Port Moody Master Transportation Plan Final Report

Endorsed by Council on Tuesday March 14, 2017

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Executive Summary

TransPort Moody is a long-term, strategic, master transportation plan for Port Moody that will help guide transportation and land use decisions, as well as public investments, over the next 20 years and beyond. It will provide the City with a template for how to move forward, build upon past successes, and rise to meet new and emerging challenges. *TransPort Moody* (the Plan) will help Council meet its strategic objective of moving people by supporting public transportation, encouraging walking and cycling, and creating effective connections between neighbourhoods.

The Plan sets forth both high level policies and actions as well as measurable targets to achieve our vision for the future of transportation in Port Moody. In addition to providing clear direction for transportation, *TransPort Moody* builds upon and supports the directions outlined in the City's Official Community Plan (OCP) and other supporting municipal plans and directions.

TransPort Moody was developed over two years with extensive public and stakeholder engagement. In total, over 50 engagements took place to develop the Plan, including workshops, surveys, public open houses, and meetings with stakeholders, industry, and Council. Feedback from residents and stakeholders was a vital part of the process and informed the development of a comprehensive transportation strategy.

Three discussion papers were developed as part of the *TransPort Moody* process. These discussion papers provided an opportunity to check-in with Council and the community. This phased approach helped ensure that the directions proposed were supported and would enable the community to move forward to the next phase of developing the Plan.

It is widely accepted that Port Moody's street network is largely built out. There are few opportunities to build new roads or widen existing roads, so we must use our existing streets as efficiently as possible to move all road users, including people who walk, cycle, drive, or take transit. We also know that building new roads or widening roads will simply lead to more demand for even more people to travel by automobile, which would create even more congestion and have a negative impact on our community's liveability.

Technical analysis was a critical part of the *TransPort Moody* process to ensure that we understood existing and future travel demands on Port Moody's street network. The traffic analysis confirmed that key sections of the city's arterial road network are congested for roughly three hours each weekday, during the morning and afternoon peak periods. During the public and stakeholder engagement sessions, members of the public and technical staff agreed that if we build more lanes and wider roadways, more people in the region will travel through the community in the morning and afternoon peak hours. Traffic modelling projections support this statement. It is also clear that wider roads and more vehicles would discourage comfortable street spaces, reducing the community's livability. Although major road widenings were considered as options throughout the planning process, they have not been included in *TransPort Moody* as they were not supported by the community. Instead, the Plan identifies localized intersection improvements to reduce some wait times for vehicular travel.

Engagement with the community confirmed that a transportation plan for Port Moody should manage the impacts of peak hour traffic with steps that promote liveability and improve street space. In particular, the community recognized that sections of our main corridor – St. Johns Street – are not comfortable places to walk, cycle, and

wait for transit. The Plan recognizes that St. Johns Street and other locations in the city should be improved, and provides direction in the form of projects to address this.

The Millennium Line Evergreen Extension, which includes stations in Moody Centre and Inlet Centre, was recognized as the potential solution to manage the impact of congestion at three peak hours of each weekday. The Evergreen Extension has a people-moving capacity of 4,000 people per peak hour, which is equivalent to opening a new four-lane highway, and will effectively double the people-moving capacity in the Moody Centre area. SkyTrain is not a cure-all solution, however. Members of the public identified a current lack of accessible, comfortable transportation infrastructure to support the use of SkyTrain service. The Plan identifies key projects to improve transportation infrastructure for walking, cycling, and transit to promote best use of the Evergreen Extension.

1. Setting the Stage

1.1 Introduction

Port Moody is growing, along with our neighbours in Coquitlam, Port Coquitlam, Anmore, and Belcarra, and this growth is particularly evident in Moody Centre and Inlet Centre. More residents and jobs mean greater travel demands, as more and more people are travelling to, from, and within our city.

The Millennium Line Evergreen Extension is one of the largest-ever investments in our community's transportation infrastructure. In light of this investment and other factors, Port Moody is moving forward with a new vision for transportation, articulated in a new long-term transportation plan – *TransPort Moody*. The overall goal of *TransPort Moody* is to identify ways to maintain and improve the quality of life, economic vibrancy, and environmental sustainability of the city, while managing the effects of non-local and regional traffic through the community.

TransPort Moody has been developed while working closely with the community over the past two years, and provides a strategic long-term vision for Port Moody that will guide transportation investments and policy for the next 20 years and beyond. The Plan sets a direction for the city, with a vision and supporting goals and targets. The Plan also identifies key projects to help guide investments to reach our goals. The Plan focuses on improving our road network, and providing better options for walking, cycling, and using transit. By developing *TransPort Moody*, we will keep pace with the anticipated growth and changes in transportation conditions, while improving quality of life, safety, and mobility for residents.

The previous master transportation plan was adopted in 2005 and provided recommendations for the road network, non-motorized transportation, and transit over the short, medium, and long term. Since 2005, we have made significant progress in implementing many of the recommendations. There have also been several other changes in Port Moody and the surrounding area since 2005. The City has adopted several overarching documents in recent years, including a new Official Community Plan (OCP), Council Strategic Plan for 2015-2018, Parks and Recreation Master Plan, and Community Sustainability Plan. In addition to these recent City plans and policies, TransLink has developed the first part of an update to the Regional Transportation Strategy, and developed a localized transit plan, called the Northeast Sector Area Transit Plan, which identifies a long-term vision for service and infrastructure priorities for the municipalities of Coquitlam, Port Coquitlam, Port Moody, Anmore, and Belcarra. The most significant change since the 2005 plan is the opening of the Millennium Line Evergreen Extension, which has brought SkyTrain to Port Moody. *TransPort Moody* takes into account recent changes of land use, transportation investments, and policies, and provides a revised approach to transportation planning moving forward.

1.2 Plan Development and Community Engagement



TransPort Moody was developed through a five-phase process over the past two years, as shown below.

To ensure that *TransPort Moody* meets the needs of residents, stakeholders, regional public agencies, local businesses, and Council, the Plan involved extensive engagement with stakeholders. Through the process, we held over 50 meetings and engaged with hundreds of Port Moody residents and stakeholders.

Development of the Plan was guided by both a **Technical Advisory Committee**, representing internal and external agencies, and a **Public Advisory Committee**, representing members of the public, including community associations, local non-profit organizations, business interests, HUB Cycling, and a number of other key public groups. We also worked closely with an internal **Steering Committee** made up of senior City of Port Moody staff and council members, and engaged regularly with the City's **civic committees**, including the Transportation Committee, Youth Focus Committee, Senior Focus Committee, Community Care Committee, Environmental Protection Committee, and the Economic Development Committee.

The Plan was developed based on extensive input from the public and key stakeholders, using a range of communications tools and engagement approaches with **community members**. Key engagement opportunities included:

- Public workshops
 - Workshop #1: July 9, 2015
 - Workshop #2: September 21, 2015
 - Workshop #3: January 14, 2016



Open houses

- Open House #1: Rocky Point Park, July 1, 2015
- Open House #2: City Hall Galleria, February 24, 2016

Advisory Committee Meetings

- o Technical Advisory Committee Phase 2 Meeting, June 15, 2015
- o Public Advisory Committee Phase 2 Meeting, June 24, 2015
- o Public Advisory Committee Phase 3 Meeting, October 25, 2015
- o Technical Advisory Committee Phase 3 Meeting, November 23, 2015
- o Public Advisory Committee Phase 4 Meeting, January 25, 2016
- Technical Advisory Committee Phase 4 Meeting, February 3, 2016
- Surveys
 - Transportation Issues, Opportunities, and Priorities Survey: June 22 July 7, 2015
 - Transportation Possibilities Survey: February 22 29, 2016

1.3 City's Role and Partnerships

The City has a number of ways in which it can influence travel behaviour and effect change in transportation. Some things are largely within the City's control, such as our public rights-of-way, street infrastructure, land use, and much of the built environment. However, much of 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 of B.C. The City's role in transportation includes:

- building and maintaining City-owned, public rights-of-way and infrastructure, including streets, sidewalks, and public spaces;
- guiding development on private property through land use and urban design policies and guidelines;
- managing how our streets are used through rules, and regulations;
- advocating and partnering with outside agencies on regional transportation improvement projects and policy; and
- educating and empowering citizens to make sustainable transportation choices.

Creating a successful plan is only possible by working with others. Partnerships are critical to achieving success, particularly in a region with 22 other municipalities, regional transportation and planning agencies, and many overlapping jurisdictions and interests. Our major partners include:

- TransLink, the regional transportation agency;
- the Province of British Columbia;
- Metro Vancouver and neighbouring municipalities;
- Vancouver Coastal Health and other health care agencies and providers; and
- the Insurance Corporation of British Columbia, through its Road Improvement Program.

1.4 TransPort Moody in Context

Transportation issues and investments in Metro Vancouver are initiated through a number of related plans. This section provides a high level overview of how *TransPort Moody* integrates with directions and initiatives across the region.

- **Regional and provincial governments:** TransLink, in coordination with the Mayors' Council, sets forth regional priorities for transportation in the region. Several key documents establish this vision from both a land use and transportation perspective.
 - Metro Vancouver: Regional Growth Strategy (2011)
 - TransLink: Regional Transportation Strategy (2013)
 - TransLink: Northeast Sector Area Transit Plan (2015)
 - o British Columbia: B.C. on the Move, A 10-Year Investment Plan (2015)
 - Mayors' Council: Regional Transportation Investments a Vision for Metro Vancouver (2016)

Neighbouring municipalities:

- Village of Anmore: Draft Official Community Plan (2015)
- City of Coquitlam: Strategic Transportation Plan (2012)
- Village of Belcarra: Official Community Plan (2011)
- City of Burnaby: Transportation Plan (2004)

Institutional partners

• Port Metro Vancouver (2010)

Previous City of Port Moody plans:

- o Official Community Plan (2014)
- Master Transportation Plan (2005)
- Draft Master Cycling Plan (2012)
- Murray Clarke Corridor Study (2013)
- Traffic Signal Asset Management Plan (2014)
- o loco Road Traffic Safety Improvements Study (2010)

TransPort Moody provides direction for transportation policy and investments in Port Moody. The Plan is fundamentally based on recommendations from the OCP, which outlines the City's long-term vision for Port Moody's future. The OCP is endorsed by Metro Vancouver as per directions set forth in the Regional Growth Strategy.

Port Moody is facing a number of challenges, some old and some new, some global in nature, and others specific to our road network and location in the region. *TransPort Moody* provides a roadmap for how to manage these challenges, as moving forward will require difficult decisions that will affect our community from a transportation, health, community planning, and liveability perspective. The section below provides some context on our current challenges today, and presents recommendations on how we should move forward.

MANAGING THE TRAFFIC IMPACTS OF A GROWING REGION Port Moody has experienced steady population growth over the past two decades, nearly doubling in size between 1991 and 2011. Although Port Moody will continue to experience steady growth, with 16,000 more residents expected over the next 30 years, much more significant growth is projected in surrounding communities, with 145,000 additional residents projected in TransLink's Northeast Sector by 2045. Recognizing the impact this growth will have on traffic, the City is committed to relieving traffic congestion on major streets and intersections, and reducing the negative effects of regional through-traffic on the liveability of our community, by increasing transportation choices.

BALANCING LIVEABILITY AND CONGESTION HOURS Roadways in Port Moody operate with limited congestion levels for approximately 20 hours of an average weekday. Peak hours of congestion occur in the morning between 7am and 9am, and in the afternoon between 4pm and 6pm. During the public and stakeholder engagement sessions, members of the public and technical staff agreed that if we build more lanes and wider roadways, more people in the region will travel through the community in the morning and afternoon peak hours. Traffic modelling projections support this statement. It is also clear that wider roads and more vehicles would discourage comfortable street spaces, reducing the community's liveability. Although major road widenings were considered as options throughout the planning process, they have not been included in *TransPort Moody* as they were not supported by the community. Instead, the Plan identifies localized intersection improvements to reduce some wait times for vehicular travel.

INCREASING DEMAND FOR TRANSIT The Millennium Line Evergreen Extension is changing how people travel in Port Moody. The Evergreen Extension runs for 11 kilometres, with two of its seven stations located in Port Moody. The new line provides a people-moving capacity of 4,000 people per hour – the same as building a new four-lane highway. Now that this significant piece of transportation infrastructure is complete, the City will work with its partners to leverage strategic investments to meet existing and future demands for transit.

IMPACTS OF PHYSICAL INACTIVITY Although walking and cycling are important recreational activities in Port Moody, only three per cent of trips to workplaces are made by these active forms of transportation. The World Health Organization has identified physical inactivity as one of the leading risk factors for global mortality, and as an underlying factor for many chronic diseases. The City can promote physical activity as a part of everyday life by ensuring its built environment contributes to making walking and cycling convenient and comfortable transportation options for resident and visitors.

HIGH COST OF HOUSING The Vancouver region is one of the most expensive regions in Canada, and the high cost of living is a concern for many residents. Transportation and land-use have an important role to play in helping to reduce this cost. A recent study found that transportation costs effectively add the cost of a second mortgage to Metro Vancouver's suburban housing. The City can help residents save thousands of dollars each year by reducing the need to drive or own a car, which is estimated to cost over \$10,000 a year. We can do this by improving access to transit and making it more convenient to walk or cycle, and by building complete communities, where homes, workplaces, and schools are near to each other.

PROVIDING CHOICES FOR PEOPLE OF ALL AGES AND ABILITIES In the next 30 years, the number of Port Moody residents aged 65 and older will more than double. Travel behaviour typically changes as older populations create new and varied transportation needs. Providing a variety of transportation options, and designing streets and spaces throughout our community that are accessible to all, will be key to ensuring all residents can travel around Port Moody with ease and confidence. Port Moody is also home to a significant youth population, with a third of Port Moody residents aged 24 or younger. It is particularly important to focus on the safety and travel demands of this segment of the population, as most youth do not have access to automobiles and rely on transit, walking, cycling, and carpooling.

GREEN HOUSE GAS EMISSIONS The largest source of greenhouse gas (GHG) emissions within Port Moody is on-road transportation, which contributes approximately 55 per cent of the City's GHG emissions. We can help reduce the use of fossil fuels and the resulting GHG emissions by providing more transportation choices.

TRANSIT-ORIENTED DEVELOPMENT The Moody Centre and Inlet Centre stations will have a major impact on how Port Moody grows and develops. The City's OCP identifies a need to focus on integrating transit-oriented development (TOD) around these stations. Areas within a five- and ten-minute walk of the stations are expected to attract more people, jobs, and activity than ever before, creating a need for new, higher density, mixed-use developments. Homes and businesses located close to the stations will generate fewer vehicle trips and more trips by transit, walking, and cycling than other homes and businesses within the City.

2. Shaping the Future

2.1 Vision

The vision for *TransPort Moody* was developed in consultation with the community and builds upon the City's commitments as outlined in a number of plans and strategies, and in particular the vision statements identified in the OCP and the Council 2015 – 2018 Strategic Plan. The vision emphasizes Port Moody's role as a unique, safe and vibrant waterfront city, with a transportation system that provides choices and supports the development of a sustainable community for people of all ages and abilities.

Port Moody's multi-modal transportation system supports the development of a unique, safe and vibrant waterfront city.

It provides convenient and attractive transportation choices connecting residents and the region to the City's thriving commercial areas, parks, trails, and neighbourhoods.

The transportation network supports a healthy, active, liveable, and sustainable community for people of all ages and abilities.

The vision outlined above is represented in all projects, policies and action statements in TransPort Moody.

2.2 Goals and Objectives

TransPort Moody has seven goals, which are intended to provide clear direction to help achieve the vision identified above. The goals were developed to clearly align with the City's overarching goals identified in the Council 2015-2018 Strategic Plan. Each goal is supported by a series of objectives, which are more specific statements that define how these goals will be achieved. In combination with the overall goals, the proposed objectives will shape the directions explored within the Plan, as well as the criteria that will be used to evaluate options, measures of success, and priorities for implementing transportation system improvements.

Community Planning Goal:

Create compact, dense, and complete communities in Port Moody's core that support walking, cycling, and transit, and provide multi-modal connections to the city's distinct neighbourhoods.

Community Planning Objectives:

- 1. Create vibrant, liveable streets and places in the city's core that celebrate Port Moody's unique heritage, natural environment, and arts and culture.
- 2. Support Port Moody's Official Community Plan by connecting neighbourhoods and facilitating transitoriented development.

Moving People Goal:

Develop and implement an integrated, multi-modal transportation system that provides inclusive and affordable transportation choices for residents, businesses, and visitors.

Moving People Objectives:

- 1. Ensure the safe and efficient movement of people and goods between Port Moody and neighbouring municipalities.
- 2. Enhance streetscapes to promote vibrancy and social interaction through the movement of people.
- 3. Provide support systems to enhance opportunities for walking, cycling, and using transit.

Parks and Recreation Goal:

Enhance the city's unique natural environment by establishing connections to the waterfront and maintaining pathways for transportation and recreation to support the lives of citizens.

Parks and Recreation Objectives:

- 1. Ensure seamless connections between the city's transportation network and recreational opportunities, including parks and trails.
- 2. Provide connections to the waterfront, schools, nearby recreational destinations, and the natural environment.

Preserving the Environment Goal:

Support a shift towards a sustainable transportation system that prioritizes walking, cycling, transit, and emerging vehicle technologies to improve local air quality, reduce greenhouse gas emissions, and enhance the natural environment.

Preserving the Environment Objectives:

- 1. Develop a transportation system that has a reduced impact on the natural environment, including measures that will reduce greenhouse gas emissions and improve local air quality.
- 2. Support initiatives to encourage car-sharing and sustainable vehicle technologies.
- 3. Continue to support initiatives to provide green spaces within the streetscape, such as rain gardens and landscaping.

Service Excellence Goal:

Plan and implement transportation infrastructure through a responsible and integrated planning approach, which will include working closely with agencies and surrounding municipalities, and planning for inclusive and meaningful community engagement.

Service Excellence Objectives:

- 1. Ensure the transportation network is affordable, safe, and efficient to support all road users.
- 2. Engage community members and stakeholders throughout the planning and implementation process in a meaningful, transparent, and inclusive way.
- 3. Work with neighbouring municipalities to ensure an effective and connected transportation system throughout TransLink's Northeast Sector.

Economic Development Goal:

Ensure the city's transportation system supports a complete, vibrant, and engaged community connecting residents and visitors to thriving local businesses and community events, while allowing residents to live, work, and play locally.

Economic Development Objectives:

- 1. Ensure there are strong transportation connections between neighbourhoods, destinations, and local businesses.
- 2. Provide effective wayfinding in community areas, including commercial centres and recreational routes.
- 3. Develop a parking strategy that balances the needs of residents and businesses.
- 4. Promote community events and festivals that encourage the use of streets as spaces for celebration and interaction.

Arts and Culture Goal:

Provide a transportation system that goes beyond getting from one place to the next, and creates a space for social interaction that reflects Port Moody's culture, heritage, and support of the arts.

Arts and Culture Objectives:

- 1. Create streetscapes that capture the unique energy and cultural, social, and environmental characteristics of Port Moody.
- 2. Incorporate public art and community projects into the streetscapes in key areas of the city.

3. Support the City's Liveable Street Guidelines in the context of individual neighbourhoods.

2.3 Targets

Targets are a critical component of a transportation plan, as they will help to ensure that *TransPort Moody* is implemented as intended, and help to determine whether the plan is achieving its goals. Targets were developed throughout the planning process in consultation with the community.

Target 1: Double the Proportion of Trips Made by Sustainable Transportation

The City will double the proportion of trips made by walking, cycling, and transit. Currently, 20 per cent of all trips made by Port Moody residents for all purposes are made by walking, cycling, or transit. Through the actions laid out in *TransPort Moody*, the City seeks to increase the use of sustainable forms of transportation, so that, by 2045, 40 per cent of all trips made by Port Moody residents will be made by walking, cycling, or transit, as shown in **Figure 1.** This target represents a 100 per cent increase in the proportion of trips made by walking, cycling or transit within thirty years, but will not change the total number of daily vehicle trips made by Port Moody residents. In fact, with these targets, the number of daily vehicle trips will remain approximately the same as they are today, despite population growth.





Target 2: Reduce Average Vehicle Distance Driven

The City will reduce the average vehicle distance driven by a third. Reducing the distance we drive is also an important factor in reducing greenhouse gas emissions, air pollution, and fuel consumption. In 2011, it was estimated that Port Moody residents drove, on average, approximately 10 kilometres 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. The City's target is to reduce, by 2045, the average distance travelled by car by 30 per cent, to approximately seven kilometres per person per day.

Target 3: Reduce Traffic-Related Injuries and Fatalities

The City's ultimate safety goal is to eliminate all fatalities from the transportation system. In Port Moody, from 2009 to 2013, there were more than 3,500 reported collisions involving motor vehicles, which works out to approximately 700 reported collisions per year. Most of these collisions involved property damage and personal injury. Over the five-year period, there was one pedestrian fatality.

The Plan places a special emphasis on improving safety. 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 and reduce traffic-related injuries and fatalities in Port Moody through a combination of engineering, enforcement, and education measures. This emphasis on safety measures will have a specific focus on pedestrians and cyclists identified as vulnerable road users.

3. Directions

Within six overarching themes, *TransPort Moody* outlines strategies and actions that will help the City achieve its goals, objectives, and targets. Identified actions were developed with community support and technical analysis. The key themes and corresponding strategies are shown in the Plan Framework in **Figure 2** below:

Figure 2: Plan Framework



A Compact, Complete City

- a) Network of complete livable streets
- b) Transit oriented communities
- c) Vibrant waterfront

A Walkable City



A Transit Oriented City

- a) Create a universally accessible transit system
 b) Create more attractive transit
- b) Create more attractive transit services
- c) Create a universally accessible transit system

Moving People and Goods

- a) Update street network classification and guidelines
 - and guidelines b) Multi-Modal Major Street
 - Improvements c) Improve connections across the railway
 - d) Safety and operational improvements
 - e) Goods movement network

A Safe and Livable City

- a) Traffic calming
- b) Improve personal safety



A Bicycle Friendly City

a) Develop a complete, comfortable and connected bicycle network

a) Create great places and destinations

b) Enhance sidewalks and pathways

c) Improve safety and accessibility

d) Develop support programs

- b) Make cycling convenient
- c) Cycling support systems

3.1 A Compact, Complete City

Continue to develop neighbourhoods that support sustainable transportation choices

BACKGROUND STORY

Land use and transportation are fundamentally inter-related, as land use can have a significant influence on travel patterns. The City's OCP lays the foundation for creating a compact, complete city that features a mix of residential and commercial uses, while encouraging the use of transit, walking, and cycling. *TransPort Moody* aims to build on, and support, the direction of the OCP.

Land use and the built environment influence travel behaviour in a number of ways, often referred to as the "Five Ds of the Built Environment":

- 1. **Destinations** locating major destinations and centres at rapid transit stations or along corridors makes them easy to serve efficiently with frequent transit
- 2. **Distance** a well-connected pedestrian network with short city blocks enables shorter, more direct walking connections and is more easily and cost-effectively served by transit
- 3. **Density** higher levels of residential and employment density support more local amenities within walking and cycling distance, and justify high levels of transit service
- 4. **Diversity** a diverse mix of land uses and housing types makes it easier to live, work, shop, and play without having to travel far
- 5. **Design** well-designed buildings and public spaces create interesting places where people feel safe to walk or cycle

Good land use decisions have been and will continue to be a major part of Port Moody's success with transportation. The City has been working towards creating a compact and complete city for many years. An example of this type of development can be seen in Inlet Centre, with higher density developments such as NewPort Village, Suter Brook Village, and the Klahanie neighbourhood. The Inlet Centre area is often cited as one of the most successful examples of a complete and compact urban development in Metro Vancouver. The OCP supports the continuation of this type of growth and development in Inlet Centre and Moody Centre by calling for higher densities and a greater mix of land uses in these areas, with a specific emphasis on the areas around the SkyTrain stations.

WHAT WE'VE HEARD

The community understands land use and transportation are fundamentally intertwined. *TransPort Moody* can play a critical role in helping to support the OCP and also provide further direction and specific actions. Through the development of the Plan, we heard about the importance of land use in creating a sustainable transportation system, including:

- ensuring the new developments in Moody Centre and Inlet Centre have high densities and mixtures of land uses to support walking, cycling, and transit;
- ensuring that new developments are designed to be walkable and bicycle-friendly;
- Providing strong connections from Inlet Centre and Moody Centre to neighbourhoods on the north and south shores; and
- preserving the liveability and quality of life of residential neighbourhoods.

TRENDS AND TARGETS

The City has grown rapidly over the past few decades – nearly doubling in size between 1991 and 2011. Over the next 30 years, Port Moody is expected to grow by about 16,000 residents, and by 2045, TransLink's Northeast Sector (which includes Port Moody, Coquitlam, Port Coquitlam, Anmore and Belcarra) is expected to grow by about 145,000 residents. Over the next 20 years, the number of jobs in Port Moody is expected to nearly double to more than 16,000 jobs. More people and more jobs mean more trips using the transportation network, but the amount of road space will remain the same. Encouraging commuters to use a sustainable mode of transportation will be key to accommodating more trips. We will continue to encourage sustainable trips using walking, cycling, and transit with appropriate land use decisions.

STRATEGIES AND ACTIONS

The City can ensure Port Moody is a compact, complete city by following the strategies below, which focus on providing a network of complete streets, creating a transit-oriented community, and creating a vibrant waterfront.

a. Network of Complete, Liveable Streets

Action A.1 Finalize the Liveable Streets Implementation Manual; work with developers to implement the guidelines to develop a network of complete streets within Moody Centre

Liveable streets require planning and design that goes beyond the typical street function of supporting through traffic. Planning and designing liveable streets means including characteristics that make streets destinations and places where people want to be, instead of places to simply move through. The City has been working towards developing a Liveable Streets Implementation Manual to identify detailed streetscape design for distinct areas within Moody Centre. Based on directions in the OCP and *TransPort Moody*, the Manual will provide guidelines for new developments within Moody Centre, including concepts, strategies, and design standards required to successfully achieve complete, liveable streets. The proposed

network of liveable streets within Port Moody includes St. Johns Street, Clarke Street, Murray Street, Spring Street, and sections of loco Road between Barnet Highway and Ungless Way.

b. Transit-Oriented Communities

Action B.1 Support the OCP directions to encourage transit-oriented communities around SkyTrain stations

Land use has a strong influence on transit service and ridership, and affects people's choices around walking and cycling. The focus of transit-oriented communities is to concentrate residential and commercial development in close proximity to transit service, allowing people to drive less and walk, cycle, and take transit more. The OCP identifies the importance of supporting a high proportion of residential units, jobs, and amenities within 400 metres of the Moody Centre and Inlet Centre SkyTrain stations (see **Map 1**).

Design considerations within these areas include:

- providing a mix of housing options;
- enhancing the network of pedestrian connections;
- incorporating opportunities for parks and public open space; and
- providing attractive, walkable, green streetscapes that encourage pedestrian activity.

c. Vibrant Waterfront

Action C.1 Improve connections and accessibility between Moody Centre and the waterfront

Port Moody has a beautiful waterfront that includes residential, industrial, and park land uses. The waterfront is an important environmental, economic, social, and cultural area. The City's recently completed Parks and Recreation Master Plan identifies the waterfront as an important city amenity and provides guidance around extending and enhancing existing waterfront parks. One of the important transportation considerations regarding Port Moody's waterfront as supported by the OCP, is the need for better connections to and from the waterfront and Moody Centre. The City will work to: create a vibrant waterfront with better connections between Moody Centre and Rocky Point Park for all types of transportation; enhance the pathway network to provide access to the waterfront for all types of transportation; and develop additional crossings along the rail corridor to improve connectivity for pedestrians and cyclists as well as other road users.

Action C.2 Support the provision of a ferry terminal facility at or near Rocky Point Park

In many cities around the world, water taxi and passenger ferry transportation service provides residents and visitors with a comfortable, reliable mobility option for travel. In the case of Port Moody, due to a shallow harbour, ferry services would likely be limited to smaller size vessels capable of higher speeds for transportation to other areas such as Vancouver, North Vancouver and West Vancouver. Since Rocky Point Park is situated at the eastern edge of Burrard Inlet and within walking distance to Moody Centre Station, it could be good location for a ferry service that would provide local and regional travel service.

Port Moody will work with public entities and/or private companies to explore options for passenger ferry services, with a terminal facility located within close proximity to Rocky Point Park. This terminal facility could have a separate dock, operated by private or public entities, or a shared dock, with an agreement in place for shared use with existing Rocky Point Pier facilities.



3.2 A Walkable City

Make walking a great transportation choice by creating safe, comfortable, complete streets.

BACKGROUND STORY

Walking is the most fundamental form of transportation. Walking is a part of every trip, whether that trip is made by car, transit, or bicycle. If suitable conditions exist within a community – such as having a complete, connected sidewalk network and major destinations close to where people live – walking trips can be increased and lengthened, which helps to reduce automobile dependence and greenhouse gas (GHG) emissions, improve public health outcomes, and create more liveable and vibrant communities. It is important for the City to promote walking today, and in the future, as Port Moody is changing from a predominantly suburban community to a more urban community, particularly in the Moody Centre area and around the SkyTrain stations. The City must promote walking as a critical component to the creation of a complete community, and to the full utilization of SkyTrain as a people mover.

WHAT WE'VE HEARD

Port Moody is already a very walkable city, particularly in the Inlet Centre area, which already has densities and land use mixtures that support walking. Moody Centre has an established street grid network of closelyspaced streets, along with flat topography, that provides excellent opportunities for improving the area's walkability. While pedestrians enjoy high connectivity throughout the Moody and Inlet Centre areas, several important challenges have been identified by residents, including:

- lack of sidewalk coverage in many areas of the city;
- gaps in the sidewalk network;
- challenging topography;
- busy streets that can be difficult to cross;
- steep grades in many areas of the city;
- low-density residential land uses outside of the Inlet Centre and Moody Centre neighbourhoods, which result in long travel distances that are not conducive to walking; and
- increased need for lighting improvements and accessible sidewalk infrastructure, such as ramps.

TRENDS AND TARGETS

One of the City's top priorities is the promotion of walking. Through the actions set out in *TransPort Moody*, the City plans to double the number of daily walking over the next 30 years. This would represent a 50 per cent increase, from nine per cent of all daily trips today to 14 per cent in 2045. The City will achieve this target by making walking a more viable option for more people. The strategies and actions outline below will help the City to improve the pedestrian environment in areas with the highest pedestrian demand.

STRATEGIES AND ACTIONS

The City can ensure Port Moody is a walkable city by following the four strategies below, which focus on creating great places and destinations, improving sidewalks and pathways, improving safety and accessibility, and supporting programs that promote walking. In response to reported concerns from the community, the Plan focuses on addressing barriers and gaps, and providing safe, convenient, and comfortable walking environments throughout Port Moody.

a. Create Great Places and Destinations

Action A.1 Ensure new developments in areas with high pedestrian activity provide high quality urban design and placemaking features

A number of urban design features can make areas with high pedestrian activity more attractive and interesting. These treatments can even help turn through-ways into destinations, and create lively, vibrant, pedestrian-oriented streetscapes. The City will work with developers to ensure a mixture of urban design and placemaking treatments are provided with new developments in areas with high pedestrian activity.

Design elements and treatments could include:

- pocket parks and plazas;
- enhanced landscaping;
- public art and benches;
- street trees;
- litter and recycling bins, benches, and curb extensions;
- weather protection; and
- pedestrian-friendly street lighting.

In addition to these streetscape improvements, wide accessible clear walking areas will be included to ensure safety and accessibility.

Action A.2 Establish Pedestrian-Priority Streets

The City will establish pedestrian-priority streets. A pedestrian-priority street features high activity spaces that welcome and prioritize pedestrians in a traffic-calmed environment, where cars are encouraged and regulated to share space with pedestrians. These streets can also be designed to stimulate business activity with patios, seating, and other design elements such as public art, lighting, and planters. Examples of potential pedestrian-priority streets include **Spring Street, Morrisey Street in Suter Brook Village, and Newport Drive in NewPort Village**. The City will encourage the development of pedestrian-priority streets as part of future developments.

b. Enhance Sidewalks and Pathways

The City will work to enhance sidewalks and pathways, including new sidewalks on existing roads and sidewalks in new developments.

Action B.1 Fill in gaps in the sidewalk network by strategically investing in new sidewalks on existing streets

The City already has an extensive sidewalk and pathway network. Currently, there are approximately 90 kilometres of sidewalks throughout Port Moody, and around 56 per cent of all city streets have sidewalks on at least one side of the street. However, there are still several areas in Port Moody that have no sidewalks on one or both sides of the street, which can create connectivity and accessibility issues for pedestrians. Ensuring sidewalk coverage and filling in gaps in the network is particularly important within high activity areas such as Moody Centre, along bus routes, near SkyTrain stations, and near parks, schools, hospitals, and other community facilities. For retrofits on existing streets, the City will strategically invest in installing new sidewalks as shown in **Map 2**. The recommended locations for new sidewalks on existing streets were selected because they are:

- located on roads classified as arterials or collectors, or are part of the major road network (MRN); these routes typically have higher vehicle volumes and speeds, and provide direct pedestrian routes to destinations; and improvements can encourage walking by making pedestrians feel safer;
- · located adjacent to schools, parks, community facilities, and other important destinations; and/or
- located on bus routes.



Action B.2 Revise the City's requirements for sidewalks on new streets

The City's Subdivision and Development Servicing Bylaw No. 2831 currently requires the construction of sidewalks as part of all new developments on both sides of all arterial and collector streets, as well as local residential streets with high density or commercial land uses. The Bylaw also identifies recommended sidewalk widths.

The City will revise guidelines for minimum sidewalk widths, particularly for St. Johns Street, to require a minimum sidewalk width of three metres. For all locations outside of Inlet Centre, Moody Centre, and commercial areas, the City will require a minimum sidewalk width of 1.8 metres. For all new developments, the City will continue to require the construction of sidewalks (outlined in the Subdivision and Development Servicing Bylaw) with these revised widths.

Action B.3 Support trail and pathway enhancements as recommended in the Parks and Recreation Master Plan

Port Moody has a number of trails and pathways. These off-street trails and pathways make up an important part of the city's pedestrian network, attracting both residents and visitors for transportation and recreational activity. The City has already done extensive work to develop the trail and pathway network. However, there are still some opportunities to improve the trail system. *TransPort Moody* supports the following recommendations, as outlined in the Parks and Recreation Master Plan:

- **expand the trail system** to provide connectivity, with links to potential destinations (e.g. parks, schools, Moody Centre), and continue to separate cyclists and pedestrians on busy routes;
- improve identification and design of street crossings along the trail system to improve safety;
- install additional infrastructure along the trail system, including benches, waste bins, bike racks, viewpoints, and recreation points of interest;
- improve safety on high-use trails, by considering strategies such as motion-activated lighting (motion-activated instead of constant to minimize disturbance to wildlife);
- expand the network of wayfinding signs, and add distance signs and markers on high use trails; and
- widen the shoreline boardwalk and trails as use increases.

Action B.4 Ensure sidewalks and pathways are well-maintained throughout the year

The quality and maintenance of sidewalks contribute significantly to ensuring a universally-accessible transportation system for people of all ages and abilities, at all times of the year. Maintenance efforts are important to keep sidewalks as near as possible to their original condition, so that infrastructure remains functional and usable over time. The City's operations department maintains a program to assess and maintain sidewalks to ensure accessibility. This program addresses surface smoothness, cracks, and

surface lift. In addition, the City's Sidewalk and Boulevard Maintenance Bylaw No. 2426 requires that residents and property owners remove snow or ice within 24 hours of a snowfall event. The City works to ensure that residents and property owners are aware of this requirement, and that the Bylaw is enforced to ensure sidewalks are accessible year-round.

Walking during and after snowfall events can create safety and mobility challenges. To help promote walking in the winter months, the City will develop a winter program to remind residents of existing bylaws that require residents to clear sidewalks within 24 hours of a snowfall event. For sidewalks adjacent to City infrastructure, the City will review and update priority procedures for clearing snow and ice from sidewalks and staircases.

c. Improve Safety and Accessibility

Walking to everyday destinations can be easy if city streets and neighbourhoods are safe and well-designed for pedestrian safety and accessibility. The pedestrian environment must be accessible to a large cross-section of people, including people with disabilities, seniors, and parents with children. Accessibility is particularly important at intersections and crossings, as a difficult crossing can act as a barrier to walking, making trips much longer or creating safety issues, particularly for seniors, children, and people with physical and cognitive disabilities.

Action C.1 Develop new pedestrian and cycling overpasses

The Millennium Line's Evergreen Extension and the rail line create significant barriers within the city's walking and cycling networks, which results in a lack of connection between the Moody Centre area and Rocky Point Park, as well as the communities to the north. Based on input from the public, a review of the OCP, and a technical review, the City will explore the potential addition of three new pedestrian and bicycle overpasses, which would enhance mobility and accessibility for people who choose to walk and cycle. The three potential overpass locations are:

Moody Centre Station Pedestrian and Cyclist Overpass

This proposed overpass would be located east of the station, providing a direct connection to Murray Street and the adjacent Rocky Point Park.

Coronation Park Pedestrian and Cyclist Overpass

This proposed overpass would be located near the intersection of Barnet Highway and loco Road, and would connect a potential new development in the Coronation Park neighbourhood to Inlet Centre Station.

St. Johns Street Pedestrian and Cyclist Overpass - East of Moody Street

This overpass is identified in the Official Community Plan as a desirable amenity to be pursued near Moody Middle School as part of any new development along St. Johns Street, east of Moody

Street. Feasibility for this overpass will be dependent on development and corresponding growth in this section of the corridor.

Klahanie Drive at Nootka Way to Suter Brook at Capilano Road

A pedestrian, cyclist, and vehicular overpass – connecting the Suter Brook and Klahanie neighbourhoods – will be pursued if the lands located west of Capilano Road and East of Nootka Way are developed.

These potential overpass structures are subject to development and growth in the corresponding neighbourhoods. All of these options will be considered with future development opportunities, should they arise.

Action C.2 Identity and implement pedestrian safety improvements at signalized intersections

There are 31 signalized intersections in Port Moody. A signalized intersection has a crosswalk on at least one approach, which provides an opportunity for pedestrians to cross. Several signalized intersections in the city have been identified as having safety issues based on collision data and input from the public. The Plan identifies a number of features that can be used at signalized intersections to improve pedestrian safety and accessibility, including: lighting improvements, audible/tactile pedestrian signals, accessibility improvements at curb letdowns, alignment improvements, and traffic signal timing/programming.

Action C.3 Install new traffic signals

Signalized intersections provide safe and accessible locations for pedestrians to cross roadways. As residential and commercial densities increase, so too will the need for signalized intersections, as more people will want to cross roadways to reach new destinations. Based on directions for growth in the OCP, the City has identified a number of locations where traffic signals may be needed. New traffic signals are recommended at the following locations:

- Clarke Road at Seaview Drive
- St. Johns Street at Douglas Street
- St. Johns Street at Queens Street
- St. Johns Street at James Road
- St. Johns Street at Golden Spike Way
- Clarke Street at Grant Street
- Murray Street at Moody Street (base of ramp)
- Murray Street at Electronic Avenue

Action C.4 Identify new crosswalks and upgrade existing crosswalks to improve pedestrian safety

In addition to improved pedestrian crossings at traffic signals, the City will improve pedestrian safety at marked crosswalks. Crosswalk recommendations include new marked crossings, narrowing crossings to improve sightlines, reducing crossing distances, and utilizing new technologies such as Rectangular Rapid Flashing Beacon (RRFB). The City has a set policy to add RRFB crosswalks, which use a flashing red light to alert drivers to pedestrian activity at a crossing. The following locations have been identified for crossing upgrades:

- Dewdney Trunk Road and Fraser Street
- loco Road and April Road
- loco Road and Barber Street
- loco Road and Campbell Road
- loco Road and Kicking Horse Way
- loco Road and Maude Road
- Glenayre Drive and Glencoe Drive

A new crossing location has been identified for Clarke Street at Elgin Street. This crossing location will be coordinated with the installation of cycling facilities for the Clarke Road corridor.

d. Develop Walking Support Programs

Action D.1 Support other organizations in their initiatives to promote walking

In addition to providing quality pedestrian facilities and networks, education campaigns and social marketing initiatives can help shift travel habits by highlighting the benefits of walking, and by providing information to help make walking easier. Many existing programs overlap with cycling support initiatives, as the two modes of transportation provide great alternatives for short local trips. In many cases, coordination with non-profit organizations, community groups, and other agencies can help improve the effectiveness of these programs. Efforts to support programs that encourage walking could include:

- providing information about walking in Port Moody;
- providing pedestrian wayfinding;
- supporting safety and education initiatives; and
- supporting Active and Safe Routes to School (a national movement dedicated to children's mobility and health) and walking school bus programs.

3.3 A Bicycle-Friendly City

Make cycling a convenient, enjoyable, and fun way for people of all ages and abilities to travel in Port Moody.

BACKGROUND STORY

Cycling is an important and growing mobility option in Port Moody for both commuting and recreational purposes. Cycling is not only a practical way to get around the City, but also a healthy activity that is cost-effective, and good for the community and the environment.

Today in Port Moody, cycling accounts for approximately one per cent of all daily trips. The City can encourage more residents and visitors to use bicycles for short- to medium-distance trips by developing a safe and comprehensive bicycle network in Port Moody, with infrastructure and programs that help cycling become more time-competitive with other modes.

We have a unique opportunity to encourage more residents to travel by bicycle in Port Moody. Most cycling trips within the city are relatively short, ranging from three to 10 kilometres. Most driving trips are also relatively short, so there is an opportunity to shift some of these shorter-distance local trips to cycling trips. More cycling trips and fewer driving trips means healthier lifestyles for residents, a reduction in pollution and GHG emissions, and a stronger focus on more cost-effective infrastructure investments.

WHAT WE'VE HEARD

Port Moody's existing bicycle network includes over 40 kilometres of on-street and off-street bicycle routes. While the City has made significant progress in developing a comprehensive bicycle network, residents have told us there are still a number of challenges for cyclists in Port Moody, including:

- gaps in the bicycle network;
- lack of adequate space to accommodate both bicycles and vehicles on many streets;
- steep grades in many areas of the city; and
- difficult connections from low-density neighbourhoods on the north and south shores to Moody Centre.

TRENDS AND TARGETS

Although cycling accounts for a relatively small portion of trips made by Port Moody residents, it is an important and growing mode of transportation. The City will work to increase the cycling mode share from less than one per cent of all daily trips made by Port Moody residents today, to four per cent of all daily trips by 2045, which would represent a ten-fold increase.

STRATEGIES AND ACTIONS

The City will work to create a complete network of bicycle routes that would connect with all key destinations throughout the City and place all residents within short distance of a bicycle route. The City will also focus on cycling infrastructure that encourages people of all ages and abilities to travel by bicycle. Other strategies include developing facilities that support cyclists, such as bicycle parking, bicycle-transit integration, and a regional bike-share program, as well as conducting education and marketing campaigns that increase awareness of cycling as a safe, easy, and convenient transportation choice for Port Moody residents.

a. Develop a Complete and Connected Bicycle Network

Action A.1 Develop and implement a complete bicycle network that connects all neighbourhoods and destinations throughout the city.

In order to make cycling a safe, easy, and enjoyable transportation option for people of all ages and abilities, the City will establish a city-wide minimum grid network of bicycle routes that will connect all neighbourhoods and key destinations in the City of Port Moody. This network will ensure that bicycle routes are regularly spaced to ensure all residents have access to a bicycle route within a short cycling distance. A complete bicycle network in Port Moody is envisioned as one that ideally places all residents and businesses within 400 metres (or four-to-five blocks) of a bicycle route that will connect to major destinations throughout the city and region. The City will also ensure there are connections to all key destinations in the community, including commercial areas in Moody Centre and Inlet Centre, SkyTrain stations, schools, parks, community facilities such as libraries and community centres, and the hospital.

Action A.2 Focus on implementing bicycle facilities that are appealing for people of all ages and abilities

The long-term bicycle network focuses primarily on facilities that are safe and for people of all ages and abilities. The network will be designed to focus primarily on facilities that are either physically separated from motor vehicles on busy streets or on pathways, or on shared spaces on quiet streets that have been

designed to slow vehicle speeds and reduce noise. These are complemented by painted bicycle lanes that serve commuter cyclists.

The long-term bicycle network plan is shown in **Map 3**, and includes a focus on the following types of facilities:

- Off-street pathways support a variety of non-motorized users including cyclists and pedestrians, and can be either for the exclusive use of people on bicycles, or can be shared with pedestrians and other non-motorized users. The long-term bicycle network plan proposes off-street pathways on a number of streets, including sections of St. Johns Street, Murray Street, Clarke Road, and two sections of loco Road. The first off street pathway on loco Road is proposed between Murray Street and Newport Drive on the west side, the second location is a multi-use pathway between April Road and First Avenue.
- Buffered bike lanes and cycle paths are on-street facilities separated from traffic by a painted buffer space and/or physical devices such as curbs, medians, or planter boxes. The long-term bicycle network plan proposes buffered bike lanes for Clarke Street and sections of St. Johns Street (east of Moody Street).
- Bicycle lanes are on-street facilities that are designated by painted markings and signage for the exclusive use of bicycles. Currently there are bicycle lanes along Guildford Way, on one side of Glenayre Drive, and on Barnett Highway. The long-term bicycle network plan proposes additional bicycle lanes on Dewdney Trunk Road, and potentially on loco Road. Bicycle lanes on loco Road would come at a significant expense and not be feasible without a complete rebuild of certain sections. At this point in time, the City is reviewing underground utilities on the North Shore. If this review results in complete replacement of utilities under loco Road, the City will pursue bike lanes on this corridor as part of this work.
- Neighbourhood 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 travel through intersections safely. The City has an extensive network of neighbourhood bikeways that include both local and collector roads. The long-term bicycle network plan proposes additional neighbourhood bikeways on St. George Street and Cecile Drive.

In addition to the bicycle network, the City will carefully consider how intersections are addressed, as these are where many cycling collisions occur. Intersection and crossing treatments can be used to assist cyclists passing through major intersections and crossing major roads. Different treatments seek to minimize potential conflicts with motor vehicles, and to increase safety and convenience for cyclists. Cycling safety improvements also serve to remove barriers and can help make cycling more attractive to people of all ages and abilities, thereby helping to increase bicycle mode share.

Action A.3 Design intersections to improve cycling safety and convenience


Designing intersections to minimize conflicts with motorists and maximize ease for cyclists can help to make cycling a safer and more convenient transportation option. Cycling safety improvements also serve to remove barriers and can help make cycling more attractive to people of all ages and abilities, thereby helping to increase bicycle mode share. A brief description of some intersection treatments is provided below:

- Coloured conflict zone markings can be used at conflict zones and other locations where visibility is a concern for cyclists, including intersections and driveways, and other areas where vehicles are merging across a bicycle lane.
 - Ioco Road and Murray Street
 - loco Road and Ungless Way
 - Ioco Road and Maude Road
 - Murray Street and Morrissey Road
 - Murray Street and Capilano Road
 - Murray Street and Klahanie Drive (east)
 - Murray Street and Klahanie Drive (west)
- Dashed bicycle lane markings at intersections provide direction for where cyclists should be positioned as they travel through an intersection. They also alert vehicle drivers that cyclists may be travelling in these lanes. Dashed bicycle lane markings are recommended at the following intersections:
 - Ioco Road and Suter Brook Way (on Ioco Road)
 - Ioco Road and Murray Street (on Ioco Road)
 - Ungless Way and loco Road (on Ungless Way)
 - Ungless Way and Noons Creek Drive (on loco Road)
 - Ungless Way and Newport Drive (on Ungless Way)
 - Guildford Way and Balmoral Drive (on Guildford Way)
 - Guildford Way and Ungless Way (on Guildford Way)
 - Murray Street and Morrissey Road
 - Murray Street and Capilano Road
 - Murray Street and Klahanie Drive (east)
 - Murray Street and Klahanie Drive (west)

- Enhanced bicycle signal crossings can include full signals or pedestrian and bicycle activated signals, which can be activated by a cyclist though 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 at locations throughout the city where bicycle facilities intersect with signalized intersections.
- Crossbikes 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 they may be used to indicate a separate bicycle crossing. Crossbikes could be installed at the following locations:
 - at pathway crosswalks along David Avenue; and/or
 - at future, shared multi-use pathway crossings.

b. Make Cycling Convenient

Beyond on-street and off-street cycling facilities, other bicycle infrastructure is required to make cycling an attractive and convenient transportation choice. Opportunities to make cycling a more convenient option in Port Moody include bicycle parking and end-of-trip facility requirements. In addition, the City will encourage bicycle-transit integration by ensuring the bicycle network seamlessly connects with SkyTrain stations, and by advocating for the following: bicycle racks on all TransLink buses; adequate space for bicycles on Millennium Line - Evergreen Extension trains; the removal of restrictions so that cyclists can bring their bicycle on Evergreen Extension trains at all times of day; and bicycle parking at SkyTrain stations, including the development of secure bicycle parking areas.

Action B.1. Work with businesses to provide bicycle parking in the public right-of-way in key areas of the city.

Similar to vehicle parking, it is important to provide safe and secure bicycle parking on-street and at private off-street locations. Fear of bicycle theft or vandalism is a significant deterrent to cycling. The City can encourage cycling by providing safe and secure on-street bicycle parking at key locations, including throughout the Moody Centre and Inlet Centre areas. In particular, secure parking is necessary in areas where residents are likely to travel by bicycle, such as shopping areas, community centres, parks, and schools.

The City will work with businesses to provide regularly spaced and sheltered bicycle parking in the public right-of-way on all commercial streets and other commercial areas, and will also work to ensure that bicycle parking is provided at schools, community centers, and other important destinations.

Action B.2 Develop requirements for bicycle parking and end-of-trip facilities for new developments

The City of Port Moody's OCP encourages the provision of bicycle parking spaces and storage spaces in new developments. However, the City does not currently have any requirements for the provision of bicycle parking in new developments. The City is currently in the process of updating its Zoning Bylaw, which presents an opportunity to incorporate bicycle parking requirements for new developments. The Bylaw update will have a new section that provides specific requirements for bicycle parking and storage. Regulations for the type and location of bicycle parking will take into account best practices in Metro Vancouver.

Action B.3 Work with businesses to develop an on-street bicycle corral program

The City will work with businesses to develop an on-street bicycle corral program to provide on-street bicycle parking as an alternative to bicycle racks on sidewalks. This program would be subject to specific reviews and partnerships depending on proposed locations, opportunities for bicycle facilities on boulevards, and projected demand and needs for cycling rack storage.

Action B.4 Work with community groups to provide temporary bicycle parking at large community events

The City will work with community groups to provide temporary bicycle parking at community events. Temporary parking typically consists of portable racks that meet the demand for an event. Racks are clustered together, providing a higher level of security than if people were to park the bicycles on their own. Event staff can monitor the area, providing people with peace of mind while they are away from their bicycle.

Action B.5 Support TransLink to encourage opportunities to integrate cycling and public transit

Transit and cycling work well in combination, providing cyclists with the ability to make trips that are farther than they may be able to ride and allowing transit riders to reach destinations that are not adjacent to transit routes. Currently, bicycles are supported on all TransLink buses through carrying racks on the front of each bus. The City will work with TransLink to encourage the seamless integration of transit and cycling, and advocate for the following:

- the continuation of the **bicycle rack** program on all TransLink buses;
- adequate space for bicycles on Evergreen Extension trains, and the removal of restrictions so that cyclists can bring bicycles on Evergreen Extension trains at all times of day;
- short-term bicycle parking at SkyTrain stations, and the development of secure bicycle parking areas at SkyTrain stations, specifically at Moody Centre Station;

The City will support the Evergreen Extension Rapid Transit Integration Plan by ensuring that Port Moody's bicycle network seamlessly connects with SkyTrain stations. In addition, the City will support TransLink and other partner municipalities in exploring the feasibility of extending a regional Public Bike Share program to Port Moody, focusing primarily on SkyTrain stations and the Moody Centre and Inlet Centre areas.

Action B.6 Prioritize cleaning of bike paths and bike lanes.

The maintenance of bike paths and bike lanes helps to ensure cyclists enjoy a comfortable riding experience throughout the year. In response to concerns from residents and Council, the Plan proposes an internal policy to review the prioritization of cleaning debris from bike paths and on-street bike lanes. The intent of this policy is to help ensure bike ways are clear of sand, gravel and litter to provide a clear and comfortable riding environment.

c. Cycling Support Systems

Action C.1 Support other organizations in their initiatives to promote cycling

In addition to the infrastructure improvements described above, there are a variety of non-infrastructure related opportunities which the City will explore to help support and encourage cycling. The City will continue to work with organizations such as HUB Your Cycling Connection, TransLink, non-profits, and other Tri-City communities to support cycling programs, such as establishing a Bicycle Friendly Business District, promoting cycling education programs, improving cycling wayfinding and signage, providing mapping and online information, supporting promotion events, and conducting regular maintenance of bicycle facilities.

3.4 A Transit-Oriented City

Support local and regional transit improvements and leverage the new Evergreen Extension to ensure transit is a fast, frequent, accessible, and competitive transportation choice.

BACKGROUND STORY

Convenient and attractive public transit is critical to creating a vibrant and sustainable community. Public transit is the primary alternative to automobile travel in Port Moody and across the region, and moves very large numbers of people in small amounts of space, supporting the economy without contributing to increased traffic congestion.

Transit services in Port Moody, and throughout the Metro Vancouver region, are funded, planned, and operated 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 information and planning. City staff, however, work with TransLink as representatives of the community on matters influencing current and future services. The existing transit system in Port Moody is made up of a variety of service types, including local bus service, regional bus service, SkyTrain, West Coast Express, and HandyDART, which together provide local service within the City as well as regional service to surrounding municipalities. However, there are a number of challenges with the existing transit system in Port Moody, including lack of frequent transit service to many areas of the city; limited mid-day, evening, late night and weekend services in some areas; and a limited number of accessible bus stops.

WHAT WE'VE HEARD

Port Moody's transit system recently underwent an unprecedented transformation with the opening of the Millennium Line Evergreen Extension in 2016. In addition to the opening of SkyTrain service, bus service frequency and routing was recently changed in preparation to service this new amenity. The completion of the Evergreen Extension will change travel patterns within the City and TransLink's Northeast Sector, providing significant improvements to transit service. The City plans to maximize and leverage this unprecedented investment in public transit in our community, and work to ensure transit is a viable and competitive transportation choice in Port Moody. The following challenges and opportunities have been identified:

- limited transit frequency in many areas of the community;
- limited mid-day, evening and weekend service;
- limited number of accessible bus stops;
- the use of traffic signal technology to improve bus exit times at Moody Centre Station
- installation of benches and bus shelters;

- sidewalk infrastructure improvements;
- more special service buses provided at key times for middle and secondary schools; and
- cost of transit

TRENDS AND TARGETS

As of the most recent data collection in 2011, public transit accounts for approximately 16 per cent of all trips to work made by Port Moody residents, although it only accounts for eight per cent of all daily trips. This higher mode share for work trips is a reflection of the fact that many transit trips made by Port Moody residents are longer distance, commute trips destined to Burnaby and New Westminster (23 per cent of all transit trips) or Vancouver and UBC (18 per cent of all transit trips). However, local transit trips are also important, as approximately half (50 per cent) of all bus trips starting in Port Moody end within TransLink's Northeast Sector. Most transit trips made by Port Moody residents are trips to work or school, although a significant proportion of transit trips are also made for personal business, recreation or social purposes, or shopping.

The City will work to triple the number of daily transit trips. This would represent a more than doubling in the transit mode share by 2045 – from nine per cent of all daily trips today, to 22 per cent in 2045. A significant portion of this increase in transit use is expected to result from the Evergreen Extension, the development of transit-oriented communities, and enhanced service frequency at all times of day, as well as successful efforts to improve the overall transit experience and make the system more accessible.

STRATEGIES AND ACTIONS

The City will work to ensure transit is a viable choice for Port Moody residents, and achieve its target of tripling the number of daily transit trips by improving access and connections to transit facilities (bus, commuter rail, and SkyTrain), advocating for service improvements and an enhanced customer experience, and continuing to encourage transit-oriented development in the neighbourhoods around Moody Centre and Inlet Centre SkyTrain stations.

a. Support the Millennium Line - Evergreen Extension

The Evergreen Extension is one of the most significant transportation investments in the City's history. Current Evergreen Extension peak hour service can quickly move 4,000 people per hour. For context, today (2016) Moody Centre area processes approximately 4,300 vehicles per peak hour. The new Evergreen Extension service is equivalent to opening a new four-lane highway, and will effectively double the number the people moving capacity in Moody Centre. The Evergreen Extension will help to connect Port Moody with the larger regional rapid transit network and will be an important component of attracting

more people to use transit. As such, it is of critical importance that the City support the Evergreen Extension to ensure it is as successful as possible. Actions to support the Evergreen Extension are described below.

Action A.1 Continue to encourage Transit Oriented Development (TOD) within 400 metres of Evergreen Extension SkyTrain stations

The Evergreen Extension opened in 2016 with two stations in Port Moody as well as a possible future third station. With the arrival of the Evergreen Extension, there is an emerging focus on integrating TOD around the new SkyTrain Stations. This TOD has been identified in the City's OCP as a designation within 400 metres of SkyTrain Line stations and major transit corridors. The TOD land use designation will result in mixed use developments with higher densities and compact building forms, which will in turn increase population growth near the stations. TOD is also discussed as an important component of creating '**A Compact, Complete Community**' but it is important that it is clear that the City's ongoing development of TOD will be key tool in supporting the success of the Evergreen Extension.

Action A.2 Support high quality transit connections to integrate with the Evergreen Extension

To ensure the success of the Evergreen Extension, it is critical that the City support TransLink initiatives to integrate bus services with rapid transit, and to ensure that there is a better integration of transit, walking and cycling. We will continue to work with TransLink to ensure that bus service in Port Moody is providing access and connections to the Evergreen Extension stations, bus route services and frequencies are meeting the demand for trips, and appropriate resource investments are being made within Port Moody.

Action A.3 Improve walking and cycling access to Evergreen Extension Stations

As identified in the previous chapters, 'A Walkable City' and 'A Bicycle-Friendly City', the City will focus on providing new and enhanced connections for people who are walking and cycling to SkyTrain stations. This includes the installation of high quality 'all ages and abilities' bicycle facilities throughout Moody Centre with direct access to stations, and ensuring that streets within Moody Centre have sidewalks and features that allow people walking to have comfortable, accessible and direct access to transit services. In addition to on-street and off-street routes, the plan also recommends additional overpasses over the rail corridor to provide improved station access and greater connectivity for people walking and cycling within Moody Centre.

Action A.4 Support the provision of a third Evergreen Extension station at Queens Street

The Evergreen Extension has been designed to allow the future construction of a third station at Queens Street. The City's OCP supports the development of this third station in the future. This third station would improve transit access from the western portions of the Moody Centre area, and would also serve future developments in the Moody Centre area.

b. Create More Attractive Transit Services

In order to achieve the targets in the plan, Port Moody's transit system needs to be designed to provide convenient and attractive services by improving the speed, frequency, and directness of transit services. By doing so, the transit system can be made to be more time-competitive with automobile travel and attracting more choice riders – people who may have access to an automobile but choose to take transit because it is convenient.

The overarching strategy to create more attractive transit services is to ensure that local routes are well integrated and provide access to the Evergreen Extension and West Coast Express, and that transit services are reliable and frequent at all times of day, including mid-day, evenings, and weekends. In response to the opening of the Evergreen Extension, TransLink recently worked with Northeast Sector communities to develop the Northeast Sector Area Transit Plan (NESATP). The NESATP identifies transit routing and service level changes associated with the opening of the Evergreen Extension in-line with TransLink's available resources, as shown in **Map 4**. However, the Master Transportation Plan provides an opportunity to identify the City's long-term aspirations for service levels to make transit an attractive and convenient transportation choice. Over the long-term the City of Port should continue to work with TransLink to further enhance service frequencies as follows:

Action B.1 Encourage TransLink to provide high frequency service during peak periods

TransLink provides 15-minute service on many routes during peak periods. While 15-minute service is attractive, this level of service may not be time-competitive with automobile travel. As such, to make transit as competitive possible, it is recommended that over the long-term service frequencies on routes feeding into the Evergreen Extension be increased to less than 10 minutes headways during peak periods.

Action B.2 Encourage TransLink to improve off-peak transit service frequency

Through the planning process, residents have noted that transit service is limited in off-peak periods, including mid-day periods as well as evenings, late nights, and weekends. The City should encourage TransLink to explore expanding operating periods of transit routes in Port Moody in order to meet a wider range of transit passenger needs outside of peak times and to provide better access to Evergreen Extension Stations.

Action B.3 Support changes that enhance service and connections within Port Moody

The Inlet Centre and Moody Centre stations are the city's most prominent commercial, retail and entertainment nodes. While these areas are in relatively close proximity of each other and they are connected by the Evergreen Extension, there is a desire for residents to be able to travel within and between these neighbourhoods by shuttle service. 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 Inlet Centre and Moody Centre.



Action B.4 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. Transit priority treatments are recommended along existing and proposed transit corridors where delays and congestion exist today or are anticipated to deteriorate in future. The City should 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, and intersection queue jumpers. 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 St. Johns Street, Murray Street, and loco Road in the Inlet Centre area.

Action B.5 Advocate for West Coast Express service improvements

Through the planning process, residents also expressed a desire for increased West Coast Express services. Currently, the West Coast Express operates primarily to serve commuters in the peak hours in peak directions only. The West Coast Express could effectively attract more regional trips to be made by transit, provided that additional peak period service as well as off-peak service is in place, including additional service during the mid-day, evenings, and weekends. As such, it is recommended that the City advocate for West Coast Express service improvements including more frequent daily service, evening and weekend service, and reverse peak service. It is important to note that this a long-term recommendation and would require negotiations and approval from TransLink and rail operators.

c. Create a Universally Accessible Transit System

Many individuals experience barriers to using transit for various reasons, ranging from the physical challenges of system elements (such as accessing bus stops and transit exchanges) through to those that experience cognitive difficulties getting around on transit. With an aging population, the number of people with differing mobility will increase. Improving safety and accessibility measures around transit stops and exchanges can serve to enhance transit service for existing customers and attract new riders.

Action C.1 Improve access to transit facilities

Currently, approximately 61% of the bus stops within Port Moody are accessible, which is lower than the system wide average of 73%, and lower than many surrounding municipalities. The City developed an Accessible Bus Stop Upgrade Program in 2012, which had a goal that 100% of the City's bus stops would be accessible. The City has made significant progress in recent years in improving the number of bus stops that are accessible; however, significant progress remains for the City to achieve its goal of making 100% of its bus stops accessible. The City will continue to work towards a goal that 100% of the City's bus stops be accessible, where feasible.

The attractiveness of transit is not only dependent on transit services, but also on passenger facilities provided at transit stations 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.

Action D.1 Improve bus stop passenger amenities

Forty bus stops throughout the city currently have both bus shelters and benches (25%). Many of these bus stops are along arterial corridors on St Johns Street, loco Road, and Guildford Way. 121 bus stops (75%) have neither benches nor shelters. In the long-term, the City should strive to provide benches at all bus stops and SkyTrain stations in Port Moody. In addition, the City will contribute an annual investment to supply bus shelter amenities.

3.5 Moving People and Goods

Develop an integrated and multi-modal street network that addresses local traffic congestion and facilitates the safe and efficient movement of all road users, including people walking, cycling, using transit, driving, as well as goods movement.

BACKGROUND STORY

The street network is designed to support mobility by all travel modes including automobiles, trucks (goods movement), transit, walking and cycling. However, in most North American communities, motor vehicles are often given preferential treatment, sometimes at the expense of walking, cycling and transit users. Whether this preferential treatment toward vehicles is merely a reflection of current travel demand patterns, it can certainly influence the shape of the community and the travel modes that people are most inclined to use in addition to the liveability of neighbourhoods and major activity nodes in the city.

Traditionally, Port Moody's street network has been built to accommodate vehicles, and many major streets are unattractive and uncomfortable places for pedestrians, cyclists, and transit users. Improving and developing roads and sidewalks to support walking, biking, transit, and vehicle concurrently is required to shift to a more sustainable transportation system. In recent years, several corridors in the city have undergone changes to improve mobility such as sections of loco Road, Clarke Road and the wider walkway on the Moody Overpass.

WHAT WE'VE HEARD

Port Moody has few opportunities to build new roads; as a result existing streets should be used more efficiently. Private cars take up significantly more road space than other forms of transportation. Transit vehicles, bicycles, and walking all require less space than cars to move more people. Through the development of the plan, the community noted a number of issues and challenges for the street network in Port Moody:

- high traffic volumes on major east-west corridors during peak periods, particularly St Johns Street, Murray Street and Clarke Street;
- rapid growth in surrounding communities which will place increasing pressures on the City's transportation network;
- the Evergreen Extension of the Millennium Line is our solution to moving people and managing peak hour congestion
- managing the impacts of through traffic on the safety and quality of life on streets;
- addressing areas of localized congestion and delay;
- integrating all modes into a comprehensive, multi-modal street network;

- difficulty finding parking; and
- vehicle speeds along major roads such as St. Johns Street, Murray Street and Clarke Street.

TRENDS AND TARGETS

Key observations about transportation patterns in the Moody Centre area that have shaped the major street network improvement strategies include:

- The number of motor vehicle lanes to, from, and within the Moody Centre area is imbalanced. When considering both the St. Johns Street and Murray Street / Clarke Street corridors, there are more westbound vehicle lanes (4 to 5 lanes) than eastbound lanes (3 to 4 lanes). In addition, in both directions, there are more motor vehicle lanes on the east side of the Moody Centre area than the west side (5 westbound lanes decreasing to 4 lanes; and 4 eastbound lanes decreasing to 3 lanes).
- The street network within the Moody Centre is already operating close to capacity. With the existing lane configurations along St. Johns Street and the Moody Street / Clarke Street corridors, the theoretical maximum vehicle capacity is approximately 3,900 vehicles per hour for the peak hour flow predominant direction (AM West and PM East). When comparing existing traffic volumes through the Moody Centre area, these corridors are already approaching their theoretical capacity today. However, the theoretical maximum vehicle capacity is significantly higher with additional lanes to the west and east of Moody Centre. Although opportunities could be considered to increase the capacity through the Moody Centre area, the capacity within Moody Centre is constrained by the current width of the Moody Street overpass, as well as the bridge over rail lines located between loco Road and Dewdney Trunk Road.
- The existing HOV lanes are under-utilized. A High Occupancy Vehicle (HOV) lane system is currently in place in the westbound direction during the AM peak period (6:00 8:30am). This westbound HOV system includes HOV lanes on St. Johns Street between Dewdney Trunk Road and Moody Street; Moody Street between St. Johns Street and Clarke Street (left turn only); and Clarke Street between Moody Street and Barnet Highway. Based on traffic counts collected in the existing HOV lane on Clarke Street and in the northbound left turn HOV lane on Clarke Street, the existing HOV lanes appear to be under-utilized. Less than 100 HOV vehicles were measured using St. Johns Street and Clarke Street HOV lanes during the AM peak hour (approximately 5% of total traffic volumes on St Johns Street). Approximately 300 HOV vehicles are travelling westbound on Clarke Street (approximately 22% of traffic volumes). HOV lanes are not in place for the eastbound direction.
- There are limited opportunities to cross the rail line. The Canadian Pacific Rail Line runs
 parallel to St Johns Street and Barnet Highway through Port Moody. The location of this rail line
 puts challenges on the road network as crossing are limited to two locations. The main crossing
 for the rail line is two bridges in parallel on St Johns Street corridor between Dewdney Trunk
 Road and loco Road. The location of these two parallel bridges results in capacity constraints for
 the Barnet at loco Road intersection due limiting queue space for vehicles on the west leg.

• The second crossing for the rail line is the Moody Street overpass, which is limited to one motor vehicle lane in each direction. The overall capacity is constrained by the Moody Street overpass, which creates a bottleneck in the network.

STRATEGIES AND ACTIONS

The long-term plan for moving people and goods includes seven related strategies that are designed to ensure the safe and convenient movement of people and goods and services throughout the city.

a. Updated Street Network Classification and Guidelines

The City's street network classification system guides the City's short-and long-term decisions regarding the configuration and design of streets and supporting facilities, as well as relationships with adjacent land uses. The Master Transportation Plan provides guidance on the typical role and function of each type of street for all road users, and provides an updated street network classification to better reflect the existing function of all streets in the City.

Action A.1 Update street network classification

Updating the street classification allows the City to establish design principles for the typical form and function of the street network on a City-wide basis. For existing streets in Port Moody, changes to the street classification are intended to better reflect their current function and will not heavily influence shifts in traffic volumes. The recommended updated street network classification is shown in **Map 5** and includes the following changes:

- Grant Street changed from local street to collector street between Clarke Street and Henry Street; and
- David Avenue changed from arterial to MRN subject to further discussions with TransLink and the City of Coquitlam.
- Heritage Mountain Boulevard changed from arterial to MRN subject to further discussions with TransLink and the City of Coquitlam
- Forest Park Way (section between David Avenue and Aspenwood) changed from collector to MRN subject to further discussions with TransLink and Village of Anmore.
- Aspenwood (west of Forest Park Way) changed from collector to MRN subject to further discussions with TransLink and Village of Anmore.



Action A.2 Adopt multi-modal street classification guidelines

The plan includes recommended multi-modal street classification guidelines. The typical characteristics of each type of street for all road users are described in **Table 1** below.

	Major Road Network	Arterial	Collector	Local – Commercial/ Institutional/ High Density
Expected traffic demands (approx. Daily)	15,000 +	5,000 – 30,000	3,000 – 12,000 (industrial/ commercial) 1,000 – 8,000 (residential)	1,000 – 3,000 (industrial/ commercial) <1,000 (residential)
Traffic and connectivity	Regional and City-wide traffic connecting to major destinations, and surrounding municipalities	City-wide traffic connecting to major destinations, MRN, and surrounding municipalities	Local and city-wide traffic connecting to Arterials	Local street traffic connecting to individual properties and Collectors
Transportation Function	Person mobility	Person mobility / land access	Person mobility / land access	Land access
Typical form	2-4 lanes plus turn lanes at intersections	2 lanes plus turn lanes at key intersections	2 lanes	2 lanes
Typical intersection spacing	400 m	200 m	60 m	60 m
Transit services	Frequent	Regular	Regular or shuttles	n/a
Bicycle facilities	Bicycle lanes, separated bicycle lanes, or off-street pathway	Bicycle lanes or off- street pathways	Bicycle lanes or shared use lanes	Neighbourhood bikeways
Pedestrian facilities	Sidewalk and/or pathway both sides with boulevard	Sidewalk both sides with boulevard	Sidewalk both sides	Sidewalk both sides
Goods Movement	Some corridors	Not designated	Not designated	Not designated
On-Street Parking	Permitted	Permitted	Permitted	Permitted
Traffic Calming	No	No	Yes	Yes

Table 1: Multi-Modal Street	Classification	Guidelines
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b. Multi-Modal Major Street Improvements

The major street network – which generally includes Major Road Network (MRN) corridors as well as arterial streets – represents a critical component of the City's transportation system, as it supports not only automobile traffic, but walking, transit, cycling, and goods movement. There are essentially three foundational approaches to shaping the long-term direction of the major street network in the City to address issues of mobility and safety as well as to accommodate planned growth and development. For the purpose of identifying all long-term possibilities for the City's major street network, three thematic types of 'possibilities' were investigated as alternatives to consider for each major street as identified below:

Increase Corridor Capacity

Increase people-moving capacity
Widen to add lane(s)
Potentially reduce space for

walking and cycling

Manage Existing Space Maintain existing vehicle lane

Widen to add space for
 walking and/or cycling

Re-balance Streetscape

- Reduce lanes (under-utilized capacity) or remove parking
- Increase space for walking cycling and/or parking
- Jarrow crossings
- Signal optimizations

Throughout the Master Transportation Plan process, discussions with community and agency stakeholders were used to assess the relative merits of these three approaches for each major street – not only evaluating the optional improvement concepts, but to develop priorities that best serve the interests of the community. Based on discussions with the community and technical input, it was determined, the City's street network is largely built out and significant changes to network (such as new roads or large-scale widenings) are not anticipated or planned in the coming years. To be more sustainable, the primary objectives of improvements to the major street network are generally to manage the existing street network and to promote the integration of all travel modes into the system, particularly along major streets where most improvements have traditionally been oriented to moving single occupant vehicles in the past. This approach will support the overall vision for a sustainable community and support the vision and goals of the Master Transportation Plan.

Action B.1 Improve primary east-west corridors

a. Remove HOV lane on St. Johns Street and re-purpose the street space. St Johns Street is part of the Major Road Network and provides a critical east-west regional connection between Coquitlam and Burnaby. The plan recommends that the City pursue an option to remove the HOV lane designation on St Johns Street. Removing this lane designation supports other operational improvements described elsewhere in the plan, and would allow the City to consider re-purposing the street space. Removing the HOV lane designation would first require approval from TransLink. It is recommended that the City first submit a request to remove the HOV lane designation. Should this removal be successful, the City should then conduct a St Johns Street Technical Study to design a streetscape that details future improvements to this corridor. This design will include onstreet parking, protected on-street or off-street bicycle facilities, intersection safety improvements, curb extensions, landscaping bus stop and accessibility improvements.

- b. Remove HOV lane on Clarke Street and re-purpose the street space. Clarke Street is part of the Major Road Network and provides an east-west link between Barnet Highway and Moody Street that continues along Murray Street east of Moody Street. The plan recommends that the City pursue an option to remove the HOV lane designation on Clarke Street. Removing this lane designation supports other operational improvements described elsewhere in the plan, and would allow the City to consider re-purposing the street space. Removing the HOV lane designation would first require approval from TransLink. It is recommended that the City submit first a request to remove the HOV lane designation. The City will then re-balance the streetscape by providing on-street bicycle lanes. As part of the proposed works, the channelized AM HOV right turn lane at The Barnet Hwy intersection will be a general purpose lane. HOV lanes will remain on Barnet Highway north of View Street.
- c. **Manage existing street space on Murray Street.** Murray Street is part of the Major Road Network and provides an east-west link between loco Road and Moody Street that continues along Clarke Street west of Moody Street. The recommended improvements for Murray Street involve Managing Existing Space and would include maintaining the number of existing vehicles lanes and on-street parking on both sides of the street, two-way off-street bicycle path, adding curb extensions, adding new crosswalks, improving bus stop accessibility and amenities, and improving pedestrian accessibility and pedestrian crossing wait times at signalized crossings.
- d. Repurpose Spring Street to be a pedestrian priority street. Spring Street is currently an east-west local street running through the Moody Centre area between Douglas Street and Electronic Avenue. Spring Street accommodates local vehicle travel as well as access to residential and commercial properties. Spring Street is envisioned to be a pedestrian priority street, where pedestrians, bicycles, and local serving motor vehicle traffic share the narrow right-of-way. Proposed improvements could include restricting vehicle traffic to one-way traffic flow in sections, adding curb extensions, creating a shared space environment, using high quality pavement markings, considering time-based restrictions for loading vehicles, and providing enhanced crossing treatments.

Action B.2 Address the Moody Street Bottleneck

One of the critical locations within the City's transportation network is the Moody Street overpass. Several options were developed for the base of the Moody Street overpass, as well as the Moody Street and Clarke Street intersection and Moody Street and Grant Street intersection. Based on the options analysis, it is recommended that the City address the Moody Street Bottleneck by adding new traffic signals at Moody Street and Murray Street (base of the ramp), and at Moody Street at Grant Street. In addition, the City should install advance detection systems for improved intersection efficiency and restrict northbound left turns and southbound through movements at Moody Street and Clarke Street. By removing these minor movements from the Moody Street and Clarke Street intersection, and coordinating signals at Grant and Murray Street, it is anticipated that improve traffic operations can be achieved over the short-term.

The Moody Street bridge is anticipated to last, at minimum, another 20 years. As the City grows during this time period, a larger structure with improved capacity at each intersection approach may be required. If there is growth in the Special Study Area (as defined by the OCP) west of Rocky Point Park, the OCP

requires that a local area or development plan be prepared and reviewed as part of any redevelopment proposal for these areas. This development plan will include a detailed transportation impact assessment that details access and egress for the development areas and impacts of the proposed development on the transportation network. If development occurs, densities will be clearly identified and corresponding transportation impacts; this information will then help guide informed decisions on how best to move forward for the Special Study Area.

Action B.3 Improve gateways and inter-municipal connections

As most trips that originate in our city end in other municipalities of the North East Sector, inter-municipal corridors provide important connections that serve our all residents in this region. Based on technical input and discussions with the community, improvements for inter-municipal corridors are identified below:

- Clarke Road provides a critical north-south regional connection to Coquitlam and Burnaby, and is part of the MRN. Clarke Road currently consists of a four lane cross-section with two lanes in each direction south of Mount Royal Drive, transitioning to a three lane cross-section with two northbound lanes and one southbound lane between Mount Royal Drive and Barnet Highway. In 2016, the City completed a pavement rehabilitation and safety project that led to safety and operational improvements along the corridor. In addition, the City recently added a sidewalk extension in 2012 that now provides continuous sidewalks on both sides of the street. The 2005 Master Transportation Plan identified the widening of Clarke Road to four lanes based on projected traffic volumes. Traffic volumes as projected in the 2005 plan have not materialized that warrant a four lane cross section for this roadway. Safety improvements identified in this plan propose a widening of Clarke Road to 4 lanes for the base of the hill only. This widening would consist of 4 lanes (2 lanes each direction) north of St George Street. The intent of this widening is to reduce potential for rear end collisions in this area. An off-street bicycle facility is also recommended for the bottom section to connect to Seaforth Way. A traffic signal is also identified for the south intersection of Seaforth Way to improve pedestrian and cycling access.
- Gatensbury Road provides a north-south regional connection to Coquitlam. Although it is a regional serving corridor serving both jurisdictions, it is classified as a collector road. Gatensbury Road has challenging topography and road alignment, as it is situated between two natural ravines/creeks with limited room for roadway improvements. The City completed safety improvements to Gatensbury Road in 2011, that reduced side-swipe and head-on collisions. Several improvements were also recommended in the Traffic Calming Plan for the Moody Centre area. Proposed improvements include adding a sidewalk to one side of Gatensbury Street to improve pedestrian safety, in conjunction with sidewalk improvements being planned in the City of Coquitlam.
- Moray Street also provides an important north-south regional connection to Coquitlam. Although it is a regional serving corridor serving both jurisdictions, it is classified as a collector road. Moray Street is a two-lane cross-section with one vehicle lane in each direction. Sidewalks are provided on both sides of the street north of Pinda Drive, and only on the east side of the street south of Pinda Drive to the Coquitlam boundary. Public feedback indicates a need for upgrades to street

lighting between Portview Place and Flinn Court. This should be completed in the near term through installation of street lights in existing BC hydro leased light poles. In the long term, if opportunities arise though developments city streetlight infrastructure should be installed along this corridor. The intersection of Moray Street at St Johns Street currently has high pedestrian activity and vehicle turning movements. The Plan identifies a right turn arrow installation for Moray Street vehicles travelling north bound to east bound. In addition, the Plan identifies Street lighting improvements in the near term for this intersection to help improve pedestrian visibility.

- Noons Creek Drive is a north south collector route that connects Inlet Centre to the Westwood Plateau neighbourhood in Coquitlam. Over the past fifteen years, several traffic calming measures were installed along this corridor. Traffic Calming measures on Noons Creek Drive comprise of temporary installations (rubber and plastic devices) and permanent construction. Areas with permanent construction were prioritized based on vehicle speeds and proximity to the Mountain Meadows Elementary School Zone. Based on speed data results and public feedback, temporary traffic calming measures will be removed, the Plan considers traffic calming measures on a Noons Creek complete.
- Ioco Road is part of the MRN and plays an important inter-municipal role to provide connections to Anmore and Belcarra, as well as the Buntzen Lake area which attracts numerous visitors, causing higher traffic volumes in the summer months. The 4-kilometre, two-way road between First Avenue and Maude Road is a windy road with several horizontal and vertical curves; however, vehicles speeds are generally higher than the posted speed limit of 50 kilometres per hour. Over the past several years, many residents have questioned the safety for vehicles, pedestrians and bicycles using the corridor.

In 2010, the City conducted the loco Road Safety Improvements Project. In addition, utility assessments along loco corridor are currently underway. All projects identified in short and medium term in the report are complete or on-hold following utility improvements for the north shore of Port Moody. If extensive repairs that involve open excavations along this corridor are required, the Master Transportation Plan recommends installing new sidewalks and on-street bicycle lanes for each direction or, installing a shared use pathway in street restoration works. If repair work does not require extensive open excavation work, the Master Transportation Plan recommends sidewalk improvements (as identified in the loco Road Safety Improvements Project report) for areas east of Barber Street to Knowle Street to be undertaken alongside installation of new bicycle and pedestrian facilities west of April Rd to First Avenue (also in this report). These improvements projects will provide continuous sidewalks for the corridor and bicycle facilities for the entire corridor (either on loco Road itself or the parallel connection of Inlet Trail, Alderside Road and loco Road west of April).

The loco Road corridor currently serves as the main access for the loco Townsite heritage area. The loco Townsite area is designated in the Official Community Plan (OCP) as a Special Study Area. For Special Study Areas, the OCP requires that a local area or development plan be prepared and reviewed as part of any redevelopment proposal for these areas. This development plan will include a detailed transportation impact assessment that details access and egress for the development areas and impacts of the proposed development on the transportation network that will help guide informed decisions for how best to move forward.

David Avenue is an arterial road that was completed as an east-west route as part of the development of Heritage Mountain and Heritage Woods. David Avenue provides a regional connection to Anmore through Forest Park Way (which is owned by Port Moody) to East Road (which is owned by Anmore and is part of the TransLink funded and regulated Major Road Network (MRN). Further east, portions of David Avenue east of Pipeline Road in Coquitlam are also designated as part of the MRN. David Avenue has a right-of-way that was acquired to accommodate a future extension west in conjunction with potential redevelopment of the loco Townsite Lands. If David Avenue is extended, the Master Transportation Plan recognizes the need to ensure bicycle and pedestrians facilities are incorporated into the roadway, impacts to adjacent park lands are minimized, and access to the park is maintained. Further, if David Avenue is extended, the City should continue to work with TransLink to have this corridor added to the TransLink funded and regulated Major Road Network.

David Avenue currently serves as the secondary access for the loco Townsite heritage area. The loco Townsite area is designated in the Official Community Plan (OCP) as a Special Study Area. For Special Study Areas, the OCP requires that a local area or development plan be prepared and reviewed as part of any redevelopment proposal for these areas. This development plan will include a detailed transportation impact assessment that details access and egress for the development areas and impacts of the proposed development on the transportation network that will help guide informed decisions for how best to move forward.

The City is currently investigating other options for the David Avenue Extension. This investigation will include an assessment of transportation, environmental and financial components.

- Barnet Highway (West Section). Barnet Highway (West) consists of four to six lanes of free flow arterial with minimal traffic signals and side streets. In general, congestion for this inter-municipal corridor is the result of activities on other sections corridor such as Hasting Street to the west and Clarke and St Johns Street to the east. Intersection operation improvements proposed in the Moody Bottleneck section and traffic signal timing updates on St Johns Street are anticipated to improve congestion delays for this corridor. No changes for the Barnet Highway (West Section) are proposed as part of this plan.
- Barnet Highway (East Section) Improvements are recommended at the Barnet Highway and loco Road intersection, which is the highest collision location in the city and has poor intersection performance. It is recommended that the City conduct a safety and operational analysis including a review of the options to close the south intersection leg of this loco Road at Barnet Highway intersection. Options to improve safety and operations could involve closing or partially closing access to the access road to the south. This could allow additional time to accommodate other major movements through the intersection. In addition, through adjacent redevelopments, there could be opportunities to create an increased grid street network through this area, including a potential new road connection at Balmoral Drive or further east at or beyond the Coquitlam border. These changes to the road network would only be considered through redevelopment, but could

offer additional local access and add redundancy to the street network and help relieve some pressures at the loco Road intersection.

 Dewdney Trunk Road. Dewdney Trunk Road should be reconfigured to provide bicycle lanes consistent with City of Coquitlam plans. In addition, the City should seek to improve intersection operations at St. Johns Street, particularly for westbound traffic. It is anticipated that intersection improvements can be achieved through signal timing upgrades

c. Improve Connections Across the Railway

Action C.1 Consider new overpasses at Mary Street and/or Moody Street if required by development

Currently, there are limited connections for motor vehicles to cross the CP rail corridor. Within the Moody Centre area, opportunities to cross the rail corridor include the CP Overpass located on Barnet Highway between loco Road and Dewdney Trunk Road, and the Moody Street overpass. These limited opportunities for vehicles to travel over the rail corridor limits creates challenges with respect to redundancy and congestion.

The OCP identifies this Oceanfront district as a Special Study area and indicates that part of the vision for this area is to integrate the existing community and the Oceanfront District through vehicle, pedestrian and cyclist linkages over the railway to connect this site with the historic commercial areas on Clarke Street, the Moody Centre commercial area, and the Evergreen Extension.

Two options were reviewed for further consideration, including:

- constructing a new overpass at the approximate location of Mary Street to accommodate redevelopment north of the rail corridor in a Special Area of Study as defined in the OCP; and/or
- decommissioning and reconstructing the Moody Street overpass as a four-lane bridge to accommodate re-development north of the rail corridor.

Connections across the railway these locations would only be required to make a connection to the Oceanfront District, which is designated as a Special Study Area in the OCP. For Special Study Areas, the OCP requires that a local area or development plan be prepared and reviewed as part of any redevelopment proposal for these areas. This development plan will include a detailed transportation impact assessment that details access and egress for the development areas and impacts of the proposed development on the transportation network that will help guide informed decisions for how best to move forward.

It is recommended a new overpass be considered if development in the OCP designated Special Study area occurs, a new overpass in this area would be the sole responsibility of developers in the Special Study Area to fund.

Action C.2 Construct new pedestrian and bicycle rail overpasses

In addition to improving vehicle connectivity across the rail corridor, it is also critical to improve pedestrian and cycling connectivity across the rail corridor. In order to improve connectivity, a pedestrian cyclist overpass is proposed east of Moody Centre Station. In addition, if the area located in the CP rail wye between the Klahnaie and Suter Brook neighbourhood, a pedestrian, cyclist (and vehicle) overpass should be constructed to connect both neighbourhoods.

d. Safety and Operational Improvements

Action D.1 Localized intersection safety improvements

There are a number of intersections throughout Port Moody that have safety or operational issues. At most locations, improvements involve intersection modifications to improve traffic operations. A number of intersection improvements have been identified, including new traffic signals, pedestrian and bicycle signals, crosswalk upgrades, and new crosswalks throughout the City. Intersection improvements are shown in **Map 6**.

Action D.2 Upgrade traffic signals and consider emerging technologies to improve traffic operations

There are a number of other changes that can be achieved through traffic signal upgrades and emerging technologies, including traffic signal updates, including:

- Signal timing and coordination. In an effort to maximize the efficiencies of the signal system and minimize stops and delays at key intersections, The City has and will continue to monitor operations and make improvements. Since 2016, the City is c phasing replacement of replace all traffic signal controllers over a 3 year period (until 2018). New traffic controllers will include revised timing plans that can and will account for revised pedestrian crossing times and intersection operation/efficiency improvements. The City will revise traffic signal timing plans across the city for various days of the week and times of day as part of this work. Traffic Signal timing plans will provide efficiency improvements city-wide. In addition to these traffic signal works, the City should conduct system wide traffic signal corridor timing revisions every 5 years to account for changes to transportation patterns and needs of the community.
- Intelligent Transportation Systems (ITS) refers to the use of information and communications technology to support transportation infrastructure and vehicles, including priority modes such as transit and the movement of commercial vehicles. Communities throughout North America have made significant advances in the signal systems hardware, software, and practices for managing mobility along urban roadways. The City has already made extensive use of ITS and should continue to focus on signal system upgrades, vehicle detection and signal preemptions, and vehicle actuated traffic calming speed signs.



e. Goods Movement Network

Action E.1 Monitor effectiveness of truck route network

A significant part of Port Moody's local economy is dependent on the movement of goods, services and people through and within the City.

TransLink has been given regulatory authority under Provincial legislation to oversee the region's truck route network. TransLink is currently developing a Goods Movement Strategy to ensure the efficient and coordinated movement of goods throughout the region.

The City recently adopted a Truck Route Bylaw. This Truck Route Bylaw identifies a goods movement network that includes the corridors of Barnet Highway, Clarke Road, Murray Street, St. Johns Street, Ioco Road, First Avenue, Bedwell Bay Road and sections of Moody Street and Clarke Street as truck routes. The City should continue to monitor trucks operations in the City to ensure compliance with the network identified.

The designated truck network is shown in **Map 7**. This truck network establishes key regional connections and also serves destinations within the City. The recommended truck network includes:

- Designated Truck Routes on St. Johns Street, Clarke Road and Barnet Highway to provide regional connections to truck routes in surrounding municipalities, and on Murray Street and Moody Street to provide access to the City's industrial areas; and
- Inter-Municipal Truck Routes on loco Road and First Avenue to provide access to Anmore and Belcarra.



3.6 A Safe and Liveable City

BACKGROUND STORY

Through the consultation for the Master Transportation Plan, residents identified the need for safe and liveable 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 neighbourhood 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 can infringe 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 street network and the ability to safely accommodate all road users.

TRENDS AND TARGETS

One of the overarching goals of the Master Transportation Plan is to make it safe for all road users to travel within the city. The plan sets a target to ultimately eliminate all fatalities from the transportation system. In Port Moody, from 2009 to 2013, there were a total of over 3,500 reported collisions involving motor vehicles, which equated to approximately 700 reported collisions per year. Most of these collisions involved property damage and personal injury. Over the five-year period, there was one pedestrian fatality.

The plan places a special emphasis on improving safety, as this is a theme which is interwoven throughout all components of this document. The previous chapters have all focused on ways to improve safety for people walking, cycling, and those using the city's major street network. This section focuses on how the City can also work to improve personal safety and security within neighbourhoods, through traffic calming as well as measures to improve personal security. These treatments will help to reduce motor vehicle volumes and speeds while also creating more walkable and bicycle-friendly communities, which will in turn work to enhance the safety and the quality of life of the city's residential neighbourhoods.

STRATEGIES AND ACTIONS

Recognizing these issues of through traffic and access to neighbourhood areas, the policies and actions to create a safe and liveable city 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 Port Moody.

a. Traffic Calming

To minimize speeding in residential areas of Port Moody, traffic calming measures can be applied where appropriate. Traffic calming 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. The City of Port Moody has developed a process for residents to initiate improvements, the Neighbourhood Traffic Calming Policy outlines a process to identify, prioritize, prepare and implement neighbourhood traffic calming plans in Port Moody. A recommendation of the Master Transportation Plan is for Port Moody to update the Neighbourhood Traffic Calming Policy. Another Action for Traffic Calming is a proactive approach of traffic calming measures that will be implemented with utility related works at the discretion of the City Engineer.

Action A.1 Update Neighbourhood Traffic Calming Guidelines

The Neighbourhood Traffic Calming Guidelines is a policy document that details the process for neighbourhood initiated actions to develop traffic calming improvements. This document should be updated to revise the scoring criteria for traffic calming initiatives.

In response to several traffic calming studies, residential streets in Moody Centre south of St Johns Street between Albert Street and Buller Street should have traffic calming features installed where feasible as part of utility related works that require road asphalt resurfacing. This work will mainly consist of speed humps located on east / west streets. Traffic calming features should be minimal on north / south streets in this area as installations will unduly delay response times for emergency vehicles accessing the neighbourhood.

b. Improve Personal Safety

Improving personal safety is a key component of TransPort Moody. All policies and projects identified will review personal safety as a key component of design. In addition, the City will make specific improvements to street lighting levels in the following areas to help encourage residents to feel comfortable and safe when using the street network:

Action B.1: Improve intersection lighting levels

- Though consultation with the public, it was found that insufficient lighting and low visibility in some areas cause many residents to feel unsafe and ultimately discourage from travelling, particularly by foot or by bicycle. In order to address issues of personal safety and to encourage active transportation as a safe and convenient transportation choice, improved intersection lighting levels are recommended at the following locations:
- loco Road west of Knowle Street;
- Moray Street

- Barnet Highway at loco Road
- St. Johns Street at the intersections of Moray Street, Buller Street, Hugh Street, Moody Street and Kyle Street; and
- Moody Centre residential neighbourhoods north of St Johns Street between Albert Street and Buller Street.

4. Moving Forward

The directions and actions described in the previous chapters are intended to guide Port Moody's policy, planning and capital investment decisions over the next 20 years and beyond. While TransPort Moody has been developed as a long-term plan, there is also a need to prioritize improvements over the short-, medium- and long-term.

This chapter presents an implementation and phasing strategy, including cost estimates and prioritization of actions and transportation infrastructure improvements over the short-term (0 to 5 years), medium-term (5 to 10 years) and long-term (10 years and beyond).

4.1 **Prioritizing Actions**

Table 2 provides perspective on how Priorities and Actions defined in the plan will be implemented with respect to:

- Timeframe. Each action is identified as either a short-term (0 to 5 years), medium-term (5 to 10 years) or long-term (10 years and beyond) initiative. Many actions will be implemented on an on-going basis, in which case they are shown under each timeframe. It should also be noted that these priorities may change over time. If an opportunity arises to implement an action identified as a medium or long-term priority, such as through a redevelopment opportunity or other capital project, the City should seek to maximize the opportunity.
- Method of Implementation. This column identifies how each action will be implemented: as a capital project, through ongoing operations and maintenance, or as a policy or programming initiative.
- Who Should Lead? This column suggests the primary and secondary responsibility for each action. Many actions are the primary responsibility of the City, while other actions should be led by external agencies, such as the TransLink or the private sector.
- Goals Addressed. Each action is categorized based on its relative contribution to each of TransPort Moody's seven goals. Although some actions may only work to achieve one goal, many actions can help achieve multiple goals.

Table 2: Prioritizing TransPort Moody Strategies and Actions

	TIMEFRAME			RESPO	GOALS	
	Short- Term	Medium -Term	Long- Term	Primary	Secondary	
1. A Compact, Complete City						
a. Network of Complete Streets						
Action A.1 Finalize the Complete Streets Implementation Manual and work with developers to implement the guidelines to develop a network of complete streets within Moody Centre	V			Planning	Engineering	Community Planning
b. Transit Oriented Communities						
Action B.1 Support the OCP directions to encourage Transit Oriented Communities around SkyTrain stations			V	Planning	Engineering	Community Planning
c. Vibrant Waterfront						
Action C.1 Improve connections and accessibility between Moody Centre and Inlet Centre with the waterfront			V	Planning	Engineering	Community Planning
2. A Walkable City		·		·	·	·

a. Create Great Places and Destinations					
Action A.1 Ensure new developments in high pedestrian activity areas provide high quality urban design and placemaking features			Planning	Engineering	Community Planning
Action A.2 Establish Pedestrian Priority Streets	V		Engineering	Planning	Community Planning
b. Enhance Sidewalks and Pathways					
Action B.1 Fill in gaps in the sidewalk network by strategically investing in new sidewalks on existing streets.	V		Engineering	Operations	Service Excellence
Action B.2 Revise the City's requirements for sidewalks on new streets	V		Engineering	Planning	Moving People
Action B.3 Support trail and pathway enhancements as recommended in the Parks and Recreation Plan			Parks	Engineering	Parks and Recreation
Action B.4 Ensure sidewalks and pathways are well-maintained throughout the year	V		Operations	Engineering	Service Excellence
c. Improve Safety and Accessibility					
Action C.1 Develop new pedestrian and cycling overpasses		V	Planning	Engineering	Community Planning / Moving People
Action C.2 Identify and implement pedestrian safety improvements at signalized intersections	V	V	Engineering	Operations	

Action C.3 Install new traffic signals	V	V	Engineering	Planning	Moving People
Action C.4 Identify new crosswalks and upgrade existing crosswalks to improve pedestrian safety	V	V	Engineering		Moving People
d. Develop Walking Support Programs					
Action D.1 Support other organizations in their initiatives to promote walking	Ø		Engineering	Planning	Service Excellence
3. A Bicycle-Friendly City					
a. Develop a Complete, Comfortable, and Connected Bicycle Network					
Action A.1 Develop and implement a complete bicycle network that connects all neighbourhoods and destinations throughout the City.	N	V	Engineering	Operations	Moving People
Action A.2 Focus on implementing bicycle facilities that are comfortable for people of all ages and abilities			Engineering	Planning	Service Excellence
Action A.3 Design intersections to improve cycling safety and comfort		V	Engineering	Planning	Arts and Culture / Moving People
b. Make Cycling Convenient					
Action B.1. Work with businesses to provide bicycle parking in the public right-of-way in key areas of the City.		V	Engineering	Cultural Services	Economic Development

Action B.2 Develop requirements for bicycle parking and end-of-trip facilities new developments			Planning	Engineering	Community Planning
Action B.3 Work with businesses to develop an on-street bicycle corral program	V		Engineering	Cultural Services	Economic Development
Action B.4 Work with community groups to provide temporary bicycle parking at large community events	V		Cultural Services	Engineering	Arts and Culture
Action B.5 Support TransLink to encourage opportunities to integrate cycling and public transit	V		Engineering	Planning	Preserving the Environment
Action B6 Prioritize cleaning of bike paths and bike lanes.	Ø		Operations	Engineering	Service Excellence
c. Cycling Support Systems					
Action C.1 Support other organizations in their initiatives to promote cycling	V		Engineering	Planning	Preserving the Environment
4. A Transit Oriented City					
a. Support the Millennium Line – Evergreen Extension					
Action A.1 Continue to encourage Transit Oriented Development (TOD) within 400 metres of Evergreen Extension SkyTrain stations			Planning	Engineering	Community Planning

Action A.2 Support high quality transit connections to integrate with the Evergreen Extension	Ŋ			Engineering	Planning	Moving People
Action A.3 Improve walking and cycling access to Evergreen Extension Stations	V	V		Engineering	Planning	Moving People
Action A.4 Support the provision of a third Evergreen Extension station at Queens Street			V	Planning	Engineering	Community Planning
b. Create More Attractive Transit Services						
Action B.1 Encourage TransLink to provide high frequency service during peak periods	V	V		Engineering	Planning	Service Excellence
Action B.2 Encourage TransLink to improve off- peak transit service frequency	V	V		Engineering	Planning	Service Excellence
Action B.3 Support changes that enhance service and connections within Port Moody	V	V		Engineering	Planning	Service Excellence
Action B.4 Implement Transit Priority Treatments	V	V		Engineering	Operations	Moving People
Action B.5 Advocate for West Coast Express service improvements		V	V	Engineering	Planning	Moving People
c. Create a Universally Accessible Transit System						
Action C.1 Improve access to transit facilities	V		V	Operations	Engineering	Moving People
d. Improve the Customer Experience						
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Action D.1 Improve bus stop passenger amenities	V	V	V	Operations	Engineering	Moving People
5. Moving People and Goods						
a. Update Street Network Classification and Guidelines						
Action A.1 Update street network classification	Ø			Engineering	Planning	Moving People
Action A.2 Adopt multi-modal street classification guidelines		V		Engineering	Planning	Moving People
b. Multi-Modal Major Street Improvements						
Action B.1 Improve primary east-west corridors	Ø	V	V	Engineering	Planning	Moving People
i. Remove HOV lane on St Johns Street and re- purpose the street space.				Engineering	Operations	Moving People
ii. Remove HOV lane on Clarke Street and re- purpose the street space.				Engineering	Operations	Moving People
iii. Manage existing street space on Murray Street.	V			Engineering	Operations	Moving People

iv. Repurpose Spring Street to be a pedestrian priority street.	V	V	V	Engineering	Operations	Moving People
Action B.2 Address the Moody Street bottleneck		V		Engineering	Planning	Moving People
Action B.3 Improve gateways and inter-municipal connections	V	V	V	Engineering	Planning	Moving People
c. Improve Connections Across the Railway						
Action C.1 Consider new overpasses at Mary Street and/or Moody Street if required by development		V		Planning	Engineering	Community Planning
Action C.2 Construct new pedestrian and bicycle overpasses in coordination with new development.		V	V	Engineering	Planning	Moving People
d. Safety and Operational Improvements						
Action D.1 Localized intersection safety improvements	V	V		Engineering	Planning	Moving People
Action D.2 Upgrade traffic signals and consider emerging technologies to improve traffic operations	V			Engineering	Planning	Moving People
e. Establish a Goods Movement Network						
Action E.1 Monitor effectiveness of truck route network	V	V	V	Engineering	Planning	Moving People

6. A Safe and Liveable City				
a. Traffic Calming				
Action A.1 Update Neighbourhood Traffic Calming Guidelines	Ø			
b. Improve personal safety				
Action B.1 Improve intersection lighting levels				

4.2 **Project Prioritization**

Cost Estimates

Conceptual order-of-magnitude cost estimates were developed for each of the capital investments identified in the Master Transportation Plan to provide a sense of the potential overall future levels of transportation investment for the City in current (2017) dollars. The cost estimates provided for discussion purposes only. The cost estimates are based on typical unit costs and recent pricing in Port Moody and elsewhere. The cost estimates have been provided to identify the relative cost for planning purposes, but should be further refined for budgeting purposes. In addition, possible contributions from other agencies and the private sector are not possible to estimate. The costs presented in this section should be refined further to establish project budgets and extent of project scope.

Capital costs have been organized thematically as follows:

- Walkability Improvements;
- Cycling Improvements;
- Transit Improvements;
- Safety Improvements;
- Accessibility Improvements;
- Efficiency Improvements; and
- Overpass Structures.

For each project, this section also identifies the primary contributing funding sources, based on whether each project would be funded through a City contribution or a development contribution. For those projects which would be funded through a City contribution, the funding sources have been further categorized as follows:

- **Existing**: Funding has previously been committed by the City to fund that particular project;
- LRN Paving: Funding would be provided through the City's existing Local Road Network (LRN) paving program;
- **TS AMP:** Funding would be provided through the City's Traffic Signal Asset Management Plan (TS AMP), which was recently developed to provide a traffic signal replacement strategy for the next ten years in addition to prioritized investments in infrastructure improvements. This includes items such as audible pedestrian push buttons, coordination timing upgrades, among others.
- MTP: New strategic investments identified in the Master Transportation Plan that would require additional City funding. Subject to approval of the Plan, further discussions with Council are anticipated to budget accordingly as per the standard five-year municipal capital planning process.

The total level of investment required to implement all capital improvements in the Master Transportation Plan is estimated to be approximately **\$31.7 million**, as summarized below. Detailed project costs are provided in **Appendix A**.

Entire Master	Overpass Structures	Walkability Improvements	
Transportation Plan =	3 projects valued at \$15.1 Million	27 projects valued at \$5 Million	
85 Projects Valued At	Development: 3 projects at \$15.1M	Development: 12 projects at \$2.3M	
\$31.7 Million	City: 0 projects at \$0	City: 15 projects at \$3.3M	
Bike Improvements	Safety Improvements	Efficiency Improvements	
18 projects valued at 5 Million	11 projects valued at \$1.5 Million	4 projects valued at \$730,000	
Development: 5 projects at \$1.6M	Development: 1 project at \$100,000	Development: 0 projects at \$0	
City = 13 projects at \$3.4M	City: 10 projects at \$1.4M	City: 4 projects at \$670,000	
Transit Improvements 2 projects valued at \$1.1 Million	Accessibility Improvements 20 projects valued at \$2.7 Million		
Development: 0 projects at \$0	Development: 5 projects at \$2,500,000		
City: 2 Projects at \$1.1M	City: 15 projects at \$200,000		

Project Priorities

This section identifies each of the City-contribution projects as either short-term (0 to 5 years), mediumterm (5 to 10 years), and long-term (10 years and beyond) priorities for the City. Priorities have been established that fit within the City's funding levels over the short- and medium-term. Priorities were assessed using a scoring system that includes **relative cost**, **mode shift**, **safety**, and **efficiency**. Each of these factors were combined to provide an overall score for each project.

Priorities for short-term, medium-term, and long-term implementation are shown in **Table 2** below. Detailed project priorities are shown in **Appendix B**. It should be noted, however that these priorities are intended to be flexible to provide the City with guidance, priorities are likely to change over time and should not be considered fixed.

Table 2: Summary of Priorities

Contribution	Number of Projects	Tot	al Cost
Short-Term (0-5 years)	26	\$	2,327,250
Medium-Term (6-10 years)	11	\$	2,145,250
Long-Term (10-20 years)	12	\$	4,183,500
Total	45*	\$	8,656,000

*number of projects exceeds 45, because transit improvements have been spread across all three time horizons

4.3 Funding Contributions

Costs to the City can be significantly reduced by pursuing partnership opportunities for many of the identified projects and by leveraging other funding sources within the City, such as other funding programs, road repaving projects, and utility upgrade projects. In addition, many of the projects identified in the Master Transportation Plan are developer-initiated projects. These projects would not be initiated by the City, and would only proceed based on development to accommodate growth, and the City would only be responsible for a portion of those project costs.

As noted previously, the projects identified in the Master Transportation Plan can be funded either through City contributions or development contributions. Although the total cost for all 87 projects identified in the Master Transportation Plan is \$94,520,500, the majority of those costs would be development contributions. As shown in **Table 3**, the total City contributions would be approximately \$9,515,000. Of those project identified as City contributions, 2 projects are already funded, and 17 projects are part of existing programs (LRN Paving, MRN Paving, and TS ASP). As such, the Master Transportation Plan identifies 45 new projects for a total of \$7,985,000.

Table 3: Funding Contributions

Contribution	Number of Projects	Tota	Cost
City Contribution			
Existing Funding	3	\$	1,230,000
LRN Funding	1	\$	42,000
TS AMP	15	\$	202,000
МТР	45	\$	8,656,000
Total City Contribution	64	\$	10,130,000
Total Development Contribution	23	\$	21,552,000
Total	87	\$	31,682,000

Costs to the City can be further reduced by pursuing external funding sources for many of the identified projects. However, it is recognized that the external funding sources do not provide a consistent and stable funding stream, and that in order to ensure completion of projects identified in the Master Transportation Plan, consistent funding sources should be identified to help ensure staff can logically plan for improvements and coordinate these improvements with other capital works to provide economies of scale for construction activities providing best value for capital expenditures.

This section describes several additional potential funding sources that the City may consider to help leverage its investments and to maximize its ability to implement transportation improvements. The City will regularly check with all levels of government to keep up to date on current funding opportunities. The City should pursue all available sources of funding for transportation facilities and programs, including the programs identified below (Note: as funding opportunities change regularly, the information in this section is subject to change).

In general, the City will not "chase" grants but rather pursue projects of best value to the City. If grants are received, these funds are then used as general revenue in the following year as part of the municipal 5 year financial planning process. The City constantly monitors grant and cost sharing opportunities for project eligibility. In many cases projects that receive grants are typically "shovel ready," meaning design work and funding mechanisms are in place.

 Major Road Network and Bike (MRNB) Minor Capital Program is an annual allocation of TransLink capital funds dedicated to managing and improving the efficiency of the existing MRN network. Eligible projects include minor capital works such as improvements to MRN intersections, geometrics, safety and network continuity.

- Major Road Network (MRN) Operation Maintenance and Rehabilitation Program is allocated on an annual basis to fund the operation, maintenance and rehabilitation of the Major Road Network on a pro-rated basis, depending on the number of MRN lane kilometres within each municipality.
- Transit-Related Road Infrastructure Program (TRRIP) is allocated for transit improvements, such as transit priority signals, queue-jumping lanes for buses, and bus lanes. TransLink contributes up to half of the costs of municipal capital projects, up to the maximum funding allocated to each municipality.
- Bicycle Infrastructure Capital Cost Sharing Program (BICCS) is intended to encourage municipalities to construct more bicycle routes and remove physical barriers to cycling. Funding is available in both "block allocations" on a per capita basis, and "regional needs" funding is based on a set of criteria including safety, network contribution, demand and adherence to guidelines Funding through TransLink's BICCS program is typically up to 50% of the project cost.
- Infrastructure Canada manages several programs that provide funding for environmental and local transportation infrastructure projects in municipalities across Canada. Typically, the federal government contributes one-third of the cost of municipal infrastructure projects. Provincial and municipal governments contribute the remaining funds, and in some instances, there may be private sector investment as well.
- Green Municipal Funds are managed by the Federation of Canadian Municipalities, with a total allocation of \$550 million. This fund is intended to support municipal government efforts to reduce pollution, reduce greenhouse gas emissions and improve quality of life. The expectation is that knowledge and experience gained in best practices and innovative environmental projects will be applied to national infrastructure projects.
- ICBC provides funding for road improvements, including pedestrian and bicycle facilities, particularly where these have the potential to reduce crashes, improve safety, and reduce claims costs to ICBC. Funding is available through ICBC's Road Improvement Program, and other ICBC programs include the Speed Watch Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Nose, and Road Sense Speaker Program for Schools.

4.4 Monitoring

Developing 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 resource limitations and will identify measures where information is accessible or data is simple to collect.

The monitoring program will focus on two main components. The first is the degree of the **progress** the City has made towards implementing the Master Transportation Plan. The second are the **outcomes** of the Plan. These outcomes, which are summarized in more detail below should be monitored every 2 to 4 years based on the availability of data.

• Number of completed projects identified in the Master Transportation Plan (Progress)

Measures of Success	Indicator
Sidewalks	# projects implemented
Bicycle Network	# projects implemented
Transit Stops	# bus stop improvements
Street Network	# projects implemented

Annual investment levels (Progress)

Measures of Success	Indicator
Walking	\$ and % of total transportation capital investment by the City
Cycling	\$ and % of total transportation capital investment by the City
Transit	\$ and % of total transportation capital investment by the City
Street Network	\$ and % of total transportation capital investment by the City

Network Development (Progress)

Measures of Success	Indicator
Sidewalk Network	km of existing facilities
Bicycle Network	km of existing facilities
Transit Network	# of bus stops with benches and/or shelters

Vehicle Activity (Outcome)

Measures of Success	Indicator
Traffic Volume Counts	Average Annual Daily Traffic (AADT) Volumes

Mode Share of Work Trips (Outcome)

Measures of Success	Indicator
Walking	%
Cycling	%
Transit	%
Auto (Driver)	%
Auto (Passenger)	%

Safety (Outcome)

Measures of Success	Indicator
Walking	Number of collisions and fatalities involving people walking and motor vehicles (normalized)
Cycling	Number of collisions and fatalities involving people cycling and motor vehicles (normalized)
Auto	Number of collisions per year normalized with traffic volumes Number of fatalities per year normalized with traffic volumes

Appendix A – Detailed Project Costs

Walkability Improvements

27 walkability improvement projects have been identified in the Master Transportation Plan, including new off-street pathways, sidewalks, and half signals. In total, walkability improvements are estimated to cost approximately \$5,620,000, as shown in **Table A-1**. These projects would be funded through a range of City contributions and development contributions.

Table	A-1:	Walkability	Improvement	Projects
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Description	Improvement Type	Project Cost	Funding Source
St Johns Street and Douglas Street	New Half Signal	\$315,000	Development
St Johns Street and Golden Spike Way	New Half Signal	\$315,000	Development
St Johns Street and James Road	New Half Signal	\$315,000	Development
St Johns Street and Mary Street	New Half Signal	\$315,000	Development
St Johns Street and Queens Street	New Half Signal	\$315,000	Development
Multi-Use Pathway Capilano Road to Station	Off-Street Facility (Paved)	\$210,000	Development
Albert Street - St George Street to St Johns Street	Sidewalk	\$30,000	Development
Buller Street - Henry Street to St Johns Street	Sidewalk	\$105,000	Development
First Avenue - loco Road to Anmore	Sidewalk	\$150,000	Development
Grant Street - St Johns Street to Henry Street	Sidewalk	\$90,000	Development
Hugh Street - St George to Spring Street	Sidewalk	\$75,000	Development

Barnet Highway CP Overpass Mixed Use Pathway Upgrade	Sidewalk	\$600,000	
Cecile Drive - Evergreen Drive to Clarke Road	Sidewalk	\$375,000	MTP
Douglas Street - Hope Street to Clarke Street	Sidewalk	\$105,000	MTP
Elgin Street - St George to St Johns	Sidewalk	\$45,000	MTP
Gatensbury Road - Coquitlam to Henry Street	Sidewalk	\$285,000	MTP
Harvard Drive - Glenayre Drive to Princeton Avenue	Sidewalk	\$90,000	MTP
Henry Street - East of Terra Vista Place to Buller Street	Sidewalk	\$45,000	Development
Henry Street - Gatensbury Road to Moody Street	Sidewalk	\$150,000	MTP
loco Road - Alderside Road to 1st Avenue	Mixed-Use Pathway	\$360,000	MTP
Mary Street - St Andrews to Henry Street	Sidewalk	\$105,000	MTP
Moody Street - Henry Street to St George	Sidewalk	\$45,000	MTP
Princeton Avenue - Harvard Drive to Washington Drive	Sidewalk	\$100,000	MTP
St. George Street - Albert Street to Kyle Street	Sidewalk	\$315,000	MTP

St. George Street - Moody Street to Buller Street	Sidewalk	\$315,000	MTP
Washington Drive - Princeton Avenue to College Park Way	Sidewalk	\$330,000	MTP
	-		
GRAND TOTAL		\$5,620,000	
Total City Contribution		\$3,340,000	
Total Development Contribution		\$2,280,000	

Cycling Improvements

18 cycling improvement projects have been identified in the Master Transportation Plan, including a range of facility types (neighbourhood bikeways, off-street pathways, and bicycle lanes) as well as new half signals and cycling improvements to be implemented as part of street upgrades. In total, cycling improvements are estimated to cost approximately \$5,029, 000, as shown in **Table A-2**. These projects would be funded through City contributions and development contributions.

Table A-2: Cycling Improvement Projects

Description	Improvement Type	Project Cost	Funding Source
Multiple Intersection Pavement Safety Treatments.	Bicycle Lane	\$45,000	MTP
Douglas Street - Spring Street to St George	Neighbourhood Bikeway	\$42,000	Development
Moody Street - St John Street to Clarke Street	Off-Street Facility (Paved)	\$140,000	Development
loco Rd - Newport To Murray	Off-Street Facility (Paved)	\$160,000	Development
Clarke Road - St George Street to St Johns Street	Off-Street Facility (Paved)	\$300,000	Development
Clarke Road - Seaview Drive to Coquitlam	Off-Street Facility (Paved)	\$980,000	Development
Dewdney Trunk - St Johns to Coquitlam	Bicycle Lane	\$42,000	LRN Paving
St Johns Street East Section (Moody St to Dewdney Trunk Rd)	Bicycle Lane	\$480,000	MTP
St Johns Street West Section (Moody Street to Clarke Road)	Off-Street Facility (Paved)	\$1,500,000	MTP
Clarke Street - Moody Street to Barnet Hwy	Bicycle Lane & Off-Street Facility (Paved)	\$620,000	MTP

Cecile Drive - College Park Way to Angela Drive	Neighbourhood Bikeway	\$7,000		MTP
Moody Street - St John Street to St George	Neighbourhood Bikeway	\$20,000		MTP
St George - Albert Street to Buller Street	Neighbourhood Bikeway	\$42,000		MTP
Buller Street - Golden Spike Lane to St George Street	Neighbourhood Bikeway	\$6,000		MTP
Clarke Road and Seaview Drive	New Half Signal	\$315,000		MTP
Murray Street - Off Street Pathway at Capilano Road - Railway Crossing	Off-Street Facility (Paved)	\$170,000		MTP
Remove HOV Lanes - Moody Centre	Street Restoration	\$60,000		MTP
St Johns Street Design Works	Street Restoration	\$100,000		MTP
GRAND TOTAL		\$	5,029,000	
Total City Contribution		\$	3,407,000	
Total Development Contribution		\$	1,622,000	

Transit Improvements

2 types of transit improvement projects have been identified in the Master Transportation Plan, including new benches and shelters at bus stops. 117 bus stops have been identified in Port Moody that required benches, In addition, the Master Transportation Plan assumes funding for implementing bus shelters at 60 bus stops throughout the City. In total, transit improvements are estimated to cost approximately \$1,117,000 as shown in **Table A-3**. All of these improvements would be funded through City contributions.

Description	Improvement Type	Projec	t Cost	Funding Source
Benches	Transit Bus Benches	\$	117,000	MTP
Shelters	Transit: Bus Shelters	\$	1,000,000	MTP
GRAND TOTAL		\$	1,117,000	
Total City Contribution		\$	1,117,000	
Total Development Contribution		\$	0	

Table A-3: Transit Improvement Projects

Safety Improvements

11 safety projects have been identified in the Master Transportation Plan, including new crosswalks, upgrades to existing crosswalks, intersection upgrades, and new traffic signals. In total, safety improvements are estimated to cost approximately \$1, 525,000, as shown in **Table A-4**. All but one of these improvements would be funded through City contributions.

Description	Improvement Type	Project	Cost	Funding Source
Barnet Highway at loco Road	Intersection Upgrade	\$	560,000	Existing
Dewdney Trunk Road and Fraser Street	Crosswalk Upgrade	\$	30,000	MTP
Glenayre Drive and Glencoe Drive	Crosswalk Upgrade	\$	95,000	MTP
loco Road and April Road	Crosswalk Upgrade	\$	35,000	MTP
loco Road and Barber Street	Crosswalk Upgrade	\$	35,000	MTP
loco Road and Campbell Road	Crosswalk Upgrade	\$	35,000	MTP
loco Road and Kicking Horse Way	Crosswalk Upgrade	\$	35,000	MTP
loco Road and Maude Road	Crosswalk Upgrade	\$	35,000	MTP
Newport Drive Xwalk Improvements	Crosswalk Upgrade	\$	75,000	MTP
Murray Street and Elgin Street	New Crosswalk	\$	100,000	Development
Moody Street and Murray Street	New Full Signal	\$	490,000	MTP
GRAND TOTAL		\$	1,425,000	_
Total City Contribution		\$	1,425,000	
Total Development Contribution		\$	100,000	

Table A-4: Safety Improvement Projects

Accessibility Improvements

20 accessibility projects have been identified in the Master Transportation Plan. Accessibility improvements consist of new audible traffic signals at 15 locations throughout the City and 5 new signalized intersections coordinated with new developments. In total, safety improvements are estimated to cost approximately \$2,637,000 as shown in **Table A-5**. New signalized intersections will be associated and funded by development growth, minor signalized improvements would be funded through City contributions.

Description	Improvement Type	Project Cost	Funding Source
St Johns Street & Golden Spike Way	New Full Signal	\$490,000	Development
St Johns Street & James Road	New Full Signal	\$490,000	Development
St Johns Street & Queens Street	New Full Signal	\$490,000	Development
St Johns Street & Douglas Street	New Full Signal	\$490,000	Development
Murray Street & Electronic Avenue	New Full Signal	\$490,000	Development
St Johns Street & Hugh Street	Audible Signals	\$14,000	TS AMP
St. Johns Street & Moray Street	Audible Signals	\$14,000	TS AMP
St. Johns Street & Williams Street	Audible Signals	\$14,000	TS AMP
Dewdney Trunk Road & Barnet Highway	Audible Signals	\$11,200	TS AMP
Moody Street & Clarke Street	Audible Signals	\$11,200	TS AMP
Murray Street & Klahanie Drive (west)	Audible Signals	\$11,200	TS AMP
Ungless Way & Guildford Way	Audible Signals	\$11,200	TS AMP

Table A-5: Accessibility Improvement Projects

Barnet Highway & loco Road	Audible Signals	\$14,000		TS AMP
Noons Creek Drive & Ungless Way	Audible Signals	\$14,000		TS AMP
St. Johns Street & Grant Street	Audible Signals	\$14,000		TS AMP
Turner Creek Drive & David Avenue	Audible Signals	\$10,500		TS AMP
Barnet Highway & Union Street	Audible Signals	\$11,200		TS AMP
Barnet Highway & View Street	Audible Signals	\$11,200		TS AMP
Ravine Drive & Heritage Mountain Blvd	Audible Signals	\$11,300		TS AMP
Turner Creek Drive & Heritage Mountain Blvd	Audible Signals	\$14,000		TS AMP
GRAND TOTAL		\$	2,637,000	
Total City Contribution		\$	187,000	
Total Development Contribution		\$	2,450,000	

Efficiency Improvements

4 projects have been identified in the Master Transportation Plan to improve the efficiency of the street network, including intersection upgrades and new traffic signals. In total, efficiency improvements are estimated to cost approximately \$659,000, as shown in **Table A-6**. All of these improvements would be funded through City contributions.

Table A-6: Efficiency Improvement Projects

Description	Improvement Type	Project	Cost	Funding Source
St Johns at Hugh Moody Centre Bus Priority	Intersection Upgrade	\$	15,000	TS AMP
St Johns at Moray Capacity Improvements	Intersection Upgrade	\$	84,000	MTP
Moody at Clarke Detection System	Intersection Upgrade	\$	70,000	MTP
Clarke Street and Grant Street	New Full Signal	\$	490,000	MTP
GRAND TOTAL		\$	659,000	
Total City Contribution		\$	659,000	
Total Development Contribution		\$	0	

Overpass Structures

The Master Transportation Plan identified three new pedestrian and cycling overpasses. One other overpass location was identified as part of a potential development area located between rail lines and the Klahanie and Suter Brook Neighbourhood. The fourth overpass would be subject to provide access for this development and was not costed out due to limited information and site feasibility. In total, overpass structures are estimated to cost approximately \$15, 100,000 as shown in **Table A-7**. All of these improvements would be funded through development contributions.

Description	Improvement Type	Projec	t Cost	Funding Source
OP: Williams - Murray	Overpass: Ped & Bike	\$5,600,000		Development
OP: Barnet / loco Coronation Park	Overpass: Ped & Bike	\$5,400,000		Development
OP: St Johns St (east of Moody)	Overpass: Ped & Bike	\$4,100,000		Development
GRAND TOTAL		\$	15,100,000	
Total City Contribution		\$	0	
Total Development Contribution		\$	15,100,000	

Table A-7: Overpass Structure Projects

Appendix B – Project Priorities

Priorities for short-term, medium-term, and long-term implementation are shown in **Table B-1**, **Table B-2**, and **Table B-3**, and, respectively. It should be noted, however that these priorities are intended to be flexible to provide the City with guidance, but that priorities are likely to change over time and should not be considered fixed.

Description	Improvement Type	Project Cost	Category
Remove HOV Lanes - Moody Centre	Street Upgrade	\$60,000	Bike
Cecile Drive - College Park Way to Angela Drive	Neighbourhood Bikeway	\$7,000	Bike
St Johns Street Redesign	Street Upgrade	\$100,000	Bike
Moody Street - St John Street to St George	Neighbourhood Bikeway	\$20,000	Bike
St George - Albert Street to Buller Street	Neighbourhood Bikeway	\$42,000	Bike
St Johns at Moray Capacity Improvements	Intersection Upgrade	\$84,000	Efficiency
Clarke Street and Grant Street	New Full Signal	\$490,000	Efficiency
loco Road and April Road	Crosswalk Upgrade	\$35,000	Safety
loco Road and Maude Road	Crosswalk Upgrade	\$35,000	Safety
loco Road and Barber Street	Crosswalk Upgrade	\$35,000	Safety
Dewdney Trunk Road and Fraser Street	Crosswalk Upgrade	\$30,000	Safety
loco Road and Campbell Road	Crosswalk Upgrade	\$35,000	Safety
loco Road and Kicking Horse Way	Crosswalk Upgrade	\$35,000	Safety

Table B-1: Short-Term Projects

Gatensbury Road - Coquitlam to Henry Street	Sidewalk	\$285,000	Walkability	
Transit: Bus Benches	Transit Bus Benches	\$29,250		Transit
Transit: Bus Shelters	Transit: Bus Shelters	\$250,000		Transit
Elgin Street - St George to St Johns	Sidewalk	\$45,000		Walkability
Multiple Intersection Pavement Safety Treatments.	Bicycle Lane	\$45,000		Bike
Moody Street - Henry Street to St George	Sidewalk	\$45,000		Walkability
Clarke Street - Moody Street to Barnet Hwy	Bicycle Lane	\$620,000		Bike
TOTAL		\$	2,327,250	

Table B-2: Medium-Term Projects (6-10 years)

Description	Improvement Type	Projec	ct Cost	Category
Murray Street - Off Street Pathway at Capilano Road - Railway Crossing	Off-Street Facility (Paved)	\$	170,000	Bike
St Johns Street - Moody Street to Dewdney Trunk Road	Bicycle Lane	\$	480,000	Bike
Buller Street - Golden Spike Lane to St George Street	Neighbourhood Bikeway	\$	6,000	Bike
Clarke Road and Seaview Drive	New Half Signal	\$	315,000	Bike
Moody Street and Murray Street	New Full Signal	\$	490,000	Bike
Moody at Clarke Detection System	Intersection Upgrade	\$	70,000	Efficiency
Glenayre Drive and Glencoe Drive	Crosswalk Upgrade	\$	95,000	Safety
Harvard Drive - Glenayre Drive to Princeton Avenue	Sidewalk	\$	90,000	Walkability
Henry Street - Gatensbury Road to Moody Street	Sidewalk	\$	150,000	Walkability
Transit: Bus Benches	Transit Bus Benches	\$	29,250	Transit
Transit: Bus Shelters	Transit: Bus Shelters	\$	250,000	Transit
TOTAL		\$	2,145,250	

Description	Improvement Type	Project Cost		Category
St Johns - Barnet Highway (west) to Moody Street	Off-Street Facility (Paved)	\$	1,500,000	Bike
Douglas Street - Hope Street to Clarke Street	Sidewalk	\$	105,000	Walkability
Mary Street - St Andrews to Henry Street	Sidewalk	\$	105,000	Walkability
St. George Street - Kyle Street to Grant Street	Sidewalk	\$	120,000	Walkability
loco Road - Alderside Road to 1st Avenue	Mixed-Use Pathway	\$	360,000	Walkability
Princeton Avenue - Harvard Drive to Washington Drive	Sidewalk	\$	100,000	Walkability
Cecile Drive - Evergreen Drive to Clarke Road	Sidewalk	\$	375,000	Walkability
Washington Drive - Princeton Avenue to College Park Way	Sidewalk	\$	330,000	Walkability
St. George Street - Moody Street to Buller Street	Sidewalk	\$	315,000	Walkability
St. George Street - Albert Street to Kyle Street	Sidewalk	\$	315,000	Walkability
Transit: Bus Shelters	Transit Bus Shelters	\$	500,000	Transit
Transit: Bus Benches	Transit Bus Benches	\$	58,500	Transit
TOTAL		\$	4,183,500	

Table B-3: Long-Term Projects (10+ years)