possibly even from Annacis Island. Approximately 21% (AM) and 48% (PM) of external southbound trucks on Pattullo Bridge come via McBride Boulevard with the remaining portion coming from the east (E. Columbia Street/ North Road or Brunette Interchange). In the PM period, a significant amount of the southbound trucks access Pattullo Bridge via McBride Boulevard, likely due to the closure of the Columbia Street on-ramp during the PM peak period.

Truck Travel by Time of Day: Truck patterns by time of day do not follow typical vehicle commuting patterns, which have a defined morning and afternoon peak period. Instead, truck travel tends to peak sometime during the mid-day when deliveries are typically made. The trip patterns are dictated by the type of truck and commodity being moved; although the patterns appear to be in line with general trucking patterns observed elsewhere.

Truck Traffic Volumes: Currently in New Westminster, Front Street carries approximately 11,000 vehicles per day (vpd) with 27% being trucks, and the majority (about 34%) is flatbeds with commodity and tractor with trailers. About a quarter of trucks are light trucks which are typical for local serving, including service trucks and local delivery. For comparison, Royal Avenue carries approximately 22,000 – 32,000 vpd with 6.5% being trucks, Knight Street Bridge carries 62,000 vpd with 10% being trucks ,and River Road in Delta carries 20,000 vpd with 20% being trucks. Front Street reaches a peak of nearly 600 trucks per hour during the mid-day period and has one of the highest percentage of truck traffic among other major regional truck routes such as Knight Street in Vancouver, River Road in Delta, and Highway 10 in Surrey.

Neighbourhood Impacts: Analysis shows that given the volume of trucks along the study routes, properties within a 100 metre buffer of the road centre line are significantly affected by truck noise and air emissions.

The key corridors in New Westminster that support both local and regional goods movement include Tenth Avenue, Front Street, Brunette Avenue, East Columbia Street (south of Brunette Avenue), McBride Boulevard and Royal Avenue. These corridors are used for goods delivery to the local businesses and, with the exception of Front Street and Royal Avenue, will be designated to continue doing so into the future to support economic activity within the city. However, the continued and growing movement of freight through the urban core of New Westminster negatively affects liveability.







The City recognizes the importance of goods movement and access to the regional road network to the local community and the economy; however minimizing the impacts of truck traffic on New Westminster's neighbourhoods and quality of life is also of critical importance. As the City has limited regulatory authority over truck movement, the Master Transportation Plan policies and actions aim to promote near and long term changes to reduce the impact on residents and neighbourhoods, while retaining connectivity for goods transport and to support an integrated approach for managing goods movements.

The existing Pattullo Bridge is under TransLink ownership and the structure has been identified with risks related to structural integrity, seismic resiliency and river scour. In 2013, the City of New Westminster engaged in a collaborative process with TransLink and the City of Surrey, including involvement of the Ministry of Transportation and Infrastructure and Metro Vancouver, to review options for the rehabilitation or replacement of the Pattullo Bridge. The Master Transportation Plan assumes that the Pattullo Bridge traffic movement will be similar to its current operation. Should the agreed solution for the Pattullo Bridge differs significantly from the existing operations, further review of the goods movement strategy within the city will be necessary.



Goods Movement Policy 6A Implement changes to the New Westminster truck route network in the near term

In the near term, the City should pursue changes to the truck route network by obtaining TransLink's approval to remove Royal Avenue, East Columbia Street (Brunette Avenue to Braid Street) and East Eighth Avenue from the truck route network.

Royal Avenue

Royal Avenue is currently an east-west goods movement link in New Westminster's roadway network as a limited time truck route from 7:00am to 9:00pm. As a part of TransLink's Major Road Network, it accommodates trucks due to its capacity and designation as a regional road. However, there are many land uses along Royal Avenue that are heavily impacted by truck traffic, including houses, apartment buildings, an elementary school, a college, City Hall and a number of businesses. Accessing Royal Avenue at either end involves steep grades, which results in significant noise from engines and brakes. The great majority of trucks using Royal Avenue have the option of using Front Street, which is level and connects directly to East Columbia Street and Stewardson Way, while trucks going to and from the Pattullo Bridge can access the bridge from McBride Boulevard.

East Eighth Avenue and Columbia Street

The removal of trucks from East Eighth Avenue and East Columbia Street – which are currently limited time truck routes from 7:00am to 9:00pm – results in positive community benefits, with minor impacts to surrounding communities and the trucking industry. East Eighth Avenue travels through residential neighbourhoods with significant grades and is used by trucks accessing Pattullo Bridge during the PM peak period when the Columbia Street on-ramp is closed. With a reconfiguration of the on-ramp, through measures such as ramp metering (i.e. traffic signals controlling the flow of traffic from the Columbia Street and Royal Avenue on-ramps), it would be operational throughout the day and trucks would no longer need to use East Eighth Avenue. East Columbia Street between Brunette Avenue and Braid Street was a truck route serving the previous Labatt's Brewery industrial site in Sapperton. Since the land use on East Columbia Street has now been transformed to a pedestrian friendly commercial street, regional trucks should not be using this corridor. The benefits of removing these truck routes include:

- Significant noise reduction as trucks are diverted away from highly sensitive urban land uses, including the Royal Columbian Hospital, to more appropriate routes, such as Brunette Avenue.
- There will be additional visual, air emissions and safety benefits.
- While some truck trips are expected to shift to Highway 1 and other regional truck routes, computer modelling shows that these impacts will be negligible, approximately 10 trucks in the peak hour.

- The removal of East Columbia Street between Brunette Avenue and Braid Street is also an important action to make this corridor a Great Street. De-emphasizing vehicular traffic, including trucks, is critical to support a vibrant, attractive street.

Ewen Avenue

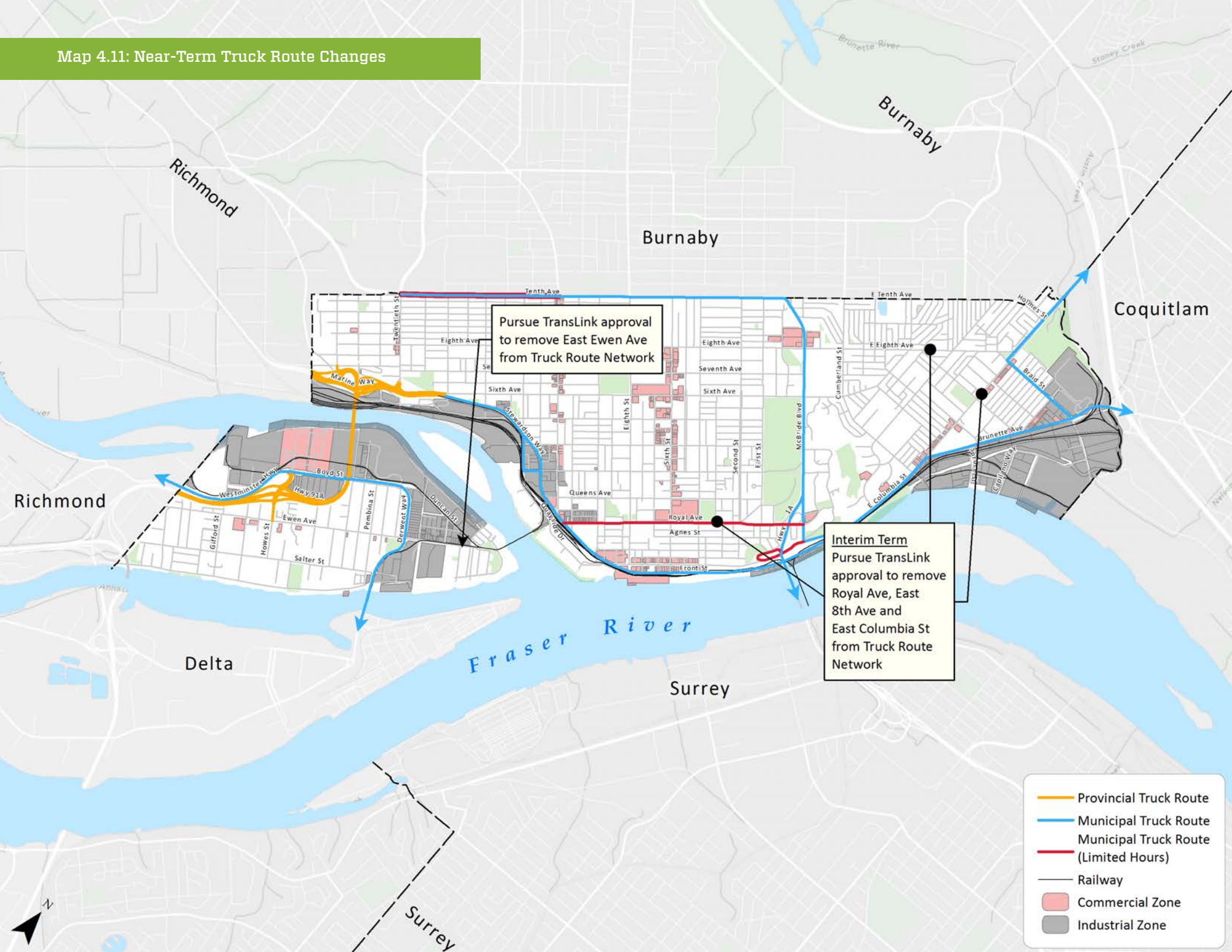
The eastern section of Ewen Avenue from Derwent Way/ Boyd Street to Furness Street has in the past serviced the waterfront industrial area and therefore it is included in the current truck route network. However, most of the properties have been and continue to be re-developed for residential and commercial uses, so the requirement for a designated truck route to this eastern portion of Queensborough is no longer required. For access to the existing industrial areas, the Street Traffic Bylaw allows trucks to continue to use Ewen Avenue if it is the most direct route to/from their origin/destination without the need of a truck route designation.

In April 2014, the City submitted an application to TransLink with supporting documentation requesting the removal of Royal Avenue, East Columbia Street Brunette Avenue to Braid Street, East Eighth Avenue and Ewen Avenue from the truck route network. TransLink has the legislative authority to approve or decline the removal of streets from the truck route network. In July 2014, TransLink Board declined the City's request to remove the foregoing streets, with the exception of Ewen Avenue, from the truck route network. The City should continue to pursue opportunities within the legislative framework to remove the foregoing streets from the truck route network including the reduction of the hours of truck operations and the re-assessment of the goods movement network within the Pattullo Bridge Replacement Project.




PARKING

Map 4.11: Near-Term Truck Route Changes



Continual regional truck traffic along City's east-west corridors over the long-term, particularly on Front Street and Royal Avenue, is not compatible with the City's aspirations. The 2013 New Westminster Truck Route Amendment Review identified positive community benefits as well as some negative impacts on other city streets, other communities, and on the trucking industry associated with the removal of Royal Avenue and Front Street from the truck route network.

The Plan's long-range goods movement strategy includes two alternatives to manage goods movements:

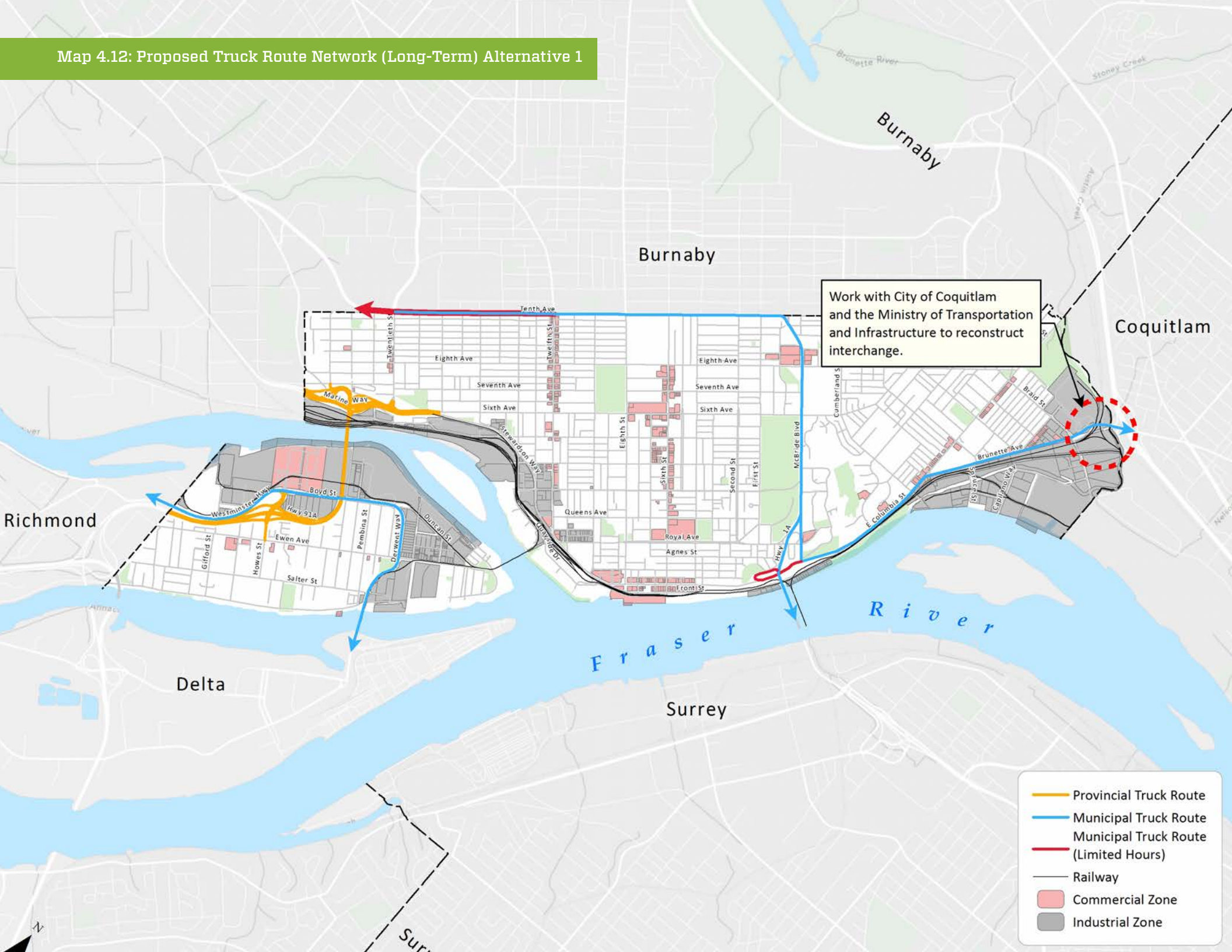
Alternative 1: Remove Front Street, Braid Street and East Columbia Street north of Braid Street from the Truck Route Network and re-route truck movements to other corridors such as Tenth Avenue, McBride Boulevard and South Fraser Perimeter Road

In recognition that the South Fraser Perimeter Road (SFPR) was developed to facilitate an efficient truck corridor on the south shore of the Fraser River. East-west truck traffic that currently uses New Westminster to travel between westerly areas (i.e., Burnaby, Richmond, Queensborough, Annacis Island) and the easterly areas (i.e., Northeast Sector) can be re-routed to the SFPR and the Port Mann Bridge or a possible future bridge crossing between Surrey and Coquitlam, as identified in the 2013 Pattullo Strategic Review Process. Although the travel distance may be longer, these routes are designed as fast highway corridors and are better suited for regional truck movements, particularly the trans-shipment of international goods through the region. In this alternative, the City would seek TransLink approval to remove Front Street (in addition to the near-term truck route network changes discussed above) from the regional truck route network.

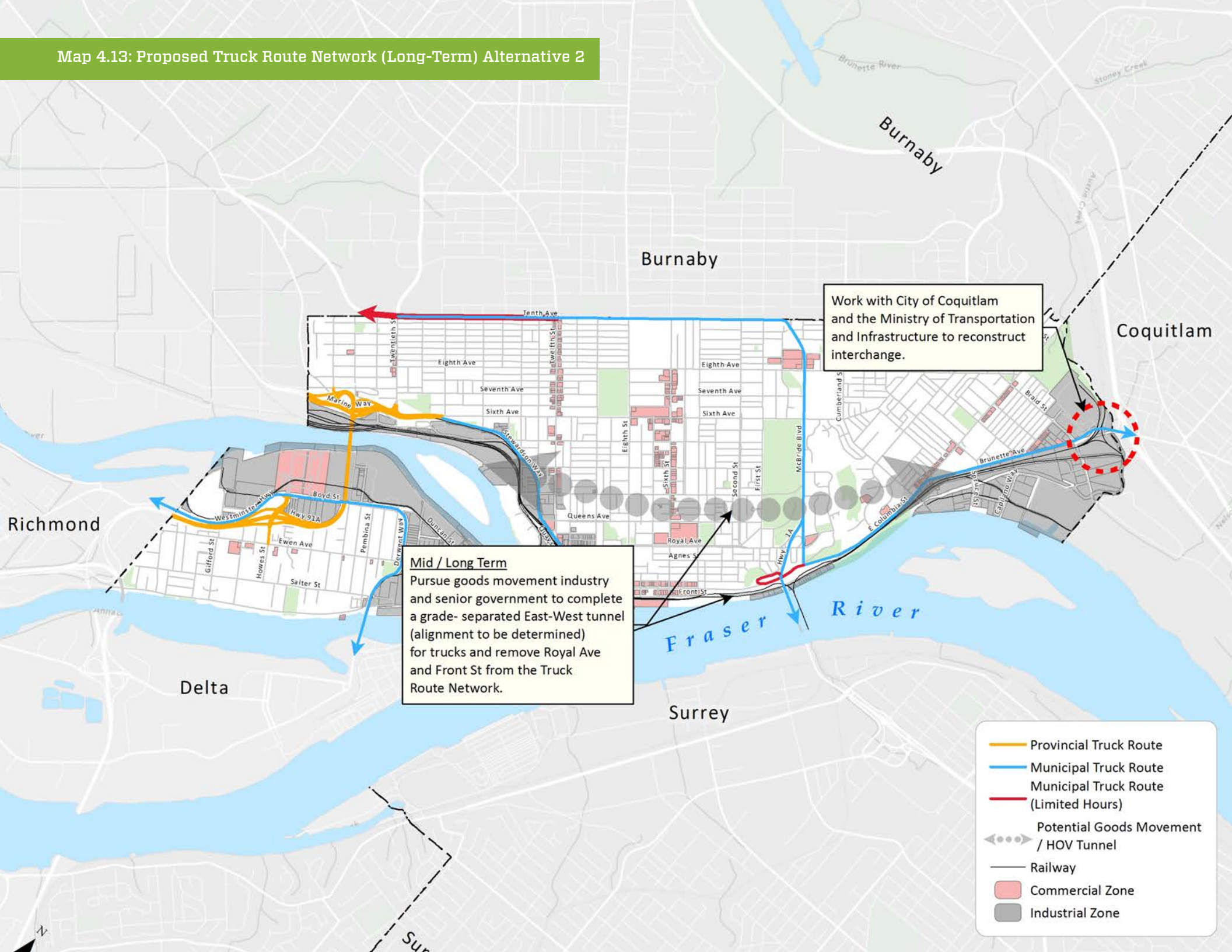
Alternate 2: Provide a grade separated East-West (i.e. Tunnel) Goods Movement Corridor

If the removal of Front Street and Royal Avenue from the truck route network is not approved by TransLink, and an east-west goods movement corridor through New Westminster is considered essential by the region, provincial and/or federal governments in support of international trade, an east-west tunnel with a suitable alignment should be pursued by TransLink, senior governments and Port Metro Vancouver. The tunnel would accommodate non-local truck movements and potentially other users such as high occupancy vehicles (HOV), and provide an efficient connection between Highway 1 and Highway 91A while reducing the impacts of goods movement on the viability of the New Westminster Regional City Centre and allowing the reallocation of surface street capacity for priority modes, including transit and High Occupancy Vehicles.

Map 4.12: Proposed Truck Route Network (Long-Term) Alternative 1



Map 4.13: Proposed Truck Route Network (Long-Term) Alternative 2



Goods Movement Policy 6C Discourage the use of Pattullo Bridge as the free alternative truck route to the tolled Port Mann Bridge

During the planning stage of the Provincial Gateway Program in 2006, the City and TransLink expressed concerns that the tolled Port Mann/Highway 1 expansion works would cause traffic diversion onto the Pattullo Bridge. Since tolling was introduced on the new Port Mann Bridge on December 8, 2012, data collected on Royal Avenue, McBride Boulevard and Pattullo Bridge indicates a significant increase of traffic on these routes, particularly for heavy trucks on Royal Avenue (increase of 40% to 83%).

The Port Mann Bridge toll for trucks in 2014 is $9.00 per crossing. Although there is a discount for crossings between the hours of 9:00 pm to 5:00 am, this is still considered a financial deterrent for many truck drivers to use the new Port Mann crossing especially during the off-peak periods when other "free alternative crossings" as such as Pattullo Bridge and Alex Fraser Bridge are available. Furthermore, the 2014 opening of the entire length of the SFPR has created a more attractive and direct route to and from the Pattullo Bridge for heavy truck operators. The City encourages adjustments to the current tolling structure of the Port Mann Bridge and possibly a regional road pricing program to reduce the diversionary traffic effect on the "free alternatives" such as Pattullo Bridge and Alex Fraser Bridge.

Goods Movement Policy 6D Promote integration and co-existence of local businesses served by trucks with other land uses in the City

Businesses served by trucks provide essential services and employment for the local economy. However, intense truck activities may sometimes create conflicts with other land uses such as residential and recreation areas. Detailed land use planning and on-going street use monitoring is essential to ensure the different land uses can co-exist in the city.

Goods Movement Policy 6E Support regional initiatives and programs that integrate good movement management and activities in Metro Vancouver

The goods movement sector in Metro Vancouver is strongly linked to the region's position as an Asia-Pacific Gateway for domestic and international trade and tourism. As such, the transport of goods via rail, road, water and air is strongly linked to import or export movements associated with the four major port facilities. In addition, goods movement traffic also serves cross-border trade, provides local deliveries, and supports the fuel, waste, construction and cargo industries within the region. Goods movement in New Westminster, via both the trucking industry and rail, is strongly connected to, and influenced by, these markets. Effective management decisions and a fully integrated goods movement system between municipalities and industries can reduce redundant truck trips on the roads and associated impacts to the communities.

TransLink is developing a Goods Movement Strategy as part of its overall Regional Transportation Strategy. This Goods Movement Strategy, recognizing the interdependence between rail, marine, and road goods movement, identifies the need for a coordinated approach between municipalities and industry to manage and integrate regional goods movement with land use planning. A key direction is to work with TransLink, the Province and federal agencies to reinforce the regional policy that goods movement related to international trade be served primarily on the provincial highway network, not local streets.



DETAILED POLICIES AND ACTIONS

Policy 6A - Implement changes to the New Westminster truck route network in the near term
Actions

- 6A.1: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of Royal Avenue from the truck route network including the reduction of the hours of truck operations and re-assess the goods movement network within the Pattullo Bridge Replacement Project.
- 6A.2: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of East Eighth Avenue from the truck route network. Work with TransLink to re-instate a 24 hours direct on-ramp from Columbia Street onto the Pattullo Bridge and re-assess the goods movement network within the Pattullo Bridge Replacement Project.
- 6A.3: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of East Columbia Street (between Brunette Avenue and Braid Street) from the truck route network and re-assess the goods movement network within the Pattullo Bridge Replacement Project.
- 6A.4: Work with TransLink to process the submitted technical documents and provide other necessary information to TransLink in support of the removal of Ewen Avenue east of Derwent Way from the truck route network.

Policy 6B - Long-Term Goods Movement Strategy
Actions

- 6B.1: Work with the Ministry of Transportation and Infrastructure, TransLink and stakeholders through processes such as the Regional Transportation Strategy and Pattullo Bridge Project to minimize truck traffic along Stewardson Way, Front Street, Royal Avenue, East Columbia Street and Brunette Avenue by re-routing east-west regional truck traffic between westerly areas (i.e. Burnaby, Richmond, Queensborough, Annacis Island) and the easterly areas (i.e. Northeast Sector) to the South Fraser Perimeter Road and the Port Mann Bridge.
- 6B.2: Encourage the Ministry of Transportation and Infrastructure, TransLink and stakeholders to improve connectivity between the South Fraser Perimeter Road and the Port Mann Bridge, or to consider a potential new crossing between Surrey and Coquitlam as identified in the 2013 Pattullo Bridge Strategic Review Process.
- 6B.3: If east-west goods movement through New Westminster is considered essential by the region, provincial or federal agencies, pursue an east-west goods movement tunnel connecting Highway 1 with Highway 91A or a potential new crossing between Surrey and Coquitlam as identified in the 2013 Pattullo Bridge Strategic Review Process by working with the Ministry of Transportation and Infrastructure, TransLink and other stakeholders, and removing Front Street and Royal Avenue from the regional truck network, except for local deliveries.

Policy 6C - Discourage the use of Pattullo Bridge as the free alternative truck route to the tolled Port Mann Bridge
Actions

- 6C.1: Work with the Ministry of Transportation and Infrastructure to reduce the tolling structure for heavy trucks on the Port Mann Bridge to discourage the use of Pattullo Bridge as a “free alternative”.
- 6C.2: Work with TransLink to ban or restrict heavy trucks on Pattullo Bridge.

... DETAILED POLICIES AND ACTIONS

Policy 6C - Discourage the use of Pattullo Bridge as the free alternative truck route to the tolled Port Mann Bridge
Actions

- 6C.3: Work with TransLink and regional partners to establish regional tolling as a travel demand management measure for the Metro Vancouver area as an immediate priority.

Policy 6D - Promote integration and co-existence of local businesses served by trucks with other land uses in the City
Actions

- 6D.1: Work with local businesses, the transport industry and the development community to minimize the impact of truck activities on adjacent land uses.
- 6D.2: Work with enforcement agencies to minimize non-compliant traffic operations on city streets, in particular trucks operating outside of designated truck routes.

Policy 6E - Support regional initiatives and programs that integrate goods movement management and activities in Metro Vancouver
Actions

- 6E.1: Encourage TransLink and Port Metro Vancouver, working with other partners such as Metro Vancouver, the Gateway Council, railways and Transport Canada, to develop and implement programs to better integrate and improve efficiency of goods movements with the goal of minimizing truck trips through urban neighbourhoods and, where feasible, promoting use of the rail network and water-based transport. This may include seeking better coordination of deliveries, loading times, warehouse operations, shipping container storage and exploring off-peak cargo delivery hours.
- 6E.2: Work with agencies and organizations to strengthen rail and water-based resources including short sea/marine shipping to transport goods and to reduce reliance on road transport.


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4.7 Liveable Neighbourhoods



New Westminster's neighbourhoods are important building blocks of the community, and contribute to the overall vitality of the city. It is important that transportation planning and design at the local level reflect the unique neighbourhood environments and the desire for local livability and sustainability.

An important sentiment among New Westminster residents, as documented in the City's OCP, is to ensure residential neighbourhoods have diverse and compatible housing types, and services and amenities in close walking distance. Through the consultation for the Master Transportation Plan, residents similarly identified the need for safe, quality, and livable neighbourhoods that are not negatively impacted by traffic. Many residents are experiencing impacts to their neighbourhoods from through-traffic, as congestion and delays on nearby major roads occur some motorists choose to use neighbourhoods streets to circumvent areas of congestion. While motorists may choose to use city streets to bypass congested routes, the resulting traffic activity on local and collector streets infringes on the ability of local residents to access and enjoy their own neighbourhood. The impact of through-traffic on neighbourhoods also puts strains on the road network and the ability to safely accommodate all road users.

Recognizing these issues of through traffic and access to neighbourhood areas, the livable neighbourhoods policies and actions seek to manage transportation at the local level to minimize the impacts of through traffic on neighbourhoods, promote safety for all road users, and ensure local access and mobility for residents. In addition, the policies and actions seek to uphold the safety and efficiency of walking, cycling, and taking transit to travel within and between neighbourhoods in New Westminster.



Liveable Neighbourhood Policy 7A Prioritize Traffic Calming Treatments Frequency

Many of New Westminster's neighbourhoods have attributes such as dense, well-connected grid street networks with small blocks, boulevards, sidewalks and street trees that encourage walking and cycling. However, many New Westminster residents are concerned about speeding, traffic volumes, and short-cutting traffic through their neighbourhoods. To address these ongoing issues, the City has been implementing traffic calming measures in neighbourhoods throughout the city for many years. In 2010, the City adopted a Traffic Calming Policy to consolidate various traffic calming practices and to provide a consistent process to implement traffic calming measures. The primary objectives of the Traffic Calming Policy include the reduction of vehicle speeds and volumes associated with through traffic, and the promotion of a safe and pleasant environment for all street users.

Traffic calming is includes engineering measures, education and enforcement to reduce vehicle speeds and traffic through infrastructure improvements in a local neighbourhood. A variety of traffic calming treatments can be implemented based on the local context and need. Examples of traffic calming treatments include speed humps, curb/corner bulges, traffic circles, textured pavement markings, and chicanes. Traffic calming improvements can also be applied to crossings and intersections, medians, diverters and raised crosswalks, which may be particularly important near sites such as schools and community centres that are in high pedestrian and cycling activity areas. Often, traffic calming treatments seek to increase the visibility of vulnerable street users (i.e., pedestrians and cyclists) and decrease crossing distances and slow down motorists and/or encourage them to use more appropriate streets.

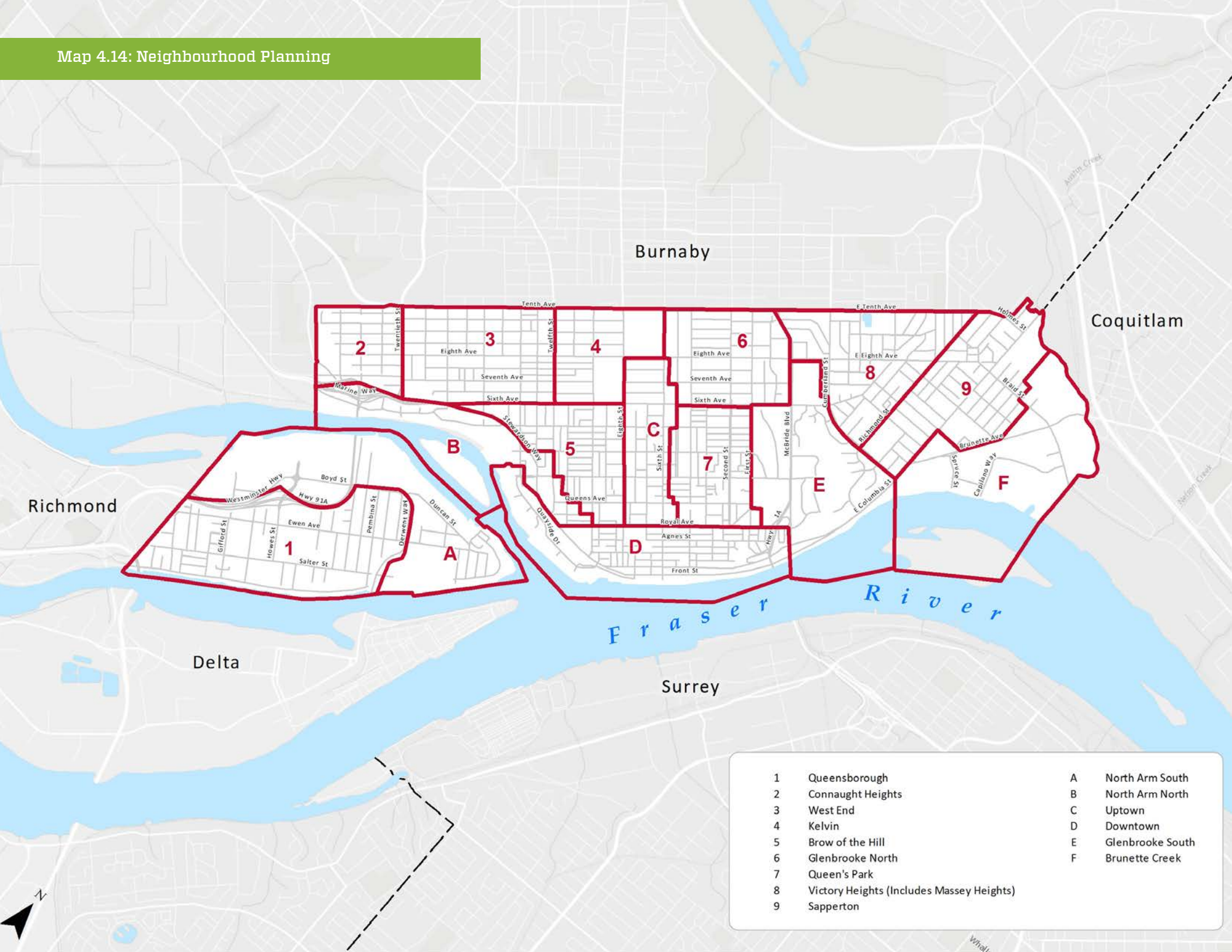
With anticipated growth in both population and traffic demand, there will be continuing pressures on New Westminster's neighbourhoods. A more aggressive approach to traffic calming is likely needed to protect neighbourhoods and ensure that they remain safe and livable. It is important to identify and prioritize where traffic calming treatments are needed – whether this is in neighbourhoods where older traffic calming treatments need to be enhanced, or in neighbourhoods where there is no traffic calming currently in place. The state of traffic calming in the city's neighbourhoods, and where priorities may need to be focused, are shown in the table below. A high presence refers to traffic calming treatments being present almost on a block by block basis throughout most of the neighbourhood. A medium presence indicates traffic calming treatments that are sporadically distributed. A low presence indicates minimal to no traffic calming treatment present.

Table 4.10: State of Traffic Calming in New Westminster's Neighbourhoods

Neighbourhood	High	Medium	Low
Connaught Heights	▲	▲	
Brow of the Hill		▲	
Brunette Creek			▲
Glenbrooke North		▲	
Glenbrooke South			▲
Kelvin	▲		
North Arm North			▲
North Arm South			▲
Queen's Park		▲	
Queensborough			▲
Sapperton		▲	
Uptown		▲	
Victory Heights		▲	
West End		▲	

The City's Traffic Calming Policy provides a framework to identify and prioritize local traffic calming requirements in response to the concerns. This process should continue to be used to evaluate traffic calming needs for neighbourhoods requiring updated traffic calming treatments, and for neighbourhoods that lack traffic calming treatments altogether. This approach to traffic calming can reduce vehicle volumes and speeds through residential areas while providing a safe and more pleasant local street environment for all users.

Map 4.14: Neighbourhood Planning



1	Queensborough	A	North Arm South
2	Connaught Heights	B	North Arm North
3	West End	C	Uptown
4	Kelvin	D	Downtown
5	Brow of the Hill	E	Glenbrooke South
6	Glenbrooke North	F	Brunette Creek
7	Queen's Park		
8	Victory Heights (Includes Massey Heights)		
9	Sapperton		



Liveable Neighbourhood Policy 7B Develop Green Streets

The City could support more livable neighbourhoods by considering developing a Green Streets approach to neighbourhood streets. Several initiatives could result in greener streets, including the development of a 'Green Streets' program, a neighbourhood-level gardening program that allows residents to adopt a corner, curb bulge or a traffic circle for planting or taking care of a garden.

A municipally supported program can provide residents with plants, professional advice, and other gardening and informational resources. The City of Vancouver runs a similar program, which has contributed to the beautification of many local neighbourhood streets, and more livable and improved street environments. Such a program in New Westminster could be enhanced by coupling it with a focus on rainwater management, specifically by designing and planting the street-side garden as a "rain garden". Street rain gardens or residential rain gardens help a community and region manage urban runoff by reducing discharge volumes and filtering pollutants from the runoff, both of which support the health of local streams and rivers. Rain gardens and bioswales are being implemented in some locations in Queensborough to help with drainage, as well as streetscape aesthetics.

The strategy of Great Streets within the Master Transportation Plan would integrate well with a green streets program, as creating green streets can result in high quality streetscapes with the benefits of an enhanced sense of place and community. Green streets can also facilitate improvements to the streetscape environments through the installation of amenities, such as bench seating, better lighting, water fountains, public gathering spaces, garbage cans, and bicycle racks. Having these amenities in place supports a variety of pedestrian and cyclist needs, and effectively facilitates the ease, convenience, and attractiveness of walking and cycling to a destination. Green streets, complemented with pedestrian amenities on select streets/boulevards, can effectively make neighbourhood streets more enjoyable places to be, enhance their attractiveness and appeal. They can also be designed to complement the heritage character of New Westminster.

Examples of Green Streets and Rain Gardens



Liveable Neighbourhood Policy 7C Manage Through Traffic

Many of New Westminster's neighbourhoods are currently impacted by excessive through-traffic, as many non-residents seek alternative routes to bypass busier major roads and intersections. To manage through-traffic and its impacts on New Westminster's neighbourhoods, the City has undertaken a review of current traffic on the street network to provide guidance on how neighbourhood streets are, and should be, functioning. The City will work with other municipalities and organizations to ensure that road projects outside of New Westminster do not result in more traffic for the city's roads.

Liveable Neighbourhood Policy 7D Maintain Local Access

Traffic congestion, delays and short-cutting through New Westminster's neighbourhood streets impact the ability of local residents and businesses to access their neighbourhoods and properties. To reduce the impacts of through traffic, while maintaining local access and mobility, operational improvements can be implemented at neighbourhood entry and exit points to make it less convenient for non-resident traffic to short-cut. In addition, the City can establish a program and process to work with neighbourhood groups, associations, and businesses to identify key areas of opportunity to better facilitate local transportation movements at the neighbourhood level.

Liveable Neighbourhood Policy 7E Minimize Driveways on Busy Arterial and Collector Corridors

Neighbourhood laneways provide rear access to residential lots. Laneways improve road safety by reducing conflicts between driveway vehicles and other road users on the front street (i.e., vehicles, bicycles, pedestrians, scooters, etc.). On an arterial road, this also helps reduce the number of vehicles turning in and out of driveways, keeping traffic on the arterial moving efficiently. Laneways also enhance the streetscape by eliminating repetitive driveways and attached garages at the front of homes, allowing more space for street trees, on-street parking and other amenities on the street frontage. Although most communities in the city have lanes, not all neighbourhood blocks have continuous laneways for rear access to individual lots.





DETAILED POLICIES AND ACTIONS

Policy 7A - Prioritize Traffic Calming Treatments
Actions

- 7A.1: Continue to identify and prioritize New Westminster neighbourhoods that require traffic calming treatments to improve neighbourhood livability.
- 7A.2: Align traffic calming locations where possible with the Pedestrian Plan, Bicycle Plan, Greenway and Trails Master Plan and 'Best Routes to School' plan, to enhance the safety, comfort, and appeal of key walking and cycling corridors.

Policy 7B - Develop Green Streets
Actions

- 7B.1: Consider developing a Green Streets Program to enhance green spaces in public rights-of-way.
- 7B.2: Integrate rainwater management, including rain gardens and bioswales, into street-side gardens, to reduce run-off and improve drainage.
- 7B.3: Incorporate pedestrian and cycling amenities into green street initiatives, where possible, to increase the attractiveness of walking and cycling in New Westminster's neighbourhoods.

Policy 7C - Manage Through Traffic
Actions

- 7C.1: Keep through traffic on major routes.
- 7C.2: Work with other municipalities and jurisdictions, including TransLink, to ensure changes to their roads and infrastructure do not result in additional traffic in New Westminster.
- 7C.3: Work towards the principle of no net added capacity for vehicles passing through the city.

Policy 7D - Maintain Local Access
Actions

- 7D.1: Maintain and improve local access for residents, employees, and businesses in New Westminster without encouraging additional through traffic.

Policy 7D - Maintain Local Access
Actions

- 7D.2: Manage traffic at key entry points to the city to minimize the impact of through-traffic while maintaining access to local destinations.

- 7D.3: Work with local residents and businesses on establishing the right balance between local access and through traffic.

Policy 7E - Minimize Driveways on Busy Arterial and Collector Corridors
Actions

- 7E.1: Develop a city-wide plan identifying laneway requirements.

- 7E.2: Develop and implement necessary regulatory tools for completing laneway connections.


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4.8 Supporting Programs and Policies



Promoting walking, cycling, transit, and other types of sustainable travel is an important way to ensure an efficient and balanced transportation system, in addition to facilitating the movement of people and goods on the road network. A major component of a balanced transportation system includes managing existing transportation infrastructure, providing attractive services and facilities to encourage driving less. In support of the City's goals towards promoting sustainable transportation, the Master Transportation Plan includes long-term directions for transit, cycling and walking for local and inter-municipal travel.

In addition to infrastructure, it is important to pursue additional 'softer measures' and programming in order to educate, inform and encourage New Westminster residents and visitors to use sustainable forms of transportation when traveling around the city.



Support Policy 8A Promote Best Routes Programming

The City has established Best Routes to School Planning. This is based on Safe Routes to School which is an international movement to improve children's safety as they walk and bicycle to school. The initiative is built on five program elements, called the "5 E's", which are engineering, education, encouragement, enforcement, and evaluation. Promotion of the Best Routes to School program is an important initiative to support the safety of students walking and cycling to school in New Westminster, and it is also an important program as it educates both students and parents on road and traffic safety, and the benefits of walking and cycling. To date, the City of New Westminster has worked with School District No. 40 and HASTE (Hub for Action on School Transportation Emissions) to deliver a number of Best Routes initiatives throughout New Westminster. This has included developing route to School Maps for each elementary, and middleschool in the New Westminster School District, delivering in-school bicycle skills training, and week-long 'bike-pool' groups to school. Further, school travel planning consultations have produced infrastructure recommendations in and around schools that are being incorporated into City infrastructure capital planning. It is recommended that the City continue to partner on these Best Routes initiatives in order to extend up to date Best Routes information to all schools in School District No.40.

It is also recommended that the City extend Best Routes programming to initiatives focussed on Best Routes for Seniors and Best Routes to transit. The Best routes for seniors is an initiative first pioneered in New York City, that seeks to improve the pedestrian environment for seniors by identifying obstacles to walking and developing design solutions to address these barriers. In order to carry out a Best Routes for Seniors initiative, the City will work with seniors groups, community associations, public health agencies, and other potential partners to build better walking environments.

Best Routes to Transit refer to ways to improve walking and cycling connections to bus stops, SkyTrain stations and transit exchanges. Best Routes to Transit can include infrastructure improvements (such as sidewalks and bicycle routes), intersection improvements, improved wayfinding, and enhanced bicycle parking at transit facilities.

SUPPORT POLICY 8B MANAGE PARKING

Like most cities, New Westminster has a combination of City-owned and privately-owned parking. City-owned parking assets include on-street parking and two parkades, which provide publically-accessible off-street parking at a fee. The two existing City-owned parkades in New Westminster, are both located Downtown (the Columbia Street Parkade, and the Front Street Parkade). The Anvil Centre also features City-owned public parking. The City's on-street parking assets are also considerable, and include metered, time-restricted, and free spaces. In total, the City operates around 1,100 metered spaces, largely in Downtown and Sapperton. The City also has a number of on-street bicycle parking assets.

The City-owned parking network works together with privately-owned parking to create a complete system. Privately-owned parking is required through the City's Zoning Bylaw. Developers are required to provide a certain number of parking spaces and long- and short-term bicycle parking spaces based on their building size and type of use. The number of parking spaces is established during the development application and review process in the Zoning Bylaw in force at the time of the application. Older buildings are not required to update their parking or bicycle parking supplies as the bylaw changes, although a change in building use or size may necessitate an update to parking supply. The City should continue to update its parking bylaws as car ownership and travel patterns continue to shift within the city.

In 2013, the City developed a Downtown Parking Strategy to guide the long-term planning and management of parking in the City's Downtown, where some of the highest growth is expected to take place. The strategy recommends approaches to parking that can be used throughout the City, including:

- **Demand-management strategies** to reduce vehicle use, such as improving walking and cycling facilities, car sharing, transit initiatives, parking strategies and wayfinding.
- **Supply-based strategies** to influence the amount of off-street parking, including tools such as shared parking between private businesses at different times of day, and reducing or changing parking bylaw requirements based on demand.
- **Pricing strategies** including metered on-street parking, particularly in areas of high commercial turnover, can help promote economic vibrancy and to encourage people to use other modes of transportation.
- **Support strategies** allow the City to effectively manage the on- and off-street parking and include preferential places for car-share users, timed curb zones for loading, and parking permit districts.

The City will continue to apply the recommendations of the Downtown Parking Strategy throughout the Downtown, and should also follow these parking management strategies in and around SkyTrain stations and Frequent Transit Network corridors. Parking strategies can encourage a range of community benefits, including more effective use of parking resources and decreased vehicle use (travel demand management).

Support Policy 8C Support Regional Policies to Reduce Automobile Dependency

Funding and financing can be used to modify travel behaviour and to create regional shifts in travel trends where needed. There are several critical regional-level policy initiatives that the City should support in order to reduce automobile use in and throughout New Westminster. This includes working with and supporting TransLink to toll the planned replacement of the Pattullo Bridge. In conjunction with tolling of the planned Pattullo Bridge, the City support the development of a comprehensive, equitable regional road pricing scheme that ensures that user-pay is in place for all major regional travel corridors across Metro Vancouver, as well as a regional goods movement strategy that can effectively reduce the impact of truck traffic through New Westminster.

The benefit of tolling is not only limited to managing travel demand, as it also creates a source of transportation funding and financing. The City encourages the use of tolling revenues to finance transit service improvements throughout New Westminster and the region, in order to make transit a more attractive transportation mode.

Support Policy 8D Support Education and Awareness Initiatives

It is important to ensure the residents have the skills, information, confidence and support to walk, cycle and take transit more. There are a number of education and awareness initiatives that the City can develop or participate with its partners in order to increase the use of sustainable transportation within New Westminster, including:

- **Supporting the TravelSmart program** delivered by TransLink. The City can use this program to partner with major employers, institutions, and other businesses in New Westminster so that more people traveling for work and/or school can access information around cycling, transit, walking, and learn skills needed to use transit efficiently.

- **Continuing to work with other agencies and organizations** such as ICBC, the RCMP, Fraser Health, and School District No. 40 to promote road safety and skills for driving, walking, and cycling. This includes teaching drivers and cyclists about sharing the road, safely crossing the street for pedestrians, and enhancing the confidence and skills of vulnerable road users.

- Work with diverse partners to **promote sustainable transportation community events and initiatives** such as Bike/Walk to Work Week or Month, World Walking Day, Open Streets/Car-Free Days and cyclovias / open streets, where certain streets are temporarily closed to automobiles for pedestrians and cyclists.





Support Policy 8E Market and Promote Sustainable Transportation

The City of New Westminster can actively market and promote the use of sustainable forms of transportation such as walking, cycling, transit and carsharing using various media outlets. For example, developing a dedicated website to provide information about sustainable transportation options along with interactive mapping can promote the use of New Westminster's pathways, sidewalks, bicycle routes and transit system. Further, providing additional support measures throughout the city such as wayfinding and car share programs can also make sustainable modes more convenient and attractive options within New Westminster, as described below:

- Develop an on-line user map with interactive information that allows residents and visitors to learn about the walking, cycling and transit networks in the City. An on-line interactive map could highlight major destinations in New Westminster, steep hills to avoid for walking and cycling, locations of amenities for cyclists and pedestrians, transit exchanges and bus stops, and bicycle parking locations.

- Continue to work on a dedicated website focusing on sustainable transportation. This website could provide links to the on-line map of the City's walking, cycling, transit resources, and other tools that promote and market sustainable and active travel.

- Promote and expand the carshare program in New Westminster. Carshare has already been introduced in a limited capacity to New Westminster, but working with carshare providers to increase service can encourage more use in and around New Westminster.

- Walking, cycling, and transit-friendly design can be supported through providing better wayfinding information for people using the sidewalks, trails, bicycle routes, and transit in New Westminster. Wayfinding materials should be simple, easy to read, easy to install and allow residents and visitors to locate key amenities and facilities within New Westminster. TransLink has recently developed Regional Bicycle Wayfinding Guidelines, which the City should support and follow. In addition, good wayfinding for parking facilities and major road corridors can facilitate better vehicle movements through the City and reduce the amount of time drivers use searching for their destinations and parking.

Support Policy 8F Integrate Transportation Demand Management into City Planning

Travel Demand Management (TDM) is the term used to represent a broad range of policies to encourage people to walk, bicycle, use transit and rideshare, as well as to discourage individuals from driving alone. Attractive alternatives must be in place in order to make TDM policies and programs effective. TDM strategies can be expected to influence travel behaviour in the following three overarching ways, thereby reducing the costs of maintaining and expanding transportation facilities:

- Change the amount of travel by encouraging trip-makers to combine two or more purposes into a single trip and by reducing the length of trips.
- Change the mode of travel by encouraging walking, bicycling, carpooling, and transit, and/or by discouraging people from driving alone.
- Change the time of travel to reduce the growth in peak period travel by encouraging shifting the time in which people travel to outside peak periods.

Integrating TDM into the City's planning processes and strategic initiatives can contribute to a more effective and efficient use of New Westminster's transportation network. TDM programs can reduce travel demand and be cost effective, flexible and delivered in shorter time periods than building infrastructure. Measures to integrate TDM into City planning can include providing design guidelines, developing parking management plans (i.e. the Downtown Parking Strategy), including pricing strategies, implementing the Great Streets framework of the Plan (ie; promote complete streets), encouraging transportation-oriented neighbourhoods and embedding TDM requirements into the development review process (e.g.. the City's Sustainability Report Card). By including TDM approaches into the planning and development processes of New Westminster, the City can experience a wide range of economic, environmental, and public health benefits.

Support Policy 8G Build Partnerships with Stakeholders

Partnerships with other organizations, employers and agencies can be an effective method for the City to promote travel choices among residents, businesses and visitors to New Westminster. The City has previously joined forces with agencies and organizations such as ICBC, New Westminster Police, HASTE, HUB, Fraser Health, Federation of Canadian Municipalities and School District 40, to deliver transportation-related programming and various education and awareness initiatives. The City will continue to explore partnerships with existing and new stakeholder groups to leverage resources for more efficient and sustainable people and goods movement within New Westminster.

DETAILED POLICIES AND ACTIONS

Policy 8A - Promote Best Routes Programming
Actions

- 8A.1: Continue to work with the New Westminster School District and local organizations to develop and update Best Routes to School travel programming for all schools in New Westminster.
- 8A.2: Work with local partners to establish Best Routes for Seniors accessing key community destinations in the city.
- 8A.3: Develop a Best Routes to Transit initiative, focussing on frequent transit corridors.

Policy 8B - Manage Parking
Actions

- 8B.1: Support the demand management recommendations of the Downtown Parking Strategy.
- 8B.2: Concentrate parking strategies within New Westminster's Downtown, SkyTrain areas and Frequent Transit Network corridors.
- 8B.3: Ensure there is adequate street space for accessibility challenged drivers and passengers to load, stop and park.

Policy 8C - Support Regional Policies to Reduce Automobile Dependency
Actions

- 8C.1: Support tolling of the planned replacement of the Pattullo Bridge.
- 8C.2: Support equitable regional road pricing strategies across Metro Vancouver.
- 8C.3: Support the development of a regional goods movement network designed to minimize the impact to neighbourhoods.

Policy 8D - Support Education and Awareness Initiatives
Actions

- 8D.1: Continue to work with other agencies and organizations for the delivery of TransLink's trip reduction programs.
- 8D.2: Continue to work with other agencies and organizations to promote road safety and skills to enhance the confidence and skills of vulnerable road users.
- 8D.3: Support events and initiatives such as Bike/Walk to Work, IWalk, World Walking Day, cyclovias, and greenway mapping that educate and encourage people to use sustainable modes of transportation.

Policy 8E - Market and Promote Sustainable Transportation
Actions

- 8E.1: Produce and regularly update an on-line interactive mapping resource for cycling, walking, and transit routes.
- 8E.2: Create a dedicated sustainable transportation website that educates residents and visitors on the City's transit, cycling, and walking networks and benefits of sustainable transportation.
- 8E.3: Work with car share providers to increase car share programs
- 8E.4: Support the development of a wayfinding plan in New Westminster for the walking, cycling, transit and road networks, in order to facilitate better information about accessing key destinations and routes.

Policy 8F - Integrate Transportation Demand Management into City Planning
Actions

- 8F.1: Continue to incorporate requirements into the planning and development processes that seek to reduce travel demand and dependency on the private vehicle.

Policy 8G - Build Partnerships with Stakeholders
Actions

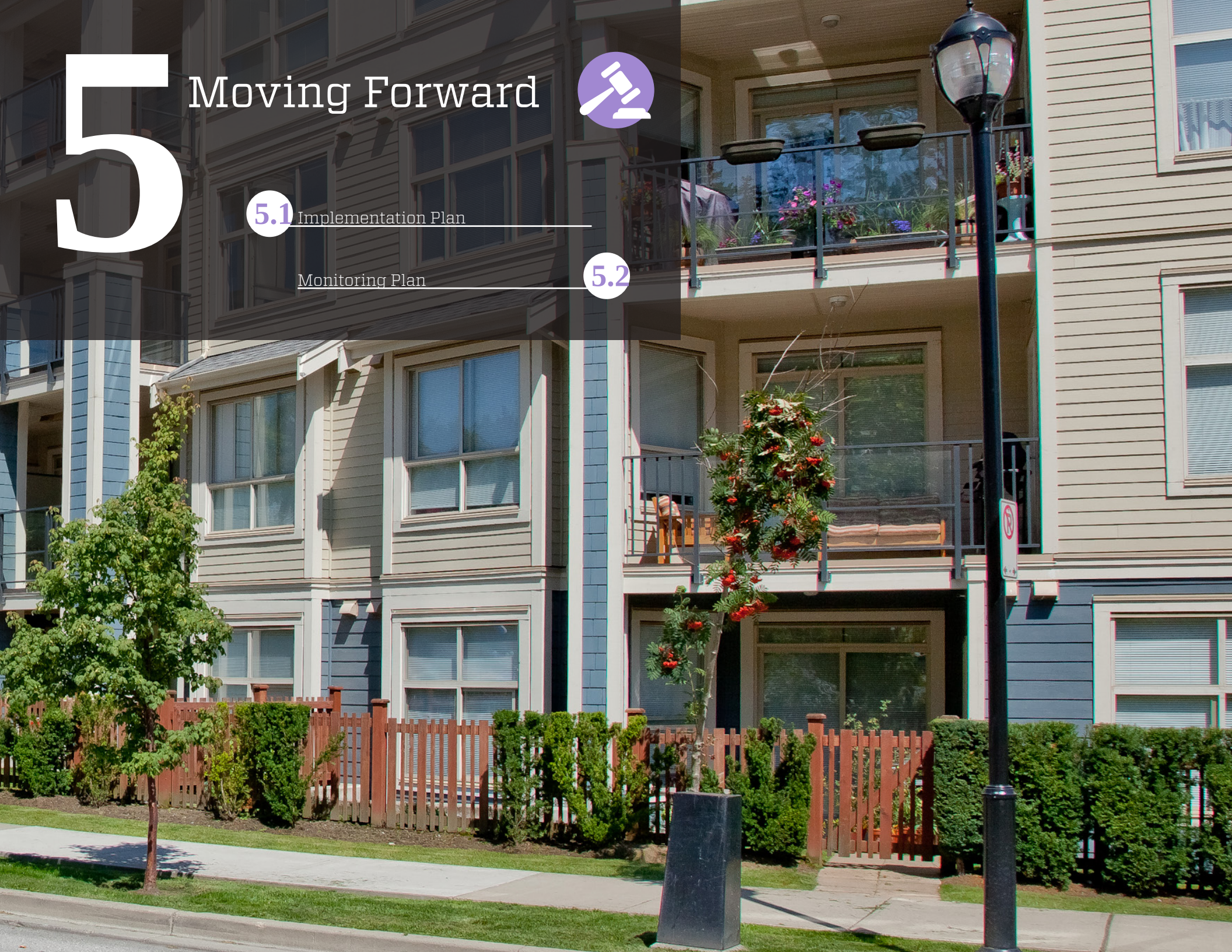
- 8G.1: Build on current partnerships and explore new partnerships, with other organizations, employers and agencies, to more effectively deliver supportive programming that promote an efficient transportation system.


STOP

5 Moving Forward

5.1 Implementation Plan

5.2 Monitoring Plan





5.1 Implementation Plan



The Master Transportation Plan provides a long-term transportation vision for the City of New Westminster, along with a series of Policies and Actions to achieve this vision. This section presents an implementation and phasing strategy, identifying priority actions over the short-term (0 to 5 years), medium term (5 to 10 years), and long-term (10 years and beyond). In addition to the short-term initiatives, the implementation and phasing strategy also identifies a number of 'quick win' initiatives that the City should begin within the next two years.

The detailed implementation priorities are summarized in the tables below. The actions presented on the following pages highlight a number of quick win and short-term priority initiatives for the City.

5.1 Implementation Plan - Short / Medium Term Priorities

Great Streets Area Plans

Timeframe	within 5 years
Plan Elements	
Policies and Actions	3A.1, 4A.3, 4A.4, 4A.5, 4B.1, 4B.2, 4B.3, 4B.4, 4C.1, 5A.1, 5A.5, 5C.1, 5C.2
Description	One of the key recommendations of the Master Transportation Plan is to focus on developing a network of Great Streets. The Plan identifies high level recommendations for six Great Streets. Over the short-term, the City should develop a more detailed areas plans for several corridors, beginning with Sixth Street due to its important role as a connection between Uptown and Downtown, and Ewen Avenue, to build on the recent Queensborough Community Plan. These Area Plans should focus not only on transportation infrastructure and facilities on each corridor, but also other amenities to support walking, cycling and transit; and supportive land use policies. The areas plans should also include cross-streets and other streets in the immediate area.

Pedestrian Improvement Priorities

Timeframe	within 2 years
Plan Elements	
Policies and Actions	4A.1, 4A.2, 4A.3
Description	The Master Transportation Plan identifies the need to update and refine the process for prioritizing sidewalk improvements. As a quick win initiative, the City should develop an updated Pedestrian Improvement Prioritization Process to identify sidewalk improvements based on pedestrian demand, pedestrian safety, connections to transit, network gaps, and anticipated needs. Through this prioritization process, the City should identify high priority sidewalk improvements, including both new sidewalks and enhancements to existing sidewalks and develop an annual capital fund for sidewalk improvements to implement sidewalk improvements.

Wayfinding Plan

Timeframe

within 2 years

Plan Elements



Policies and Actions

3A.1, 5A.5, 6E.4, 6E.5

Description

The Master Transportation Plan identifies wayfinding as an important strategy for walking, cycling, transit and the road network to help residents and tourists navigate around the City. The City should develop a wayfinding plan for all users as a quick win project, identifying key destinations throughout the City, including connections to the waterfront, and around SkyTrain stations.

Cycling Improvement Priorities

Timeframe

within 2 to 5 years

Plan Elements



Policies and Actions

5A.1, 5A.2, 5A.6, 5B.1, 5B.2, 5B.3, 5B.6

Description

The Master Transportation Plan identifies a long-term bicycle network, including a network of primary and secondary bicycle routes. The City should develop a process to develop "whole-route" bicycle route studies, completely with link and intersection improvements. The City should prioritize doing "whole route" studies on primary routes, and should seek to do at least one study per year. The City should prioritize a "whole route" study to upgrade Seventh Avenue, Braid Street Section of Brunette Fraser Greenway, and "whole route" studies for new north-south corridors, including Tenth Street, First/Second Street and new east-west corridors, including Fourth Avenue and Ewen Avenue (in conjunction with the Ewen Avenue Great Street Area Plan).

Cycling Support Measures

Timeframe: within 5 years

Plan Elements: 

Policies and Actions: 5C.1, 5C.2, 5C.3, 5C.4

Description

The Master Transportation Plan identifies a range of support measures to making cycling more convenient. The City should develop a bicycle corral program and work with local businesses to identify locations for bicycle corrals as well as work to provide convenient and regularly spaced bicycle parking on all Great Streets and other key locations. Finally, the City should support TransLink in improving bicycle parking at SkyTrain Stations by implementing a Secure Bicycle Parking Area pilot project at 22nd Street and New Westminster SkyTrain Stations.

Transit Oriented Community Area Plans

Timeframe: within 5 years

Plan Elements: 

Policies and Actions: 6A.2, 6D.1, 6D.4, 6D.5

Description

The Master Transportation Plan identifies the need to develop transit oriented communities to support frequent and rapid transit service. The City should follow TransLink's Transit Oriented Communities guidelines, identifying improvement opportunities for walking, cycling and transit along with other land use measures required to support transit service.


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Transit Amenities

Timeframe

within 5 years

Plan Elements



Policies and Actions

6E.1, 6E.2, 6E.6, 6F.1

Description

Improving transit passenger amenities, including improved customer information, benches and shelters, and bus stop accessibility, are key priorities for making transit a more comfortable and attractive transportation choice. The City should compile and maintain a transit facility inventory and priority installation of shelters and bus stops,m so that 75% of all bus stops have adequate weather protection and seating by 2020. The City should also retrofit all remaining inaccessible bus stops in the City where feasible to provide 100% accessible transit stops in the City by 2016, and support TransLink's SkyTrain station upgrades, including providing stair and an elevator or accessible ramp form the Sapperton Station to the Braid Industrial Area, as well as supporting TransLink's SkyTrain Station and Exchange Improvements Program.

Managing Goods Movement

Timeframe

within 5 years

Plan Elements



Policies and Actions

8A.1, 8A.2, 8A.3, 8A.4, 8C.1, 8C.2, 8C.3

Description

The City has already submitted technical documents to TransLink in support of removal of Royal Avenue, East Eighth Avenue, East Columbia Street and Ewen Avenue from the truck route network but TransLink has declined removal of streets from the truck route network. The City should continue to pursue opportunities within the legislative framework to remove these corridors from the truck route network as an immediate priority. The City should also formalize its position and work with its partners to reduce the tolling structure for heavy trucks on the Pattullo Bridge to discourage the use of Pattullo Bridge as a "free alternative", ban or restrict heavy trucks on the Pattullo Bridge, and establish regional tolling as a travel demand measure for Metro Vancouver as an immediate priority.

Improve Pedestrian and Cycling Safety and Accessibility

Timeframe	within 5 to 10 years
Plan Elements	
Policies and Actions	4C.1, 4C.2, 4C.3, 4C.4, 4C.5, 4C.6, 4C.9, 4C.10, 4C.11, 4C.12, 4C.13, 5A.1, 5A.6, 5A.7
Description	Pedestrian and cyclists are vulnerable road users and account for a high proportion of traffic fatalities in the City. In addition, with an aging population, there is a need to improve accessibility for people of all ages. The City should focus on improving safety for vulnerable road users, particularly pedestrians and cyclists. This includes reducing pedestrian crossing distances through the use of curb extensions and median islands, installing missing curb letdowns and upgrading older letdowns to current standards, installing accessible pedestrian signals and pedestrian countdown timers at all locations throughout the City, and maintaining and rehabilitating sidewalks so they are free of hazards and debris. The City should also carry out and review collision reviews every five years to prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions and costs.

Create Traffic Calming Plans

Timeframe	within 2-5 years
Plan Elements	
Policies and Actions	9A.1, 9A.2, 9B.1, 9B.3, 9C.1
Description	An important element of the Master Transportation Plan is balancing the needs of local residents and neighbourhoods with travel patterns through the City. The Plan emphasizes the need to protect residential neighbourhoods to preserve safety and quality of life of residential neighbourhoods. The City should develop a process to prioritize neighbourhoods requiring traffic calming treatments, and as a quick win should work to implement at least one area-wide traffic calming plan per year. Traffic calming plans should look to integrate with the Pedestrian Plan, Bicycle Plan, Greenway and Trails Master Plan, and 'Best Routes to School' Plans to enhance the safety, comfort and appeal of key walking and cycling corridors.

Continue to Develop and Update Best Routes Plans

Timeframe

within 2-5 years

Plan Elements



Policies and Actions

10A.1, 10A.2, 10A.3

Description

The City is already a leader in Best Routes to School programming, and should continue to work with the New Westminster School District and local organizations to develop and update Best Routes to School travel programming for all schools in New Westminster. These plans should be updated for each school on a regular basis. The City should also work with other partners to establish a Best Routes for Seniors program as well as a Best Routes to Transit initiative.

Enhance the Waterfront

Timeframe

within 5 years

Plan Elements



Policies and Actions

1D.1, 1D.2, 1D.3, 1D.4, 1D.5, 2A.1, 2A.4, 2B.1

Description

The Fraser River waterfront is an important focal point of the City, but is currently disconnected from the Downtown by Front Street and the rail corridor. The City should work to develop a complete, continuous waterfront pathway network for pedestrians and cyclists along the Fraser River, including a continuous loop around Queensborough. This should include improving connections to Downtown at key locations, including Fourth Street, Begbie Street, Sixth Street, McInnes overpass, and Eighth Street at Hyack Square, and also constructing the bicycle and pedestrian connection between Queensborough and Quayside neighbourhoods. In addition to connections, the City should enhance the waterfront through enhanced amenities such as benches, water fountains, art, historical references, wayfinding, signage and playground areas as well as through community events.

POLICIES AND ACTIONS - WALKING

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 1A - Enhance the Pedestrian Network Actions								
• 1A.1: Refine the existing sidewalk prioritization process to identify priority sidewalk improvements to fill in gaps in the sidewalk network shown in Map 4.1 based on pedestrian demand, pedestrian safety, connection to skytrain / transit, network gaps and anticipated needs.	●						●	N/A
• 1A.2: Prioritize sidewalk improvements, including both new sidewalks and enhancements to existing sidewalks, in areas with high concentrations of vulnerable road users (children, youth and seniors) including areas around schools, parks, community centres and seniors' facilities.	●	●			●			$$
• 1A.3: Identify opportunities for enhanced pedestrian connections within and between parks, to commercial / institutional amenities and throughout the city.		●					●	N/A
• 1A.4: Improve environment for pedestrians along narrow streets, lanes and alleyways. These are often the shortest walking path in Downtown. Maintain essential functions in laneways such as loading, parking, fire access and services.		●			●			$$
Policy 1B - Create Great Places and Destinations Actions								
• 1B.1: Create and implement design guidelines that encourage developers to provide amenities to enhance the pedestrian environment, including appropriate building setbacks and weather protection such as canopies or awnings.	●						●	N/A
• 1B.2: Construct landscaped features such as curb extensions and sidewalk boulevards to improve the safety, comfort and visual appeal of the pedestrian environment.		●			●			$
• 1B.3: Work with local businesses, business associations and community members to consider opportunities for public gathering spaces, such as parklets and plazas, along Great Streets and other neighbourhood centres.		●			●			$
• 1B.4: Encourage the creation of outdoor patio seating at cafes and restaurants on Great Streets to create a more vibrant streetscape, while maintaining sidewalk clear zones for pedestrian movement including wheelchairs and other mobility aids.	●						●	N/A
Policy 1C - Improve Pedestrian Safety and Accessibility Actions								
• 1C.1: Where appropriate, consider reducing pedestrian crossing distances through the use of curb extensions and median islands			●		●			$
• 1C.2: Provide pedestrian-scale street lighting, in and around key walking destinations and crosswalks to support pedestrian visibility day and night. Transition to white light sources, particularly at crossing locations, which make pedestrians more visible.			●		●			$

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 1C - Improve Pedestrian Safety and Accessibility								
Actions								
• 1C.3: Work towards all sidewalks in the city having a minimum clear width of 1.8 metres, with an enhanced sidewalk clear width of at least 3.0 metres on Great Streets and other areas with high pedestrian activity.			●		●			$$
• 1C.4: Ensure the traveling portion of sidewalks ("sidewalk clear zones") remain free of obstructions.		●				●		N/A
• 1C.5: Continue to carry out and update collision reviews every five years. The reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions and costs. Work towards a road network where pedestrian fatalities and serious injuries are exceedingly rare.			●				●	N/A
• 1C.6: Apply Crime Prevention Through Environmental Design (CPTED) principles of streetscape design to improve pedestrian safety.		●	●			●		N/A
• 1C.7: Develop design standards that recognize the diverse needs of pedestrians, including sidewalk clear zone width, benches, and enhanced pedestrian crossings such as reduced crossing distances and modified pedestrian signal timing.		●					●	N/A
• 1C.8: Consider using parking payment-in-lieu funds and voluntary amenity contributions to fund new amenities.		●					●	N/A
• 1C.9: Work with agencies such as the Integrated Road Safety Unit, New Westminster Police Department, and Bylaw Officers to enhance traffic enforcement to improve pedestrian safety.		●	●	●		●		N/A
• 1C.10: Consider pedestrian improvements as part of all street capital projects, and significant developments that install and upgrade sidewalks, boulevards, streetscape and crossing facilities as opportunities arise.		●	●	●		●		N/A
• 1C.11: Continue to install missing curb letdowns and upgrade older letdowns to current design standards. Develop a process for prioritizing curb let downs improvements. Aim to have curb let downs at all city street intersections by 2020.	●	●			●			$
• 1C.12: Continue to install accessible pedestrian signals city-wide through on-going replacement programs, at locations prioritized in consultation with stakeholder groups representing seniors and individuals with differing physical or visual abilities.	●	●			●			$

POLICIES AND ACTIONS - WALKING

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 1C - Improve Pedestrian Safety and Accessibility								
Actions								
• 1C.13: Continue to maintain and rehabilitate sidewalks and pathways so they are free of trip hazards and debris (i.e., sandwich boards); use smooth materials and designs that are comfortable for users of strollers, wheelchairs, or other mobility aids.		●	●			●		N/A
• 1C.14: Improve and enforce measures to maintain accessibility around construction zones and special events.		●				●		N/A
Policy 1D - Enhance the Waterfront								
Actions								
• 1D.1: Work with agencies and organizations such as TransLink and Metro Vancouver to advance regional trails and inter-municipal connectivity, with a focus on acquiring and developing a complete, continuous waterfront pathway for pedestrians and cyclists along the Fraser River, including a continuous loop around Queensborough.	●	●	●		●			$$$
• 1D.2: Work to seamlessly integrate the Downtown and the waterfront by improving pedestrian connections at key locations, including Fourth Street, Begbie Street, Sixth Street, McInnes overpass and Eighth Street at Hyack Square.	●	●	●		●			$$$
• 1D.3: Construct a bicycle and pedestrian connection between the Queensborough and Quayside Neighbourhoods.	●				●			$$$
• 1D.4: Enhance waterfront amenities by providing a greater diversity of destinations and pedestrian amenities including benches, water fountains, art, historical references, wayfinding, signage and playground areas.	●				●			$
• 1D.5: Enhance the waterfront through community events that celebrate the role of the Fraser River in New Westminster's development and establishment as a City.	●					●		N/A
• 1D.6: Work with agencies and organizations such as TransLink and Metro Vancouver to advance regional trail and inter-municipal connectivity, with a focus on the waterfront and the creation of a continuous waterfront greenway from Queensborough to Sapperton.		●	●					N/A




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	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 2A - Develop a Complete, Connected Bicycle Network								
Actions								
• 2A.1: Complete the long-term bicycle network.		●	●	●	●			$$
• 2A.2: Re-allocate road space from general traffic and/or motor vehicle parking to provide bicycle facilities where appropriate.		●	●	●	●			$
• 2A.3: Consider bicycle route improvements as part of all major street capital projects (including new streets and improvements to existing streets). Install and upgrade routes as opportunities arise.		●	●	●	●			$
• 2A.4: Continue to work with adjacent municipalities and other partners to ensure seamless cycling connections across municipal boundaries.			●				●	N/A
• 2A.5: Design new and review existing routes on a whole-route basis, producing a complete study with necessary link and intersection improvements.	●	●			●			$$
• 2A.6: Continue to carry out and update collision reviews every five years. The reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions, and costs.			●				●	N/A
Policy 2B - Provide Safe and Comfortable Bicycle Facilities								
Actions								
• 2B.1: Develop a Primary and Secondary Bicycle Network that is comfortable for people of all ages and abilities by encouraging the provision off-street pathways, physically separated bicycle lanes, and local street bikeways.	●	●			●			$$
• 2B.2: Prioritize cyclist movements on Primary Routes to give cyclists greater priority at intersections.	●	●			●			$
• 2B.3: Develop and implement maintenance and cleaning guidelines for primary bicycle routes, prioritizing routes with high ridership.		●				●		N/A

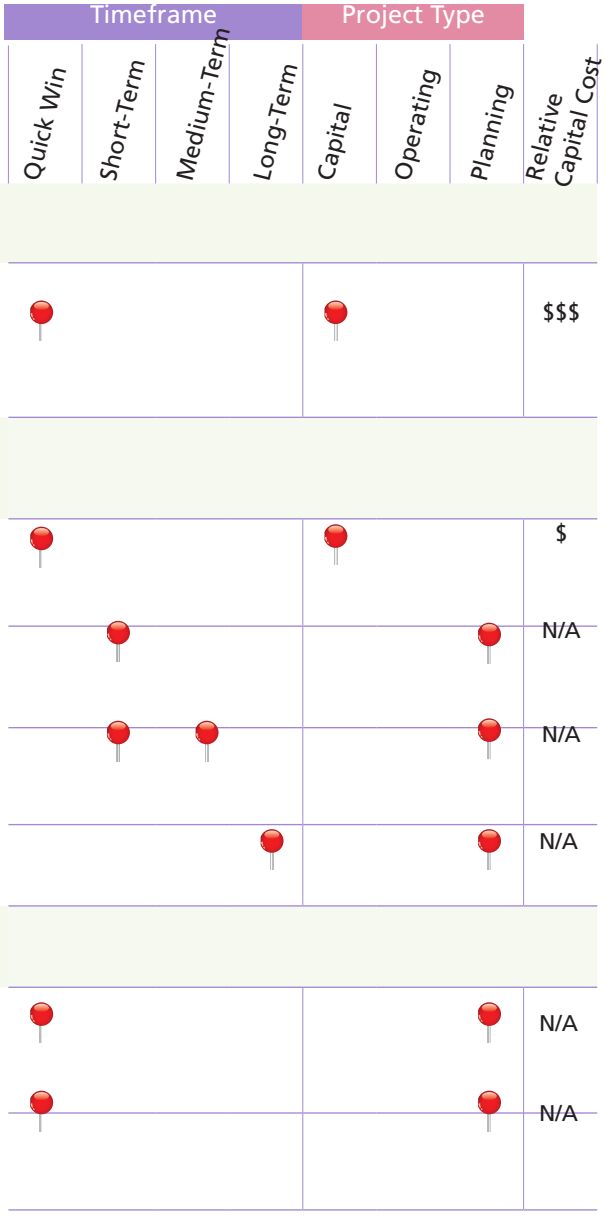
POLICIES AND ACTIONS - CYCLING

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 2B - Provide Comfortable Bicycle Facilities								
Actions								
• 2B.4: Improve and enforce measures to maintain safe cycling access around construction zones and during special events.		●				●		N/A
• 2B.5: Design the bicycle network in consideration of the gradients of the route.			●				●	N/A
Policy 2C - Make Cycling Convenient								
Actions								
• 2C.1: Provide convenient and regularly spaced bicycle parking within the public right-of-way on all Great Streets and other key locations, including commercial areas, schools, community centres and other important destinations.		●	●		●			$
• 2C.2: Consider bicycle "corrals" (in-street bicycle parking) and work with local businesses to identify locations for bicycle corrals as an alternative to bicycle racks on sidewalks.	●				●			$
• 2C.3: Support TransLink in improving bicycle parking areas at 22nd Street, New Westminster, Columbia, Sapperton and Braid SkyTrain stations.	●	●			●			$$
• 2C.4: Install sheltered bicycle parking in areas of high bicycle parking demand.			●		●			$
• 2C.5: Develop a retrofit program to encourage building owners to provide bicycle facilities in existing buildings.			●				●	N/A
• 2C.6: Support measures to expand the on-board carrying capacity of bicycles on public transit vehicles.				●			●	N/A

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 3A - Enhance Transit Service Frequency								
Actions								
• 3A.1: Work with TransLink to add Twelfth Street to the Frequent Transit Network (FTN).		●					●	N/A
• 3A.2: Work with TransLink to provide more frequent service along Sixth and Eighth Streets throughout the day.		●	●				●	N/A
• 3A.3: Maintain Westminster Highway, Boundary Road and Ewen Avenue west of Howes Street in Queensborough as important, regionally-serving FTN corridors.		●					●	N/A
• 3A.4: Work with TransLink to provide enhanced local transit services on key east-west corridors throughout the City, including Sixth Avenue, Eighth Avenue and East Columbia Street, with a focus on increasing peak period service.			●				●	N/A
• 3A.5: Work with TransLink to improve peak period transit service in Queensborough, Fraserview and Victoria Hill.				●			●	N/A
• 3A.6: Support TransLink in providing a greater level of coverage and service to neighbourhoods throughout New Westminster.				●			●	N/A
Policy 3B - Improve Transit Connections Between Uptown and Downtown								
Actions								
• 3B.1: Continue to explore an affordable shuttle service that would provide residents and visitors with improved transit service between Downtown and Uptown.			●			●		N/A
Policy 3C - Implement Transit Priority Treatments								
Actions								
• 3C.1: Work in partnership with TransLink to review transit reliability and identify where delays are occurring.	●						●	N/A
• 3C.2: Work in partnership with TransLink to develop a list of potential transit priority measures and priorities.		●					●	N/A

POLICIES AND ACTIONS - TRANSIT

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 3C - Implement Transit Priority Treatments								
Actions								
• 3C.3: Work in partnership with TransLink to strategically implement transit priority measures.		●	●		●			$$
Policy 3D - Develop Transit Oriented Communities								
Actions								
• 3D.1: Consider TransLink's Transit Oriented Communities guidelines and other relevant best management practices in the development of plans for SkyTrain station areas and Frequent Transit Network corridors.		●	●				●	N/A
• 3D.2: Work with TransLink to develop and implement a Compass Card program that enables developers to provide ongoing transit pass subsidies in support of reducing parking requirements.			●				●	N/A
• 3D.3: Apply TransLink resources to accelerate the development of pedestrian and bicycle facilities that facilitate access to transit routes in employment and residential areas.		●					●	N/A
• 3D.4: Through City land-use planning processes, explore the potential for developing transit oriented neighbourhoods at appropriate locations in the community.			●				●	N/A
Policy 3E - Provide Excellent Customer Facilities and Information								
Actions								
• 3E.1: Develop a plan to prioritize and install transit shelters throughout the City, with a target of having 75% of all feasible stops provided with adequate weather protection and seating by 2020.	●	●			●			$$
• 3E.2: Work with TransLink to provide stairs and an elevator or accessible ramp from the Sapperton Station to the Braid Industrial Area to improve access to employment and waterfront greenways.		●	●				●	N/A
• 3E.3: Work with TransLink to ensure bus route and system maps or route schedules are readily available and accessible for transit users at bus stops and at SkyTrain stations.		●					●	N/A
• 3E.4: Work with Translink to support real-time information at transit stops along Frequent Transit Network corridors.		●					●	N/A



Policy 3E - Provide Excellent Customer Facilities and Information
Actions

- 3E.5: Support TransLink's SkyTrain Station and Exchange Improvements Program to upgrade existing stations and exchanges in order to accommodate increasing passenger volumes, meet accessibility commitments and improve the customer experience. Prioritize improvements at Columbia Station in order to accommodate future demand from the Evergreen Line and Surrey Light Rail Transit lines.

Policy 3F - Improve Safety and Accessibility of Transit
Actions

- 3F.1: Retrofit all remaining inaccessible bus stops in the city where feasible (i.e. suitable grade for ramp deployment, sufficient right-of-way, etc.) to provide 100% accessible transit stops in the City by 2016 where technically feasible.
- 3F.2: Work with TransLink to improve safety and security at SkyTrain stations.
- 3F.3: Work with TransLink to improve interchange facilities for pedestrians and cyclists, including better bicycle-transit integration at SkyTrain stations, bicycle parking options and complete sidewalks around FTN corridors and SkyTrain stations.
- 3F.4: Work with TransLink to improve service integration between transit node and taxi services, especially for passengers with special needs.

Policy 3G - Promote Region-Wide Transit Improvements
Actions

- 3G.1: Support rapid transit improvements and projects throughout the Metro Vancouver region that can enhance the use of the SkyTrain and other transit services and reduce automobile-dependency across the region, including the Evergreen, Surrey Light Rail Transit, and Broadway Rapid Transit Lines
- 3G.2: Support travel demand management measures in respect of financial disincentives for automobile use, such as fuel tax, carbon tax, and road pricing schemes that can actively encourage more people to use transit throughout the region.

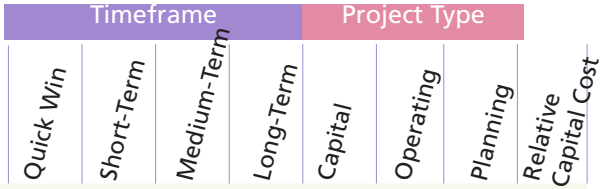
POLICIES AND ACTIONS - GREAT STREETS

	Timeframe				Project Type			
	Quick Win	*Short-Term*	*Medium-Term*	*Long-Term*	*Capital*	*Operating*	*Planning*	*Relative Capital Cost*
Policy 4A Actions								
• 4A.1: Strive to implement walking, cycling, transit and place-making qualities as development occurs and as part of street revitalization efforts to enhance usage of Great Streets.		●	●	●	●			$$
• 4A.2: Increase building setback through regulatory bylaws to expand pedestrian activity space		●					●	N/A



POLICIES AND ACTIONS - MANAGED ROADS

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 5A - Updated Street Network Classification								
Actions								
• 5A.1: Update the City's design standards to reflect multi-modal guidelines		●					●	N/A
Policy 5B - Major Road Network Improvements								
Actions								
• 5B.1: Direct regional traffic to the Major Road Network and discourage regional traffic from using New Westminster's internal road network			●		●			
• 5B.2: Make improvements to the Major Road Network to reflect regional traffic volumes and composition while minimizing impacts on the internal road network to encourage through traffic onto the most appropriate routes.				●	●			$$$
• 5B.3: Apply the principle of no net increase to general purpose traffic within the City to the city road network, other than for safety and for accommodating walking, cycling, and transit	●	●	●	●			●	N/A
Policy 5C - Manage Internal Road Network								
Actions								
• 5C.1: Work towards a road network where serious injuries and fatalities are exceedingly rare. Continue to carry out and update collision reviews every five years. These reviews should prioritize safety mitigation projects based on factors such as number of collisions, severity, ability to reduce collisions and cost			●				●	N/A
• 5C.2: Minimize driveways on busy Arterial and Collector Corridors; especially through the land development process or capital infrastructure improvements		●	●					N/A
• 5C.3: Update the Queensborough Community Transportation Plan	●	●					●	N/A



	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 6A - Implement changes to the New Westminster truck route network in the near term								
Actions								
• 6A.1: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of Royal Avenue from the truck route network including the reduction of the hours of truck operations and re-assess the goods movement network within the Pattullo Bridge Replacement Project.			●				●	N/A
• 6A.2: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of East Eighth Avenue from the truck route network. Work with TransLink to re-instate a 24 hours direct on-ramp from Columbia Street onto the Pattullo Bridge and re-assess the goods movement network within the Pattullo Bridge Replacement Project.		●					●	N/A
• 6A.3: Work with TransLink and provide other necessary information within the legislative framework in support of the removal of East Columbia Street (between Brunette Avenue and Braid Street) from the truck route network and re-assess the goods movement network within the Pattullo Bridge Replacement Project.		●					●	N/A
• 6A.4: Work with TransLink to process the submitted technical documents and provide other necessary information to TransLink in support of the removal of Ewen Avenue east of Derwent Way from the truck route network.	●						●	N/A
Policy 6B - Long-Term Goods Movement Strategy								
Actions								
• 6B.1: Work with the Ministry of Transportation and Infrastructure, TransLink and stakeholders through processes such as the Regional Transportation Strategy and Pattullo Bridge Project to minimize truck traffic along Stewardson Way, Front Street, Royal Avenue, East Columbia Street and Brunette Avenue by re-routing east-west regional truck traffic between westerly areas (i.e. Burnaby, Richmond, Queensborough, Annacis Island) and the easterly areas (i.e. Northeast Sector) to the South Fraser Perimeter Road and the Port Mann Bridge.			●	●			●	N/A
• 6B.2: Encourage the Ministry of Transportation and Infrastructure, TransLink and stakeholders to improve connectivity between the South Fraser Perimeter Road and the Port Mann Bridge, or to consider a potential new crossing between Surrey and Coquitlam as identified in the 2013 Pattullo Bridge Strategic Review Process.			●				●	N/A
• 6B.3: If east-west goods movement through New Westminster is considered essential by the region, provincial or federal agencies, pursue an east-west goods movement tunnel connecting Highway 1 with Highway 91A or a potential new crossing between Surrey and Coquitlam as identified in the 2013 Pattullo Bridge Strategic Review Process by working with the Ministry of Transportation and Infrastructure, TransLink and other stakeholders, and removing Front Street and Royal Avenue from the regional truck network, except for local deliveries.				●			●	N/A

POLICIES AND ACTIONS - MANAGING GOODS MOVEMENT

	Timeframe				Project Type			
	Quick Win	*Short-Term*	*Medium-Term*	*Long-Term*	*Capital*	*Operating*	*Planning*	*Relative Capital Cost*
Policy 6C - Discourage the use of Pattullo Bridge as the free alternative truck route to the tolled Port Mann Bridge								
Actions								
• 6C.1: Work with the Ministry of Transportation and Infrastructure to reduce the tolling structure for heavy trucks on the Port Mann Bridge to discourage the use of Pattullo Bridge as a "free alternative".		●					●	N/A
• 6C.2: Work with TransLink to ban or restrict heavy trucks on Pattullo Bridge.		●	●				●	N/A
• 6C.3: Work with TransLink and regional partners to establish regional tolling as a travel demand management measure for the Metro Vancouver area as an immediate priority.			●				●	N/A
Policy 6D - Promote integration and co-existence of local businesses served by trucks with other land uses in the City								
Actions								
• 6D.1: Work with local businesses, the transport industry and the development community to minimize the impact of truck activities on adjacent land uses.			●			●		N/A
• 6D.2: Work with enforcement agencies to minimize non-compliant traffic operations on city streets, in particular trucks operating outside of designated truck routes.			●			●		N/A
Policy 6E - Support regional initiatives and programs that integrate goods movement management and activities in Metro Vancouver	●							N/A
Actions								
• 6E.1: Encourage TransLink and Port Metro Vancouver, working with other partners such as Metro Vancouver, the Gateway Council, railways and Transport Canada, to develop and implement programs to better integrate and improve efficiency of goods movements with the goal of minimizing truck trips through urban neighbourhoods and, where feasible, promoting use of the rail network and water-based transport. This may include seeking better coordination of deliveries, loading times, warehouse operations, shipping container storage and exploring off-peak cargo delivery hours.			●	●			●	N/A





	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 7A - Prioritize Traffic Calming Treatments								
Actions								
• 7A.1: Continue to identify and prioritize New Westminster neighbourhoods that require traffic calming treatments to improve neighbourhood livability.	●				●			$$
• 7A.2: Align traffic calming locations where possible with the Pedestrian Plan, Bicycle Plan, Greenway and Trails Master Plan and 'Best Routes to School' plan, to enhance the safety, comfort, and appeal of key walking and cycling corridors.		●	●	●	●			$$
Policy 7B - Develop Green Streets								
Actions								
• 7B.1: Consider developing a Green Streets Program to enhance green spaces in public rights-of-way.			●				●	N/A
• 7B.2: Integrate rainwater management, including rain gardens and bioswales, into street-side gardens, to reduce run-off and improve drainage.		●	●	●	●			$$
• 7B.3: Incorporate pedestrian and cycling amenities into green street initiatives, where possible, to increase the attractiveness of walking and cycling in New Westminster's neighbourhoods.		●	●	●	●			$$
Policy 7C - Manage Through Traffic								
Actions								
• 7C.1: Keep through traffic on major routes.		●	●	●			●	N/A
• 7C.2: Work with other municipalities and jurisdictions, including TransLink, to ensure changes to their roads and infrastructure do not result in additional traffic in New Westminster.		●	●	●			●	N/A
• 7C.3: Work towards the principle of no net added capacity for vehicles passing through the city.	●	●	●	●			●	N/A
Policy 7D - Maintain Local Access								
Actions								
• 7D.1: Maintain and improve local access for residents, employees, and businesses in New Westminster without encouraging additional through traffic.		●					●	N/A

POLICIES AND ACTIONS - LIVEABLE NEIGHBOURHOODS

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 7D - Maintain Local Access								
Actions								
• 7D.2: Manage traffic at key entry points to the city to minimize the impact of through-traffic while maintaining access to local destinations.			●				●	N/A
• 7D.3: Work with local residents and businesses on establishing the right balance between local access and through traffic.			●				●	N/A
Policy 7E - Minimize Driveways on Busy Arterial and Collector Corridors								
Actions								
• 7E.1: Develop a city-wide plan identifying laneway requirements.		●					●	N/A
• 7E.2: Develop and implement necessary regulatory tools for completing laneway connections.			●	●			●	N/A

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 8A - Promote Best Routes Programming								
Actions								
• 8A.1: Continue to work with the New Westminster School District and local organizations to develop and update Best Routes to School travel programming for all schools in New Westminster.	●						●	N/A
• 8A.2: Work with local partners to establish Best Routes for Seniors accessing key community destinations in the city.		●					●	N/A
• 8A.3: Develop a Best Routes to Transit initiative, focussing on frequent transit corridors.		●					●	N/A
Policy 8B - Manage Parking								
Actions								
• 8B.1: Support the demand management recommendations of the Downtown Parking Strategy.	●					●		N/A
• 8B.2: Concentrate parking strategies within New Westminster's Downtown, SkyTrain areas and Frequent Transit Network corridors.		●				●		N/A
• 8B.3: Ensure there is adequate street space for accessibility challenged drivers and passengers to load, stop and park.		●				●		N/A
Policy 8C - Support Regional Policies to Reduce Automobile Dependency								
Actions								
• 8C.1: Support tolling of the planned replacement of the Pattullo Bridge.	●						●	N/A
• 8C.2: Support equitable regional road pricing strategies across Metro Vancouver.		●	●				●	N/A
• 8C.3: Support the development of a regional goods movement network designed to minimize the impact to neighbourhoods.		●	●				●	N/A
Policy 8D - Support Education and Awareness Initiatives								
Actions								
• 8D.1: Continue to work with other agencies and organizations for the delivery of TransLink's trip reduction programs.		●	●				●	N/A

POLICIES AND ACTIONS - Supportive Policies and Programs

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 8D - Support Education and Awareness Initiatives								
Actions								
• 8D.2: Continue to work with other agencies and organizations to promote road safety and skills to enhance the confidence and skills of vulnerable road users.		●	●				●	N/A
• 8D.3: Support events and initiatives such as Bike/Walk to Work, IWalk, World Walking Day, cyclovias, and greenway mapping that educate and encourage people to use sustainable modes of transportation.	●	●					●	N/A
Policy 8E - Market and Promote Sustainable Transportation								
Actions								
• 8E.1: Produce and regularly update an on-line interactive mapping resource for cycling, walking, and transit routes.	●						●	N/A
• 8E.2: Create a dedicated sustainable transportation website that educates residents and visitors on the City's transit, cycling, and walking networks and benefits of sustainable transportation.	●						●	N/A
• 8E.3: Work with car share providers to increase car share programs		●					●	N/A
• 8E.4: Support the development of a wayfinding plan in New Westminster for the walking, cycling, transit and road networks, in order to facilitate better information about accessing key destinations and routes.	●						●	N/A
Policy 8F - Integrate Transportation Demand Management into City Planning								
Actions								
• 8F.1: Continue to incorporate requirements into the planning and development processes that seek to reduce travel demand and dependency on the private vehicle.		●	●				●	N/A
Policy 8G - Build Partnerships with Stakeholders								
Actions								
• 8G.1: Build on current partnerships and explore new partnerships, with other organizations, employers and agencies, to more effectively deliver supportive programming that promote an efficient transportation system.		●	●	●			●	N/A







5.2 Monitoring Plan

A monitoring strategy is essential to ensure that the Master Transportation Plan is implemented as intended, and to determine whether the plan is achieving its goals. A monitoring program will also enable City staff to justify continued expenditures and allocation of resources to implement prioritized initiatives of the Master Transportation Plan. Monitoring also provides a means of identifying changing conditions which would require changes to the Plan.

The monitoring program needs to be:

- **Meaningful.** The monitoring strategy should yield meaningful results and point to the success in achieving the vision, goals and targets of the Master Transportation Plan.
- **Measurable.** The monitoring program needs to establish criteria that are readily measurable and for which data or information can be readily obtained.
- **Manageable.** The monitoring program needs to take into account the resource limitations of the City and will identify measures where information is accessible or data is simple to collect.

The monitoring program will focus on two components: first, the degree of progress in implementing the plan, and secondly, the outcomes of the plan, as summarized below. It is recommended that the City of New Westminster monitor progress in each of these areas every 2 to 4 years, based on data availability.

5.2 Monitoring Plan

1.0 Implementation Progress

- Number of completed projects identified in the Master Transportation Plan
  - Sidewalks (# projects)
  - Bicycle Route (# projects)
  - Transit (# bus stop improvements)
  - Street Network (# projects)
  - Traffic calming plans (# plans)
- Annual investment levels
  - Walking ($ and % of City's total transportation capital investments)
  - Cycling ($ and % of City's total transportation capital investments)
  - Transit ($ and % of City's total transportation capital investments)
  - Street Network ($ and % of City's total transportation capital investments)
- Network development
  - Sidewalk network (km of existing facilities)
  - Bicycle Network (km of existing facilities)
  - Transit Network (km of FTN corridors)

2.0 Outcomes

- Mode Share of Work Trips
  - Transit (%)
  - Walking (%)
  - Cycling (%)
  - Auto Driver
  - Auto Passenger
- Traffic counts
  - Average Annual Daily Traffic volumes on all MRN, arterial and collector roads
- GHG Emissions
  - Transportation-related GHG emissions (tonnes)
- Safety
  - Number of collisions per year normalized with traffic volumes
  - Number of fatalities per year normalized with traffic volumes
  - Number of collisions and fatalities involving vulnerable road users normalized with traffic volumes
- Screen line counts for:
  - Heavy Trucks
  - Bicycles
  - Pedestrians
  - Motor Vehicles
- Regular counts of Cyclists on Primary Routes

Background

Changes in technology have drastically reshaped how we've moved over the ages. Recent innovations like shared mobility, micromobility, autonomous vehicles and the electrification of transport, are changing expectations with how transportation needs are accommodated.

These new technologies bring possibilities to improve our transportation system, including opportunities to reduce reliance on fossil fuels, improve goods movement, and improve mobility and access to destinations. With proper thought, due diligence, and foresight, micromobility can be managed and harnessed to improve transportation systems, cities, and quality of life. This management must be done in conjunction with neighbouring municipalities and at the regional level with Translink. A coordinated approach to new mobility solutions will help increase the likelihood of success and permanency.

New mobility is currently assuming several forms, but can be generalized into three main areas:

1. Micromobility

2. Autonomous Mobility

3. The Electrification of Mobility.

- **Micromobility** includes small electric and/or human powered transportation devices that provide mobility to users over relatively short distances. These vehicles generally operate at speeds faster than walking, but slower than an automobile. Examples of micromobility include bicycles, scooters, skateboards, and hoverboards.
- **Autonomous mobility** refers to the automation of vehicles or devices that would normally require a driver or an operator. This includes autonomous automobiles, including personal automobiles, ride-hailing, shuttles, and busses, as well as autonomous freight vehicles and delivery vehicles, such as automated ground robots and drones.
- **The electrification of mobility** includes not only micromobility and personal vehicles, and buses, but also the future expansion to larger freight vehicles with continued improvements to electric battery ranges and power. It is also expected that future cost reductions will increase adoption levels of electrified mobility.



Micromobility

Bicycle sharing programs were the original shared micromobility platforms and have. With sufficient station density, consistent bicycle availability, supporting cycling infrastructure, and the population density to support them, bicycle sharing programs can flourish.

The ability to pick up a bike at will and return it to any station within the operating area, while not worrying about bicycle theft or indoor storage creates a level of convenience and security unparalleled by personal bicycles. Electric bicycle sharing promises to bring this convenience to the next level as these e-bikes can help overcome traditional barriers to cycling, like hilly terrain, or a lack of physical endurance. They are not only excellent first- and last-mile connectors, but can replace short-distance automobile trips too.

Different ownership models (Public, Private non-profit, Private for-profit), much like the different types of bicycle sharing systems (dock-based, dockless, and hybrid), can be better suited for different contexts. Conducting a feasibility will help to understand if the City has the necessary elements for a bicycle sharing program to succeed, and what a successful program would look like in New Westminster.

Other shared mobility programs, such as electric scooters, will need to await Provincial legislation that provides the sufficient direction for municipalities to establish appropriate operating parameters. Currently eight municipalities have been granted permission to operate electric scooters under the "Electric Kick Scooter Pilot Project Regulation" [B.C. Reg. 200/2021]. This regulation will be in effect until April 5, 2024. Until such time, the City, through its regional partnerships should encourage the Provincial Government to regulate electric micromobility devices.

Micromobility Options in the City of Richmond



Photo credit: City of Richmond

Autonomous Mobility

Though SkyTrain is an example of autonomous mobility, future forms of autonomous mobility will likely be operating on streets and sidewalks.

Many North American municipalities and states are operating pilot projects or have adopted legislation permitting and regulating the use of various autonomous devices in the past couple years. These include testing of autonomous cars by Google, Uber, Apple, Samsung, GM, Tesla, Nissan, as well as testing of autonomous delivery vehicles.

Autonomous delivery vehicles, including ground robots and drones, which have the potential to support "last-mile" delivery will also require careful consideration regarding how these devices can be used on streets and in the air. If not managed appropriately, these devices have the potential to disrupt the public realm and restrict mobility within public rights-of-way.

Electrification of Mobility

The City has implemented Zoning Bylaw regulations that require Level 2 charging stations for all residential vehicle parking spaces in new developments, and electrical outlets within long-term bicycle parking areas.

As noted, most electric micromobility devices are unregulated by the Province, with the exception of electric bicycles (motor-assisted cycles) which, under the Motor Vehicle Act, prohibits operation by anyone under the age of 16.

An autonomous drone delivering medicine



Photo credit: TechCrunch

DETAILED POLICIES AND ACTIONS

	Timeframe				Project Type			
	Quick Win	*Short-Term*	*Medium-Term*	*Long-Term*	*Capital*	*Operating*	*Planning*	*Relative Capital Cost*
Policy 9A - Plan for Micromobility Actions								
• 9A.1: Work with Translink and other municipal partners to ensure a cohesive approach to micromobility region-wide.			●				●	N/A
• 9A.2: Through regional partnerships, encourage the Provincial Government to regulate and provide guidance on all micromobility devices under the Motor Vehicle Act.			●				●	N/A
• 9A.3: Conduct a feasibility study for a future electric bicycle sharing program.		●					●	$
• 9A.4: Adopt a permitting framework, inclusive of operational parameters, service requirements, data sharing, and pricing controls for future shared e-scooter programs, pending regulation from the Provincial Government.			●				●	$
• 9A.5: Adopt a policy that gives direction on how equity and universal accessibility must be considered in any shared micromobility permitting program.			●				●	N/A
• 9A.6: Complete the Active Transportation Network Plan.		●					●	$
• 9A.7: Identify and prioritize new locations for publically accessible bicycle parking.		●					●	N/A
• 9A.8: Investigate funding sources and opportunities for new micromobility parking on-street and in the furniture zones.		●	●				●	N/A
• 9A.9: Through partnership with Translink investigate opportunities for fare integration with local shared micromobility services.			●				●	N/A

DETAILED POLICIES AND ACTIONS

	Timeframe				Project Type			
	Quick Win	Short-Term	Medium-Term	Long-Term	Capital	Operating	Planning	Relative Capital Cost
Policy 9B - Plan for Autonomous Mobility Actions								
• 9B.1: Working with TransLink and regional partners, ask the provincial government to adopt a framework or regulations for autonomous vehicles			●	●			●	N/A
• 9B.2: In collaboration with Translink and municipal partners, ensure a cohesive approach to autonomous vehicles and autonomous mobility region-wide.			●	●			●	N/A
Policy 9C - Support the Electrification of New Mobility Actions								
• 9C.1: Amend the Zoning Bylaw to include a provision for electric vehicle charging requirements for new non-residential buildings.		●					●	N/A
• 9C.2: Invest in secure e-bike parking at City Facilities.		●	●		●			$$
• 9C.3: Implement an e-bike educational program for seniors.			●				●	$
• 9C.4: Investigate and determine appropriate parameters for curbside electric vehicle charging in commercial areas.		●					●	N/A

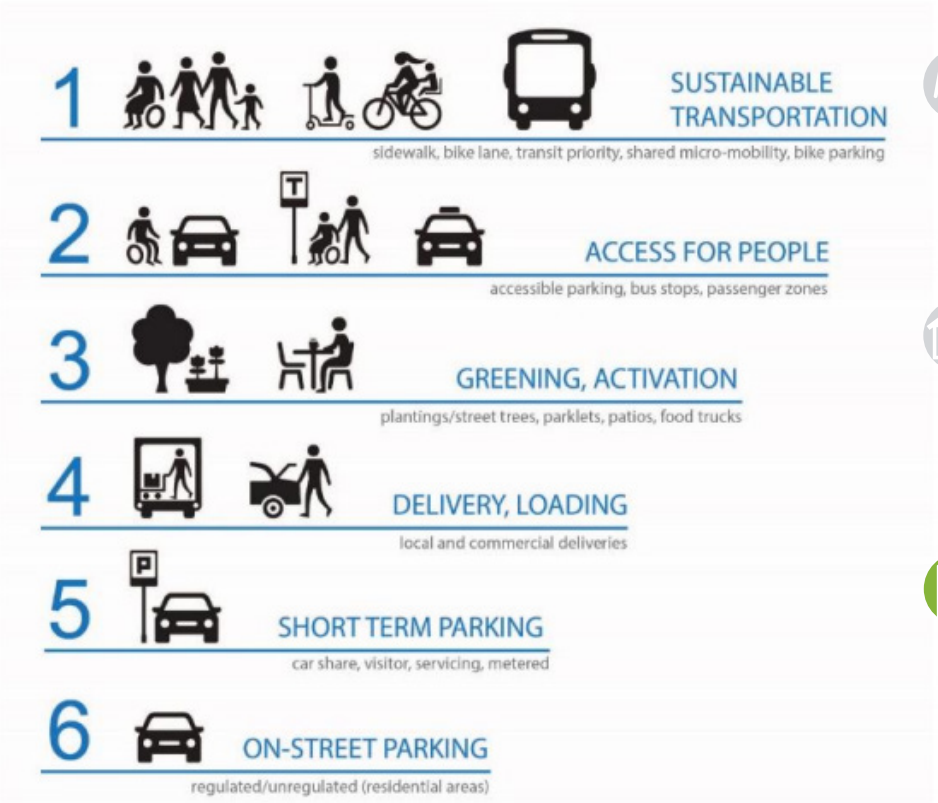
Curbside space is where mobility meets access. As transportation options continue to evolve, there will be increased demand for cubside space. Optimizing this valuable flex space will need to be done using clear principles and priorities. The prioritization of curb space needs to account for the local context of land use and activity within street blocks.

At a general level, the figure to the right, Heirarchy of Curbside Access, identifies the functional priorities for curbside uses. These priorities will assist with evaluating the trade-offs necessary and help ensure that the allocation of curbside and right-of-way in specific locations meets the City's broader community, transportation, and livability goals.

Designated curbside uses in the City are generally allocated on a request or as-needed basis for loading zones, taxi zones, and accessible parking spaces. The demand for curbside space is evolving and increasingly requires proactive and intentional management to support City goals. Many larger cities are now developing and deploying technology for the management of curbside space. As these technologies become more advanced and widespread, the City may consider adopting various new approaches for managing curbside space, particularly in commercial areas like Downtown.

Curbside space is starting to be managed differently than it traditionally has been, accordingly the hierarchy of prioritization of curbside space should be made clear. Sustainable transportation modes should be prioritized whenever possible. This includes sidewalk space for pedestrians, bike or transit priority lanes, shared micromobility and bike parking.

Heirarchy of Curbside Access



	Timeframe				Project Type			
	Quick Win	*Short-Term*	*Medium-Term*	*Long-Term*	*Capital*	*Operating*	*Planning*	*Relative Capital Cost*
Policy 10A - Modernize Curbside Management Policies and Approaches Actions								
• 10A.1: Consolidate curbside uses for efficiency and to optimize the space allocated to specific functions		●	●				●	N/A
• 10A.2: Implement flex zones that accommodate multiple uses in the right-of-way. This can include combined commercial and passenger loading zones, different functions at different times using time-of-day restrictions, as well as multiple functions occupying the same block.		●	●		●			$
• 10A.3: Explore options for the digitization of curbside space as a means of establishing dynamic parking pricing and parking durations to optimize parking use.			●				●	N/A




NEW WESTMINSTER
URBAN
SYSTEMS