



City of Coquitlam

Strategic Transportation Plan

Summary Report

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TABLE OF CONTENTS

| 1.0 | INTRODUCTION | 1 |
|-----|---|----|
| 2.0 | VISION, GOALS & OBJECTIVES | 3 |
| 3.0 | TRANSPORTATION PLAN FEATURES | 6 |
| 3. | 1 PEDESTRIAN PLAN | 7 |
| 3. | .1.1 Key Issues and Challenges | 7 |
| 3. | .1.2 Long-Term Pedestrian Plan | 8 |
| 3. | 2 BICYCLE PLAN | 15 |
| 3. | .2.1 Key Issues and Challenges | 15 |
| 3. | .2.2 Long-Term Bicycle Plan | 16 |
| 3. | 3 Transit Strategy | 19 |
| 3. | .3.1 Key Issues and Challenges | 19 |
| 3. | .3.2 Long-Term Transit Strategy | 20 |
| 3. | 4 Street Network Plan | 24 |
| 3. | .4.1 Key Issues and Challenges | |
| 3. | .4.2 Long-Term Street Network Plan | 25 |
| 3. | 5 Parking Strategy | |
| 3. | .5.1 Key Issues and Challenges | 37 |
| 3. | .5.2 Long-Term Parking Strategy | 38 |
| 3. | 6 TRANSPORTATION DEMAND MANAGEMENT STRATEGY | |
| 3. | .6.1 Key Issues and Challenges | 42 |
| 3. | .6.2 Long-Term TDM Strategy | 42 |
| 4.0 | IMPLEMENTATION & PHASING | 47 |
| 4. | 1 THE APPROXIMATE COST OF THE PLAN | 47 |
| 4. | 2 Funding Strategies | |
| 4. | 3 Phasing Strategy | 50 |
| | MONITORING STRATEGY | |
| | | |

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1.0 INTRODUCTION

The City of Coquitlam is a vibrant and rapidly growing community located in the Northeast Sector of the Metro Vancouver region. The City has experienced rapid growth in recent years and is undergoing a transition from a predominantly suburban community to a more urbanized community with a regionally significant city centre area. In fact, Coquitlam is one of British Columbia's largest and fastest growing communities, as the City's population has doubled over the past 25 years to approximately 120,000 residents today. Rapid growth is expected to continue over the next 30 years, with an additional 100,000 residents anticipated to live in Coquitlam by the year 2041.

This growth will place significant pressures on the transportation system in coming years. Communities such as Coquitlam can no longer afford to deal with goals such as transportation, land use patterns, the environment, and the economy in isolation. It is uneconomical to invest in a single set of priorities such as transportation without serving

other City goals and objectives. The benefits of investing in transportation infrastructure go far beyond simply the provision of roads, transit services, bicycle routes and pedestrian facilities. In broader terms, investment in transportation can also help the City achieve overarching goals and objectives, such as creating a compact, complete community with land use patterns that support alternatives to the automobile; promoting a healthy environment where greenhouse gas emissions (GHG) are reduced and local and regional air quality is improved; and ensuring a vital economy that allows residents to live, work and play locally while also supporting regional economic priorities through effective goods movement.



The City's previous Strategic Transportation Plan (STP) was approved by Council in 2001 and recommended transportation improvements for all types of travel in the City for the next 20 years and beyond. Since the previous STP was adopted, there have been a number of significant changes to land use patterns and the transportation network in and around Coquitlam, including the Pitt River Bridge, provision of Community Shuttle services, construction of new road corridors such as the David Avenue connector and Coast Meridian Overpass, implementation of new bicycle routes, and increased efforts at densification throughout the community and particularly in the Coquitlam City Centre area. In addition, TransLink's Mayors' Council on Regional Transportation recently approved funding for the Evergreen Line, with associated funding commitments by the provincial and the federal government. The Evergreen Line will provide a rapid transit connection from Coquitlam City Centre through Port Moody to Lougheed Town Centre, with connections to the existing Expo and Millennium SkyTrain lines.



The development of the updated STP has involved a comprehensive process over the past 18 months. As shown in **Figure 1**, the STP was developed in four discrete phases based on a series of five Discussion Papers were been prepared throughout the course of this study. This summary document incorporates and summaries the findings and directions from each Discussion Paper. Each of these Discussion Papers is included as Technical Appendices to this document.

Figure 1: Process for Developing the Strategic Transportation Plan

| Phase | Phase 1 Discovering & Visioning | Phase 2 Developing Scenarios | Phase 3 Preferred Scenario | Phase 4 Adopting the Plan |
|---------|---|---|---|--------------------------------|
| Purpose | Transportation Conditions and Challenges Vision, Goals and Opportunities | Vision, Objectives and Targets Develop multiple scenarios | Choose elements of preferred scenario Refine scenario and strategies | •Draft and Adopt STP Update |
| Reports | Discussion Paper #1 – Discovering Discussion Paper #2 - Visioning | Discussion Paper #3– Evaluation Criteria and Funding Trends Outlook Discussion Paper #4 – Transportation Improvement Possibilities | • Discussion Paper #5 – Transportation Possibilities Performance and Evaluation | • Draft STP • Final STP |

The STP has been developed with broad participation of the Coquitlam community to ensure that the plan reflects the values and interests of the community. The Plan has been guided by both a Technical Advisory Committee made up of City staff from various departments and external agencies as well as a Public Advisory Group made up of key stakeholders. There were also several opportunities for public input through various forums such as open houses, workshops, and on-line surveys.

The ultimate success of the STP will depend largely on the municipal-wide coordination of transportation and land use planning activities. The integration and coordination of land use and transportation planning can occur through the development of a compact, complete community that directs growth towards compact, mixed-use, high density, pedestrian- and bicycle-friendly, and transit-oriented communities, while also promoting sensitive approaches to residential intensification in the lower density residential neighbourhoods. Further, investment in transportation is a foundational element to achieve each of the City's overarching community goals as well as economic, social, and environmental sustainability. As such, the STP is explicitly linked to key planning documents, such as the City's Corporate Strategic Plan and Official Community Plan (OCP). Implementation of the STP will also help achieve the goals and objectives of many of the City's plans, such as Neighbourhood Plans and Area Plans, the Community GHG Reduction Strategy, the Parks and Recreation Master Plan and other related local initiatives, as well as regional plans such as the Regional Growth Strategy, Regional Transportation Strategy, and forthcoming Northeast Sector Area Transit Plan.

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2.0 VISION, GOALS & OBJECTIVES

The vision, goals and objectives of the STP are explicitly linked to the City's overall commitments towards sustainability and livability. In keeping with that commitment and through the input and guidance from public and agency stakeholders, the stated **Vision** for the STP is as follows:

> Coquitlam's transportation system by 2031 will enhance the livability and sustainability of our community of neighbourhoods, by providing accessible, safe and convenient transportation choices with a greater emphasis on transit, walking and cycling both locally and between neighbouring communities.

The Goals are intended to provide clear direction to help achieve the vision identified above, and are shaped by the City's Official Community Plan. The Vision for the City's transportation is as follows:

Goal 1: A Compact, Complete Community By Nature. Build high quality multi-modal facilities within and between neighbourhoods.

Goal 2: A Healthy Environment. Develop transportation infrastructure and services to support a healthy environment.

Goal 3: Housing Choices in Distinctive Neighbourhoods. Maintain and improve the quality of streets as a place for people.

Goal 4: A Vital Economy. Move people and goods efficiently.

Goal 5: Strategic Transportation Choices. Prioritize walking, cycling, transit, and other sustainable modes of transportation.

Goal 6: Meeting Changing Community Service and Infrastructure Needs. Manage the transportation system efficiently as the community evolves.

Each goal is supported by more specific objectives that define how those goals will be achieved The goals and objectives for the STP are not simply aspirational statements to guide the plan process, but have been used to develop **Strategic Transportation Plan** 3



mode shift targets that will support the City's commitment to reduced GHG emissions, to shape the development of improvement strategies that have been developed for each mode, to evaluate the options and to establish priorities based on a balanced evaluation that is specifically tied to the City's long-term goal for the community. Some of the measures used as indicators are shown in **Figure 2**.

| 1. Compact, Complete Community | Percent of City within 400 metres of bicycle facility, sidewalk, or frequent transit corridor |
|--|--|
| 2. A Healthy Environment | Percent change in greenhouse emissions Percent change in vehicle kilometres trvelled |
| 3. Quality of Streets | Improving safety of neighbourhood streets Contribution to making key urban centres more pedestrian, bicycle and transit friendly Accesibility improvements |
| 4. Move People and Goods | Travel time savingsChanges in delay |
| 5. Prioritze Sustainable Transportation | Mode shift to walking, cycling and transit Attractiveness of walking, cycling and transit Safety improvements for all users |
| 6. Manage the Transportation System Efficiently | •Costs and Benefits |

Figure 2: Key Indicators to Evaluate Options and Shape Priorities

Targets are a critical component of a transportation plan, as they are an effective way to measure progress towards achieving the goals of the Plan. Targets will help to ensure that the STP is implemented as intended, and to determine whether the plan is achieving its goals. One of the most common targets for transportation plans is mode share, or the percentage of trips made by each mode of transportation. It implies much more than simply how people are choosing to travel. Among other things, changes in mode share can be an indicator of how attractive the City will be for walking, cycling and using transit; how integrated the City's transportation system is with land use patterns; and how well the transportation system is helping to achieve the City's vision to be a community of neighbourhoods within a vibrant urban city were people of all ages, abilities and cultures choose to live, learn, work, and play.

City of Coquitlam – Strategic Transportation Plan

Based on the greenhouse gas emissions reductions targets established in the City's Draft Community Greenhouse Gas Reduction Strategy as well as input from public and agency stakeholders, the target for the STP is that 30% of all trips made by Coquitlam, residents in 2031 are made by walking, cycling or transit. As shown in **Figure 3**, achieving this target will mean reducing the proportion of vehicle trips from 82% today to 70% in 2031, and increasing the mode share for walking, cycling and transit from 18% to 30% of all trips made by Coquitlam residents. Experience elsewhere suggests that this is an ambitious target, and achieving this target will require significant investments in pedestrian, cycling and transit over the next twenty years.

Figure 3: Existing Baseline (2008), Future Trend (2031), and Future Target (2031) Trips and Mode Shares



Source: 2008 Data based on 2008 TransLink Trip Diary Survey

3.0 TRANSPORTATION PLAN FEATURES

This plan presents a vision for each of the primary modes of travel – namely walking, cycling, transit, and the street network. In addition, the Plan provides guidance regarding parking management as well as a Transportation Demand Management (TDM) Strategy. Each component of the long-term Strategic Transportation Plan contains several features designed to achieve the overall vision, goals and objectives for the City of Coquitlam. Although these features are grouped by mode for the purpose of discussion, they are very much interdependent. This approach ensures that the resulting transportation system improvements are seamless and that the transportation system will help the City move towards sustainability. The key features of the Strategic Transportation Plan are illustrated in **Figure 4.** Note that plans can be distinguished from strategies in that plans require the allocation of capital resources, while strategies provide policy direction and strategic guidance to municipalities and agencies such as TransLink.



Figure 4: Key Features of the Strategic Transportation Plan



3.1 Pedestrian Plan

Walking is the most fundamental form of transportation. Walking is 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 can also be a convenient alternative to the automobile for almost all short trips. Promoting walking can help reduce automobile dependence and greenhouse gas emissions, improve public health outcomes, increase social connections, reduce infrastructure demands, and create more livable and vibrant communities. Walking is a key element to support the City's commitments towards liveability and sustainability as well as the vision and goals for the Strategic Transportation Plan.



3.1.1 Key Issues and Challenges

The opportunities to walk in Coquitlam are principally shaped by land use patterns as envisioned in the City's Official Community Plan as well as the neighbourhood and area plans that continue to be prepared for key areas of the community. The Pedestrian Plan supports a walkable Coquitlam through the provision of attractive facilities that are intended to overcome many of the barriers that exist today. The key issues and challenges for walking that have been highlighted through discussions with community stakeholders include:

- Sidewalk coverage In many of the older areas of the City, particularly in Southwest Coquitlam, sidewalks have not been provided.
- Sidewalk quality and accessibility Many existing sidewalks are not perceived to be comfortable, attractive and accessible.
- Wide road crossings There are a number of major arterial roads and highways which are challenging, particularly for the elderly and disabled, to cross.
- **Topography** Physical challenges are presented by the steep topography throughout the community.
- Transit integration Pedestrian facilities that provide access to bus stops and transit exchanges are not always
 planned and designed effectively.
- Pedestrian safety and security Pedestrian safety, comfort, and security are primary concerns for residents.

Pedestrian facilities in commercial areas – The provision of attractive and accessible pedestrian facilities within
commercial areas is seen as an important way to support local businesses and to encourage residents and visitors to
visit the City's commercial districts on foot.

3.1.2 Long-Term Pedestrian Plan

The long-term Pedestrian Plan recognizes that in some areas of the City, the provision of sidewalks to complete the network and provide continuity for walking trips is essential. The Pedestrian Plan also recognizes that certain areas of the City will generate more pedestrian demand over a larger area than others. For many areas of the City, such as the City Centre and Neighbourhood Commercial Centres where walking will be most prominent, extraordinary treatments above and beyond the provision of sidewalks are required to make walking even more attractive and to contribute toward the vibrancy of City streets. This section summarizes the key features of the Pedestrian Plan.

1. Increase Sidewalk Coverage

The City's current sidewalk network includes approximately 479 km of sidewalks. As discussed above, there are several large areas that do not meet the City's sidewalk standards. Most of the areas that are deficient in sidewalks are in some of the established parts of the City, particularly in Southwest Coquitlam. However, implementing new sidewalks throughout the City to meet the full City standards is not reasonable. Improvements in the pedestrian strategy recommend strategically increasing sidewalk coverage in areas that reflect higher pedestrian demand as well as areas that address safety concerns. To that end, the Pedestrian Plan recommends strategically increasing sidewalk coverage in key areas of the City, and recommends an additional 142 km of sidewalks throughout the City over the long-term. To help establish priorities among the new sidewalks, the implementation of new sidewalks can be prioritized as shown in **Table 1**, which results in approximately 46 km of highest priority sidewalks. This information is shown in **Map 1**.

Table 1: Sidewalk Priorities

| Highest Priority | Within or directly connecting to the City Centre or a Neighbourhood Commercial Centre Within a Pedestrian Precinct and also adjacent to a bus stop or school Outside a Pedestrian Precinct, but on an arterial or collector road with no current sidewalks |
|----------------------|--|
| Moderate Priority | Outside a Pedestrian Precinct, but adjacent to a bus stop or school Outside a Pedestrian Precinct, but on an arterial or collector road with a sidewalk currently only on one side of the street |
| Lower Priority | Within a Pedestrian Precinct, but not within or connecting to the City Centre or Neighbourhood Commercial Centres and not adjacent to a bus stop or school Outside a Pedestrian Precinct, but on an arterial or collector road in a rural context |



2. Enhance Pedestrian Quality

The Pedestrian Plan defines three types of pedestrian areas in which to identify design treatments that will make Coquitlam an even more walkable community in the long-term, as shown in Map 2. These pedestrian areas include:

- Pedestrian Precincts are those areas where walking could be the primary mode of travel and should be prioritized. These are areas that support a diverse mix of higher-density land uses that attract multi-purpose trip making and where significant volumes of pedestrians can be expected. Pedestrian Precincts throughout Coquitlam include the City Centre area, Neighbourhood Commercial Areas throughout the City, and areas around rapid transit stations.
- School Pedestrian Areas include areas around schools throughout the City. These areas will attract children
 and youth and require attractive and safe pedestrian facilities to increase pedestrian travel.
- 3. Community and Recreation Pedestrian Areas are those land uses within the City that will typically generate a moderate number of walking trips. As such, pedestrian facilities in the immediate area will be provided to encourage walking to and from the area. The specific uses identified as primary pedestrian generators include major parks, community centres, cultural facilities, ice rinks, and pools.

The Pedestrian Plan recommends a range of enhanced treatments in each of these pedestrian areas to improve the quality of the walking experience, above and beyond simply expanding the sidewalk network as noted in the previous section. There are a range of treatments that can be considered around commercial areas, schools, and community and recreation facilities as described in further detail in **Appendix A of Discussion Paper #4**, but which generally includes:

- Crossing treatments beyond the provision of sidewalks, it is also important to address pedestrian barriers by improving pedestrian crossings.
- Accessibility treatments With an increase in seniors and people with mobility challenges, a variety of treatments are included that help to provide universally accessible facilities
- Community amenities above and beyond improving safety by providing sidewalks and crosswalks, as well designing pedestrian facilities to be universally accessible, there are a range of other pedestrian amenities that can be considered to help make attractive places such as signage and wayfinding, landscaping, benches, and lighting.





Enhancing pedestrian quality represents significant investments, but have many significant benefits. For example, enhancing pedestrian quality will help create vibrant streets in key parts of the City, contribute to the economic vitality of key commercial areas, make transit more attractive, support ageing and mobility needs and aspirations throughout the City, and will promote enhanced street activity. Many of the improvements to enhance pedestrian quality will be implemented as redevelopment occurs in the City Centre and Neighbourhood Centres as well as around schools and community and recreation facilities.

3. Develop Trails & Greenways

The Pedestrian Plan recommends developing a network of on-street and off-street trails and greenway facilities throughout the community to support walking, cycling and other non-motorized modes of transportation for recreational and commuting purposes.

The recommended Pedestrian and Bicycle Plans in the STP include a comprehensive greenway network, which is made up of both Citywide Greenways and Neighbourhood Greenways. The Citywide and Neighbourhood Greenway network redefines the role that City streets and boulevards can play in a sustainable community as these are intended to be multi-modal streets that encourage and support walking and cycling for both recreational and commuting purposes.

- Citywide Greenways are intended to be continuous routes that provide strategic links to major destinations throughout the City, including major commercial centres, schools, parks, rapid transit stations, and other community facilities, as shown in Map 3.
- Neighbourhood Greenways will generally be shorter and will provide connections within the City Centre and Neighbourhood Commercial Centres, as well as connections to the Citywide Greenway network and new and enhanced connector pathways, when opportunities exist, as an opportunity to enhance pedestrian connections and shorten walking distances.



These greenways should have enhanced treatments to distinguish them from other cycling and walking routes. Potential treatments along Citywide and Neighbourhood Greenways include:

- Enhanced sidewalk width on some streets to improve pedestrian comfort
- Local street bikeways on low volume roadways where cyclists and motor vehicles can safely share the road
- A continuous, accessible wide **multi-use pathway** on one side of the street that can safety accommodate both pedestrians and cyclists
- Significant landscaping, including a boulevard between the curb and the pathway

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- Narrow crossings at arterials using curb extensions
- Design measures aimed at maintaining low traffic volumes and speeds along the street to discourage speeding and short-cutting, where appropriate
- Pedestrian amenities, such as park benches and water fountains
- Street level lighting
- Public art and interpretive signage
- Alternative **stormwater management** techniques, such as rain gardens.







3.2 Bicycle Plan

Cycling is an increasingly important mode of transportation for both local and longer-distance trips. Cycling is an effective mode of transportation for short- and medium-distance trips, as short and medium distance trips are time-competitive with driving and transit in congested environments.

The City is committed to developing a safe and attractive network of bicycle facilities to accommodate all cyclists. To achieve the City's objectives to encourage sustainable transportation and promote healthy lifestyles, recommended improvements to the cycling network include the development of a network of high quality bicycle routes to support those residents that wish to cycle on designated routes, as well as to provide support facilities, policies, and programs to encourage cycling.

3.2.1 Key Issues and Challenges

A number of issues and challenges have been identified regarding cycling in Coquitlam, including:

- Incomplete bicycle network The City has made progress on the implementation of its bicycle network in recent years, but there are still many areas of the City without bicycle facilities.
- Cyclist safety and security Many people are interested in cycling and may already cycle occasionally, but are deterred from cycling due to safety concerns of interacting with motor vehicle traffic.
- **Challenging Intersections and corridors** Several areas throughout the City have been identified as difficult areas or intersections which should generally be avoided by inexperienced cyclists.
- **Topography** Topography is a significant deterrent in many areas of the City, particularly in Southwest Coquitlam and the Westwood Plateau areas.
- Limited connections to other municipalities Many existing bicycle routes do not provide adequate connections to surrounding municipalities.
- Awareness As cycling accounts for a small portion of commuting trips throughout the City, there is a lack of awareness about cycling routes in the City.
- **Support facilities and programs** Support facilities such as bicycle parking should be provided to ensure that cyclists have a safe place to leave their bicycles.
- Bicycle-Transit Integration Cycling facilities should be seamless integrated with public transit by providing bicycle parking at transit exchanges and rapid transit stations.



3.2.2 Long-Term Bicycle Plan

The Bicycle Plan includes strategies to provide a dense network of high quality bicycle facilities that are attractive to a variety of target markets, including the "strong and confident", "enthused and optimistic" and "interested but concerned" groups. The improvement concepts also include support facilities, policies and programs such as bicycle parking and other end-of-trip facilities, improved signage and wayfinding, bicycle-transit integration, and developing a bicycle user map.

Expand Bicycle Network Coverage

The recommended bicycle network is shown in **Map 4** and includes approximately 110km of planned bicycle routes, in addition to the approximately 40 km of existing bicycle routes. The bicycle network has been designed to connect to key destinations throughout the City, including the City Centre, Neighbourhood Commercial Centres, parks, rapid transit stations, and community and recreation facilities. Since most bicycle trips are less than 5 km in length, the bicycle network focuses on prioritizing investments in and around the City Centre and Neighbourhood Commercial Centres. The complete network would place most residents within close proximity to a bicycle route. Today, less than 30% of the urban area of the City is located within approximately 400 metres of a bicycle route (approximately a one to two minute bicycle ride). When the full bicycle network is complete, over 70% of the urban area of the City would be located within 400 metres of a bicycle route.

Expanding bicycle network coverage includes not only improvements to the bicycle network within the City, but also includes adequate connections to adjacent municipalities. The City should work with adjacent municipalities and government agencies (i.e. TransLink) to ensure the seamless integration of bicycle routes across municipal boundaries.

2. High Quality Bicycle Facilities

There a range of different types of bicycle facilities that can be considered in different contexts and which have varying levels of appeal to different types of cyclists. As most cyclists prefer bicycle facilities that are physically separated from motorized traffic, or which are located on low volume streets, the Bicycle Plan includes a classification of bicycle facilities based on their target markets:

- **Class 1 Facilities** would appeal to a wide variety of cyclists including the "strong and confident", "enthused and optimistic", and "interested but concerned" cyclists. These high quality routes can include off-street pathways, separated bicycle lanes, and local street bikeways on streets with low traffic volumes.
- **Class 2 Facilities** appeal to more limited group of cyclists including the "strong and confident" and "enthused and optimistic" groups, and include facilities such as unpaved multi-use pathways, bicycle lanes on collector or arterial roads, or shared facilities on busier roadways (with more than 3,000 vehicles per day in both directions).

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 Class 3 Facilities would appeal to a limited group of commuter cyclists and consist of facilities on major roads with higher motor vehicle volumes and speeds. Facilities could include paved shoulders, bicycle lanes on arterial roads or highways, or marked wide curb lanes.

Many of these bicycle facilities would coincide with the city-wide greenways and be multi-modal corridors that connect major activity centres, such as major commercial areas, schools, parks, and other community facilities. These greenways should be high quality routes (Class 1 facilities) where possible to not only provide enhanced bicycle facilities but also enhanced pedestrian treatments such as wayfinding, benches, bicycle racks, public art and other amenities, as described in the Pedestrian Plan.

3. Develop Support Facilities, Policies & Programs

In addition to providing a comprehensive network of high quality bicycle facilities, the following support facilities, policies, and programs are essential to consider as part of a comprehensive approach to make cycling more convenient and attractive in Coquitlam:

- **Bicycle Parking and End-of-Trip Facility Requirements.** The City should amend its Zoning Bylaw to provide requirements for bicycle parking in private developments and other end-of-trip facilities such as shower and clothing lockers be provided at major workplaces.
- Enhanced On-Street Bicycle Parking in Key Areas. Additional bicycle parking is recommended in key areas of Coquitlam including major commercial areas, parks, schools, and rapid transit stations.
- Enhanced Wayfinding and Signage should be used to help "brand" the bicycle network, increase awareness and market the bicycle network for both cyclists and motorists.
- **Public Bike Sharing.** The City can work with other agencies to determine the feasibility of implementing a public bike sharing program in Coquitlam or the broader Northeast Sector.
- **Bicycle-Transit Integration** includes the provision of bicycle racks on buses, allowing bicycles on rapid transit, as well as secure parking at major transit facilities as noted above.
- Education and Awareness Programs. There are a number of education and awareness programs and initiatives that the City can develop and support with its partners, including supporting cycling skills programs, safe routes to schools program, and events such as Bike to Work Week and Bike Month.
- Marketing and Promotion Strategies. The City can actively market and promote its bicycle facilities, policies
 and programs using various media, including developing a Bicycle User Map for Coquitlam residents in which the
 City could coordinate with TransLink's Regional Bicycle Map for cyclists crossing municipal boundaries. The City
 could also develop a dedicated web presence and use other social media tools to promote and market cycling
 initiatives in Coquitlam.





3.3 Transit Strategy

Transit is the primary alternative to the automobile for travel in Coquitlam and across the region, as it can offer competitive travel times and reduce overall environmental and community impacts of motor vehicle transportation. For

those who do not drive, transit is often the only option for getting to jobs, shopping areas, and recreational centres.

Transit services in Coquitlam, and throughout Metro Vancouver, are planned and funded by TransLink in coordination with municipalities. The City participates in the transit planning process through TransLink's Northeast Sector Area Transit Plan, which was completed in 2002 and is anticipated to be updated in the next few years. The Transit Strategy is intended to provide strategic direction to the City and TransLink regarding the long-term needs of the community with respect to transit services.



TransLink's Mayors' Council on Regional Transportation has recently approved funding for the Evergreen Line, with associated funding commitments by the provincial and the federal government. The Transit Strategy assumes that the Evergreen Line is a committed project. In addition, Douglas College recently initiated a universal transit program, through a partnership between the Douglas Students' Union (DSU), TransLink, and the Province. The U-Pass provides unlimited, all-zone access to bus, SkyTrain and SeaBus services, and discounts on the West Coast Express service. This program supports the use of transit services in Coquitlam and supports the need for a transit-supportive community.

3.3.1 Key Issues and Challenges

Key issues and challenges that have been identified with current transit services and facilities within Coquitlam include:

- Service levels Peak hour and off-peak period service levels are unattractive in some parts of the City.
- **Integrated land use** In order for frequent transit to become a reality in the City, there needs to be supportive land use along identified corridors, such as high density residential and transit-oriented developments.
- Identifiable transit corridors There is a need for corridors with frequent, direct and reliable transit services in key areas of the City such as the southwest and northeast.
- Transit supportive facilities In order for transit to be an attractive option, passenger amenities such as shelters, seating, and transit information are required.

• **Transit priority measures** – There are limited transit priority measures in Coquitlam to help buses move quickly and efficient through congested areas.

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- Transit accessibility Many bus stops and transit exchanges are not fully accessible.
- Safety and security Safety and security are potential concerns at bus stops and waiting areas where lighting and visibility is limited.

3.3.2 Long-Term Transit Strategy

The long-term Transit Strategy outlines priority areas for improvements to local transit services within Coquitlam to connect key destinations, enhanced regional transit connections, particularly to communities to the south and east, and recommendations for a variety of transit support measures to help ensure that transit is an attractive and convenient transportation option. These long-term improvement strategies build upon the commitment to construct the Evergreen Line in the coming years.

1. Increased Local Area Frequency and Coverage

Local service improvements in Coquitlam are designed to keep pace with the changing areas of the City over the next 20 years by increasing frequency along many of the major corridors (particularly in the Southwest area of the City and between the City Centre and Northeast Coquitlam) and providing enhanced local services between neighbourhoods such as the City Centre and north-south community services in Southwest Coquitlam. The Transit Strategy recommends increasing local area frequency and coverage, particularly in Southwest Coquitlam to accommodate the increasing demands for travel locally within the City. Specific opportunities to increase local area frequency and coverage are described below and shown on Map 5.

- Enhance services in Southwest Coquitlam. This includes increasing frequencies on existing routes, providing more direct services on Austin Avenue and north-south community shuttle routes in the eastern and western areas of the City to connect the United Boulevard area, Lougheed area, and rapid transit stations to other parts of the community. Local service connections within the Southwest area will promote a grid system concept for transit where transfers can be facilitated to make local travel more attractive. Additionally, more frequent and direct east-west services along Austin Avenue throughout the day and evening will support growth and development in the area and provide a defined transit corridor for the community.
- Frequent, Direct Connection from Northeast Coquitlam to the City Centre and Evergreen Line. A large
 proportion of travel generated by Northeast Coquitlam is going to the City Centre or other parts of the region. In the
 near term, there is an identified need to continue to increase local bus coverage to Northeast Coquitlam as new areas
 develop. Frequent and direct weekday and weekend services between these growing travel markets are essential to
 support the significant ridership that may be generated.

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• Improve City Centre Mobility. The Transit Strategy recommends that the City consider possible solutions to improve mobility in the City Centre with the provision of a new circulator service or strategic design of existing services to connect key destinations through the City Centre including rapid transit stations and the transit exchange.

2. Enhance Regional Services

The eastern areas of Metro Vancouver are among the fastest growing communities in the region. Over the next 20 years, the importance of expanding inter-municipal services to the travel markets in the eastern parts of the region is vital. Direct, frequent and reliable transit services will be the cornerstone to providing an attractive alternative to driving between Coquitlam and communities such as Surrey and other Northeast Sector communities as shown in Map 5:

- Integrate with Port Coquitlam. As growth and development occur in both Coquitlam and Port Coquitlam, travel demands between the communities will also increase. In particular, enhanced transit service connections between Port Coquitlam City Centre and the Coquitlam City Centre and Evergreen Line are important markets to serve in the future.
- Enhance Pitt Meadows Maple Ridge Service. The Provincial Transit Plan identified the corridor between Coquitlam City Centre and Maple Ridge as part of a future rapid bus network. A frequent express bus or rapid bus service should be investigated through the Area Transit Planning process with adequate provision for transit accommodation and priority treatments.
- New Coquitlam South of Fraser Services. There are currently no direct transit services between Coquitlam
 and the communities south of the Fraser River. In addition to the Rapid Bus connections along the Highway 1
 corridor connecting with the Lougheed Station, frequent express bus services between Surrey City Centre and
 Coquitlam City Centre will provide a needed connection between these core areas and provide access to other rapid
 transit services.

3. Transit Supportive Strategies & Policies

New and expanded local and regional transit services for Coquitlam are only one part of making transit more attractive to residents and visitors of the community. Transit supportive strategies and policies are essential to creating a transit oriented community and supporting significant investments in attractive transit services and facilities. Some of the specific directions and relative priorities for transit supportive actions include:

Transit priority treatments are recommended along future Frequent Transit Network corridors. Where delays
and congestion exist today or are anticipated to get worse in the future, the City will examine opportunities for
priority treatments that reduce delays to bus services, such as Austin Avenue, Lougheed Highway (east) and David
Avenue/Pinetree Way.



- Transit Oriented Design. Land use patterns significantly initiality initiality over all take patterns and, consequently, the success of transit. Communities that are more "transit oriented" not only support higher levels of transit, but also are more pedestrian and bicycle friendly. Features of transit-oriented communities include higher densities and land use mix and should be considered along future Frequent Transit corridors and near rapid transit stations.
- Enhance Passenger Facilities. Although providing attractive bus services with connections to desired destinations both locally and regionally is critical to the success of transit in Coquitlam, passenger amenities at bus stops, transit exchanges and rapid transit stations can also have a significant impact on attracting new users. In the long-term, the City and TransLink will need to work on enhancing passenger facilities. For example, the City is generally responsible for providing seating, benches and lighting at bus stops, while TransLink can provide customer information at all bus stops, rapid transit stations and transit exchanges in Coquitlam.
- Improve accessibility to transit. Increased accessibility to transit is designed to enhance services and facilities
 for all existing customers and to attract new riders. This includes ensuring where feasible that all bus stops are
 transit facilities are universally accessible and have adequate sidewalk and crosswalk access within 100 metres of
 transit stops.



3.4 Street Network Plan

Vehicle travel is the predominant mode of transportation for most residents and visitors to Coquitlam, as automobiles account for over 80% of all trips made by Coquitlam residents. In most communities, vehicles have often been given preferential treatment on the roadway network. However, the street network is designed to support mobility for all modes of travel including general purpose traffic, goods movement, transit, walking and cycling. Maintaining an efficient street network to support all modes is critical to supporting the vision and goals of the STP, as this helps to ensure that people and goods move efficiently through Coquitlam to support the economic vitality of the City and surrounding area.

3

3.4.1 Key Issues and Challenges

The street network plays a critical role in supporting vehicle travel and ensuring the efficient movement of both people and goods. Some of the issues identified by stakeholders regarding the street network include:

- Roadway designation and function Some roadways in Coquitlam may not be operating as intended or indicated by their classification. The future of Coquitlam's transportation system will focus on a multi-modal roadway network that accommodates many different modes of travel, not just cars.
- There are several key areas of delay and congestion today and in the future. The overall performance of an urban roadway is typically measured by the delays experienced at major intersections
- Discontinuous roadway network In key established areas of Coquitlam, some roadways do not provide a
 continuous connection. This affects the permeability of traffic including walking and cycling and forces many trips
 onto major facilities that are already congested.
- Neighbourhood livability is affected by traffic volumes, noise, and speed. Traffic noise, vehicle speeds on residential streets, and short-cutting and overall traffic volumes are primary concerns of many residents. These issues can become more prominent when there are recurring delays on the major roadways.
- Regional traffic Because of Coquitlam's central location, it serves a significant amount of regional travel on its arterial network in addition to local traffic
- Goods movement Coquitlam's role in moving goods is integrally linked to Metro Vancouver's role as a gateway
 region for domestic and international trade. There are several key road and rail corridors running through Coquitlam
 that have a significant role in moving goods throughout the City and the region. Coquitlam's local economy also
 facilitates a significant amount of local and regional goods movement, including movement to retail and commercial
 areas of the community.



3.4.2 Long-Term Street Network Plan

The City's transportation system is influenced by decisions and directions from neighbouring municipalities and other levels of government, including TransLink and the Province. There are several roadway-related projects being undertaken or considered by agencies external to the City of Coquitlam that will have long-term influences on Coquitlam's transportation system and are assumed as part of the STP, as shown in **Map 6**. Projects currently under construction, being planned, or under consideration by other agencies include:

- Port Mann Bridge / Highway 1 Expansion. The Provincial Government is currently constructing the Port Mann / Highway 1 project, which is scheduled to be completed by 2013. This project includes widening of Highway 1 through Coquitlam to eight lanes, a new ten lane bridge, and a reconfiguration of several interchanges, including the Cape Horn and Brunette Interchanges.
- United Boulevard upgrades have been considered as part of the North Fraser Perimeter Road (NFPR) Project to
 improve the connection between United Boulevard and Brunette Avenue; support the transportation network; and
 enhance and benefit the local community. TransLink has conducted extensive analysis and received significant
 community input on options for the United Boulevard Extension. TransLink has concluded that, at this point in time,
 there is no project option that currently meets the needs of both the regional road network and local interests and is
 not pursuing this project at the current time. However, TransLink and the City remain interested in exploring
 alternative options to improve connections in this area.
- **Brunette Interchange** is being considered as part of the upgrades to Highway 1 to improve connections from Coquitlam to New Westminster.
- Murray Clarke Connector is a potential four-lane road to improve east-west traffic flow in Port Moody.
- **Fremont Connector** is a planned project in Port Coquitlam that would provide a direction connection between from the Pitt River Bridge to Northeast Coquitlam.
- **Broadway Street** is a planned project in Port Coquitlam to improve north-south connections between the new Coast Meridian Overpass and the Mary Hill Bypass.
- Westwood Street is a planned project to widen this street, which is on the border between the City of Coquitlam and City of Port Coquitlam.
- Mary Hill Bypass interchanges are being considered at three intersections by the Ministry of Transportation & Infrastructure.

The Street Network Plan is designed to address overall mobility and safety issues within Coquitlam for all modes of transportation. Many of the improvements address delays and congestion experienced by transit and the movement of goods and services, as well as private vehicles. In addition, provision of new streets also provides connections for pedestrians and cyclists where barriers currently exist. This following section highlights the four categories of improvements identified in the Street Network Plan for Coquitlam.





1. Major Network Improvement Concepts

All possible major network improvement concepts identified and considered in the STP include the provision of new roadway links to serve growth areas and those parts of the City where the network is less complete, as well as major corridor widenings and/or the provision of grade-separated intersections to address existing and projected delays and congestion. Three primary areas for major network improvements are included in the Street Network Plan as described and illustrated in **Map 7**. In general, the improvements described below are intended to be high-level, and it is recommended that additional planning work be conducted at the corridor level to include stakeholder consultation and cost-benefit analysis.

a. City Centre Network Improvements

Coquitlam's City Centre area is generally bound by the Canadian Pacific Railway in the south, David Avenue in the north, and the boundaries with Port Moody in the west and Port Coquitlam in the east. The City Centre Area Plan process outlined the long-term form of growth and development patterns throughout the area. As part of the City Centre Area Plan process, alternative methods of accommodating growth in the City Centre were examined and largely revolved around the themes of either 'Great Street' or 'Nodal' concepts. In addition to designing for priority modes within the City Centre, the plan identified the need for a grid system of collector and local streets to contribute toward the transformation to an urban scale and to support the major roadways by providing other routes that could perform access and circulation of traffic within the City Centre beyond the major arterial road. The alternative strategy contained in the 2000 STP was the provision of grade-separation along Lougheed Highway and Barnet Highway at Johnson Street, Pinetree Way, and Westwood Street. While they may be considered only if the recommended actions described below cannot be achieved, they are not consistent with the City Centre Area Plan.

The following discussion highlights the strategies to address not only delays and congestion on the major roads, but to enhance access and circulation within the City Centre and to support the goals and policies of a thriving downtown area within the City.

• Grid Street System. In support of the concept included in the City Centre Area Plan, the arterial road system could potentially be complemented with a finer grain of east-west and north-south roadways. While the arterial roadway system will still serve overall travel to, from and through the City Centre area, a support system of collector and local roads would provide the needed access and circulation within the City Centre. As the grid network is established in the City Centre in addition to redevelopment in other Neighbourhood Commercial Centre areas, access should be provided for local service goods movement. A grid system of streets would provide relief to address major road congestion, and would also function to benefit pedestrians and cyclists that use the street network. A grid street system could also be designed to accommodate these users through including minor connections that are pedestrian/cyclist only.

Falcon Overpass. The Falcon Overpass of the CPR tracks is a new, north-south connection between Barnet • Highway and Dewdney Trunk Road. The intent of the new overpass is to provide additional north-south capacity as an alternate to address the delays and congestion along Johnson Street and Pinetree Way.

30

- Lincoln Avenue Crossing of the Coquitlam River. The Lincoln Avenue crossing of the Coquitlam River was identified in the City of Coquitlam 2001 Strategic Transportation Plan as a two lane connection between Shaughnessy Street and Pinetree Way. The crossing will be connected with Ozada Avenue immediately west of the Coquitlam River providing a direct link to Guildford Way and another east-west alternative through the City Centre.
- Improved east-west connections through the City Centre using the Aberdeen frontage road south of Barnet, extending from the Port Moody border aligning with the future Falcon station, intersecting with Bond / Lansdowne, continuing under the Mariner Way overpass, and terminating just west of Lougheed Highway at the Coguitlam Station Exchange.

b. Brunette/Lougheed/Blue Mountain

The Brunette Avenue, Lougheed Highway and Blue Mountain Street area has been identified as an area of recurring congestion and delay. The intersections of these three roadways not only provide access from Coquitlam into Burnaby and New Westminster, but also provide a connection to Highway 1.

Since the 2001 STP, the Ministry of Transportation & Infrastructure has begun construction on the Gateway Project that includes the widening of the Highway 1 corridor and twinning of the Port Mann Bridge along with the provision of the King Edward Overpass and improvements to the Cape Horn and Brunette Avenue interchanges. This project is scheduled to be complete by 2013. Even with these committed improvements, the Brunette / Lougheed / Blue Mountain area is still projected to experience significant delays and congestion, much of which is attributable to the limited capacity of the Brunette Interchange with the upgraded Highway 1.

During the preparation of the STP, the United Boulevard extension and grade separation with Brunette Avenue in New Westminster was removed as a planned project by TransLink, although the City is committed to exploring alternatives to provide this connection. The removal of this connection will place more pressure on the Brunette Interchange and the local area roadways, and the BC Ministry of Transportation and Infrastructure is reviewing options for the Brunette Interchange.

The potential solutions for the Brunette/Lougheed/Blue Mountain area in the STP will be largely shaped by the preferred concept for the Highway 1/Brunette Interchange. The options include a complete grade-separation concept with a depressed Lougheed Highway as well as a tunnel concept. In comparing the two options as a concept planning level, the complete grade-separation option with a depressed Lougheed Highway is less desirable than the tunnel concept for several reasons. Because of the interrelationships with the Highway and uncertainty of additional capacity

Urban Systems Ltd. – February 2012 28



through the Brunette interchange, the tunnel concept remains a high priority that requires resolution and coordination with the Province and TransLink over the medium term.

c. Rail Crossings at the periphery

There are two at-grade rail crossings in the City of Coquitlam that have been identified for improvements in the Transport Canada South Shore Trade Area Study. This includes improvements at Westwood Street, which is located on the border between the cities of Coquitlam and Port Coquitlam and currently has an at-grade rail crossing directly west of the CPR Coquitlam Yard. The South Shore Trade Area Study recommends an underpass structure at this location that would eliminate the existing at-grade crossing of Westwood Street with the CPR trunk line. The South Shore Trade Area Study also identified improvements at Pitt River Road and Lougheed Highway, which is a three-leg intersection that provides one of the most direct routes to access the Port Coquitlam City Centre from Highway 1. Improvement concepts for this intersection include grade separation to eliminate the existing at-grade crossing of the rail line, which would allow for uninterrupted movement along Lougheed Highway and offer southbound left turn movements onto Pitt River Road.

d. Northeast Coquitlam

A number of new and upgraded streets have been identified through the various neighbourhood planning processes to support development in Northeast Coquitlam. These roadways will be provided as development occurs and include such streets as David Avenue, Coast Meridian Road, Victoria Drive and other future collector streets as defined in the City's neighbourhood plans.

2. Minor Network Improvements

There are a number of other future 'problem' areas throughout the City that have been considered for various improvement strategies. These include improvements that were previously identified in the 2001 STP and other area or neighbourhood planning processes, as well as other improvements identified to address safety or operational issues. The primary distinction between these improvements and the Major Street Network improvements is that the improvement strategies discussed in this section are less extensive than providing new or expanded roadways.

a. Neighbourhood Street Improvements

A number of neighbourhood street improvements have been identified in previous area or neighbourhood planning processes. These neighbourhood street improvements generally include new road connections or extensions or existing roads as well as multi-modal improvements to existing roadways, as shown on **Map 6**. Neighbourhood street improvements would generally be provided through the redevelopment process and include:

 Myrnan Street extension is identified in the Southwest Area Plan to provide a connection between Brunette Avenue and Lougheed Highway. This connection requires an extension of Myrnam Street from Lucille Ball Way to Lougheed Highway and would require additional right-of-way.

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- New local industrial road system east of Schoolhouse Street is identified in the Southwest Coquitlam Area Plan and Maillardville Neighbourhood Plan, to connect Schoolhouse to Myrnam Street and Coleman Avenue in order to direct industrial traffic away from Booth Avenue and Brunette Avenue, in addition to a pedestrian and bicycle connection between Schoolhouse and Myrnan Street.
- Adair Avenue Extension east to Nelson Street is identified in the Maillardville Neighbourhood Plan and would require additional right-of-way.
- East-West Connector between Clarke Road and Emerson Street is identified in the Burquitlam Neighbourhood Plan to facilitate access to the Burquitlam Evergreen Line station. This connection would require redevelopment of the Burquitlam Plaza site.
- Emerson Street extension and realignment from Como Lake to Smith is identified in the Burquitlam Neighbourhood Plan. Also to be considered is a new north-south local street connection between Smith and Foster, extending south to Webster pending land density changes.
- East-West Connector from North Road to Lougheed Highway is identified in the Lougheed Neigubourhood Plan through the proposed Urban Quarter to facilitate goods movement, transit, pedestrians, and
- Mobility and circulation improvements are identified in the Austin Heights Neighbourhood Plan, including
 improvements to specific intersections and corridor improvements on Austin Avenue, Ridgeway Avenue, and Nelson
 Street.

b. Signal timing and coordination

In an effort to maximize the efficiencies of the signal system and minimize stops and delays at key intersections, practices are needed to plan, operate and maintain signal systems in Coquitlam. Recommended initiatives include:

- Establish performance guidelines for planning and operating signals
- Develop design guidelines for signal systems along primary corridors to ensure that treatments for all modes are consistent throughout the City.
- **Implement signal warrants** (including pedestrian signals) along the primary roadways within the region that restrict the implementation of unwarranted signals.
- Establish guidelines for the design and implementation of timing plans for seven periods of the day and week as follows: AM peak, PM peak, off-peak, evening, late night, Saturday, and Sunday.
- Develop a monitoring plan in which to re-examine daily and peak traffic conditions and signal timing plans along primary roadways and intersections.



c. Intelligent Transportation Systems (ITS)

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. Specific ITS measures recommended in the STP include:

- Signal System Upgrades. The City has committed towards a long-term program to upgrade signal systems, including the implementation of new controllers, fibre optics, and central control systems that permit communications between signalized intersections in order to provide real-time controls. 76 out the City's 135 signalized intersections are connected to the City's traffic network and monitored by the Central Traffic System. The City should connect the remaining signals to the communication fiber in the future.
- Vehicle Detection and Signal Preemptions. 85 out of the City's 135 signalized intersections are equipped with
 preemption capabilities to provide right of way priority to Fire and Rescue vehicles. The City should equip the
 remaining traffic signals with preemption capabilities, and encourage TransLink and Coast Mountain Bus Company
 to equip transit vehicles with transmitters to allow for transit detection and preemptions.
- Vehicle Actuated Traffic Management Signs. The City has three vehicle actuated traffic management signs (Speed Reader or Radar sign) which are being employed on routes with reported speed issues. The City has chosen to target roadways which are adjacent to elementary schools as a means to improve walkability for the school community.

d. Minor intersection upgrades

The provision of additional turn lanes at key intersections could be considered to address localized safety and mobility issues, because they generally enhance mobility for through movements. The City will allocate sufficient resources for intersection upgrades to address safety and operational improvements and/or will identify funding through the Neighbourhood Area Plan servicing strategies.

e. Improved signage

Improves signage can help enhance the flow of traffic within commercial or residential areas. Signage can be used to encourage motorists to use key intersections and the adjacent support roadways – instead of the through roadway – to access certain developments. In addition, signage can be used to alleviate existing or developing safety problems.




3. Multi-Modal Street Guidelines

The street network within Coquitlam generally serves two primary roles – access and mobility. The street classification system is designed to guide the City's short- and long-term decisions regarding the configuration and design of roads and supporting facilities, as well as relationships with adjacent land uses. In some cases, the existing classification neither reflects the current or planned role and function of a given roadway as anticipated.

The STP includes an updated street classification system which better reflects the current and planned long-term role and function of streets in Coquitlam, particularly given the evolving nature of the City of Coquitlam from a suburban to more urban community with rapid population growth in recent years, which is expected to continue in the coming years. Unlike design standards for roads and other municipal infrastructure, a classification system represents the typical form and functions for each class, and are meant only as guidelines. Further, the updated street classification system includes some proposed changes to the road classification system, including Ozada Drive and Lincoln Avenue which are proposed to be part of the Major Road Network. The typical characteristics of each type of roadway are described in **Table 2**. Potential street classification changes are shown in **Map 8**.

4. Goods Movement

The movement of goods and services around the City is critical to supporting the local, provincial, and national economies, but at the same time can have impacts on local neighbourhoods that need to be managed. The City has adopted a truck route bylaw which defines a truck as any vehicle or combination of vehicles with a gross vehicle weight in excess of 13,600 kg. The bylaw designates a number of streets throughout the City as truck routes, and states that trucks shall only travel on a designated truck route, unless a truck is engaged in a local delivery, in which case it should proceed on the truck route until it reaches a point closest to the destination, from where it may travel on other roads to access to access its destination by way of an arterial street where possible.

The goods movement strategy identifies two changes to the City's goods movement map, as shown in Map 9:

- 1. Removal of David Avenue west of Johnson Street as a designated truck route as this section only serves residential neighbourhoods
- 2. Add United Boulevard as a future designated truck route west of King Edward Street upon completion of the United Boulevard extension.



| Table 2. Multi-Modal Street Classification Guidelines | | | | | |
|--|--|--|---|--|--|
| | City Arterial | City Collector | Community Collector | Local – Commercial/ Institutional/ High Density | Local – Single Family Residential |
| Expected traffic demands (approx. Daily) | 15,000 + | 6,000 – 15,000 | 3,000 -6,000 | < 3,000 | < 1,000 |
| Traffic and connectivity | City-wide traffic connecting to major destinations, MRN, and highways | City-wide traffic connecting to City Arterials | Local traffic connecting to City Collectors or Arterials | Local street traffic connecting to individual properties and collectors | Local street traffic connecting to individual properties and collectors |
| Transportation Function | Person mobility | Person mobility / land access | Person mobility / land access | 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 | 2 lanes |
| Typical intersection spacing | 400 m | 200 m | 100 m | 100 m | 100 m |
| Transit services | Frequent | Regular or shuttles | Regular or shuttles | Shuttles | n/a |
| Bicycle facilities (on designated bicycle routes) | Bicycle lanes, separated bicycle lanes, or off-street pathway | Bicycle lanes or marked wide curb lane | Marked wide curb lanes or local bikeway | Local bikeway | Local bikeway |
| Pedestrian facilities | Sidewalk and/or pathway both sides with boulevard | Sidewalk both sides with boulevard | Sidewalk both sides | Sidewalk both sides | Sidewalk on one side |
| On-Street Parking | Not desirable | Permitted | Permitted | Permitted | Permitted |
| Traffic Management | No | Limited | Limited | Limited | Yes |

Table 2: Multi-Modal Street Classification Guidelines







3.5 Parking Strategy

The City of Coquitlam plays an important role in the overall provision of parking in the community. On one hand, the City's policies affect the supply of parking for new developments through the parking requirements outlined in the Zoning Bylaw. On the other hand, the City can also influence and be involved in the provision of public parking that is often used to support the economic vitality of activity centres such as the City Centre or Neighbourhood Commercial Centres. Within these areas, public parking can be either operated privately or through a more integrated on-street and off-street public parking system designed to achieve other land use and commercial objectives.

The effective management of parking supply throughout the City is fundamental to achieving many of the City's broad goals. In this regard, parking management is a foundational element in achieving the City's goals of encouraging sustainable forms of transportation while supporting the economic vitality of the City. Parking management is particularly important in the City Centre due to planned rapid growth and development in the coming years as well to support the Evergreen Line.

3.5.1 Key Issues and Challenges

Beyond the role parking in ensuring mobility, providing transportation choices, and supporting local and regional economic activity, there are a number of issues regarding the provision of parking in Coquitlam, including:

- Abundant supply of off-street surface parking in commercial areas Typical suburban parking requirements are not reflective of demands in higher density areas. In the City Centre and Neighbourhood Commercial Centres, this has resulted in an excess supply of parking for commercial purposes. This results in increasing the attractiveness of driving, and decreasing the attractiveness of other modes of transportation. Too much surface parking can also negatively impact the character and vibrancy of a commercial area.
- Off-Street Parking Variances In recent years, Coquitlam City Council has authorized a number of parking variances and the City's parking standards should be reviewed to ensure the appropriate balance between parking supply and demand.
- High cost of providing parking The cost of building, operating and maintaining parking are significant; depending on the type of parking surface, structure or underground, the capital cost of parking can be as much as \$40,000 per stall to construct, while operating costs for a parking stall are in the order of \$500 to \$700 per year
- Parking management can support rapid transit Parking management is an important strategy to directly
 support the provision of Evergreen stations in the City Centre. Parking pricing is a parking management strategy that
 can reduce parking problems in an area and can reduce vehicle traffic. Parking management in the City Centre
 should anticipate a significant shift of travel demand from private automobiles to public transit, in particular
 commute trips to and from work.

3.5.2 Long-Term Parking Strategy

The long-term strategy focuses on three broad parking management strategies:

- Private development parking policies;
- Public parking systems; and
- Parking support strategies.

There are a range of specific parking management tools that can be implemented under each of these scenarios at various scales, ranging from city-wide techniques to those that would be implemented only in the City Centre area, around Rapid Transit stations, or in Neighbourhood Commercial Centres, as described below. A summary of the parking management strategies that should be considered in on a City-wide basis, in the City Centre and Rapid Transit Station areas, and in Neighbourhood Commercial Centres is shown in **Figure 6**. Implementation of the Parking Management Strategy should include the development of a City Centre Parking Management Strategy and will also require changes to parking requirements in the City's Zoning Bylaw. Parking policies should also be included in the City's OCP as well as relevant Area Plans and Neighbourhood Plans.

| | City-Wide | City Centre/ Rapid Transit Station Areas | Neighbourhood Commercial Centres |
|---------------------------------|--------------|--|--|
| Private Development Policies | | | |
| Parking Maximums | \checkmark | \checkmark | \checkmark |
| Flexible Standards | \checkmark | ✓ | \checkmark |
| Off-Street Bicycle Parking | \checkmark | \checkmark | \checkmark |
| Electric Vehicles | \checkmark | \checkmark | \checkmark |
| Shared Parking | | \checkmark | \checkmark |
| Minimize Principal Use Facility | | ✓ | \checkmark |
| Preferential Parking | | ✓ | \checkmark |
| Unbundle Parking | | \checkmark | |
| Public Parking Systems | | | |
| On-Street time Limits | | ✓ | \checkmark |
| Parking Pricing | | ✓ | |
| Public Off-street Parking | | \checkmark | |
| Cash-in-lieu | | ✓ | |
| Park-and-ride | | \checkmark | |
| On-Street Bicycle Parking | <u> </u> | ✓ | ✓ |
| Parking Support Strategies | | | |
| Financial Incentives | √ | | |
| After-Tax Exemptions | \checkmark | | |
| Enforcement | \checkmark | \checkmark | ✓ |
| User Information | | \checkmark | \checkmark |
| Overflow Parking Areas | | \checkmark | ✓ |

Figure 6: Parking Management Strategy



City-Wide Policies

Potential city-wide parking strategies are largely intended to ensure that the supply of parking best reflects the demands of an evolving community where site specific attributes may suggest that parking requirements could be managed differently. The City-wide policies apply mostly to the following parking policies for the private sector in the case of supply strategies and policies of senior levels of government with regard to support strategies.

a. Private Development Parking Policies

The City should amend its Zoning Bylaw to **establish parking maximums** to limit the amount of parking that developers may build in order to ensure that an overly abundant supply of parking is not provided, and to consider **flexible or reduced parking standards** to reduce parking requirements based on the location features of a site relative to other modes of travel or in return for agreements to support local or on-site initiatives for transit, carpooling, vanpooling, cycling, cash-in-lieu for parking and/or a cash out program. The Zoning Bylaw should also be amended to require developers to provide **bicycle parking and other end-of-trip facilities**, as noted in the Bicycle Plan, and to require **provisions to accommodate electric vehicles and other new technologies**.

b. Public Parking Systems

The City should work with TransLink to coordinate **park & ride facilities** near transit stations to facilitate transit and rideshare use. The City should also provide **on-street bicycle parking** at major destinations throughout the City.

c. Parking Support Strategies

The City should encourage **financial incentives** to use alternate modes of transportation and reduce the use of parking facilities as part of the Transportation Demand Management strategy, such as employers' funding employees' fees for transit and rideshare, and encouraging **cash-out employer parking subsidies**.

2. City Centre and Rapid Transit Station Areas

The City Centre area is evolving from a predominantly suburban character to an urban downtown area that will serve the needs of the Northeast Sector with significant increases in population and employment projected over the next 20 to 30 years. With this change will come the need to actively develop a comprehensive City Centre Parking Management Plan that may include a variety of strategies that support the economic vitality of the area and at the same time support the provision and use of sustainable modes such as walking, cycling and making use of transit to, from and within the area.

The City Centre Area Plan includes a recommendation to develop an effective and equitable parking management strategy to manage the full range of parking demand in the City Centre, as well as to formulate a multi-faceted

Strategic Transportation Plan 39

Transportation Demand Management Strategy that reduces the dependency on Single Occupancy Vehicle travel in the City Centre. The City will revisit their on-site parking requirements specifically for areas served by rapid transit stations and with high density mixed uses.

The City is in the process of developing a City Centre Parking Management Plan. Potential parking strategies that may be examined as part of this plan may include those briefly highlighted below:

a. Private Development Parking Policies

In addition to City-wide policies to establish parking maximums, flexible or reduced parking standards, and bicycle parking and other end-of-trip facilities, there are a number of policies the City should consider in the City Centre and around rapid transit stations, including **shared parking**, where parking spaces are shared by more than one user; **minimizing principal use facilities** to limit the number of new facilities which are constructed for the sole purpose of providing parking; establishing **preferential parking areas** to allocated parking spaces for ridesharing participants and car sharing programs; and **unbundling parking**, whereby parking costs are separated from building costs.

b. Public Parking Systems

In addition to City-wide policies to promote park-and ride facilities and provide on-street bicycle parking, the City should consider establishing **on-street time limits** and **parking pricing** in the City Centre and around rapid transit stations. In addition, the City should take on a greater role in managing and/or providing centralized **public off-street parking facilities**, and encourage developers to provide **cash-in-lieu fees** to fund public parking facilities as an alternative to minimum requirements for off-street parking.

c. Support Strategies

The City can consider a number of support strategies in the City Centre and around rapid transit stations, including **enforcement programs**, **user information and marketing**, **developing overflow parking plans**, and **addressing spillover problems**.

3. Neighbourhood Commercial Centres

In Neighbourhood Commercial Centres that do not have a rapid transit stations, many of the same parking management strategies would apply as in the City Centre, with less emphasis on parking pricing, public off-street parking, and financial exemptions, for example.

In Neighbourhood Commercial Centres, private development parking policies would be the same as those considered on a City-wide basis related to creating flexible parking standards, adopting parking maximums, developing bicycle parking



City of Coquitlam – Strategic Transportation Plan

requirements, promoting shared parking, minimizing principal use facilities, establishing preferential parking areas, as described in the previous section. For implementing park & ride facilities at major transit facilities, TransLink and the City would need to work together to assess the impacts of the facility on a case-by-case basis, including an assessment of the benefit, costs, and trade-offs, with guidance preferably from the Regional Growth Strategy. Public parking systems in Neighbourhood Commercial Centres would consist primarily of establishing time limits for on-street parking. Support strategies in Neighbourhood Commercial Centres would consist primarily of increased enforcement of on-street time limits, improved user information, and establishing overflow parking plans.

3.6 Transportation Demand Management Strategy

Transportation Demand Management (TDM) is the term used to represent a broad range of policies and programs used in many communities throughout North America to encourage people to walk, bicycle, use transit and rideshare, as well as to discourage individuals from driving alone. Attractive alternatives must be in place in order to make TDM policies and programs more effective. In support of the City's overall goal for a sustainable transportation plan, TDM strategies can be expected to influence travel behaviour in the following three overarching ways, thereby reducing the costs of maintaining and expanding transportation facilities:

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

3.6.1 Key Issues and Challenges

To achieve the goals of the STP, the City wishes to explore various transportation demand management (TDM) programs to encourage people to walk, bicycle, use transit, and rideshare, as well as to discourage individuals from driving alone. The primary issues pertaining to TDM programs are:

- **Driving is predominant** For the foreseeable future, driving is and will continue to be the most convenient and flexible mode of travel for most people in Coquitlam and throughout the region.
- Few incentives and disincentives There are few policies and programs that encourage City residents to use alternative modes, and there are also few disincentives to driving alone.
- Education and awareness Residents of the City are not well aware of the options that are available to them for using non-automobile modes.

3.6.2 Long-Term TDM Strategy

The TDM Strategy for Coquitlam includes a range of policies and initiatives that can be taken directly by the City of Coquitlam, as well ways in which the City can support TDM initiatives by other agencies as well as the private sector. In that regard, the TDM strategy includes an emphasis on integrating land use and transportation planning, taking a



leadership role in promoting transportation choices among its own staff, promoting education and awareness programs, and encouraging the private sector and other agencies to promote TDM initiatives.

1. Integrated Land Use and Transportation Planning

Land use policies and decisions within the City can have the greatest influence on travel demands and mode choice. Land use policies that support high densities are likely to have the most significant impact on mode choice. Mixture of land uses is also critical to support sustainable modes of transportation, as this ensures that there are a greater variety of destinations within reasonable distance (such as homes, workplaces, stores, restaurants, or parks) to generate multipurpose trips in an area for people to walk or bike. The City should coordinate land use and transportation planning to develop transit oriented communities in the City Centre and Neighbourhood Commercial Centres, as well as along future Frequent Transit Corridors and future Frequent Transit Development Areas identified by the City in conjunction with TransLink.

2. Leadership

If the City wants to encourage other agencies and private sector businesses to implement TDM measures, the City must lead by its actions for its own employees. There are a number of initiatives that the City could take in addition to what it is currently doing to encourage its own employees to use alternate forms of transportation, including:

- **Ridematching.** Provide ridematching assistance to encourage and help facilitate employee ride sharing.
- Guaranteed Ride Home. Establish and promote a guaranteed ride home (GRH) program for staff.
- Preferred Parking. Expand preferred parking policy for carpool groups of two or more employees.
- Flexible Work Arrangements. Provide flexibility in start and finish times wherever possible if that flexibility helps facilitate employee carpool arrangements.
- **Teleworking.** Provide opportunities for teleworking/telecommuting on a pilot program basis subject to business case analysis.
- Car Sharing. Introduce corporate car Share pilot program, subject to favourable business case evaluation.
- Bicycle Parking. Provide covered bike parking at outdoor locations in the City Centre area.
- Cycling Support Measures. Encourage employee cycling by offering cycling skills course, through active participation in the annual Commuter Challenge, and by ensuring that bicycle route signage in the City meets high standards.

3. Education & Awareness

Many residents are not aware of the transportation options available to them. Consequently, an important part of a TDM program and initiative is marketing and education efforts intended to encourage a shift in travel patterns and greater use of sustainable modes of transportation. Strategies to improve education and awareness generally fall into two categories: distributing existing information from other groups and agencies, and developing and running more locally generated programs.

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a. Information Distribution

The first strategy involves distributing information that has already been produced, either by the City or by other agencies such as TransLink. There are many existing resources that describe programs and initiatives already under way. TransLink currently produces a number of materials and resources designed to provide information on transit services and facilities as well as general information on how to use transit, both for the general public and specific groups. Some of the information already produced by TransLink includes transit system maps, route maps and schedules, bus exchange maps, information on how to use the transit system, accessible services, and customer outreach initiatives. TransLink also produces a regional cycling map for Metro Vancouver and includes a range of other cycling information on its website, including bicycle parking availability. TransLink also offers the TravelSmart program (TravelSmart.ca) to provide tips and tools on alternative ways of traveling. In addition, a number of carpooling and ridesharing options are available through a number of organizations. There are many ways in which the City can work to help distribute this information. The City could produce a brochure, newsletter, or newspaper ad, or webpage on the City's website summarizing existing resources and how to find more information.

b. Develop Local Programs

The second strategy involves the City creating, developing and running more locally generated TDM programs, and actively working with resident groups, employers and institutions to promote transit, cycling, walking, or carpooling. It is recommended that the City create a TDM Coordinator position to oversee the development and implementation of these community programs, such as:

- Safety training and education activities targeting cyclists, to improve cycling skills in traffic.
- Marketing activities targeting employers for adoption of transit fare incentives and implementation of trip reduction programs.
- Marketing of ridesharing, carpooling and vanpooling services.
- Improved information for transit users regarding routes, schedules and real-time bus arrival information.
- Education programs for school children and parents intended to improve pedestrian safety and encourage children to walk to school.
- Continue to participate in marketing and education programs such as Bike-to-Work week and other marketing and education programs to encourage cycling.
- Continue to work with schools to reduce motorized trips to and from school

City of Coquitlam – Strategic Transportation Plan

- **Community-based marketing of transportation services,** whereby information regarding available transportation services is customized to a person's needs.
- **Recognizing local companies that offer the Employer Pass Program** in conjunction with TransLink.
- Encourage use of alternate fuel vehicles, such as hybrid vehicles, electric cars, Smart Cars, etc.

4. Private Sector and Other Agency Initiatives

There is also a role for major employers, small businesses, schools, and residents in reducing travel demands. Each of these groups provides different opportunities for trip reduction. Each of these groups has a different role to play in encouraging TDM initiatives:

- **Major employers** provide the most significant opportunity for implementing successful TDM programs because they have a much larger pool of potential participants.
- Small businesses are often clustered together in specific areas, such as the City Centre, Austin Heights, Maillardville, and Burquitlam. By working together, the businesses in each of these areas can develop the resources required to provide programs and incentives to encourage employees to change their travel behaviour.
- Schools. School programs can target both students and employees. As many schools are large employers, there is
 an opportunity for the employer to capitalize on this large pool of participants. Schools also provide an opportunity
 to encourage students to find alternate means of getting to and from school, such as a walking school bus program,
 improved cycling facilities, and general education and awareness.
- Residents. TDM initiatives can be targeted specifically to residents, through incentives and agreements with developers on a site-specific basis. For example, the City could work with developers and other agencies where necessary to provide amenities promoting sustainable modes of transportation in new developments, such as car coops, increased bicycle parking, and reduced parking standards. The City also supports working with TransLink to implement the TravelSmart program in one of the City's neighbourhoods.

Each of these different groups provides different opportunities for TDM programs and initiatives. **Table 3** summarizes some TDM programs and how each of these programs can be targeted to most effectively serve their target audience. As noted above, it is not enough to simply identify these initiatives. The City itself must play an active role in leading by example by encouraging such initiatives, as it is one of the City's major employers, and by actively educating its residents and businesses about the opportunities available to them, and by establishing a TDM Coordinator.



Table 3: Private Sector and Other Agency Initiatives

| | Target | | | |
|--|--------------------|---------------------|--------------|--------------|
| TDM Program | Major Employers | Small Businesses | Schools | Residents |
| Flexible Work Arrangements | ✓ | ✓ | | |
| Ridematching (internal) | \checkmark | | | |
| Ridematching (TransLink/Jack Bell Foundation) | ✓ | ✓ | | ✓ |
| Guaranteed Ride Home | \checkmark | \checkmark | | |
| Facilities for cyclists/walkers | ✓ | ✓ | ✓ | |
| Preferential Parking for Carpool/Vanpool | \checkmark | | | |
| Transit Pass Programs | ✓ | ✓ | ✓ | |
| Incentive Programs | \checkmark | \checkmark | \checkmark | \checkmark |
| Fleet/Company Vehicles | ✓ | | | |
| Transit Management Associations | | \checkmark | | |
| Walking School Bus | | | ✓ | |
| Education and Promotion | \checkmark | \checkmark | \checkmark | \checkmark |
| Co-operative Auto Network | | | | \checkmark |
| Bicycle Parking Facilities for Multi-Family Developments | | | | \checkmark |
| TravelSmart | ✓ | ✓ | ✓ | \checkmark |



4.0 IMPLEMENTATION & PHASING

The STP is intended to provide long-term direction for the City's transportation system. To achieve the vision and goals of the STP, an implementation strategy is necessary to provide a framework for advancing specific transportation improvements. This chapter presents an implementation and monitoring strategy for the STP. The implementation and monitoring strategy outlines the approximately cost to implement the capital components of the plan, and also includes a phasing strategy identifying recommended improvements over the short-term (0-5 years), medium-term (5-10 years), and long-term (10 or more years). This chapter also describes a monitoring strategy for the City.

4.1 The Approximate Cost of the Plan

Conceptual order-of-magnitude cost estimates were developed for each of the capital investments identified in the STP to provide a sense of the potential overall future levels of transportation investment for the City in current dollars. These order-of-magnitude costs are for comparative purposes, and are based on a conceptual level of design and should be refined to establish project budgets. Actual costs for implementation could vary significantly for each initiative as costs change over time and are typically not used for project budgeting purposes. In addition, possible contributions from other agencies and the private sector are not possible to estimate.

The level of investment required to implement all improvements recommended in the STP is estimated to be in the range of \$221 - \$237 million (in 2011 dollars), as summarized below. It should be noted that these cost estimates do not include items such as property costs, environmental mitigation costs, and utility relocations.

| Category of Capital Improvement | Level of Investment |
|---------------------------------|-----------------------|
| Pedestrian Plan | \$43 million |
| Bicycle Facilities | \$27* |
| Transit Facilities | \$15 million** |
| Street Network | \$136 - \$152 million |
| TOTAL | \$221 - \$237 million |

Table 4 – Estimated Level of Investments for Capital Improvements

* Total cost of bicycle network includes costs for 'Trails and Greenways' identified in Pedestrian Plan

** Transit costs reflect shelter and transit priority costs only

However, costs to the City can be significantly reduced by pursuing external funding sources and partnership opportunities for many of the identified projects and by leveraging other funding sources within the City, such as development cost charges. In fact, over the past decade, nearly 40% of transportation funding for projects in the City

of Coquitlam have come up other sources, including TransLink, provincial or federal grant programs, or ICBC. Assuming that the City is able to continue to leverage other funding sources at this rate, it is estimated that the City's share of transportation capital investments identified in the STP will be approximately \$133 - \$142 million. This is consistent with the amount the City has historically spent on transportation on an annual basis, and is in keeping with projected funding levels identified in Discussion Paper #3, which forecast that the City will have the ability to spend a total of between approximately \$130 million to \$160 million in transportation capital projects over the next twenty years. It is recommended that in considering a major improvement project, the City conducts a cost benefit analysis to provide a comparison with other options, and to determine if the course of action is justified and/or feasible.

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4.2 Funding Strategies

In some cases, the transportation investments included in the STP for major projects in particular would not occur without external funding sources or without partnerships with private or public sector interests. This section describes several funding strategies and potential funding sources that the City may consider to help leverage its investments and to maximize its ability to implement transportation improvements. The City should pursue all available sources of funding for transportation facilities and programs, including the programs identified below. As funding opportunities change regularly, the information in this section is subject to change. The City should regularly check with all levels of government to keep up to date on current funding opportunities. It should also be noted that TransLink is currently reviewing their cost-sharing funding programs to be in line with regional goals and responsibilities, so funding categories are anticipated to change in the future.

- Provincial Programs and Initiatives. The Ministry of Transportation & Infrastructure is responsible for provincial highways, including Highway 1 and sections of the Lougheed Highway and United Boulevard through the Cape Horn Interchange. In some case, the Province may work with municipalities on partnership initiatives where there is a shared benefit in terms of safety, travel time, etc. In addition, the Provincial Government administers the *BikeBC* program, which promotes new, safe and high quality cycling infrastructure through cost-sharing with local governments. *BikeBC* includes the programs below:
 - Bike BC focuses on strategic investments to build important cycling corridors of regional and provincial significance. Some possible projects include new bicycle trails and bicycle lanes, improvements to existing cycling infrastructure, and providing for bicycle lockers and other equipment that makes cycling a safer and more convenient option for travelers.
 - Cycling Infrastructure Partnerships Program (CIPP). Through this program, the Ministry of Transportation & Infrastructure provides up to 50 percent cost-sharing (to a maximum of \$100,000 per project) for new bicycle facilities.

- Regional Programs and Initiatives. TransLink provides funding for road network, transit and bicycle facility
 projects in Metro Vancouver through several means. It should be noted that TransLink is currently reviewing their
 cost-sharing funding programs to be in line with regional goals and responsibilities, so funding categories are
 anticipated to change in the future.
 - Major Road Network 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 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 rata 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 based on a set of criteria including safety, network contribution, demand and adherence to guidelines. Funding through the BICCS program is typically up to 50 percent 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.** The Federation of Canadian Municipalities manages the Green Municipal Fund, 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, which has assisted the District in conducting a variety of studies and implementing many safety improvements over the past 15 years. Other ICBC programs include the Speed Watch

Program (through the Community Policing Centres), Speed and Intersection Safety Program, Counter Attack, Operation Red Node, and Road Sense Speaker Program for Schools.

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Private sector. Many corporations wish to be good corporate neighbours — to be active in the community and to
promote environmentally-beneficial causes. Bicycle and pedestrian facilities are well-suited to corporate sponsorship,
and have attracted significant sponsorship both at the local level and throughout North America. Examples in B.C.
include Construction Aggregates in Sechelt, which constructed an overpass over a gravel conveyor to provide a link
for pedestrians and cyclists, and 7-Eleven and Molson Breweries which have sponsored multi-use pathways in
Vancouver, Burnaby and New Westminster. In addition, VanCity provides funding through its Environmental Fund
and TD provides funding through its Friends of the Environment Foundation.

4.3 Phasing Strategy

All the transportation improvements identified in the previous chapters of the STP were evaluated based on the evaluation framework described in previous sections. The evaluation framework assesses the degree to which each improvement meets the vision and goals of the STP. In that regard, those improvements that are most closely aligned with meeting the overall vision and goals of the STP are given the highest priority. In particular, the priorities reflect the significant growth and development that is planned in the City Centre and many Neighbourhood Commercial Centres and, as such, priorities for all modes are concentrated in these areas. Based on this evaluation, priority projects were identified for each chapter to be implemented over the short-term (0-5 years), medium-term (5-10 years) and long-term (10 years and beyond) as shown in the maps on the following pages.

The results of the evaluation process are intended to aid the City in its future decision-making and for capital budget planning. However, it should be noted that there are number of factors that will continually shape and influence the ultimate development of the City's transportation system over time. Although the implementation of the STP may be affected by unforeseen changes, the general direction and balance of investments in the transportation system should not be significantly altered. In addition, the priorities are intended to be flexible and can be adjusted based on changing circumstances. For example, in some cases, an initiative with a lower priority may be implemented prior to a one with a higher score if an opportunity presents itself (i.e. as redevelopment or grant opportunities arise). Conversely, a project with a higher priority may be implemented later than one with a priority if the costs are prohibitive and if cost-sharing opportunities are not available.

Maps 10,11 and 12 illustrate the short-term, medium-term and long-term capital improvements for roadway, pedestrian, and bikeway projects as shown in Table 5. It should be noted the capital investment projects are dependent on redevelopment opportunities as well as City priorities.





Table 5 – Horizon of Capital Improvement Projects

| Category of Capital | 1 | Total Cost (2011 dollars) | | | |
|---------------------------|-----------------|---------------------------|-----------------|--|--|
| Improvement | Short-Term (0- | Medium-Term | Long-Term | | |
| | 5 years) | (5-10 years) | (10+ years) | | |
| Pedestrian Plan | \$14 million | \$14 million | \$15 million | | |
| Bicycle Facilities | \$9 million | \$8 million | \$9 million | | |
| Transit Facilities | \$4 million | \$3 million | \$8 million | | |
| Street Network | \$23-34 million | \$37-42 million | \$75-76 million | | |
| TOTAL | \$50-61 million | \$62-67 million | \$107-108 | | |
| | | | million | | |

* Total cost of bicycle network includes costs for 'Trails and Greenways' identified in Pedestrian Plan

** Transit costs reflect shelter and transit priority costs only







City of Coquitlam – Strategic Transportation Plan

5.0 MONITORING PLAN

A monitoring strategy is essential to ensure that the STP 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 STP. Monitoring also provides a means of identifying changing conditions which would require changes to the STP.

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 STP.
- **Measurable.** The monitoring program needs to establish criteria that are readily measurable and for which data or information can be readily obtained.
- **Manageable.** The monitoring program needs to take into account the resource limitations of the City and will identify measures where information is accessible or data is simple to collect.

The monitoring program will focus on two components: first, the degree of progress in implementing the plan, and secondly, the outcomes of the plan, as summarized below. It is recommended that the City of Coquitlam monitor progress in each of these areas every 1-2 years, based on data availability.

1. Implementation Progress

- Number of completed projects identified in the STP
 - Sidewalks (# projects)
 - Bicycle Route (# projects)
 - Transit (# projects)
 - Street Network (# projects)

• Annual investment levels

- Walking (\$ and % of City's total transportation capital investments)
- Cycling (\$ and % of City's total transportation capital investments)
- Transit (\$ and % of City's total transportation capital investments)
- Street Network (\$ and % of City's total transportation capital investments)

• Network development

- Sidewalk network (km of existing facilities)
- Bicycle Network (km of existing facilities)



• Transit Network (km of frequent transit corridors)

2. Outcomes

- Mode Share of Work Trips
 - Transit (%)
 - Walking (%)
 - Cycling (%)

• GHG Emissions

• Transportation-related GHG emissions (tonnes)

• Proximity

- Walking (% of road network with sidewalk)
- Cycling (% of City within 400 metres of existing bicycle route)
- $\circ~$ Transit (% of City within 400 metres of transit route)