



City of Coquitlam

Strategic Transportation Plan Update

Discussion Paper #5:

Transportation Possibilities, Performance and Evaluation

URBANSYSTEMS.

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1.0 INTRODUCTION

The Strategic Transportation Plan (STP) Update is intended to help shape Coquitlam's transportation investments and programs over the next twenty years and beyond. This process is important to ensure that transportation investments work towards achieving the City's strategic vision and community goals, and make the best use of available resources.

This is the fifth Discussion Paper being prepared as part of the STP Update. The purpose of this Discussion Paper is to evaluate the transportation improvement possibilities included in Discussion Paper #4 based on the evaluation framework developed in Discussion Paper #3, and to present the preferred scenario to be included in the final Strategic Transportation Plan.

This Discussion Paper begins by summarizing the evaluation framework developed in Discussion Paper #3, and then includes a summary of the evaluation of the transportation possibilities for each mode of transportation, highlighting observations on key patterns and differences.

The results of the evaluation in this Discussion Paper will form the basis for the features that will be included in the final Strategic Transportation Plan.



2.0EVALUATION FRAMEWORK

As previously noted, Discussion Paper #3 outlined an evaluation framework to be used to assess the transportation possibilities identified in Discussion Paper #4. The evaluation framework has two main applications:

- **1. Major Projects.** The evaluation is used to compare improvement options for major projects. The framework is used to compare project options relatively to each other and a base case scenario.
- Transportation Scenarios. The evaluation is also used to compare the overall transportation scenarios for sustainable modes – namely walking, cycling and transit.

The framework includes indicators that are linked to the goals and objectives of the STP Update. Each indicator includes one or more measures that are assessed either qualitatively or quantitatively on a relative scale ranging from low, moderate, to high. The evaluation framework is goals oriented and is designed to deliver a balanced transportation system that achieves the City's vision and broad community goals. Descriptions of indicators and measures are summarized in **Table 1**.

The evaluation framework includes an assessment of the relative benefits and impacts of each of the transportation possibilities. A five-point scale was used for each assessment as shown below:



Significant Modest Impact Impact Neutral

Modes Benefit Significant Benefit

Table 1: Evaluation Framework for Transportation Scenarios and Major Investments

STP Goal	Indicators	Measures	Assessment
Goal #1: Build high quality multi-modal facilities within and between		Percent of City land area within 400 metres of bicycle facility	Quantitative
neighbourhoods	Network Coverage	Percent of streets with sidewalks within 400 metres of identified pedestrian generators ¹	Quantitative
		Average residential and employment densities within 400 metres ² of frequent transit corridors or within 800 metres of rapid transit stations ³	Quantitative
Goal #2: Develop transportation infrastructure and services to support a healthy environment	GHG Emissions	Percent change in GHG emissions reductions compared to baseline	Quantitative
	Vehicle Kilometres Travelled (VKT)	Percent change in VKT compared to future base	Quantitative
Goal #3: Maintain and improve the quality of streets as a place for people	Quality of neighbourhood streets	Relative contribution to improving safety of neighbourhood streets	Qualitative
	Quality of key urban centres ⁴	Relative contribution to making key urban centres more pedestrian, bicycle and transit friendly	Qualitative
	Accessibility	Relative contribution toward enhancing access for people with physical and cognitive disabilities as well as the general public	Qualitative
Goal #4: Move people and goods efficiently	Travel Time Savings	Person travel time reduction relative to base case condition	Quantitative
	People Moving Capacity	Changes in delays at key intersections and along the major street network as measured in terms of people and vehicles	Quantitative
Goal #5: Prioritize walking, cycling, transit,		Mode shift to walking, cycling and transit	Quantitative
and other sustainable modes of transportation	Transportation Choices	Attractiveness of sustainable modes of transportation	Qualitative
	Safety	Relative contribution towards improving safety for all street users	Qualitative
Goal #6: Manage the transportation system efficiently as the community evolves	Financial	Class D cost estimates	Quantitative

¹ Pedestrian generators include the City Centre, Neighbourhood Commercial Centres, rapid transit stations, post-secondary schools, community centres, cultural facilities, ice rinks, pools, schools, and parks. ² 400m represents a 5-minute walking distance, 800m represents a 10-minute walking distance

³ Routes with 15 min or better service throughout the day and into the evening, 7 days per week

⁴ Regional City Centres or Neighbourhood Centres as defined in the Official Community Plan



3.0EVALUATION

This section presents the results of the evaluation of the transportation improvement possibilities for each mode of transportation based on the evaluation criteria presented in the previous section.

3.1 Walking

Walking currently accounts for approximately 8% of all trips made by City of Coquitlam residents. The STP includes an ambitious target to increase this mode share, so that walking would account for 12% of all trips by 2031 compared to 8% in 2008. To achieve these targets, significant investments in high quality pedestrian facilities will be required. To that end, the Pedestrian Plan for Coquitlam is intended to ensure high quality pedestrian facilities in key areas of the City where there is the greatest potential to increase walking trips.

Discussion Paper #4 included three categories of potential pedestrian improvements that should be considered for the long-term in Coquitlam, including:

- 1. Increase Sidewalk Coverage
- 2. Enhance Pedestrian Quality
- 3. Develop Trails and Greenways

This section of the Discussion Paper examines how each of these key themes aligns with the vision and goals for the STP that have been outlined in previous Discussion Papers.

1. Increase Sidewalk Coverage

The City's current sidewalk network includes approximately 479km of sidewalks. However, as noted in Discussion Paper #4, there are several large areas of the City that do not meet the City's sidewalk standards, particularly in the older areas of the City. This improvement possibility recommends strategically increasing sidewalk coverage in areas that reflect higher pedestrian demand as well as areas that address safety concerns. The Pedestrian Plan recommends an additional 142 km of sidewalks throughout the City. It should be noted, however, that many of these new sidewalks could be implemented as redevelopment occurs in the City Centre and Neighbourhood Commercial Centres.

Using a unit cost estimate of \$300 per metre of sidewalk, it is estimated that the priority sidewalks will cost approximately \$42.6 million for the City to fully implement. This is much

lower than the over \$100 million that it is expected to cost for a full build out of the sidewalk network.

Recognizing the significant cost to implement all priority sidewalks identified above, individual sidewalk needs were further prioritized based on their relative demand and safety benefits. In particular, recognizing that in order to work towards meeting the STP target of 12% of all trips made by walking, significant investment in pedestrian facilities is required, and this investment must be strategic to achieve the greatest return on investment. As such, the highest priority sidewalks were identified in those areas with the greatest potential to increase pedestrian trips based on their proximity to the City Centre or Neighbourhood Commercial Centres, schools, bus stops as well as safety based on road classification, as described below:

Highest Priority Sidewalks:

- 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
- Connects to rapid transit stations

Moderate Priority Sidewalks

- 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 Sidewalks

- 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

Costs to implement the higher, moderate, and lower priority sidewalks are shown in **Table 2.** Although all priority sidewalks will cost \$42.6M to implement, the higher priority sidewalks will cost \$13.9M and these should be the priority for implementation over the short-term.



		Higher Priority	Moderate Priority	Lower Priority	Total
1.	Within & around City &				
	Neighbourhood	\$11.3M	\$6.0M	\$13.7M	\$31.0M
	Commercial Centres				
2.	Adjacent to schools	n/a	\$4.1M	n/a	\$4.1M
3.	Adjacent to bus stops	n/a	\$2.9M	n/a	\$2.9M
4.	Other arterial roads	\$2.3M	\$0.7M	\$1.3M	\$4.3M
5.	Other collector roads	\$0.4M	\$0.01M	n/a	\$0.4M
	TOTAL	\$13.9M	\$13.8M	\$14.9M	\$42.6M

Table 2: Sidewalk Priorities and Costs

Sidewalk priorities are summarized in **Appendix A.** It should be emphasized, however, that many of the sidewalks identified as priorities are in areas of redevelopment in the City Centre, new development in Northeast Coquitlam, and redevelopment in Austin Heights, Maillardville, and Burquitlam. Sidewalks in these neighbourhoods can and ought to be provided as redevelopment occurs in the future.

The assessment results for increased sidewalk coverage are shown in Table 3.



Theme: Increase Sidewalk Coverage		
Goal	Summary	Rating
1: High Quality, Multi-Modal Facilities	 Sidewalk coverage increase by over 140km Complete implementation will result in 100% of roads in Pedestrian Precincts with sidewalks 	
2: Support a Healthy Environment	 Increasing sidewalk coverage will make walking a safer and more attractive option and encourage residents to walk for short and medium distance trips and reduce GHG emissions 	
3: Maintain and improve the quality of streets	 By constructing new sidewalks on all collector and arterial roads, this will have a high contribution towards to improving safety of neighbourhood streets. By prioritizing sidewalk investments in the City Centre and Neighbourhood Commercial Centres, improvements will have a high contribution to making these key centres more pedestrian friendly. 	
4: Move people and goods efficiently	• It is not anticipated that implementing the sidewalk network will provide significant travel time reductions or have any changes in delays at key intersections along the roadway network.	
5: Prioritize sustainable modes of transportation	 By ensuring that sidewalks are provided within walking distance to key destinations throughout the City, walking will be a significantly more attractive transportation option. This will also improve safety for pedestrians by ensuring that they have a safe place to walk near these key land uses. Increased sidewalk coverage also contributes to transit as all transit trips start and end as a pedestrian trip. However, despite these benefits, it is not anticipated that increasing the sidewalk coverage will have a significant effect on shifting travel modes, as most walking trips are relatively short trips. 	
6: Manage the transportation system efficiently	 Capital cost to implement all priority sidewalks is approximately \$43 million; cost for highest priority sidewalks is approximately \$14 million. 	0
Overall Assessment	High Priority / Ongoing	

Table 3: Evaluation Results – Increase Sidewalk Coverage

2. Enhance Pedestrian Quality

The Pedestrian Plan 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, other rapid transit station areas, and Neighbourhood Commercial Centres where walking will be most prominent, extraordinary treatments are required to make walking even more attractive. These will require treatments within and leading to those areas that make walking are attractive to all users and are accessible for all levels of mobility. In order to enhance pedestrian quality in key areas, the Pedestrian Plan identifies three key types of pedestrian areas in which to enhance pedestrian treatments – Pedestrian Precincts and People Streets, School Pedestrian Areas, and

Community and Recreation Pedestrian Areas. These areas were defined by a 400 metre radius around key pedestrian generators, equivalent to approximately a five-minute walk. The Pedestrian Plan identifies a range of treatments to make walking within each of these areas the most attractive mode of transportation. Treatments range from crossing treatments, accessibility improvements, and other amenities such as signage and wayfinding, landscaping, benches, and lighting. The assessment results for enhanced pedestrian quality are shown in **Table 4**.

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Theme:				
Enhance Pedestrian Quality				
Goal	Summary	Rating		
1: High Quality, Multi-Modal Facilities	 A range of enhanced treatments are recommended in key areas to improve the quality of the walking experience. Although these enhanced treatments will increase the attractiveness of walking, they do not increase network coverage beyond what is recommended with increased sidewalk coverage 			
2: Support a Healthy Environment	 Most walking trips are short distance trips, and this strategy helps make walking the most attractive option for short distances close to major destinations. This will help shift trips to walking in and around key destinations throughout the City, reduce GHG emissions, and improve air quality. Further, there are many community health benefits to supporting active transportation. 	•		
3: Maintain and improve the quality of streets	• Enhanced crossing treatments, accessibility improvements, and additional pedestrian amenities will play a significant role in improving safety of neighbourhood streets and making key urban centres more pedestrian-friendly.			
4: Move people and goods efficiently	• Sidewalk network improvements may not significantly reduce travel time or significantly impact delays at key intersections along the roadway network, but will improve walking trips at the origin and destination	•		
5: Prioritize sustainable modes of transportation	• Walking would be the priority of mode of transportation in identified pedestrian areas and enhanced treatments in these areas would make walking significantly more attractive in these areas	•		
6: Manage the transportation system efficiently	 Pedestrian Precincts – 50% premium School Pedestrian Areas – 30% premium Community and Recreation Pedestrian Areas – 30% premium Based on Pedestrian precinct premium, cost is estimated to be \$15.5M 			
Overall Assessment	Moderate Priority / On-Going			

Table 4: Evaluation Results – Enhanced Pedestrian Quality

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 plan includes a network of Citywide Greenways which are intended to be continuous routes that provide strategic links to major destinations throughout the City, including major commercial centres, schools, parks and other community facilities; as well as Neighbourhood Greenways, which 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. These greenways should have enhanced treatments to distinguish them from other routes such as enhanced sidewalk width, local street bikeways, multi-use pathways, landscaping, narrower crossings, design measures aimed at maintaining low traffic volumes and speeds, pedestrian amenities, street level lighting, public art, and alternative stormwater management. It should be noted that off-street trails will be implemented in accordance with an updated Trails Master Plan.

The STP identifies a network of approximately 60 km of Citywide Greenways as described below. It should be noted this Citywide Greenway network includes approximately 6 km of existing facilities.

- **David Avenue** would provide a direct east-west connection across Coquitlam from the Port Moody boundary in the west to Northeast Coquitlam in the east. A multi-use pathway already exists on the south side of David Avenue between Pinetree Way and Coast Meridian Way.
- **Pinetree Way** is a key north-south connection through the City Centre. In recognition of the Evergreen Line, the City has completed a conceptual design for Pinetree Way to be a multi-modal street with transit priority measures, promoting mixed use development, and creating a sense of place.
- **Johnson Street** is another key north-south connection and has sufficient right of way along the majority of the proposed route to provide a multi-use pathway on the west side of the street.
- **Lougheed Highway** would consist of a multi-use pathway adjacent to Lougheed Highway to provide a connection between the City Centre and Southwest Coquitlam. The City has completed a background study reviewing potential alignments for this multi-use pathway, with the preferred alignment running through the Province's Riverview property adjacent to Lougheed Highway. The grades along this alignment are appropriate for cycling and walking.
- **Mariner Way** would consist of a multi-use pathway on the west side of Mariner Way to provide a connection from Mundy Park and Como Lake Road to the Lougheed



Highway and Colony Farm greenways. A multi-use pathway already exists on the west side of Mariner Way between Como Lake Avenue and Austin Avenue.

- **Colony Farm Road** would be a local street bikeway or off-street pathway to provide a north-south connection between the Lougheed Highway and Mariner Way Greenways with the Waterfront Greenway.
- **Waterfront**, which is a long-term multi-use pathway adjacent to the Fraser River. The City has completed a background study reviewing potential alignments for this multi-use pathway.
- **Clarke Road**, which would consist of a multi-use pathway on Clarke Road in conjunction with the Evergreen Line.
- **King Edward / Nelson / Porter**, which would make use of the bicycle lanes and multi-use pathway currently being constructed as part of the King Edward Overpass, and would consist of a shared local bikeway and enhanced sidewalks and other pedestrian amenities along Nelson Street and Porter Street.
- **Brunette**, which would include an overpass over Highway to connect with the Braid Street SkyTrain station and would provide a connection to Maillardville using a combination of on-street and off-street facilities.
- **King Albert / Austin**, which would provide a direct connection between Lougheed Town Centre, Austin Heights, and Mundy Park, and would consist of a consist of a shared local bikeway and enhanced sidewalks and other pedestrian amenities along King Albert Avenue, including a new pedestrian and bicycle bridge between Gatensbury Street and Schoolhouse Street. This would also consist of a multi-use pathway on the north side of Austin Avenue between North Road and Roxham Street.
- Regan / Smith, which would provide a direct connection between Burquitlam Centre and Mundy Park and pointing east, consisting of a shared local bikeway and enhanced sidewalks and other pedestrian amenities along Regan Avenue and Smith Avenue. The greenway would continue along the existing multi-use pathway on the south side of Como Lake Avenue adjacent to Mundy Park as well as the existing Crosstown Bicycle Route between Mundy Park and Coquitlam City Centre.
- **Dogwood / Fairview**, which would provide a direct north-south connection through Burquitlam Centre using a shared local bikeway and new sidewalks.
- **Poirier Street**, which would provide a direct north-south multi-use pathway connection to the Poirier Sport and Leisure Complex, Poirier Library, Centennial School and other community facilities using a shared local bikeway and enhanced sidewalks.
- **City Centre**, which would provide an east-west connection between Ioco SkyTrain Station and Port Coquitlam and could be implemented in conjunction with the development of a finer-grained city centre road network. In addition, to connect the West Coast / Coquitlam Station to potential development lands on the south east



quadrant of Lougheed Highway and Pinetree Way, a potential pedestrian/bicycle overpass is recommended over Lougheed Highway by the railway overpass.

The assessment results for trails and greenways are shown in **Table 5.** Costs for urban greenways were calculated based on a unit rate of \$1,000,000/km for off-street pathways and \$50,000/km for on-street improvements. Based on these unit costs, it is estimated that implementation of the complete network of Urban Greenways would cost approximately \$20 million, although it should be noted that these costs include improvements to bicycle facilities included in the following chapter. Recognizing the significant cost to implement all greenways identified above, individual greenways were prioritized based on their relative importance in connecting key destinations throughout the City. It is estimated that the highest priority greenways would cost approximately \$6.6 million to implement, as shown in **Table 6.**

Theme: Develop Trails and Greenways				
Goal	Summary	Rating		
1: High Quality, Multi- Modal Facilities	 Citywide Greenway network increases from 6 km to 60 km in distance 			
2: Support a Healthy Environment	 Citywide Greenways provide attractive, direct connections between major destinations throughout the City and will encourage people to walk or cycle between these destinations for commuting or recreational purposes. 	•		
3: Maintain and improve the quality of streets	 By prioritizing pedestrians and cyclists along the Citywide Greenway corridors and designing for people, these connections will improve safety of neighbourhood streets and make key urban centres for pedestrian and bicycle friendly 	•		
4: Move people and goods efficiently	 Citywide Greenways will likely be used primarily for recreation or utilitarian trips and will help move people – particularly cyclists – efficiently. Design measures designated to keep traffic volumes and speeds low along neighbourhood streets 	•		
5: Prioritize sustainable modes of transportation	 Citywide Greenways are intended to prioritize high quality, attractive pedestrian and bicycle facilities in order to see a significant increase in walking and cycling 			
6: Manage the transportation system efficiently	 Approximately \$20 million capital costs for implementation of all urban greenways; approximately \$6.6 million to implement highest priority greenways. 			
Overall Assessment	High Priority / Ongoing			

Table 5: Evaluation Results – Develop Trails and Greenways



Urban Greenway	Priority	Cost
David Avenue	High	\$1.3M
Pinetree Way	High	Implement with Pinetree Way improvements
Brunette	High	\$1.0M
King Albert / Austin	High	\$1.6M
Regan / Smith	High	\$220,000
Dogwood / Fairview	High	\$380,000
Clarke Road	High	\$0.5M
Poirier	High	\$1.7M
City Centre	High	To be determined based on final alignment
Lougheed Highway	Moderate	\$3.7M
Mariner Way	Moderate	\$1.8M
Johnson Street	Moderate	\$1.1M
Nelson	Moderate	\$70,000
Porter	Moderate	\$60,000
Colony Farm Road	Low	\$1.2M
Waterfront (Implement with Development)	Low	\$5.4M
King Edward	Low	Implement with Waterfront road network
Colony Farm Road	Low	\$1.2M

Table 6: Greenway Priorities and Costs

3.2 Cycling

Although cycling currently accounts for less than 1% of all trips in Coquitlam, it is an increasingly important mode of transportation for both local and longer-distance trips. The STP includes ambitious targets that 3% of all trips made by Coquitlam residents be made by cycling. In addition, the Regional Cycling Strategy for Metro Vancouver has a set a target that 15% of all trips less than 8 km in distance across the region be made by bicycle. Achieving these mode share targets locally and across the region will require a significant investment in cycling facilities and support initiatives, but most importantly, will require a market based approach to providing bicycle facilities to ensure that cycling is a safe, convenient and attractive option for cyclists of all ages and abilities. 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.

Discussion Paper #4 included three categories of potential cycling improvements that should be considered for the long-term in Coquitlam, including:

- 1. Expand Bicycle Network Coverage
- 2. High Quality Bicycle Facilities
- 3. Develop Support Facilities, Policies & Programs

This section of the Discussion Paper examines how each of these key themes aligns with the vision and goals for the STP that have been outlined in previous Discussion Papers.

1. Expand Bicycle Network Coverage

The recommended bicycle network identified in the Bicycle Plan includes approximately 150 km of bicycle facilities. This is an increase from approximately 40 km of bicycle facilities that already exist. The City has implemented 40 km of bicycle routes over the past decade. An additional 110 km of facilities could be implemented over the next twenty five years and beyond at approximately the same implementation rate as over the past decade. In addition, 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. Assessment results for expanded bicycle network coverage are shown in **Table 7**.



Table 7: Evaluation Results – Expand Bicycle Network Coverage

Theme: Expand Bicycle Network Coverage				
Goal	Summary	Rating		
1: High Quality, Multi- Modal Facilities	 Bicycle network increases from 40km today to 150km in the future – an increase of 275% Currently less than 30% of the urban area of the City is located within 500 metres of a bicycle route, and this will increase to 70% upon full build out of the bicycle network 			
2: Support a Healthy Environment	 By providing increased network coverage and most residents within a short cycling distance to a designated bicycle route, cycling will be an attractive option to replace short and medium-distance trips. 			
3: Maintain and improve the quality of streets	 Providing a complete network of bicycle facilities will help to ensure safety for cyclists and other road users on neighbourhood streets By providing connections within and between the City Centre and Neighbourhood Commercial Centres, improvements will have a high contribution to making these key centres more bicycle friendly. 			
4: Move people and goods efficiently	• A dense network of bicycle routes will help move cyclists efficiently across the City and, with an increasing number of cyclists, will help reduce the number of vehicles on the road to ensure the efficient movement of goods and services.	•		
5: Prioritize sustainable modes of transportation	• By implementing a complete network of bicycle facilities, bicycle facilities would be a very attractive mode of transportation in Coquitlam.			
6: Manage the transportation system efficiently	• It is estimated that full implementation of the bicycle network would cost approximately \$27.1 million.			
Overall Assessment	High Priority / Ongoing			

2. High Quality Bicycle Facilities

As noted in the Bicycle Plan, There are a wide range of different types of cyclists, ranging from those who currently cycle regularly for commuting purposes, to others who may not be comfortable cycling on bicycle routes on busy roadways. The City of Portland has categorized the cycling market based on people's willingness to use bicycles for transportation. The first group, "Strong and Confident" cyclists, are a small group of very regular cyclists, representing less than 1% of the population, who would cycle regardless of road conditions. The "Enthused and Optimistic" group is made up of 7% of the population and is comfortable on most cycling facilities, such as bicycle lanes on arterial streets. The "No Way No How" group makes up 33%

of the population and would be unwilling to use a bicycle for transportation, regardless of conditions.

What remains is the key untapped market, the "Interested but Concerned" group, and there is a significant opportunity to focus on the needs of this large market segment to achieve a significant increase in bicycle use. TransLink's Regional Cycling Strategy estimates that the "Interested but Concerned" group represents approximately 41% of the population. The Regional Cycling Strategy notes that the single greatest deterred for this group is concern about cycling in motor vehicle traffic. To that end, the Bicycle Plan recommends focusing on implementing high quality cycling facilities that are attractive to this segment of the population,

- Class 1 Facilities which appeal to a wide variety of cyclists including the "strong and confident", "enthused and optimistic", and "interested but concerned" cyclists. These facilities have the potential to significantly increase cycling among the interested but concerned group in particular. These high quality routes can include off-street pathways, separated bicycle lanes, and local street bikeways on streets with low traffic volumes (less than 3,000 vehicles per day in both directions).
- Class 2 Facilities appeal to more limited group of cyclists including the "strong and confident" and "enthused and optimistic" groups and can include local street bikeways on busier roadways (3,000 6,000 vehicles per day in both directions) or bicycle facilities on collector or arterial streets with moderate traffic volumes (6,000- to 15,000 vehicles per day in both directions).
- Class 3 Facilities would appeal to a limited group of commuter cyclists and consist of bicycle facilities on collector or arterial streets with motor vehicle volumes greater than 15,000 vehicles per day.

Assessment results for high quality bicycle facilities are shown in **Table 8**. It is estimated that the cost of implementing the complete bicycle network would cost approximately \$27.1 million, *not including any bicycle facilities that would be implemented as part of a road improvement or road construction project*. This includes approximately \$20 million for urban greenways are described in the previous section, as many of the Class 1 cycling facilities are also classified as urban greenways. Recognizing the significant cost to implement bicycle facilities, bicycle routes were prioritized based on their network contribution, appeal, and implementability. The highest priority bicycle routes are estimated to cost approximately \$9.6 million. A detailed summary of bicycle network costs and priorities is shown in **Appendix B**.



Theme: High Quality Bicycle Facilities				
Goal	Summary	Rating		
1: High Quality, Multi- Modal Facilities	 Focusing on high quality bicycle facilities will enhance the quality of the cycling experience. Although these high quality facilities will increase the attractiveness of cycling, they do not increase network coverage beyond what is recommended with increased bicycle network coverage 	•		
2: Support a Healthy Environment	• By providing high quality facilities that are attractive to a large segment of the population, cycling will be an attractive option to replace short and medium-distance trips.			
3: Maintain and improve the quality of streets	 Providing high quality "Class 1" cycling facilities will make a significant improvement to safety and quality of neighbourhood streets by prioritizing cycling, implementing design measures aimed at maintaining low traffic volumes and speeds, and installing other bicycle and pedestrian amenities on neighbourhood streets. 			
4: Move people and goods efficiently	 A network of high quality bicycle routes will help move cyclists safely across the City and, with an increasing number of cyclists, will help reduce the number of vehicles on the road to ensure the efficient movement of goods and services. 	•		
5: Prioritize sustainable modes of transportation	 By focusing on developing high quality, safe, and attractive bicycle facilities, there would be a significant opportunity to encourage the "interested but concerned" segment of the population to cycle. Since this group represents a significant share of the population (estimated at 41% of the Metro Vancouver population) there is significant potential to increase mode share by tapping into this market. 			
6: Manage the transportation system efficiently	 It is estimated that full implementation of the bicycle network would cost approximately \$27.1 million, excluding routes constructed as part of other road improvement or road construction projects (and including costs for greenways identified in the previous section); highest priority bicycle routes would cost approximately \$9.6 million 			
Overall Assessment	High Priority / Ongoing			

Table 8: Evaluation Results – High Quality Bicycle Facilities

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. The Bicycle Plan includes a number of recommendations for support initiatives, including:

- Enhanced On-Street Bicycle Parking in Key Areas with additional bicycle parking recommended in key areas of Coquitlam, such as the City Centre, Neighbourhood Commecial Centres, SkyTrain stations and transit exchanges, Community centres, Schools, and Key parks.
- Enhanced Wayfinding and Signage to identify designated bicycle routes and guide cyclists throughout the bicycle network, and also to provide a visual cue to motorists that they are driving along a bicycle route.
- **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 Parking Requirements**, including amendments to the City's Zoning Bylaw to provide requirements for the bicycle parking and other end-of-trip facilities.
- Education and Awareness Programs 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 include developing a Bicycle User Map for Coquitlam residents which could display information such as bicycle routes, key destinations, transit routes, bicycle parking, and bicycle retailers, for example. The City could also develop a dedicated web presence and use other social media tools to promote and market cycling initiatives in Coquitlam.

A summary of assessment results for bicycle support strategies is shown in Table 9.

Table 9: Evaluation Results – Bicycle Support Facilities, Policies and Programs

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Theme: Bicycle Support Facilities, Policies and Programs					
Strategy	Key Directions	Overall Priority			
Enhanced On- Street Bicycle Parking in Key Areas	 Ensure on-street bicycle parking is provided in key areas such as the City Centre, Neighbourhood Commercial Centres, SkyTrain stations and transit exchanges, community centres, schools, and key parks Bicycle parking should range depending on the duration and anticipated to use and could include bicycle racks, bicycle 'corrals, bicycle shelters, or bicycle lockers. 	High Priority / On-going			
Enhanced Wayfinding and Signage	 Provide enhanced signage on designated bicycle routes to identify the bicycle network and help "brand" the network. Work with TransLink on using a common wayfinding system for cycling. 	Moderate Priority / On-Going			
Public Bike Sharing	 Work with partners to conduct a feasibility study of implementing a public bike share program in the City or the broader Northeast Sector 	Low Priority / Long- Term			
Bicycle Parking Requirements	 Amend the Zoning Bylaw to provide requirements for bicycle parking and other end-of-trip facilities 	High Priority / Short-Term			
Education and Awareness Programs	 Support a range of programs such as cycling skills programs, safe routes to school programs, and events such as Bike to Work Week and Bike Month 	Moderate Priority / Ongoing			
Marketing and Promotion Strategies	 Develop bicycle user map identifying key bicycle routes, destinations, transit routes, bicycle parking, and key retailers Develop a dedicated web presence and other social media tools to promote cycling in Coquitlam 	Moderate Priority / Ongoing			

3.3 Transit

The Transit Strategy for Coquitlam is designed to take stock in the importance of transit the established and growing areas of the City, identify and assess the relative markets, examine conceptual long-term improvements to the transit system beyond the provision of the Evergreen Line and outline relative priorities based on local goals and aspirations for the transportation system and community plans.

The outcomes and priorities of the STP Update process will serve as input into the Area Transit Planning process for the Northeast Sector to be undertaken by TransLink in the next few years. In addition to outlining the City's interests in local and regional transit services as well as supportive strategies, the process provides the City the opportunity to work through the key ingredients to a achieving many other objectives and the role of transit at a local level. TransLink can then work through these and other concepts at a sub-regional level within the Northeast Sector and evaluate potential improvements based on these aspirations and other performance indicators to ensure that investments in transit are beneficial to the community and the transit system as a whole.

The improvement concepts section in Discussion Paper #4 outlined three categories of potential transit improvement strategies that should be considered in Coquitlam for the long-term as briefly highlighted below.

- 1. Increased local area frequencies & coverage
- 2. Enhanced Regional Services
- 3. Transit Supportive Strategies and Policies

This section of the Discussion Paper broadly examines the relative alignment between these concepts and the City's aspirations not only for transit, but the other goals and objectives reflected in the evaluation criteria. In some cases, preliminary analysis of the concepts included very cursory modeling to provide general guidance on the potential changes in ridership that may occur in support of other qualitative measures to gauge relative support.

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. Overall, the improvement strategies identified in Discussion Paper #4 broadly outline several key strategies to enhance local services within the City. An assessment of these strategies and associated priorities are briefly summarized below and in **Table 10**.

a. Enhance services in Southwest Coquitlam by 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 and Lougheed areas to other parts of the community. Overall, these improvement concepts support the significant level of planned growth in Southwest Coquitlam and are expected result in a moderate increase in transit ridership. Additionally, more frequent and direct east-west services along Austin will support growth and development in the area and provide a defined transit corridor for 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. In particular, local services will support mobility needs of an aging community as well as people with cognitive and physical disabilities. These improvement concepts are considered a high priority to support the growing Southwest Coquitlam area.

- **b.** Frequent and direct transit service connections between Northeast Coquitlam and the City Centre area and Evergreen Line stations. A large proportion of travel generated by Northeast Coquitlam is going to the City Centre or other parts of the region. Frequent and direct services between these growing travel markets are essential to support the significant ridership that has may be generated. Previous forecasts for the Northeast Sector suggest that long-term build out of the community would support a frequent, direct service along the David Avenue corridor through the City Centre to Coquitlam Station to connect with the planned Evergreen Line. Intermodal connections for pedestrians and cyclists will be important. Introduction of this service is a high priority for the development of the Northeast and City Centre areas and is considered a high priority for the City. In the near term, there is a need to continue to increase local bus coverage as new areas develop.
- c. Lower Lougheed Rapid Transit service connecting Coquitlam Station to Lougheed Station. This potential service was identified in the Livability Accord to be explored could include service frequencies of 5 to 10 minutes throughout the day with transit priority required to address areas of recurring delays and congestion. The preliminary assessment of a rapid or frequent transit service along the Lougheed corridor with priority treatments indicates that there would be a marginal increase in overall transit ridership in 2031. Similar to today's Route 169, much of the ridership projected for this service would originate in the City Centre and travel to the Braid Station with some boarding and alighting along the corridor. In this regard, the service would be redundant with the Evergreen Line without serving other significant development nodes along the corridor that would support rapid or frequent transit service levels. Unless there are plans for significant redevelopment of all or parts of the corridor with greater densities and mixture of uses at key nodes, a rapid transit or frequent transit service is considered a



low priority for the area. It should be noted that local services providing direct connections between the lower areas of Southwest Coquitlam to the City Centre area and to Braid Station would however continue to be beneficial in the long-term.

d. City Centre Local Service Coverage to provide mobility choices for travel within the growing downtown area of Coquitlam. Travel within the City Centre is expected to increase significantly over the next 20 years as presented in the City Centre land use plan. However, the planned rapid transit service and bus integration strategy may not be designed to support the local travel market, and the physical size of the downtown area will not be conducive to walking between uses. In fact, many people will drive between commercial uses and/or residential areas and other activity nodes in the City Centre. The STP calls for a grid street system extending east-west and north-south throughout the area, significantly enhanced pedestrian corridors and facilities to entice people to walk from place to place, and tremendous growth in development that will extend to the boundaries of the City Centre area. A community shuttle operating may ensure that the City Centre is attractive not only to get around to by transit, but it is reasonable to take transit within the area where walking distances may be a deterrent. This option seeks to pursue enhancements to existing and new transit services in support of the City Centre. This improvement concept is considered a moderate priority as ridership may not be significant, but the costs of the service would be relatively modest to support mobility needs of a large City Centre.



Table 10: Evaluation Results – Increased Local Area Service and Coverage

Goal	A Enhanced SW Service	B Frequent NE Service	C Lougheed Rapid Transit	D City Centre Shuttle
1: High Quality, Multi- Modal Facilities	 Significantly improves coverage Supports accessibility needs of community 	 Supports growing travel markets 	 Marginal improvement 	 Moderately improved accessibility
		•	0	•
2: Support a Healthy Environment	 Modest reduction in GHGs/VKT 	Modest reduction in GHGs/VKT	 Limited-No reduction in GHG/VKT 	 Limited-No reduction in GHG/VKT
	•	•		•
3: Maintain and improve the quality of streets	Supports planned densification & live/work/play local	Supports growth & alternatives modes	Limited-No improvement	Important for accessibility needs
	•	•	•	•
4: Move people and goods efficiently	 Transit travel time benefits 	 Modest travel time benefits with direct service 	No system travel time benefits	No travel time benefits
		•		U
5: Prioritize sustainable modes of transportation	 Modest ridership increase 	 Modest ridership increase 	 Modest ridership for frequent transit Marginal increase in system ridership 	 Marginal ridership increase
	•	•	O	
6: Manage the transportation system efficiently	Moderate system costs off-set by ridership growth	• Moderate system costs off-set by ridership growth	 Significant costs for rapid or frequent transit service 	Modest cost and ridership growth
	\bullet		O	
Overall Assessment	High Priority/ Short-term	Moderate Priority / Medium-term	Low Priority/ Long-term Only if TOD occurs along Lougheed	Moderate Priority / Medium-term



2. Enhance Regional Services

The eastern areas of Metro Vancouver are among the fastest growing communities in the region. As presented in Discussion Paper #4, transit service and subsequently ridership today and in future for Coquitlam residents and visitors is primarily directed toward the cities in the west such as New Westminster, Burnaby and Vancouver. 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. With the planned growth in the City Centre of these communities and increased development along key corridors that may be transit-friendly, investments in transit will become a critical ingredient to achieving community, environmental, economic and overall transportation goals of the City.

The improvement strategies identified in Working Paper #4 broadly outlined several key opportunities to enhance regional services between Coquitlam and other Northeast Sector communities as well as with the City of Surrey. A preliminary review of these possibilities and associated priorities are summarized below and in **Table 11**.

- a. Integrate services with Port Coquitlam. As growth and development occur in both Coquitlam and Port Coquitlam, travel demands between the communities 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. Additionally, the importance of services between the City Centre and the western edges of Port Coguitlam has been identified by both municipalities as desired improvements. In general, the travel markets between the Coquitlam City Centre and Port Coquitlam are growing and expected to increase further in future. Integrating the western areas of Port Coguitlam with the previously identified City Centre shuttle/neighbourhood services that also connect with rapid transit in future will be important to local and regional mobility. Additionally, direct connections between North Port Coquitlam and the City Centre and Evergreen Line will draw on the growing travel markets to these nodes in Coquitlam. Improved integration and enhanced services between Port Coguitlam and Coguitlam as described are considered moderate-high priorities to be examined further in the Area Transit Plan.
- b. Enhance the Coquitlam Pitt Meadows/Maple Ridge Connection. This corridor is envisioned by the Provincial Transit Plan as providing a rapid bus

connection. Existing services across the Northeast include the #701, which provides frequent transit service throughout the day and into the evening. With significant growth in this area of the region, investments in the Evergreen Line and aspirations for attractive transportation alternatives, significantly enhanced transit services are required to meet the future needs of Coquitlam residents and visitors. Increasing transit frequency, directness and reliability through transit priority strategies between Coquitlam and other Northeast Sector communities is essential not only to attract increased transit ridership, but to keep pace with and exceed the rate of growth in travel between these communities. A frequent express bus or rapid bus service should be considered through the Area Transit Planning process with adequate provision for transit accommodation and priority treatments. This service improvement is considered a high priority for Coquitlam to support aspirations for an accessible and transit oriented City Centre area along with connections to other regional transit services that can reduce the need for park-and-ride facilities.

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c. New Coquitlam – South of Fraser Services. Today, travel between Surrey and Coquitlam represents approximately 3-5% of all vehicle trips (for the Coquitlam), and only 1% of transit trips. As these are among the highest growth communities in the region and changes to travel behaviour are necessary to achieve the aspirations of both communities, new and very attractive transit service connections must be considered for a sustainable future. In addition to the Rapid Bus connections along the Highway 1 corridor connecting with the Lougheed Town Centre Station, frequent express bus services connecting Surrey City Centre and Coquitlam City Centre will provide needed connection between these cities as well as connect with other services to increase mobility for other communities north and south of the Fraser River. Assuming a frequent service, consideration should be given toward the provision for transit priority treatments along the Lougheed Highway. Recognizing the projected growth in these communities and increases in travel, this service improvement is considered a high priority to be included in the Area Transit Plan.



Goal A B С Enhance Cog – Maple Integration with PoCo New Coquitlam – South **Ridge/ Pitt Meadows** of Fraser 1: High Quality, Significantly more Improves network Significantly more Multi-Modal Facilities attractive connections attractive connection coverage and attractiveness 2: Support a Modest reduction in Limited reduction in GHG/ Modest reduction in GHG/VKT Healthy GHGs/VKT VKT Environment 3: Maintain and • Supports planned • Supports growth & • Supports City Centre improve the quality densification & alternatives modes arowth plans & other of streets live/work/play local regional connections 4: Move people and • Limited travel time benefits Moderate time benefits Moderate time benefits • • goods efficiently with direct service and with direct service and transit priority transit priority 5: Prioritize Limited ridership increase Significant ridership Significant ridership • sustainable modes increase from NE growth expected of transportation 6: Manage the Moderate to higher Moderate to higher Moderate system costs offtransportation set by ridership growth system costs off-set by system costs off-set by system efficiently ridership growth ridership growth

High Priority /

Short-term

High Priority /

Short-term

Table 11: Evaluation Results – Enhanced Regional Services

Transit Supportive Strategies & Policies 3

Moderate Priority / Medium-term

Overall

Assessment

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. Discussion Paper #4 of the STP identified several potential support strategies and policies that are important to making transit more attractive in Coquitlam. This section of the Plan outlines some of the specific



directions and relative priorities for transit supportive actions. A summary of the assessment for transit supportive strategies and policies is shown in **Table 12**.

Table 12: Evaluation Results – Transit Supportive Strategies and Policies

Theme: Transit Supportive Strategies and Policies		
Goal	Key Directions	Overall Priority
Transit Priority Treatments	 Review menu of transit priority treatments contained in the previous STP and Northeast Sector Area Transit Plan Identify priority treatments for specific frequent local and express transit corridors such as Austin Avenue and Lougheed east of Pinetree Way 	Moderate / Medium-term
Transit Oriented Design	 Focus on the major corridors and nodes of development that can be served by attractive transit through increased scale, density, mixture and form of land uses. Support multi-modal connections to primary transit corridors and stations to easily connect communities to transit services and facilities 	High / Ongoing
Enhanced Passenger Facilities	• For the most active transit stop locations, stations and exchanges, the City will strive to serve the passenger needs with comfortable seating, lighting and customer information.	Moderate / Ongoing
Improved Accessibility	 Provide accessible sidewalks, paths and crossings within 100m of all bus stops, stations and exchanges in the City. Prioritize the most active stop locations as noted above. Improve on-street signage regarding the location of major transit nodes such as stations and exchanges 	Moderate / Ongoing
Expanded Transit Pass Program	• Explore the potential of employer pass programs for new developments in close proximity to rapid transit stations.	High / Short- term

As TransLink is responsible for the provision of transit services throughout the City and Metro Vancouver region, costs to enhance local and regional transit services would be made by TransLink. However, the City does have role to play with regards to transit facilities and transit priority measures. As such, the transit strategy includes costs for transit passenger amenities (bus shelters and seating) as well as improved passenger information and transit signal priority on key corridors. The long-term transit strategy envisions all bus stops in the City having full bus shelters and seating, upgrading customer information to include digital messaging at all existing bus shelters, and provide transit priority measures on key corridors including Pinetree Way and Austin Avenue. The total estimated cost to implement all transit priority and passenger amenity improvements is approximately \$19.1 million. The highest priority projects include ensuring all bus stops on the highest frequency corridors have shelters – namely Austin Avenue, Mariner Way, Pinetree Way, and Como Lake Road, as well as including digital customer information at bus stops along these corridors and transit priority measures. The total short-term transit priority measures.

and amenity costs are estimated to be approximately \$5.9 million. The assumptions for transit costs and priorities are shown in **Appendix C**. It should be noted, however, that bus shelters are currently provided and paid for by an advertising agency on contract to the City. Although the transit strategy recognizes the costs for these shelters, it is anticipated that the majority of the transit shelters would be provided by a third party.

3.4 Vehicle Travel

The roadway network plays a critical role in supporting vehicle travel and the movement of goods and services in the City. The Roadway Network Plan includes a review of roadway network improvements that essentially fall into three categories:

- **New roadway connections** in the growing areas of the City and to build more of a grid street network to provide capacity and greater support to the major roads for other functions such as access and circulation.
- **Expansion of the existing roadway network** to address issues of mobility and safety. Those improvements examined include increases in capacity for general purpose or high occupant vehicles and buses.
- Manage the existing roadway network in an effort to make better use of resources and minimize transportation costs.

It should be noted that the Roadway Network Plan will ultimately outline the multi-modal role and function of the street network in the City of which the network improvement concepts are only a portion of the Plan.

1. Major Network Improvement Concepts

All major network improvements examined in this section of the Discussion Paper include the provision of new links as well as major corridor widenings and/or the provision of grade-separations at intersections to address existing and projected delays.

1) City Centre Network Improvements

a) Lougheed/Barnet Corridor Grade Separation

The Lougheed/Barnet Corridor grade seperation concept was identified in the 2001 Coquitlam STP to accommodate significant growth in the area and to address recurring congestion on the major roadways such as Lougheed, Barnet, Westwood, Pintree Way and Johnson. Today, each of these major roadways serve local access and circulation to adjacent properties, city-wide travel and regional traffic and as well as the movement of goods within and between communities of the Northeast Sector and other parts of the Lower Mainland.

Traffic volumes on the Lougheed/Barnet corridor between Johnson Street and Shaughnessy Street are forecast to increase by more than 20% by 2031. It is projected that the Lougheed/Barnet corridor would generate up to 4,500 vehicles during the AM peak hour. Analysis of future base conditions indicate that each of the major intersections along the Lougheed and Barnet Highway at Westwood Street, Pinetree Way and Johnson Street would operate at a LOS F, as highlighted in **Figure 1.1**. These intersections will continue to experience significant queues and delays as the area continues to grow. Recognizing the many roles of these major roads, it is anticipated that corridor safety will continue to be a growing issue for the future without any changes.

In order to address the congestion and increased traffic growth along this corridor and at the key intersections, many improvement options have historically been considered in the 2001 STP and since that time. These concepts generally included grade-separated intersections such as diamond Interchanges at Westwood, Pinetree and Johnson as well as the lowering of the Barnet/Lougheed corridor beneath major cross-streets along with the provision of east-west frontage roads.



vood Street O Lincoln Avenue Barnet Highway Legend Potential Network Lane Arrangement ed Highu Traffic Signal 0 С Levels of Service

Figure 1.1: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service

An example of a grade separation concept along the Lougheed/Barnet corridor is highlighted in **Figure 1.2**. These grade-separated intersections would provide free flow traffic on Lougheed/Barnet Highway between Westwood and Johnson and would significantly reduce the delays and congestion.



Figure 1.2: Example Lougheed/Barnet Highway Grade Separation Concept



Despite the reduction in delays and congestion, grade-separation concepts are not consistent with Coquitlam's context of an urban setting for the City Centre area. Overall, this improvement would have a significant negative impact to the City Centre concept and the broader aspirations of the community and would require significant property acquisition to accommodate any forms of grade separation.

As part of the City Centre Plan, two land use structure plans were explored. The preferred concept included land use and development patterns that will create building frontages on all major roadways such as Johnson Street, Pinetree Way, Lougheed Highway and Barnet Highway. In support of this form of development, the City Centre Plan recommends a finer grid system of streets throughout the City Centre and managing the scale of major roads. In areas and



corridors with redevelopment, such as Pinetree Way and Barnet Highway, west of Johnson Street, 'Boulevard Streets' were identified as the preferred strategy to provide the environment where land uses could front onto lower traffic streets that run parallel to the major roadways within the same right-of-way.

In order to be consistent with the City Centre Plan, it is recommended that grade separation concept not be considered further in the STP update. However, the City will want to seek opportunities to achieve the preferred concept from the City Centre Plan through corridor planning and redevelopment. It should be noted that the previously described frequent or rapid transit along the Lougheed Highway east of Coquitlam City Centre should be accommodated through transit priority treatments in future corridor planning. As a minimum, dedicated bus lanes should be considered to provide attractive connections to the planned Evergreen Line.

b) Grid Street System

As previously described, the City Centre Plan recommended the a network improvement concept that includes the potential grid street system with a finer grain of east-west and north-south roadways complementing the existing arterial road system in the City Centre area. While the arterial roadway system would continue to serve overall travel to, from and through the City Centre area, a support system of collector and local roads would provide needed access and circulation within the City Centre for all modes.



Figure 1.3: Potential City Centre Grid System Network


The potential grid street concept, as illustrated in **Figure 1.3**, includes a series of signalized and unsignalized intersections with two lane city collector roadways carrying traffic volumes of up to 600 vehicles per direction. Connections would be provided to all major roadways throughout the City Centre such as Pinetree Way, Barnet Highway and Johnson Street. The Falcon Overpass, Lincoln Avenue Crossing, Aberdeen Road and Westwood Street widening will also play an integral role in supporting the grid street system and are described in the next sections below. The Westwood Street widening is required on the east side which is under the jurisdiction of the City of Port Coquitlam.

Shown in **Figure 1.4**, the grid street system is expected to attract approximately 200-700 vehicles during the AM peak hour in 2031, with some of this traffic being diverted from Pinetree Way, Johnson Street, Barnet Highway and Lougheed Highway. By providing improved access and circulation to, from and through the City Centre area, traffic congestion/delays are slightly reduced at several major intersections.



Figure 1.4: Forecast (2031) AM Peak Hour Link Volumes – Grid System Improvement



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Overall, the forecast travel patterns and traffic analysis indicate that the grid street system will provide significant benefits in improving local access and circulation within the City Centre. As expected, the grid system of streets is projected to support the major roads with better access and circulation with the City Centre area while maintaining regional travel along the Lougheed and Barnet Highways. The summary of benefits and impacts of the grid system of streets within the City Centre are summarized in **Table 13**. Overall, the grid system of streets is considered a high priority to achieve the transportation and land use goals for the City Centre. In fact, the City will need to work with land owners of the City Centre to encourage redevelopment patterns that are more conducive to a downtown area for block sizes ranging from 100m to 150m.

Table 13: Evaluation Results – City Centre Grid Street Network

Goal	Summary	Rating
1: High Quality, Multi-	Increased density of pedestrian and bicycle facilities for downtown	
Modal Facilities	area	
	 More direct connections and routes with shorter walking and cycling 	
	distances	
	Improved access for specialized transit services	
2: Support a Healthy	Will support more walking within the City centre rather than driving	
Environment	between uses	
	Modest reduction in GHG emissions with a slight decrease in delays	•
	on major roads	
	• Estimated reduction in GHGs of 3 tonnes/day, despite additional	
	traffic on the network	
3: Maintain and improve	Requires redevelopment through much of the City Centre to be	
the quality of streets	Implementable and most effective and can occur in stages	
	Increased opportunity for place making for people in the downtown	
	More street space and opportunity for commercial frontage	
	 Greater connectivity to buildings from the street and where possible, lange may be used to convice businesses (or Cathogo leading etc.) 	
	Ianes may be used to service businesses (eg. Garbage, loading, etc.)	
	• Improved opportunity to integrate transportation with land use in terms of neurole encode	
	Encourages greater street activity during the day and night	
	Elicoulages greater street activity during the day and hight Improved local access and circulation for goods, convises and traffic	
4: Move people and	Improved local access and circulation for goods, services and traffic	
goods efficiently	• Network projected to accommodate more traincy traver as a result of the planned growth and development	
	 Slight reduction in projected demands and delays on major roads 	
	such as Barnet & Lougheed Highway as well as Lincoln Avenue	
	 Increased provision of shared short-term on-street parking may 	
	enhance access to the city centre area	
5. Prioritize sustainable	Walking within City Centre will contribute towards improving safety	
modes of transportation	for all road users	
modes of transportation	Grid system of streets that support different functions are generally	
	safer than larger streets that support all functions	
6: Manage the	Slight reduction in delays on major roads that dissect the City Centre	
transportation system	as well as investments that may be considered to address these	
officiently	issues	
encientiy	Capital Costs for local and collector roads of \$10-20 mill of roadway	
	construction may be off-set through redevelopment incentives and in	
	partnership with land owners.	
Overall Assessment	High Priority / Ongoing	

c) Falcon Overpass

The Falcon Drive Overpass is identified as a potential connection between the Southwest and City Centre areas of Coquitlam located on the western edge of the City Centre. This new link would provide a grade-separated connection over the CP Rail tracks connecting Falcon Drive from Barnet Highway to Dewdney Trunk Road. Currently, the Johnson/Mariner Way overpass is the only



north-south connection into Southwest Coquitlam that is west of City Centre in Coquitlam. All the traffic from Northwest Coquitlam and Port Moody connecting to Southwest Coquitlam is limited to using the Johnson Street overpass.

Shown in **Figure 1.5**, future base (2031) conditions without improvements indicate that the intersections on Barnet Highway at Lansdowne Drive and Johnson Street/Mariner Way are projected to operate at LOS F in the PM peak hour, while Falcon Drive would operate at LOS D. With limited north-south connections in the area, most of the traffic growth would be forced onto the existing network.

The potential Falcon Drive extension would include a new two-lane overpass over the CP Rail track. As shown in **Figure 1.6**, the conceptual design of the overpass would be equipped with sidewalks and bicycle facilities to provide enhanced north-south access, which supports other multi-modal strategies identified in this plan. The overpass will cross the proposed Evergreen Line with sufficient clearance and connect at Dewdney Trunk Road via an unsignalized t-intersection. The intersection configuration at Barnet Highway/Falcon Drive will require new northbound and southbound left-turns. Dedicated left-turns bays will be provided in both northbound and southbound in order to accommodate the increased traffic at the intersection. It should be noted that some property will be required between Dewdney Trunk Road and CP Rail to accommodate the overpass.





Figure 1.6: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service – with Falcon Overpass



Under future base conditions in 2031, the overpass is expected to attract approximately 600 vehicles in the PM peak hour. Much of this traffic would be diverted from other parallel north-south routes such as Johnson Street. In addition, approximately 250 vehicles on Barnet Highway between Falcon Drive and Johnson Street will be diverted to Dewdney Trunk Road. As shown in **Figure 1.7**, forecasted V/C ratios along Dewdney Trunk Road is relatively low and would be able to accommodate the diverted traffic.

Analysis indicates that the traffic diversion, as a result of the overpass, will improve the intersections at Lansdowne Drive and Johnson Street to LOS D and E, respectively. However, Falcon Drive would operate at LOS F without any improvement. The provision of a single northbound and southbound left-turn lane on Falcon Drive would be required to improve the



intersection operation to LOS D. All the movements at the unsignalized t-intersection at Dewdney Trunk are expected to operate at an acceptable LOS D, with the exception of the southbound left-turn. The southbound left-turn would operate at LOS F, however, the provision of a signal will improve the operation of the southbound movement. Consideration may also be given toward the provision of a roundabout if grades are appropriate.

Overall, the forecasted travel patterns and traffic analysis indicate that the Falcon Overpass improvement will support access and circulation within the City Centre. This improvement is expected to alleviate current traffic congestion on parallel routes. **Table 14** below summarizes the key benefits and impacts of the Falcon Overpass which is generally rated as a moderate-high priority for the City to work with TransLink and other municipalities.



Figure 1.7: Forecast (2031) AM Peak Hour Volume to Capacity (V/C) Ratio



Goal	Summary	Rating
1: High Quality, Multi-Modal Facilities	 Local and inter-municipal travel accommodated on Falcon Overpass Provides important pedestrian connections between communities on the south side of the CP Rail tracks and the City Centre area Supports bicycle plan connection as an attractive connection to Dewdney Trunk Road Ensures improved pedestrian access to future Evergreen Line and proposed Falcon Station for neighbouring communities to the north and south 	•
2: Support a Healthy Environment	 New north-south connection will provide modest reduction in greenhouse gas emissions and/or vehicle kilometers travelled Estimated reduction in GHGs by 2 tonnes/day 	
3: Maintain and improve the quality of streets	 Marginal benefit to the quality of the street environment Minor property impacts at the Barnet / Falcon intersection and moderate impacts at the Dewdney Trunk Road intersection 	
4: Move people and goods efficiently	 Improved accessibility on the western area of the City Centre for residents and visitors Limited-no travel time savings, however, a minor reduction in delays are projected along Barnet Highway 	
5: Prioritize sustainable modes of transportation	 Supports needed access for cyclists and pedestrians in the western area of the City Centre A significant mode shift is expected to remain relatively the same as the future base (2031) 	
6: Manage the transportation system efficiently	 The transportation benefits with the provision of the Falcon Overpass is estimated to be \$1.4M annually The Overpass is estimated to cost approximately \$12M, excluding property costs. 	
Overall Assessment	Moderate Priority / Medium-Term	

Table 14: Evaluation Results – Falcon Overpass

d) Lincoln Avenue Crossing

There are currently four east-west connections across the Coquitlam River including Pitt River Road, Mary Hill Bypass, David Avenue and Lougheed Highway. With continued growth in the Northeast Sector of Metro Vancouver, east-west travel demands will continue to increase, placing greater pressure on the existing connections.

Future base conditions highlighted in **Figure 1.8** indicate that the Lincoln Ave/Pinetree Way and Lincoln Ave/Westwood Street intersections are projected to operate at LOS C, while Lougheed Highway at Westwood and at Shaughnessy operate at LOS F during the PM peak hour.

The previous Coquitlam STP and Port Coquitlam Master Transportation Plans identified the need for an additional crossing of the Coquitlam River at Lincoln Avenue. The potential Lincoln Avenue crossing includes a new 4-lane connection between Shaughnessy Street and Pinetree Way, with connection at Ozada Avenue as shown in **Figure 1.9**. The intersections at Shaughnessy Street and Pipeline Road would be signalized while Ozada Avenue would be a stop-controlled intersection. Lincoln Avenue between Pinetree Way and Pipeline Road would also be upgraded to a four-lane cross section, while maintaining the existing turn bays at Pinetree, Westwood and Pipeline. In order to accommodate the projected volumes south of Lincoln Ave, Westwood Street will require widening between north of Cabbe Avenue and Lincoln Ave. Some property impacts and additional right-of-way may be required in Coquitlam and Port Coquitlam to accommodate the 4-lane connection. In addition to property impacts, environmental impacts such as instream and riparian impacts with the crossing should be expected. Bridge construction will also require habitat compensation.



Figure 1.8: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service

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Figure 1.9: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service With Lincoln Avenue Crossing





The Lincoln Avenue Crossing is expected to attract approximately 1,600 vehicles in the PM peak hour in the future base, 2031. Approximately 400 vehicles would be diverted from both David Avenue and Lougheed Highway, between Shaughnessy and Pipeline. In addition, traffic volumes on Pipeline between Guildford and Lincoln are expected to decrease between 350 – 500 vehicles and divert over to Ozada Avenue. The new crossing is expected to provide some relief to parallel east-west connectors such as David Avenue, Barnet Highway and Lougheed Highway, as well as serving an alternate access into the City Centre.

Analysis shows that the new Lincoln crossing will reduce projected delays at the intersection of Lougheed Highway/Westwood Street to LOS E. Delays at Lincoln Avenue/Westwood Street are expected to remain similar to today with the planned configuration, while Lincoln Avenue/Pinetree Way will decrease slightly from a LOS C to LOS D.

Forecast 2031 V/C ratios indicate sections of David Avenue and Lougheed Highway, between Pipeline and Shaughnessy are operating at capacity in the peak direction during the AM peak hour. The improved east-west connection will provide some relief on these corridors and reduce the overall system delays. Overall, the forecasted travel patterns and traffic analysis indicate that the Lincoln Avenue crossing will moderately benefit access and circulation to and from the City Centre.

The Lincoln Avenue crossing is rated as a high priority in the STP as summarized below in **Table 15**.



Table 15: Evaluation Results – Lincoln Overpass

Goal	Summary	Rating
1: High Quality, Multi-Modal Facilities	 Crossing provides for enhanced vehicle and transit access across the Coquitlam River through to the City Centre area Lincoln Avenue is a planned bicycle corridor connecting Coquitlam and Port Coquitlam The new crossing will provide enhanced pedestrian access between both communities 	
2: Support a Healthy Environment	 The Lincoln crossing will marginally reduce greenhouse gas emissions and/or vehicle kilometres travelled GHG estimated reduction of 4 tonnes/day, and reduction of 230 vehicles-kilometre travelled (VKT) daily 	
3: Maintain and improve the quality of streets	 A new east-west connection through the City Centre will support the grid street concepts in the City Centre Additional ROW required on the west side of the Lincoln corridor nearby Hastings Street 	
4: Move people and goods efficiently	 Generally improves access to and from the City Centre as well as east-west travel across the Coquitlam River Marginal change in travel times, however, some traffic relief to areas of congestion along Lougheed Highway and David Avenue A savings of 20 vehicle-hours travelled (VHT) is estimated 	•
5: Prioritize sustainable modes of transportation	 The Lincoln crossing is an important link proposed in the Bicycle section of the Plan Crossing supports the provision of community transit services between Port Coquitlam and the City Centre Building redundancy in the network and marginally reducing vehicle kilometres traveled will provide modest safety benefits 	•
6: Manage the transportation system efficiently	 Projected annual benefits in terms of travel time savings is \$4.5M/year Capital costs are estimated to be \$14M (Class D), excluding any property requirements and habitat compensation (\$0.5M is typical for this type of project) 	•
o ter un Assessment		

2) Blue Mountain, Lougheed and Brunette Improvements

The 2001 STP identified several improvements to address projected delays and congestion in the Brunette Avenue, Lougheed Highway and Blue Mountain area. The intersections of these three roadways not only provide access from Coquitlam into Burnaby and New Westminster, but also allow connection to Highway 1. **Figure 2.1** highlights the existing configuration of the Brunette/Lougheed/Blue Mountain intersections, as well as the AM and PM peak hour turn

volumes and levels of service. Lougheed Highway/Blue Mountain Street and Lougheed Highway/Brunette Avenue are signalized intersections while Blue Mountain Street/Brunette is a stop-controlled intersection. These three intersections are very close in proximity, with less than 100 metres spacing between Blue Mountain and Brunette on Lougheed and approximately 70m between Lougheed and Brunette on Blue Mountain.

The traffic analysis suggests that there are moderate delays at the three intersections during the AM and PM peak hour. Overall, the three intersections are operating at a LOS D or better during both morning and afternoon peak hours. However, the queues and vehicle spillback into adjacent intersections created by the Highway 1 interchange with Brunette Avenue contribute to the overall delays experienced today and will be further exacerbated once the Gateway Program Port Mann/Highway 1 project is complete.

Applying the forecasts provided by the subarea model to existing AM peak hour volumes, the intersections at Lougheed Highway/Blue Mountain Street and Lougheed Highway/Brunette Avenue are projected to operate with significant delays (LOS F), as shown in **Figure 2.2**. This is also the case for the PM peak hour. In addition to the localized congestion and delay, the Brunette Interchange remains problematic for the area network in that the delays at the on- and off-ramps continue to increase vehicle queues and further impact the local area networks on either side of the Highway.



Figure 2.1: AM and PM Peak Hour Turn Volumes and Levels of Service

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Figure 2.2: Forecast (2031) AM and PM Peak Hour Turn Volumes and Levels of Service

The recommended concepts to address these issues identified in the 2001 STP included the King Edward Overpass to United Boulevard as well as the United Boulevard Extension to Brunette Avenue via a grade separated intersection. During the preparation of this STP update, three related initiatives unfolded to influence not only the future base conditions at the Brunette interchange, but the options to address the local area network issues along Brunette/Lougheed/ Blue Mountain as highlighted below:

- United Boulevard Extension and grade separation with Brunette Avenue was removed as a planned project by TransLink as a consensus could not be achieved with the City of New Westminster. This decision not to proceed with the project will place more pressure on the Brunette Interchange and the Lougheed/Brunette and Blue Mountain network in Coquitlam.
- 2. The removal of the United Boulevard Extension will place more pressure on area roadways and the Brunette Overpass. However, as part of the Gateway Project for Highway 1, the Ministry of Transportation is currently reviewing options for the Brunette Interchange. It should be noted that pedestrian and cycling improvements across the Brunette Interchange are also being examined.



3. The City examined various strategies to divert traffic away from the Brunette Interchange and undertake modifications at the Lougheed/Brunette/Blue Mountain triangle with a Blue Mountain Overpass of Highway 1 with modifications to the highway connections. Even with the United Boulevard extension, these concepts did not generate sufficient benefits to offset the costs. Regardless of any future changes to the United Boulevard decision, this concept is not recommended for future consideration.

These three actions and assessments indicate that the Lougheed/Brunette/Blue Mountain will continue to experience the pressures previously noted and that the City must work with the Ministry of Transportation on improvements to the Brunette Interchange that reduce impacts on the local area network. In an effort to address the local area network challenge, the 2001 STP included a review of two grade separations between Lougheed highway, Brunette Avenue and Blue Mountain Street, as highlighted in **Figure 2.3** and **2.4**.



Figure 2.3: Brunette/Lougheed/Blue Mountain Grade Separation Concept



Figure 2.4: Brunette/Lougheed/Blue Mountain Tunnel Concept



For the purpose of this Strategic Plan Update and looking ahead, the potential solutions for the Brunette/Lougheed/Blue Mountain area will be largely shaped by the preferred concept for the Highway 1/Brunette Interchange. 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 as briefly highlighted below:

- The overall capital costs to construct would be much higher for the grade-separation concept that could be anywhere from \$40-\$50 million due to the staging challenges in comparison to approximately \$25-\$30 million for the tunnel concept.
- The property impacts and costs will be more significant for the grade separation option.
- Property access along Lougheed Highway will be more problematic with the gradeseparation concepts.
- Depressing Lougheed Highway will be challenging to construct without significant costs and impacts.
- The tunnel concept addresses the principal westbound left-turn delays experienced today and in the long-term.

Because of the interrelationships with the Highway and uncertainty of additional capacity through the Brunette interchange, the tunnel concept remains a high priority for the medium-term that requires resolution and coordination with the Province and TransLink.



In addition, there is a need to conduct a business case study, as well as public consultation with subsequent corridor planning initiatives for the Brunette Interchange – Lougheed – Brunette Corridor. Corridor planning will clarify preservation needs assisting in the land development process.

Table 16: Evaluation Results – Lougheed/Brunette/Blue Mountain Grade Separation / Tu

Goal	Summary	Rating
1: High Quality, Multi-Modal Facilities	 Provisions for enhanced bicycle and pedestrian connections can be incorporated into the grade separated concepts and Brunette Interchange redesigns 	•
2: Support a Healthy Environment	 Moderate reduction in existing and forecast delays and congestion at the intersection with Lougheed and Brunette 	•
3: Maintain and improve the quality of streets	 Brunette Grade-separation of Lougheed at Brunette will have moderate impacts on the entry/exit for Maillardville (depressing Lougheed could minimize impact, but will significantly increase costs) 	٠
	 Accesses along Lougheed would be restricted and require relationship with depression at a significant cost 	
	Modest impacts with left-turn lane tunnel	
	 Both improvement concepts would require property along Brunette and Lougheed Highway 	
4: Move people and goods efficiently	 Moderate reduction in delay in the Lougheed/Brunette/Blue Mountain triangle 	•
5: Prioritize sustainable modes of transportation	 Enhanced cycling and pedestrian facilities could be incorporated into the concept to access an improved Brunette Interchange. 	•
6: Manage the transportation	 Capital costs are estimated to be approximately \$25-\$30 mil (Class D), excluding property costs. 	O
system emciently	Property requirements would increase project costs significantly.	
	Travel time benefits can only be achieved with improvements to the Brunette Interchange which are not known at this time.	
Overall Assessment	High Priority / Medium-Term	



3) Upper Lougheed Corridor Transit/HOV Lanes and Intersection Improvements

The Upper Lougheed Highway corridor (north of Colony Farm and south of Barnet) is a major north-south route connecting many Northeast Sector communities with other areas of Metro Vancouver to the west and south. This section of Lougheed Highway is projected to experience significant delays during the morning based on EMME modelling results, as shown in the 2031 AM peak hour volume-to-capacity ratios in **Figure 3.1**. Future base conditions shown in **Figure 3.2** indicate the intersection of Barnet Highway and Pinetree Way will continue to operate at a LOS F, while Lougheed/Dewdney will operate with delays at LOS E in the PM peak hour. Both intersections at Como Lake and Pitt River Road are projected to operate at LOS D. It should be noted that train blockages at Pitt River Road have not been captured in the analysis. Historically, train blockages at Pitt River Road cause frequent delays and queues at the intersection for the northbound right-turn movement and all westbound traffic.

Rather than building additional capacity for single-occupant vehicles (SOV), the localized potential of an HOV/Transit Only lane in both directions is examined. This improvement concept includes the widening of Lougheed Highway between south of Barnet Highway and Colony Farm Road from four to six lanes with the curb lane in both direction designated for HOV/Transit only traffic. As shown in **Figure 3.3**, turning lanes at each of the intersections along this corridor will be maintained. This improvement also includes the grade separation upgrade at Pitt River Road, which will be discussed in the section below. Widening the Lougheed Corridor will have environmental impacts that are mitigable and significant property requirements on the west side of the corridor.

The widening of Lougheed Highway is expected to attract an additional 600 to 1,000 vehicles during the PM peak hour. This traffic would be generally diverted from Mariner Way, Mary Hill Bypass and Chilko Road. Traffic analysis shows that the new upgrade would improve the intersection operations on Lougheed Highway/Dewdney to LOS E, while Como Lake and Pitt River Road improves to LOS C. However, Barnet Highway/Pinetree Way intersection will remain operating at a LOS F.

As previously noted, the HOV / transit priority lane was intended to provide a preliminary assessment of the potential for supporting more sustainable modes. The initial results contained in the modeling analysis suggest that the HOV lanes as a 2+ facility would generate slightly less than 1,000 vehicles in the curb lane in the peak direction (many of which are diverted from other corridors). Further, the network level assessment demonstrates that the proportion of HOV trips generated by Coquitlam increases during the peak hour. While the 2+ lane operation would appear to be taking away many of the advantages of a priority lane, it may be worthwhile



examining a broader HOV network in this section of Lougheed Highway as well as Lougheed Highway to the east connecting with the HOV lanes near the Pitt River Bridge.

With respect to the transit priority treatments, the benefits of the widening are examined in the Transit Strategy section of the Discussion Paper. It should be noted that the projected volumes of HOVs in the peak direction with a 2+ occupancy restriction would not provide the necessary benefits for transit.







Table 17: Evaluation Results – Lougheed Widening, HOV/Transit Lanes

Goal	Summary	Rating
1: High Quality, Multi-Modal	 Could be incentive for HOV travel if 3+ and connected within a broader network 	O
Facilities	• Does not work effectively as a 2+ lane	
	 Transit priority would likely only benefit from 3+ to manage lane volumes 	
	• Potential for class 1 bicycle facility on the west side of the corridor as part of project.	
2: Support a Healthy	Estimated GHG reduction of 1 tonne/day	
Environment	• Impacts environmentally sensitive areas could be mitigable	
3: Maintain and improve the quality of streets	 Significant property impacts along Lougheed 	0
4: Move people and goods efficiently	 Delays at intersections along Lougheed Highway are expected to be reduced with the widening 	•
	• Increases travel along the corridor and total travel through the City	
	• Supports movement of goods to and from the City Centre area	
5: Prioritize	1% increase in HOV travel	
of transportation	Transit mode split remains relatively the same	
6: Manage the transportation system efficiently	 Capital cost for widening is approximately \$35M (not including the rail structure) and \$47 for the Pitt River Road Interchange (not including property and environmental impacts) 	O
Overall Assessment	Not recommend for STP	



Figure 3.2: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service – No Improvements

Figure 3.3: Forecast (2031) PM Peak Hour Corridor Volumes and Levels of Service – with Lougheed Corridor Widening





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4) Pitt River Road Grade Separation

The grade separation of the railway tracks and Lougheed Highway at Pitt River Road was identified in the 2001 STP and more recently examined in the South Shore Trade Area Study (SNC Lavlin, 2009). Historically, trains crossing the CP Railway tracks at Pitt River Road cause significant delays at the intersection for the northbound right-turn movement on Lougheed and the eastbound movement on Pitt River Road.

Figure 3.2 summarized the projected levels of service at the intersection of Pitt River Road and Lougheed Highway which is projected to operate at LOS D during the afternoon peak hour. Once again, it should be noted that these delays to not reflect the impacts of the train crossing on northbound right turn and westbound traffic. To address this recurring issue, two improvement options have been identified in the South Shore Trade Area Study that would provide grade separation at Pitt River Road to eliminate the existing at-grade crossing of the CPR tracks. The two options are shown in **Figures 3.5** and **3.6**. Both options include an overpass structure with a clearance that would allow for the addition of up to two tracks in the future. Option A provides a trumpet interchange allowing free flow in all directions, while Option B provides a tight diamond interchange consisting of an unsignalized intersection on the overpass. Both concepts allow for free flow movement on Lougheed Highway and offer the eastbound left-turn movement onto Pitt River Road.

This potential improvement is expected to generate an additional 350 vehicles in the PM peak hour on Pitt River Road (see **Figure 3.2** for comparison). Much of this traffic is diverted from the Barnet Highway, between Westwood and Pinetree, and the Mary Hill Bypass. Shown in **Figure 3.1**, the projected V/C ratio on Pitt River Road in the peak direction in the AM peak hour is approaching capacity (0.97). The grade separation will significantly improve capacity and reduce congestion at this intersection, as well as improving travel time. In addition, safety benefits will also be provided by eliminating the existing queue spillbacks onto the rail tracks from Pitt River Road.

Despite the mobility and safety benefits, the grade separation concept will impact property and impact environmentally sensitive areas nearby. The ramp configuration of Concept A has a more significant impact on property, but both are expected to impact fish habitat and surrounding wetlands that are mitigable.



Figure 3.4: Forecast (2031) PM Peak Hour Corridor Volumes– with Grade Separation Option A

Source: South Shore Area Trade Study (SNC Lavalin, 2009)





Figure 3.5: Forecast (2031) PM Peak Hour Corridor Volumes-

with Grade Separation Option B

Source: South Shore Area Trade Study (SNC Lavalin, 2009)





Table 18: Evaluation Results – Pitt River Road

Goal	Summary	Rating
1: High Quality, Multi- Modal Facilities	 Slightly improved transit benefits with reduced delays for services between Coquitlam Centre and Surrey May be designed to incorporate planned multi-use pathway along west side of Lougheed corridor 	•
2: Support a Healthy Environment	 Grade separation will provide minimal reductions to greenhouse gas emissions and/or vehicle kilometers travelled Environmental impacts on fish habitat and wetlands are mitigable Archeological risks have been identified 	•
3: Maintain and improve the quality of streets	 Significant contribution to improving the safety by eliminating at-grade crossing at CP Rail tracks Accessibility to, from and within City Centre will provide enhanced access for residents and visitors Property required for grade-separation 	•
4: Move people and goods efficiently	 Moderate travel time reductions are expected with free flow conditions through the intersection and grade- separation Intersection operation is expected to significantly improve 	•
5: Prioritize sustainable modes of transportation	 Reduction in delays to local and regional transit services operating along Lougheed in the long-term 	•
6: Manage the transportation system efficiently	 \$46-47M in construction cost, depending on Option (does not include cost of property and environmental impacts) \$21M indirect rail costs associated with improvement \$2M annually in road user benefits 	•
Overall Assessment	Moderate Priority / Medium-Term	

5) Westwood Grade Separation

Westwood Street between Dewdney Trunk Road and south of Lougheed Highway was identified as one of the candidate locations for improvements in the South Shore Trade Area Study (*SNC Lavlin, 2009*) in order to meet future Port and rail needs. Westwood Street is a north-south route that is part of the Major Road Network (MRN) in Coquitlam and crosses the CP Rail tracks south of Lougheed Highway. The at-grade rail crossing is one of the busiest train crossings in the South Shore Trade Area and frequently

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interrupts traffic flow on Westwood Street and north-south access around the Lougheed Highway area.

Currently, the Lougheed Highway/Westwood Street intersection is operating under failing conditions and is projected to continue operating under a LOS of F in 2031. In addition to increased growth in the area, future train blockage is expected to increase due to longer trains.

To address the on-going challenge of an at-grade crossing, a concept for potential improvements have been proposed in the area in the South Shore Trade Area Study. This improvement includes an underpass structure that would eliminate the existing at-grade crossing at Westwood Street and the CPR tracks. As shown in **Figure 4.1**, this concept allows for north-south vehicle movement without loss of access to the commercial areas along Westwood Street. To retain access to Davies Avenue, it is also suggested that Shaftsbury Avenue be extended. However, significant property impacts to existing commercial property frontages north of the railway crossing are expected.

The mobility benefits expected from this improvement are significant, as the existing rail crossing experiences the highest number of trains per day. It has been observed that many accidents occurring at this location is a result of vehicles stopping or slowing down at the rail crossing and sliding on the metal grid plate between the tracks. Grade separation at this location will provide safety benefits by eliminating vehicle stops or slow downs at the rail crossing.



Figure 4.1: Potential Westwood Grade Separation

Source: South Shore Area Trade Study (SNC Lavalin, 2009)



Overall, this improvement will provide modest benefits by eliminating the crossing at the CPR tracks on Pitt River Road. In addition to improving the efficiency at the intersection, safety benefits can also be expected.



Goal Summary Rating 1: High Quality, Multi-• Multi-model network coverage is not impacted Modal Facilities 2: Support a Healthy Modest reductions to greenhouse gas emissions • Environment and/or vehicle kilometers travelled Significant contribution to improving the safety of 3: Maintain and improve • the quality of streets neighbouring streets by providing new transit facilities • Other modes of transportation are not impacted • Enhanced accessibility for residents and visitors 4: Move people and • Train related delays are eliminated goods efficiently 4 5: Prioritize sustainable Sustainable modes of transportation are not modes of transportation impacted • Overall, will contribute towards improving safety for all road users 6: Manage the \$29M in Construction Cost • Travel time savings are expected, \$7.8M in road transportation system user benefits over 25 years efficiently **Overall Assessment Moderate Priority / Medium-Term**

Table 19: Evaluation Results – Westwood Street Grade Separation



4.0 PREFERRED SCENARIO

This Discussion Paper presented a comprehensive assessment of the relative benefits and impacts of each of the key features of the STP Update. A summary of the overall assessment is provided in **Table 20.** Based on the assessment, two projects in particular were not recommended to be further considered as part of the STP Update – grade separation on the Lougheed / Barnet Corridor, and widening of the Lougheed Highway between Colony Farm Road and Barnet Highway to accommodate HOV lanes or rapid transit. Consistent with the vision and goals for the STP Update, the majority of the pedestrian, cycling, and transit improvements possibilities scored high, with the notable exception of rapid transit along the Lower Lougheed corridor which received a low overall rating. The highest priority road network improvements included improvements to the grid street network in the City Centre as well as the Lincoln Crossing, both of which scored high. The findings of the overall assessment will be used to develop the key features to be presented in the final Strategic Transportation Plan document.



Table 20: Overall Assessment Summary

Theme	Cost	Overall Rating
Pedestrians		
1. Increased Sidewalk Coverage		High
2. Enhance Pedestrian Quality		High
3. Develop Trails and Greenways		High
Cycling		
1. Expand Bicycle Network Coverage		High
2. High Quality Bicycle Facilities		High
3. Develop Support Facilities, Policies & Programs		
a. Enhanced On-Street Bicycle Parking in Key Areas		High
b. Enhanced Wayfinding and Signage		Moderate
c. Public Bike Sharing		Moderate-Low
d. Bicycle Parking Requirements		High
e. Education and Awareness Programs		Moderate
f. Marketing and Promotion Strategies		Moderate
Transit		
1. Increase Local Area Frequency and Coverage		
a. Enhance Services in Southwest Coquitlam		High
b. Connections from Northeast Coquitlam to City		High
Centre		
c. Lower Lougheed Rapid Transit Service		Low
d. Improve City Centre Mobility		Moderate
2. Enhance Regional Services		
a. Integrate with Port Coquitlam		Moderate
b. Enhance Pitt Meadows – Maple Ridge Service		High
c. New Coquitlam – South of Fraser Service		High
3. Transit Supportive Strategies and Policies		
a. Transit Priority Treatments		High
b. Transit Oriented Design		High
c. Enhance Passenger Facilities		High
d. Improve Accessibility to Transit		High
e. Expand Employer Transit Pass Programs		Low
Road Network		
Major Network Improvement Concepts		
a. City Centre Network Improvements		
I. Grid Street System		High ,
II. Grade Separation on Lougheed/Barnet Corridor	r	Low – n/a
III. Falcon Overpass		Moderate
b. Blue Mountain. Lougheed and Brunel	tte	High
Improvements		
c. Lincoln Crossing		High
d. Upper Lougheed Corridor Transit/HOV lanes		
i. Widening for HOV/Transit Only Lanes		Low – n/a
II. Pitt River Road Grade Separation		Moderate
e. Westwood Street Grade Separation		Moderate



APPENDIX A

Sidewalk Priorities and Costs

			1 or 2	Distance	Distance Both				Priority			
Street Pederhine Profesto	From	T 0	Sides	Each Side	Sides	Total Cost	Arterial	Collector	Pedestrian Area Sch	nool Bus Stop	Priority	Notes
Pedestrian Precincts	North Road	Guilby St	-	2005	500	\$ 150 000	ŀ		l nuahaad	╞	Hiah	
Dansey Ave	Westview St	End of Street	2	405	810	\$ 243,000			Lougheed		High	Connects to Commercial Core
Sydney Ave	End of street	Guilby St	1	165	165	\$ 49,500			Lougheed		High	Connects to Commercial Core
Sydney Ave	Guilby St	Selman St	2	385	770	\$ 231,000			Lougheed		High	Connects to Commercial Core
Delstree Ave	North Road	Loring St	1	355	355	\$ 106,500			Lougheed		Low	
Loring St	Delstree Ave	Loring St	1	75	75	\$ 22,500			Lougheed	_	Low	
Loring St	Loring St	Dunlop St	1	65	65	\$ 19,500			Lougheed		Low	
Dunlop St	Sunset Ave	Loring St	1	150	150	\$ 45,000			Lougheed		Low	
Edgar Ave	End of street	Guilby St	2	155	310	\$ 93,000			Lougheed		Low	
Guilby St	Edgar Ave	Shaw Ave	2	160	320	\$ 96,000			Lougheed		Low	
Guilby St	Shaw Ave	Rochester Ave	2	160	320	\$ 96,000			Lougheed		Low	
Guilby St	Rochester Ave	Moadore Ave	1	100	100	\$ 30,000			Lougheed		Low	
Guilby St	Madore Ave	Dansey Ave	1	105	105	\$ 31,500			Lougheed		Low	
Guilby St	Dansey Ave	Sydney Ave	1	105	105	\$ 31,500			Lougheed		Low	
Guilby St	Sydney Ave	Austin Ave	1	100	100	\$ 30,000			Lougheed		Low	
Shaw Ave	Clayton St	Guilby St	1	135	135	\$ 40,500			Lougheed		Low	
Clayton St	Shaw Ave	Rochester Ave	2	155	310	\$ 93,000			Lougheed		Low	
Madore Ave	End of street	Donald St	2	460	920	\$ 276,000			Lougheed		Low	
Walker St	Shaw Ave	Rochester Ave	1	130	130	\$ 39,000			Lougheed		Low	
Total Lougheed				3865	5745	\$ 1,723,500						
Whiting Way	Whiting Way	Beginning of curve	1	50	50	\$ 15,000		•	Burquitlam		High	
Whiting Way	Brookmere Ave	Cochrane Ave	1	105	105	\$ 31,500		•	Burquitlam		High	
Whiting Way	Perth Ave	Foster Ave	1	340	340	\$ 102,000		•	Burquitlam	_	High	
Brookmere Ave	Whiting Way	Bosworth St	2	155	310	\$ 93,000			Burquitlam	•	High	
Brookmere Ave	Bosworth St	Denton St	2	200	400	\$ 120,000			Burquitlam	•	High	
Bosworth St	Brookmere Ave	Cochrane Ave	2	75	150	\$ 45,000			Burquitlam	•	High	
Denton St	Brookmere Ave	Cochrane Ave	2	70	140	\$ 42,000			Burquitlam	•	High	
Cochrane Ave	Whiting Way	Bosworth St	2	145	290	\$ 87,000			Burquitlam	_	High	Connects to Commercial Core
Cochrane Ave	Bosworth St	Denton St	2	205	410	\$ 123,000			Burquitlam	_	High	Connects to Commercial Core
Appian Way	Whiting Way	Bosworth St	2	140	280	\$ 84,000			Burquitlam		High	Connects to Commercial Core
Appian Way	Bosworth St	Denton St	2	210	420	\$ 126,000			Burquitlam		High	Connects to Commercial Core
Appian Way	Denton St	Crosby St	1	45	45	\$ 13,500			Burquitlam	•	High	Connects to Commercial Core
Appian Way	Fairview St	Robinson St	2	165	330	\$ 99,000			Burquitlam	•	High	
Perth Ave	Whiting Way	Rutland Ct	2	50	100	\$ 30,000			Burquitlam		High	Connects to Commercial Core
Perth Ave	Rutland Ct	Bosworth St	2	100	200	\$ 60,000			Burquitlam		High	Connects to Commercial Core
Perth Ave	Bosworth St	Victor St	2	105	210	\$ 63,000			Burquitlam	_	High	Connects to Commercial Core
Perth Ave	Victor St	Denton St	2	100	200	\$ 60,000			Burquitlam		High	Connects to Commercial Core
Crosby St	Appian Way	lvy Ave	2	175	350	\$ 105,000			Burquitlam	•	High	
Ivy Ave	Denton St	Crosby St	2	100	200	\$ 60,000			Burquitlam	•	High	
Ivy Ave	Fairview St	Robinson St	2	150	300	\$ 90,000			Burquitlam	•	High	
Ebert Ave	Whiting Way	Fairview St	1	120	120	\$ 36,000			Burquitlam		High	Connects to Commercial Core
Foster Ave	Whiting Way	Aspen St	1	360	360	\$ 108,000		•	Burquitlam		High	
Cottonwood Ave	Whiting Way	Adler Ave		105	105	\$ 31,500			Burquitlam		High	Small segment missing sidewalk
Cottonwood Ave	Adler Ave	Fairview St	-	45	45	5 13,500 2 22 22 22 22 22 22 22 22 22 22 22 22 2			Burquitlam	+	High	Small segment missing sidewalk
Cottonwood Ave	Fairview St	Florence St		120	120	5 36,000			Burquitlam	•	High	
Cottonwood Ave	Robinson St	Easterbrook St		195	195	5 58,500			Burguitlam	•	High	
	Easterbrook St	Halley St	- 0	320	320	5 96,000			Burguitiam	•	Hign	
Accacia Ave	Fairview St	Kobinson St	7	017	420	× 126,000			Burquitiam	•	Hign	
Fairview St	Ivy Ave	Ebert Ave		110	110	5 33,000			Burguitlam	•	High	
Smith Ave	North Koad	Clarke Kd		OTT	OIT	5 33,000		•	Burguitiam		High	
Farrow St	Smith Ave	Como Lake Ave		06	06	5 27,000			Burguitiam		High	
Langside Ave	End of Street	Breslay St	7 0	125	250	5 /5,000			Burguitiam		High	Connects to Commercial Core
Emerson St Berge Aug	End of Street	Lomo Lake Ave	7	140	340	2 102,000			Burguitlam		High	Connects to Commercial Core
Kegan Ave	Emerson St	Bresiay St	V (140	200	2 04,000			Burguitiam		Hign	Connects to commercial core
Regan Ave	Breslay St	Dogwood St	7	CUT.	017	\$ 63,000			Burquitlam		High	Connects to Commercial Core

			1 or 2	Distance	Distance Both			Priority			
Street	From	To	Sides	Each Side	Sides	Total Cost	Arterial Collecto	or Pedestrian Area	School Bus Sto	op Priority	/ Notes
Regan Ave	Dogwood St	Robinson St	2	255	510	\$ 153,000 2 155,000		Burquitlam		High	Connects to Commercial Core
I yndall St	Como Lake Ave	Jetterson Ave	7 0	00C	620	2 TSB,UUU		Burguitiam	•	Hgn	
Claremont St	Como Lake Ave	Iyndall St	7	330	660	5 198,000		Burguitiam	•	High	
Jetterson Ave	Trundall C+	lyndall St Claremont Ct	7 0	DOT	200			Burguitiam	•	пgп	
Flmwood St	rynuaii ou Como Lake Ave	Westley Ave	7	360	120	5 20,000 5 716 000		Burduitlam	•	High	
Gardena Dr	Westlev Ave	Kemslev Ave	2	100	200	\$ 60.000		Burguitlam	•	High	
Gardena Dr	Kemsley Ave	Harrison Ave	2	100	200	\$ 60,000		Burquitlam	•	High	
Harrison Ave	Gardena Dr	Elmwood St	2	295	590	\$ 177,000		Burquitlam	•	High	
Kemsley Ave	Gardena Dr	Elmwood St	2	260	520	\$ 156,000		Burquitlam	•	High	
Kemsley Ave	Elmwood St	Clarke Rd	2	190	380	\$ 114,000		Burquitlam		High	
Gilroy Crescent	North Road	Chapman Ave	2	280	560	\$ 168,000		Burquitlam	•	High	
Thompson Ave	End of Street	Bowron St	2	265	530	\$ 159,000		Burquitlam	•	High	
Adiron Ave	Robinson St	Miller Ave	2	410	820	\$ 246,000	_	Burquitlam	•	High	
Robinson St	Como Lake Ave	Lea Ave	1	130	130	\$ 39,000	_	Burquitlam	•	High	
Robinson St	Lea Ave	Morrison Ave	1	75	75	\$ 22,500		Burquitlam	•	High	Existing poor quality sidewalk on east side
Robinson St	Morrison Ave	Egmont Ave	1	45	45	\$ 13,500	_	Burquitlam	•	High	
Dalip Couty	Banting St	End of street	2	50	100	\$ 30,000		Burquitlam	•	High	
Townley Street	Grover Ave	Como Lake Ave	2	105	210	\$ 63,000		Burquitlam	•	High	
Guiltner St	Smith Ave	Regan Ave	2	155	310	\$ 93,000		Burquitlam	•	High	
Runnymede Ave	End of Street	Easterbrook St	2	95	190	\$ 57,000		Burquitlam	•	High	
Easterbrook St	Cottonwood Ave	Runnymede Ave	2	105	210	\$ 63,000		Burquitlam	•	High	
Sprice Ave	Sprice Ave	End of Street	1	25	25	\$ 7,500		Burquitlam	•	High	Cul-de-sac
Bosworth St	Cochrane Ave	Appian Way	2	95	190	\$ 57,000		Burquitlam		Low	
Bosworth St	Appian Way	Perth Ave	2	105	210	\$ 63,000	_	Burquitlam		Low	
Bosworth St	Perth Ave	End of street	2	85	170	\$ 51,000		Burquitlam		Low	Cul-de-sac
Denton St	Cochrane Ave	Appian Way	2	95	190	\$ 57,000	_	Burquitlam		Low	
Denton St	Appian Way	Perth Ave	2	105	210	\$ 63,000		Burquitlam		Low	
Denton St	Perth Ave	lvy Ave	2	105	210	\$ 63,000		Burquitlam		Low	
Rutland Ct	Perth Ave	End of street	2	70	140	\$ 42,000	_	Burquitlam		Low	Cul-de-sac
Victor St	Perth Ave	lvy Ave	2	105	210	\$ 63,000		Burquitlam		Low	Cul-de-sac
Victor St	hy Ave	Webster Ave	2	35	70	\$ 21,000	_	Burquitlam		Low	
Webster Ave	Whiting Way	Victor St	2	255	510	\$ 153,000	_	Burquitlam		Low	
Ivy Ave	Victor St	Denton St	2	90	180	\$ 54,000	_	Burquitlam		Low	
Aspen St	Foster Ave	Adler AVe	2	155	310	\$ 93,000	_	Burquitlam		Low	
Fairview St	Cottonwood Ave	Smith Ave	1	175	175	\$ 52,500		Burquitlam		Low	
Vanessa Ct	Vanessa Ct	Smith Ave	1	120	120	\$ 36,000		Burquitlam		Low	
Breslay St	Smith Ave	Langside Ave	2	115	230	\$ 69,000		Burquitlam		Low	
Breslay St	Langside Ave	Regan Ave	2	105	210	\$ 63,000		Burquitlam		Low	
Dogwood St	Smith Ave	Regan Ave	2	215	430	\$ 129,000		Burquitlam		Low	
Dogwood St	Regan Ave	Grover Ave	2	20	140	\$ 42,000		Burquitlam		Low	
Dogwood St	Grover Ave	Como Lake Ave	7	75	150	5 45,000		Burguitlam		Low	
Dogwood St	Como Lake Ave	Lea Ave	2	06	180	\$ 54,000		Burquitlam		Low	
Dogwood St	Lea Ave	Morrison Ave	7	140	280	5 84,000		Burguitlam		Low	
Ducklow St	Smith Ave	End of street	2	160	320	5 96,000		Burguitlam		Low	
	Viscelan Aug	End of street	7 C	C+1	150	د مرم ۲۵/۵۵		Burguitiam		Low	cur-ae-sac
Elmwood St	westiey Ave	Herrison Ave	7 0	00	160 160	48,000		Burguitiam		LOW	
	Elminood C+		4 C	110	DOT	40,000		Durguitiam		LOW L	
Wastley Ave	Gardena Dr	Flmwood St	4 C	180	095	¢ 108 000		Burduitlam		LOW	
Westley Ave	Flmwood St	End of street	7 7	UB	160			Burduitlam		LOW LOW	
Morrison Ave	Clarke Rd	Brada Dr	1 -	000	240	5 72 000		Burduitlam		LOW	
Lea Ave	Lea Ave	Morrison Ave		9	60	<u>5</u> 18,000		Burguitlam		Low	
Lea Ave	Clarke Road	Dogwood St	2	06	180	\$ 54,000		Burquitlam		Low	
Lea Ave	Dogwood St	Robinson St	2	265	530	\$ 159,000		Burquitlam		Low	
Total Buravitlam				13100	23215	\$ 6.964.500					

		,	1 or 2	Distance	Distance Both			Priority			
Street Rue Bernatchev	Brunette Ave	Tupper Ave	2	Lach side 125	250 .	5 10tal COSt 5 75.000		Waterfront	•	High	NOTes
Hartley Ave	Brigantine Dr	Schooner St	1	650	650	\$ 195,000		Waterfront	•	High	
Clipper St	End of Street	Ketch Ct	1	95	95	\$ 28,500		Waterfront		Low	
Clipper St	Ketch Ct	United Boulevard	1	210	210	\$ 63,000		Waterfront		Low	
Ketch Ct	End of Street	Clipper St	1	165	165	\$ 49,500		Waterfront		Low	
Tupper Ave	Rue Bernatchey	Blue Mountain St	-	8	80	\$ 24,000		Waterfront		Low	
Tupper Ave	Blue Mountain St	Woolridge St		50	50	<u>5 15,000</u>		Waterfront		Low	
I upper Ave	Blue Mountain St	Woolridge St	7	780	560	5 168,000		Waterfront		Low	
Woolridge St	Tupper Ave	King Edward St		640 1 AF	640 14F	5 192,000 5 42,500		Waterfront		Low	
Woolridge St	I upper Ave	Lougneeu mignway Brunatta Awa		C+T	200	43,200 ¢ 60.000		Waterfront Misterfront		LOW	
Woolridge St	King Edward St	Lougheed Highwav	10	215	430	5 129-000		Waterfront		Low	
Brigantine Dr	Schooner St	United Boulevard		615	615	\$ 184.500		Waterfront		Low	
Total Waterfront				3470	4090	\$ 1,227,000	-				
			4	44	1.4	40 L C C C		A 4 - 11	-	1-10	
Blue Mountain St	Sherwood Ave	brunette Ave	-	⁴⁵	45	2 T2,500		MaillardVIIIe	•	HIGN	0
Adair Ave	Montriden C+	Woolridge St	7 C	145 AE	067	\$ 37,000		Maillardville		High	Within Commercial Core
Adair Ave	can Daniale JL	Sati Dafilele Li	7	7F	30	¢ 27,000		Maillar dville		nign ui <i>c</i> h	Within Commercial Core
San Dariolo Ln	Adair Avo	Nolcon C+		205	100	¢ 13,500 ¢ 01 500		Maillar dvine Maailiar dvine		nign Lich	Within Commercial Core
Gauthier Ave	End of Street	Find of Street	-	375	305	47 500		Maillardville	•	High	
Lougheed Highway	Rochester Ave	Guilby St	1	495	495	\$ 148.500	•	Maillardville		High	
Lougheed Highway	Guilby St	Alderson Ave	1	220	220	\$ 66,000	•	Maillardville		High	
Lougheed Highway	Alderson Ave	Girard Ave	1	365	365	\$ 109,500	•	Maillardville	•	High	
Lougheed Highway	Girard Ave	Blue Mountain St	2	245	490	\$ 147,000	•	Maillardville		High	
Lougheed Highway	Brunette Ave	Woolridge St	1	255	255	\$ 76,500	•	Maillardville		High	
Lougheed Highway	Woolridge St	King Edward St	1	430	430	\$ 129,000	•	Maillardville		High	
Lougheed Highway	King Edward St	Schoolhouse St	2	680	1360	\$ 408,000	•	Maillardville	•	High	
Rue Bernatchey	Alderson Ave	Gauthier Ave	2	130	260	\$ 78,000		Maillardville		High	
Thrift St	Roderick Ave	Gauthier Ave	2	95	190	\$ 57,000		Maillardville		High	
Burns St	Alderson Ave	Quadling Ave	2	130	260	\$ 78,000		Maillardville		High	
Roderick Ave	Thrift St	Blue Mountain St	1	205	205	\$ 61,500		Maillardville		High	
Roderick Ave	Blue Mountain St	Allard St	2	280	560	\$ 168,000		Maillardville		High	
Allard St	Brunette Ave	Harris Ave	2	170	340	\$ 102,000		Maillardville		High	
Allard St	Harris Ave	Alderson Ave	2	100	200	\$ 60,000		Maillardville		High	
Boileau St	Brunette Ave	Harris Ave	2	150	300	\$ 90,000		Maillardville		High	
Nelson St	Brunette Ave	Alderson Ave		1/5	1/5	5 52,500 5 70,000		Maillardville		High	
Nelson St	San Daniele Ln	brunette Ave	-	200	260	× /8,000		Malliar dville	,	HIGN 11:24	
Visc Educed Ct	Nelson St	Niarmont St	7	202	410	\$ 120 E00	•	Maillardville	•	HIGN Lish	
NIIIG EUWAI U 3L	Lougileeu nigilway	DIUTELLE AVE	+ +	400 10	100	000 TT 000	•			⊓igi⊓ '	
Blue Mountain St	Tinner Ave	Sherwood Ave		100	1001	21,000 21,000		Maillardville		LOW	
Sherwood Ave	Blue Mountain St	Find of Street	-	060	580	\$ 174,000		Maillardville			
Girard Ave	Godwin Ct	End of Street	1	165	165	\$ 49.500		Maillardville		Low	
Gauthier Ave	Rue Bernatchey	Thrift St	2	140	280	\$ 84,000		Maillardville		Low	
Roderick Ave	End of Street	End of Street	1	345	345	\$ 103,500		Maillardville		Low	
Roderick Ave	Thrift St	Blue Mountain St	1	205	205	\$ 61,500		Maillardville		Low	
Henderson Ave	Hart St	Rue Bernatchey	1	210	210	\$ 63,000		Maillardville		Low	
Henderson Ave	Rue Bernatchey	Lougheed Highway	1	215	215	\$ 64,500		Maillardville		Low	
Jackson St	Henderson Ave	Beginning of Curve	1	155	155	\$ 46,500		Maillardville		Low	
Hart St	Henderson Ave	Roderick Ave	1	100	100	\$ 30,000		Maillardville		Low	
Hart St	Roderick Ave	Gauthier Ave	1	105	105	\$ 31,500		Maillardville		Low	
Hart St	Gauthier Ave	Girard Ave	1	105	105	\$ 31,500		Maillardville		Low	
Hart St	Girard Ave	Alderson Ave	1	115	115	\$ 34,500		Maillardville		Low	
Allison St	Alderson Ave	Quadling Ave	2	105	210	\$ 63,000 2 63,000		Maillardville	_	Low	
Allison St	Quadling Ave	Delestre Ave	7 0	CLT COC	230	5 69,000 -	+	Maillardville	+	Low	
Quadling Ave	End of Street	End of Street	2	200	400	\$ 120,000		Maillardville		Low	

			1 or 2	Distance	Distance Both				Priority			
Street Ouadling Ave	Burns St	lo Blue Mountain St	Sides 7	Each Side	SIGES 470	5 10tal LOST	Аптегіаі	Collector	Pedestrian Area Schoo Maillardville	l Bus stop	Priority	NOTES
Quadling Ave	Blue Mountain St	Lebleu St	2	395	062	5 237.000			Maillardville		MO	
Quadling Ave	Lebleu St	Nelson St	2	185	370	\$ 111,000			Maillardville		MO	
Quadling Ave	Nelson St	Marmont St	2	205	410	\$ 123,000			Maillardville		-ow	
Quadling Ave	Marmont St	Begin St	2	180	360	\$ 108,000			Maillardville	_	-ow	
Thrift St	Gauthier Ave	Alderson Ave		110	110	\$ 33,000			Maillardville	_	-ow	
Burns St	Quadling Ave	End of Street	2	125	250	\$ 75,000			Maillardville	_	-ow	
Delestre Ave	Blue Mountain St	Marmont St	2	780	1560	\$ 468,000			Maillardville	_	-ow	
King St	Alderson Ave	Quadling Ave	2	115	230	\$ 69,000			Maillardville		MO-	
Lebleu St	Brunette Ave	Alderson Ave	1	230	230	5 69,000 5 76,000			Maillardville		-ow	
Lebleu St	Alderson Ave	Quading Ave	H C	105	120	5 55,000			Maillardville		MO	
Lebieu St	Quading Ave	Delestre Ave	7 7	TU2	210	5 63,000 5 63,000			Maillardville		MO	
Lebieu St	Delestre Ave	End of Street	7	SUL	017	5 63,000			Mailardville		MO-	
Harris Ave	Blue Mountain St	Allard St	2	280	560	5 168,000			Mailardville		MO	
Harris Ave	Allard St	Boileau St	7	01 01	130	5 39,000			Mailardville		MO	
James Ave	Nelson St	End of Street	7	0/T	340	> 102,000			MaillardVIIIe		MO	
I herrien St	Brunette Ave	Quadling Ave		1/0	1/0	\$ 51,000			Maillardville		MO	
Therrien St	Hachey Ave	Thomas Ave	2	80	160	\$ 48,000			Maillardville		-ow	
Begin St	Quadling Ave	Cartier Ave	2	85	170	\$ 51,000			Maillardville	_	-ow	
Begin St	Cartier Ave	Hachey Ave	2	85	170	\$ 51,000			Maillardville	_	-ow	
Cartier Ave	Marmont St	Begin St	1	180	180	\$ 54,000			Maillardville	_	-ow	
Cartier Ave	Begin St	Laval Square	1	80	80	\$ 24,000			Maillardville	_	-ow	
Hachey Ave	Marmont St	Therrien St	2	180	360	\$ 108,000			Maillardville	_	-ow	
Hachey Ave	Therrien St	Begin St	2	06	180	\$ 54,000			Maillardville	_	-ow	
Total Maillardville				13030	19720	\$ 5,916,000						
Rochester Ave	Blue Mountain St	Lebleu St	1	380	380	\$ 114,000		•	Austin Heights	_	High	
Rochester Ave	Lebleu St	Nelson St	1	180	180	\$ 54,000		•	Austin Heights	-	High	
Rochester Ave	Nelson St	Marmont St	1	210	210	\$ 63,000		•	Austin Heights	_	High	
Madore Ave	Blue Mountain St	Lebleu St	2	345	690	\$ 207,000			Austin Heights	_	High	
Madore Ave	Dansey Ave	Schoolhouse St	2	275	550	\$ 165,000			Austin Heights	_	High	
Dansey Ave	Karp Ct	Schoolhouse St	2	200	400	\$ 120,000			Austin Heights	_	High	
Charland Ave	Joyce St	End of Street	2	60	180	\$ 54,000			Austin Heights	_	High	
Ridgeway Ave	Blue Mountain St	Lane	1	55	55	\$ 16,500			Austin Heights	_	High W	ithin Commercial Core
Ridgeway Ave	Marmont St	Gatensbury St	1	220	220	\$ 66,000			Austin Heights	-	High W	ithin Commercial Core
Marmont St	Ridgeway Ave	Howie Ave	1	55	55	\$ 16,500		•	Austin Heights	_	High	
Nelson St	Ridgeway Ave	Howie Ave		55	55	\$ 16,500			Austin Heights	_	High W	ithin Commercial Core
Lemax Ave	Lemax Ave	End of Street	2	245	490	\$ 147,000			Austin Heights		High	
Gatensbury St	King Albert Ave	Winslow Ave	1	270	270	\$ 81,000		•	Austin Heights	_	High	
Porter St	King Albert Ave	Winslow Ave	2	270	540	\$ 162,000		•	Austin Heights	_	⊣igh	
Madore Ave	Lebleu St	Nelson St	2	185	370	5 111,000 5 111,000			Austin Heights		MO-	
Madore Ave	Nelson St	Marmont St	7	210	420	5 126,000			Austin Heights		MO	
	Madrinonu su	End of Street		020	020	و و و و و و و و و و و و و و و و و و و			Austin meignus Austin Moights		MO	
Douge FI	Iniduale Ave	Ellu Ul Sueet	- r	0/7	0/7	000'T0 ¢			Austin Heights		-wo	
Dansey Ave	Blue Mountain St	Lablan St	2	020	240	\$ 162 000			Austin Heights Austin Heights		- MO	
Dansey Ave	Lebleu St	Nelson St	- 0	185	370	\$ 111.000			Austin Heights		MO	
Dansev Ave	Nelson St	Marmont St	2	215	430	\$ 129.000			Austin Heights		MO	
Dansey Ave	Marmont St	End of Street	2	310	620	\$ 186,000			Austin Heights		MO	
Charland Ave	Blue Mountain St	Lebleu St	2	170	340	\$ 102,000			Austin Heights		-ow	
Charland Ave	Nelson St	Marmont St	2	225	450	\$ 135,000			Austin Heights	_	-ow	
Charland Ave	Marmont St	End of Street	2	315	630	\$ 189,000			Austin Heights	_	-ow	
Charland Ave	End of Street	Schoolhouse St	2	210	420	\$ 126,000			Austin Heights	_	-ow	
Haversley Ave	End of Street	Schoolhouse St	2	190	380	\$ 114,000			Austin Heights	_	-ow	
Lyn Ct	Haversley Ave	End of Street	2	60	120	5 36,000 5			Austin Heights		-ow	
Marlow St	King Albert Ave	End of Street	7	06	180	\$ 54,000			Austin Heights		-ow	
Lebleu St	Walls Ave	Rochester Ave	2	100	200	\$ 60,000			Austin Heights	_	-ow	

			1 or 2	Distance	Distance Both			Priority				
Street	From	То	Sides	Each Side	Sides	Total Cost	Arterial Collecto	r Pedestrian Area	School Bu	s Stop Prior	ity Notes	
Lebleu St	Rochester Ave	Madore Ave	2	100	200	5 60,000 5 60,000		Austin Heights		Low		
Lebleu St	Madore Ave	Dansey Ave	7	001	200	5 60,000		Austin Heights		LOW		
Lebleu St	Charland Ave	Austin Ave		05	05	5 ID/000		Austin Heights		LOW		
Joyce St	End of Street	Dansey Ave	1	130	130	5 39,000 5 50,000		Austin Heights		Low		
Joyce St.	Charland Ave	Austin Ave		1001	100	2000/05 \$		Austin Heights		LOW		
Joyce St	Austin Ave	Dennison Ave		185	185	\$ 55.500		Austin Heights		Low		
Roxham St	Austin Ave	Dennison Ave	2	205	410	\$ 123,000		Austin Heights	•	Low		
Mentmore St	Austin Ave	Dennison Ave	-	115	115	\$ 34.500		Austin Heights		Low		
Dennison Ave	Dennison Ave	Mentmore St	2	160	320	\$ 96,000		Austin Heights		Low		
Flovd Ave	Blue Mountain St	MacIntosh St	2	245	490	\$ 147,000		Austin Heights		Low		
MacIntosh St	Floyd Ave	Winslow Ave	2	90	180	\$ 54,000		Austin Heights		Low		
Therrien St	Brunette Ave	Quadling Ave		170	170	\$ 51,000		Austin Heights		Low		
Therrien St	Hachey Ave	Thomas Ave	2	80	160	\$ 48,000		Austin Heights		Low		
Laval St	Vanier Ave	Rochester Ave	1	55	55	\$ 16,500		Austin Heights		Low		
Total Austin Heights				8125	13385	\$ 4,015,500						
			*	010		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				1-1-1		
	Rideau Ave	Kegan Ave		2/0	0/7	000/T8 ¢	•	Como Lake		• High		
Grover Ave	Poirier St	Linton St	7	410 01	820	5 246,000 5 57,000		Como Lake	•	High		
Grover Ave	Montrose St	End of Street	7	145	146	× ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/ ۲/	,	Como Lake	•	High		
Thormal Dr	LIII+r., C+	Course of the		C+T	147	¢ 43,300 ¢ 156,000	•	Como Lake		Light Light		
Newbort St	Smith Ave	Woodvale Ave	- 0	120	220	\$ 72 000		Como Lake		low.		
Danville Ct	Bideau Ave	End of Street	- 2	130	260	\$ 78 000		Como Lake		LOW		
Lomond St	Rideau Ave	Woodvale Ave	2	180	360	\$ 108 000		Como Lake		Low		
Ponlar St	Arhury Ave	Oninton Ave	2	170	340	\$ 102,000		Como Lake		LOW		
		End of Street	1 C	001		\$ 60,000		Como Lake		LOW		
Firdale St	Crane Ave	Arbury Ave	2	165	330	000.99		Como Lake		Low		
Firdale St	Arhiiry Ave	Ouinton Ave	- 0	170	340	\$ 102,000		Como Lake		Low		
Wilmot St	Crane Ave	Regan Ave	1	440	440	\$ 132.000		Como Lake		Low		
Quintion Ave	Poplar St	Firdale St	2	175	350	\$ 105,000		Como Lake		Low		
Woodvale Ave	Newport St	Lomond St	2	220	440	\$ 132,000		Como Lake		Low		
Rideau Ave	Newport St	Linton St	2	195	390	\$ 117,000		Como Lake		Low		
Arbury Ave	Poplar St	Firdale St	2	180	360	\$ 108,000		Como Lake		Low		
Mars St	Quinton Ave	Regan Ave	2	95	190	\$ 57,000		Como Lake	_	Low		
Shannon Ct	End of Street	Prospect St	2	120	240	\$ 72,000		Como Lake		Low	cul-de-sac	
Bowman Ave	Poirier St	Prospect St	2	210	420	\$ 126,000		Como Lake	_	Low		
Bowman Ave	Prospect St	St Laurence St	2	90	180	\$ 54,000		Como Lake		Low		
Bowman Ave	St Laurence St	End of Street	1	115	115	\$ 34,500		Como Lake		Low		
Prospect St	Como Lake Ave	Bowman Ave	2	185	370	\$ 111,000		Como Lake		Low		
Prospect St	Bowman Ave	Harbour Dr	2	125	250	\$ 75,000		Como Lake		Low		
St Laurence St	Como Lake Ave	Masset Ct	1	85	85	\$ 25,500		Como Lake		Low		
St Laurence St	Masset Ct	Bowman Ave	1	100	100	\$ 30,000		Como Lake		Low		
Custer Ct	Como Lake Ave	End of Street	2	250	500	\$ 150,000		Como Lake		Low	cul-de-sac	
Northview Pl	Como Lake Ave	End of Street	2	85	170	\$ 51,000		Como Lake		Low	cul-de-sac	
Ultra Ct	Thermal Dr	End of Street	2	60	120	\$ 36,000		Como Lake		Low	cul-de-sac	
Total Como Lake				5205	8735	\$ 2,620,500						
Barnet Highwav	loco Rd	Falcon Dr	1	415	415	\$ 124.500	_	loco	•	• High		
Palmer Ave	Balmoral Dr	End of Street	2	195	390	\$ 117.000		loco	•	High		
Balmoral Dr	Palmer Ave	Guildford Dr	2	210	420	\$ 126.000		loco	•	High		
Guildford Dr	Balmoral Dr	Afton Ln		50	50	\$ 15,000		loco	•	High		
Viewmount Dr	Channel Court	Dewdney Trunk Rd	Ч	100	100	\$ 30,000		loco		Low		
Total loco				970	1375	\$ 412,500						
Cordon Aug	Monthunded Ct	Christmac Mari	c	0 IC	EOO	¢ 1E0.000	_	City, Contro	_	Link	Withhis Commercial Core	
GOLGOULAVE	Westwood Junear	CITISUIIds vv dy	4 4	25	2000	2000/000 ÷	- -	Cliv Contro	+	TI8:-		
Dewaney Irunk ка	Hansarg Crescent	Cawthra Lt	1	C,	C 0		•	CITY CENTRE	_	ngn		
			1 or 2	Distance	Distance Both				Priority			
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Street	From	To	Sides	Each Side	Sides	Total Cost	Arterial	Collector	Pedestrian Area Schoo	ol Bus Stop	Priority	Notes
Aberdeen Ave	Lansdowne Dr	Barnet Highway	1	360	360	\$ 108,000			City Centre		High	Connects with Commercial Core
Pacific St	Atlantic Ave	Glen Dr	1	110	110	\$ 33,000			City Centre		High	Within Commercial Core
Atlantic Ave	Johnson St	Pacific St	1	160	160	\$ 48,000			City Centre		High	Within Commercial Core
Atlantic Ave	Pacific St	Baldwin St	1	130	130	\$ 39,000			City Centre		High	Within Commercial Core
Atlantic Ave	Baldwin St	The High St	1	70	20	\$ 21,000			City Centre		High	Within Commercial Core
Baldwin St	Northern Ave	Atlantic Ave	1	105	105	\$ 31,500			City Centre		High	Within Commercial Core
Northern Ave	The High St	Pinetree Way	1	210	210	\$ 63,000			City Centre		High	Within Commercial Core
Obelisk Ln	Pinetree Way	Heffley Crescent	1	395	395	\$ 118,500			City Centre		High	Within Commercial Core
Town Centre Blvd	Princess Crescent	Pinetree Way	1	205	205	\$ 61,500			City Centre		High	Connects with Commercial Core
Gabriola Dr	Dunkirk Ave	Georgeson Ave	1	85	85	\$ 25,500			City Centre	•	High	
Gabriola Dr	Savary Ave	Harwood Ave	1	140	140	\$ 42,000			City Centre	•	High	
Mason Ave	Oxford St	Wellington St	1	115	115	\$ 34,500			City Centre	•	High	
Wellington St	Canterbury Ln	Wellington Court	1	50	50	\$ 15,000			City Centre	•	High	
Lincoln Dr	Nakoma PI	Kensal Pl	1	135	135	\$ 40,500	•		City Centre		High	
Alderbrook Pl	Irvine St	End of Street	2	170	340	\$ 102,000			City Centre		Low	
Birchbrook PI	End of Street	Dewdney Trunk Rd	2	145	290	\$ 87,000			City Centre		Low	
Cherrybrook Pl	End of Street	Dewdney Trunk Rd	2	240	480	\$ 144,000			City Centre		Low	
Hosmer Ct	Dewdney Trunk Rd	End of Street	1	135	135	\$ 40,500			City Centre		Low	
Hoy St	Dewdney Trunk Rd	Berkeley Pl	1	100	100	\$ 30,000			City Centre		Low	
Hoy St	Berkeley Pl	Reece Ave	1	105	105	\$ 31,500			City Centre		Low	
Reece Ave	Hoy St	Irvine St	2	110	220	\$ 66,000			City Centre		Low	
Reece Ave	Irvine St	End of Street	2	50	100	\$ 30,000			City Centre		Low	First 50m of the segment requires sidewalk
Irvine St	Dewdney Trunk Rd	Reece Ave	2	135	270	\$ 81,000			City Centre		Low	
Irvine St	Reece Ave	Flemming Ave	2	200	400	\$ 120,000			City Centre		Low	
Ranch Park Way	Norman Ave	Dewdney Trunk Rd	1	140	140	\$ 42,000			City Centre		Low	
Langara Ct	Locarno Dr	End of Street	1	15	15	\$ 4,500			City Centre		Low	Cul-de-sac
Locarno Dr	End of Street	Langara Ct	1	30	30	\$ 9,000			City Centre		Low	
Cawthra Ct	Dewdney Trunk Rd	End of Street	1	80	80	\$ 24,000			City Centre		Low	Cul-de-sac
Pheasant St	End of Street	Christmas Way	1	170	170	\$ 51,000			City Centre		Low	
Inlet St	Pipeline Road	Tahsin Ave	1	70	70	\$ 21,000			City Centre		Low	
Windsor Gate	Pipeline Road	Nakoma Pl	2	135	270	\$ 81,000			City Centre		Low	
Windsor Gate	Nakoma Pl	Kensal Pl	2	105	210	\$ 63,000			City Centre		Low	
Nakoma PI	Lincoln Ave	Windsor Gate	1	140	140	\$ 42,000			City Centre		Low	
Kensal Pl	Lincoln Ave	Windsor Gate	2	140	280	\$ 84,000			City Centre	_	Low	
Kensal Pl	Windsor Gate	End of Street	2	140	280	\$ 84,000			City Centre		Low	
Total City Centre				5110	6930	\$ 2,079,000						
			•									
Unnamed Road (North East L	of Coquitlam)		2	100/0	20140	\$ 6,042,000			Northeast Coquitiam		Moderate	

			1 or 2	Distance	Distance Both			Priority			
Street	From	To	Sides	Each Side	Sides	Total Cost	Arterial Collecto	 Pedestrian Area 	chool Bus Stop	Priority Notes	
Schools											
Porter St	Smallwood Ave	End of street	2	485	970	\$ 291,000			•	Moderate	
MacIntosh St	Smith Ave	Regan Ave	1	85	85	\$ 25,500			•	Moderate	
	Regan Ave	Grover Ave	2	100	200	\$ 60,000			•	Moderate	
	Grover Ave	Como Lake Ave	2	110	220	\$ 66,000			•	Moderate	
Grover Ave	Blue Mountain St	MacIntosh St	2	205	410	\$ 123,000			•	Moderate	
	MacIntosh St	Porter St	2	205	410	\$ 123,000			•	Moderate	
	Porter St	End of street	2	185	370	\$ 111,000			•	Moderate	
	Schoolhouse St	End of street	2	125	250	\$ 75,000			•	Moderate	
Regan Ave	Colinet St	MacIntosh St	2	100	200	\$ 60,000			•	Moderate	
	Porter St	End of street	2	175	350	\$ 105,000			•	Moderate	
Cornell Ave	Porter St	End of street	2	200	400	\$ 120,000			•	Moderate	
Wasco St	Como Lake Ave	Spray Ave	1	85	85	5 25,500			•	Moderate	
Cambridge Dr	Milford Ave	Schoolhouse St	2	300	600	180,000			•	Moderate	
Madera Ct	Cambridge Dr	End of street	2	65	130	39,000			•	Moderate	
Berry St	King Albert Ave	Lemax Ave	2	80	160	\$ 48,000			•	Moderate	
	Lemax Ave	Winslow Ave	2	55	110	33,000			•	Moderate	
Haversley Ave	Firby Ct	End of street	2	105	210	\$ 63,000			•	Moderate	
	Poirier St	Laurentian Cres	2	200	400	\$ 120,000			•	Moderate	
King Albert Ave	Poirier St	Laurentian Cres	2	200	400	\$ 120,000			•	Moderate	
Elva Ave	Laurentian Cres	As cot St	2	95	190	\$ 57,000			•	Moderate	
Laurentian Cres	King Albert Ave	Lemax Ave	2	105	210	\$ 63,000			•	Moderate	
	Lemax Ave	Winslow Ave	2	150	300	000'06 \$			•	Moderate	
Madore Ave	Decaire St	Winona St	2	180	360	\$ 108,000			•	Moderate	
Dalton Ct	End of Street	Schoolhouse St	2	70	140	\$ 42,000			•	Moderate	
Vanier Ave	End of Street	Laval St	2	160	320	96,000			•	Moderate	
Hammond Ave	Therrien St	Laval St	2	275	550	\$ 165,000			•	Moderate	
	Laval St	End of street	2	80	160	\$ 48,000			•	Moderate	
Thomas Ave	Laval St	Millview St	1	30	30	9,000			•	Moderate	
	Millview St	Casey St	2	06	180	5 54,000			•	Moderate	
Millview St	Hachey Ave	Thomas Ave	2	85	170	\$ 51,000			•	Moderate	
Dawes Hill Rd	Finnigan St	Mundy St	2	200	400	\$ 120,000			•	Moderate	
Lorraine Ave	Montgomery St	Mundy St	2	350	200	\$ 210,000			•	Moderate	
Kugler Ave	Montgomery St	Mundy St	2	355	710	\$ 213,000			•	Moderate	
Edgewood Ave	End of Street	Glenholme St	2	80	160	\$ 48,000			•	Moderate	
	Glenholme St	Montgomery St	2	06	180	\$ 54,000			•	Moderate	
	Montgomery St	Midvale St	2	80	160	\$ 48,000			•	Moderate	
Glenholme St	Edgewood Ave	Rhodena Ave	2	110	220	\$ 66,000			•	Moderate	
Mongomery St	Edgewood Ave	Colfax Ave	2	215	430	\$ 129,000			•	Moderate	
Kaptey Ave	Baltic St	Finnigan St	2	95	190	\$ 57,000			•	Moderate	
	Finnigan St	Mundy St	2	195	390	\$ 117,000			•	Moderate	
Finnigan St	Hillside Ave	Kaptey Ave	2	115	230	\$ 69,000			•	Moderate	
Armada St	Spuraway Ave	Daybreak Ave	2	360	720	\$ 216,000			•	Moderate	
Balmoral Dr	Palmer Ave	Guildford Drive	2	215	430	\$ 129,000			•	Moderate	
Soball St	Darwin Ave	Roxton Ave	1	100	100	\$ 30,000			•	Moderate	
TOTAL				6945	13590	\$ 4,077,000					

			1 or 2	Distance	Distance Both				Priority				
Street	From	То	Sides	Each Side	Sides	Total Cost	Arterial C	ollector	edestrian Area	School	Bus Stop	Priority	Notes
Bus Stops													
Schoolhouse St	Foster Ave	Sprice Ave	1	115	115	\$ 34,500					•	Moderate	
	Regan Ave	Grover Ave	1	100	100	\$ 30,000					•	Moderate	
Hillcrest St	Haversley Ave	King Albert Ave	1	70	20	\$ 21,000					•	Moderate	
	King Albert Ave	Winslow Ave	1	80	80	\$ 24,000					•	Moderate	
	Winslow Ave	Foster Ave	1	250	250	\$ 75,000					•	Moderate	
Winslow Ave	Schoolhouse St	Berry St	1	115	115	\$ 34,500					•	Moderate	
Foster Ave	Poirier St	Linton St	1	400	400	\$ 120,000					•	Moderate	
	Cypress St	Midvale St	1	80	80	\$ 24,000					•	Moderate	
Laurentian Cres	Brunette Ave	Sheridan Ave	1	135	135	\$ 40,500					•	Moderate	
	Glendale Ave	Cutler St	1	180	180	\$ 54,000					•	Moderate	
	Cutler St	Seaforth Cres	1	85	85	\$ 25,500					•	Moderate	
	Seaforth Cres	Thomas Ave	1	140	140	\$ 42,000					•	Moderate	
	Hammond Ave	Rochester Ave	1	125	125	\$ 37,500					•	Moderate	
	Madore Ave	Dansey Ave	1	125	125	\$ 37,500					•	Moderate	
	Charland Ave	Austin Ave	1	55	55	\$ 16,500					•	Moderate	
Brunette Ave	Coleman Ave	Hillside Ave	1	175	175	\$ 52,500					•	Moderate	
Schooner St	Hartley Ave	United Blvd	1	210	210	\$ 63,000					•	Moderate	
Wiltshire Ave	Brunette Ave	Montgomery St	2	55	110	\$ 33,000					•	Moderate	
United Boulevard	Shuswap Ave	Golden Dr	2	305	610	\$ 183,000					•	Moderate	
Hickey Dr	Bognor St	Dartmoor Dr	1	95	95	\$ 28,500					•	Moderate	
Cape Horn Ave	United Blvd	Conony Farm Rd	1	430	430	\$ 129,000					•	Moderate	
	Colony Farm Rd	Como Lake Ave	2	2090	4180	\$ 1,254,000					•	Moderate	
Chilko Dr	Riverview Cres	East Lake Gate	1	220	220	\$ 66,000					•	Moderate	
	East Lake Gate	Silver Lake Place	1	345	345	\$ 103,500					•	Moderate	
	Silver Lake Place	Kalamalka Drive	1	110	110	\$ 33,000					•	Moderate	
	Tatla Place	Como Lake Ave	1	210	210	\$ 63,000					•	Moderate	
Spuraway Ave	Cove PI	Starlight Way	1	80	80	\$ 24,000					•	Moderate	
	The Dell	Pasture Circle	1	160	160	\$ 48,000					•	Moderate	
	Pasture Circle	Ranch Park Way	1	440	440	\$ 132,000					•	Moderate	
	Ranch Park way	Norman Ave	1	205	205	\$ 61,500					•	Moderate	
TOTAL				7185	9635	\$ 67,003,500							

			1 or 2	Distance	Distance Both				Priority			
Street	From	То	Sides	Each Side	Sides	Total Cost	Arterial	Collector P	edestrian Area School	Bus Stop	Priority No	tes
Other Arterial Roads												
United Boulevard	King Edward St	Clipper St	1	500	500	\$ 150,000	•			•	High	
United Boulevard	Brigantine Dr	Schooner St	1	1300	1300	\$ 390,000	•			•	High	
United Boulevard	Leeder St	Burbidge St	1	490	490	\$ 147,000	•			•	High	
Brunette Ave	Cayer St	Brunette Ave	1	270	270	\$ 81,000	•			•	High	
Victoria Drive	Coast Meridian Road	Toronto St	1	210	210	\$ 63,000	•		•		High	
Victoria Drive	Toronto St	Soball St	1	195	195	\$ 58,500	•			•	High	
Victoria Drive	Soball St	Holtby St	1	210	210	\$ 63,000	•		•	•	High	
Victoria Drive	Holtby St	Burke Mountain St	1	195	195	\$ 58,500	•			•	High	
Victoria Drive	Burke Mountain St	Rocklin St	1	345	345	\$ 103,500	•			•	High	
Coast Meridian Rd	Victoria Drive	Wilkie Ave	1	105	105	\$ 31,500	•				High	
Coast Meridian Rd	Wilkie Ave	Darwin Ave	1	100	100	\$ 30,000	•				High	
Coast Meridian Rd	Darwin Ave	Roxton Ave	2	100	200	\$ 60,000	•				High	
Coast Meridian Rd	Roxton Ave	Gislason Ave	2	95	190	\$ 57,000	•				High	
Coast Meridian Rd	Gislason Ave	David Ave	2	410	820	\$ 246,000	•				High	
Coast Meridian Rd	David Ave	Galloway Ave	2	210	420	\$ 126,000	•				High Ongoing Development w	ith sidewalk
Coast Meridian Rd	Galloway Ave	Millard Ave	2	195	390	\$ 117,000	•				High	
Coast Meridian Rd	Millard Ave	Queenston Ave	2	105	210	\$ 63,000	•				High	
Coast Meridian Rd	Queenston Ave	Highland Drive	2	300	600	\$ 180,000	•				High	
Coast Meridian Rd	Highland Drive	Devonshire Ave	1	140	140	\$ 42,000	•				High	
Coast Meridian Rd	Devonshire Drive	Horizon Drive	2	50	100	\$ 30,000	•				High	
Coast Meridian Rd	Horizon Drive	Scotch Pine Ave	2	160	320	\$ 96,000	•				High	
Coast Meridian Rd	Scotch Pine Ave	Harper Road	1	115	115	\$ 34,500	•				High	
Victoria Drive	Rocklin St	Lower Victoria Drive	2	40	80	\$ 24,000	•			•	Low	
Victoria Drive	Lower Victoria Drive	Baycrest Ave	2	385	770	\$ 231,000	•				Low Rural	
Victoria Drive	Baycrest Ave	David Ave	2	06/	1580	\$ 474,000	•				Low Rural	
United Boulevard	Braid St	King Edward St	2	1140	2280	\$ 684,000	•				Moderate Slope on south side	
United Boulevard	Schooner St	Leeder St	1	785	785	\$ 235,500	•				Moderate	
United Boulevard	Burbidge St	Mar Hill By-Pass	1	380	380	\$ 114,000	•				Moderate	
United Boulevard	Cape Horn Ave	Mariner Way	1	60	60	\$ 18,000	•				Moderate	
Brunette Ave	Marathon Ct	Cayer St	1	245	245	\$ 73,500	•				Moderate	
Como Lake Ave	Lougheed Highway	Westwood St	1	280	280	\$ 84,000	•				Moderate	
Ozada Ave	Tahsis Ave	Inlet St	1	295	295	\$ 88,500	•				Moderate	
TOTAL				10200	14180	\$ 4,254,000						
Other Collector Roads												
Laurentian Crescent	Thomas Ave	Hammond Ave	1	60	60	\$ 18,000		•			Moderate	
Robinson St	Foster Ave	Cottonwood Ave	2	185	370	\$ 111,000		•	•		High	
Gatensbury St	Bartlett Ave	Noble Ct	2	200	400	\$ 120,000		•			High	
Coast Meridian Road	Harper Road	Hazel Ave	2	230	460	\$ 138,000		•			High	
				LEC	1000	1000 100						



APPENDIX B

Bicycle Network Priorities and Costs

Street	From	То	Distance (km) Facility Type	Class Cost		Priority	Notes
City Centre							
David Avenue	Port Moody	Pinetree	2.691 Off-Street Pathway	1 \$	1,345,500.00	High	Urban Greenway
Lougheed Hwy	Crossing		0.13 Pedestrian/Bicycle Overpass	1 \$	325,000.00	High	
Glen	Lansdowne	Pipeline Drive	1.621 Marked Wide Curb Lane	2 \$	24,315.00	High	
Pacific Street	Glen	Guildford	0.29 Local Bikeway	1 \$	52,950.00	High	
Pinetree Way	Guildford	Lougheed	1.059 Bicycle Lane	2	n/a	High	Urban Greenway, Implement with Pinetree Way Road Improve
Falcon Drive	Barnet Highway	Dewdney Trunk Road	0.23 Bicycle Lane	2	n/a	Moderate	Implement with Falcon Overpass
Aberdeen Ave	loco	Rona	2.52 Local Bikeway	1	n/a	Moderate	Implement with City Centre Grid
Aberdeen Ave	Rona	Park and Ride	0.3 Off-Street Pathway	1 \$	300,000.00	Moderate	
Robson Drive	Johnson Street	Purcell Drive	0.909 Marked Wide Curb Lane	2 \$	13,635.00	Moderate	
Robson Drive	Purcell Drive	Pipeline Drive	0.498 Bicycle Lane	2 \$	14,940.00	Moderate	
Johnson Street	Barnet	Guildford	1.074 Off-Street Pathway	1 \$	1,074,000.00	Moderate	Urban Greenway
Johnson Street	Guildford	David Avenue	1.169 Bicycle Lane	3 \$	1,169,000.00	Moderate	Remove Centre Median
Johnson Street	David Avenue	Robson Drive	1.037 Marked Wide Curb Lane	3 \$	15,555.00	Moderate	
Walton / Pinewood	Johnson	Pipeline Drive	1.829 Local Bikeway	1 \$	91,450.00	Moderate	
Pipeline	Lincoln	Robson	2.366 Marked Wide Curb Lane	3 \$	35,490.00	Moderate	
Lincoln	Pinetree	Oxford	1.984 Bicycle Lane	2	n/a	Moderate	Implement with Lincoln Crossing
Shaughnessy	Lincoln	David Avenue	2.063 Marked Wide Curb Lane	2 \$	30,945.00	Moderate	
Ozada Ave	Shaughnessy	Pipeline Drive	1.2 Bicycle Lane	2	n/a	Moderate	Implement with Lincoln Crossing
Guildford Way	Pipeline	Pinetree	0.585 Marked Wide Curb Lane	2 \$	8,775.00	Moderate	
Pinetree Way	David Avenue	Robson Drive	0.9 Marked Wide Curb Lane	3 \$	13,500.00	Moderate	
Dewdney Trunk Road	Viewmount	Lougheed	2.136 Marked Wide Curb Lane	2 \$	32,040.00	Moderate	
Noons Creek	South End	David Avenue	0.215 Marked Wide Curb Lane	2 \$	3,225.00	Low	Remove Parking One Side from Huneysuckle to South End
Falcon Drive	Port Moody	Barnet Highway	1.294 Marked Wide Curb Lane	3 \$	19,410.00	Low	Remove Parking One Side
Landsdowne Avenue	David Avenue	Barnet Highway	2.962 Marked Wide Curb Lane	3 \$	44,430.00	Low	Remove Parking One Side
Barnet / Lougheed	Johnson	Westwood	0.92 Bicycle Lane	3 \$	27,600.00	Low	Remove travel lane
				TOTAL \$	4,641,760.00		
Northeast Coquitlam							
Oxford Way	Mason	North End	1.017 Local Bikeway	1 \$	50,850.00	Moderate	
Oxford Way	North End	Coast Meridian	1.152 Local Bikeway	1	n/a	Moderate	Implement with future road
Dayton Street	Harper Road	David Avenue	1.56 Marked Wide Curb Lane		n/a	Moderate	Implement with future road
Soball Street	Victoria Drive	David Av	0.946 Marked Wide Curb Lane		n/a	Moderate	Implement with future road
Coast Meridian	Victoria	Hazel	2.417 Bicycle Lane	2 \$	2,417,000.00	Moderate	
Victoria Drive	Coast Meridian	Burke Mtn Extension	2.414 Marked Wide Curb Lane	2 \$	36,210.00	Moderate	
Other Planned Roads			10.726	n/a		Moderate	Implement with future roads
				TOTAL \$	2,504,060.00		
Southwest Coquitam							
Fairview / Dogwood	Robinson	Smith	0.82 Local Bikeway	1 5	41,000.00	High	Urban Greenway
Fairview / Dogwood	Fairview	Dogwood	0.03 Off-Street Pathway	1 4	30,000.00	High	Urban Greenway
Fairview / Dogwood	Smith	Denton		∧ √	63,000.00	High	Urban Greenway
Clossing	Elminood /Cardon	Ausuri Larricon		 	245,000.00	півп ціль	
Glenavre	Harrison	Тротрор	0.13 Off-Street Dathway	v v 1 -	1300000	High	
Glenavre	Thomason	Pathwav	0.21 Local Bikeway	15	10.500.00	High	
Glenavre	Thompson	Chapman	0.12 Off-Street Pathway	1 \$	120,000.00	High	
Delestre	North Road	Lougheed Hwy	1.084 Local Bikeway	1 \$	54,200.00	High	
Austin	Westview/Whiting	Roxham	1.122 Off-Street Pathway	1 \$	1,122,000.00	High	Urban Greenway
Brunette Overpass	Braid	Jackson	0.4 Pedestrian/Bicycle Overpass	1 \$	1,000,000.00	High	Urban Greenway
Brunette	Jackson	Lougheed	0.36 Local Bikeway	1 \$	18,000.00	High	Urban Greenway
King Albert	Austin	Hickey	3.744 Local Bikeway	1 \$	187,200.00	High	Urban Greenway
King Albert Crossing	End	End	0.11 Pedestrian/Bicycle Overpass	1 \$	275,000.00	High	Urban Greenway
Poirier	King Albert	Harbour Dr	1.718 Off-Street Pathway	1 \$	1,718,000.00	High	Urban Greenway
Regan	Emerson	Robinson	0.498 Local Bikeway	1 5	24,900.00	High	
Regan / Smith	Clarke	Hillcrest	4.369 Local Bikeway	1 5	218,450.00	High	

Street	From	To	Distance (km)	Facility Type	Class Cost		Priority	Notes
Clarke	Como Lake Ave	Kelmsley	0.5	off-Street Pathway	1 \$	500,000.00	High	Urban Greenway
Nelson	Brunette	King Albert	1.447	7 Local Bikeway	1 \$	72,350.00	High	Urban Greenway
Como Lake / Westwood	Lougheed	Greene	0.62	2 Marked Wide Curb Lane	3 \$	9,300.00	Moderate	Narrow centre travel lane
Robinson / Clarke	Glenaryre	Clarke	0.259	Bicycle Lane	2 \$	7,770.00	Moderate	
Robinson	Clarke	Morrison	0.40	1 Marked Wide Curb Lane	2 \$	6,060.00	Moderate	Remove Parking Lane
Lougheed	Brunette	Woolridge	0.235	3 Bicycle Lane	m	n/a	Moderate	Implement with Blue Mountain/Lougheed/Brunette Improver
Monterey	Montgomery	Mundy	0.349	J Local Bikeway	1 \$	17,450.00	Moderate	
Monterey	Mundy	Laurentian	0.45	5 Off-Street Pathway	1 \$	450,000.00	Moderate	
Mundy / Hillcrest	Cape Horn	Austin	2.555	5 Local Bikeway	1 \$	127,750.00	Moderate	
Mundy / Hillcrest	Mundy	Hillcrest	260.0	2 Off-Street Pathway	1 \$	92,000.00	Moderate	
Mundy / Hillcrest	Austin	Foster	0.77	1 Local Bikeway	1 \$	38,700.00	Moderate	Urban Greenway
Porter	King Albert	Grover	1.25	3 Local Bikeway	1 \$	61,500.00	Moderate	Urban Greenway
Harbour	Gatensbury	Poirer	0.848	3 Local Bikeway	1 \$	42,400.00	Moderate	
Miller	Robinson	End	0.47	1 Local Bikeway	1 \$	23,700.00	Moderate	
Grant	Miller	End	0.5	3 Local Bikeway	1 \$	15,000.00	Moderate	
Baker Dr	Como Lake Ave	Thermal Dr	1.05	J Local Bikeway	1 \$	54,500.00	Moderate	
Pitt River Rd	Lougheed Hwy	Port Coquitlam	0.385	3 Bicycle Lane	£	n/a	Moderate	Implement with Pitt River Grade Separation
Lougheed Hwy	Barnet Hwy	Colony Farm Road	3.719	Off-Street Pathway	1 \$	3,719,000.00	Moderate	Urban Greenway
Lougheed Hwy	Brunette	Woolridge	0.233	8 Bicycle Lane	8	n/a	Moderate	Implement with Blue Mountain/Lougheed/Brunette Improver
Mariner Way	Access Road	Lougheed Hwy	1.7	7 Off-Street Pathway	1 \$	1,770,000.00	Moderate	Urban Greenway
Colony Farm	South End	Lougheed	1.24	3 Off-Street Pathway	1 \$	1,243,000.00	Low	Urban Greenway
Waterfront	Braid	Colony Farm	5.42	l Off-Street Pathway	1 \$	5,410,000.00	Low	Urban Greenway
United Blvd	Braid	King Edward	1.138	3 Bicycle Lane	2 \$	34,140.00	Low	
King Edward	United Blvd	Waterfront	0.58	3 Bicycle Lane	2	n/a	Low	Urban Greenway; Implement with Waterfront road network
Brunette	Lougheed	Brunette/Cape Horn	2.35	Off-Street Pathway	1 \$	2,390,000.00	Low	Urban Greenway
Cape Horn	Brunette	United Blvd	2.4	1 Marked Wide Curb Lane	2 \$	36,000.00	Low	
Laurentian	Thomas	King Albert	0.91	l Marked Wide Curb Lane	2 \$	13,665.00	Low	Remove parking one side
Leclair	Mundy	Hickey	0.976	5 Marked Wide Curb Lane	2 \$	14,640.00	Low	
Hickey	King Albert	Mariner	1.38(5 Marked Wide Curb Lane	2 \$	20,790.00	Low	
Riverview	Mariner	Chilko	1.275	5 Marked Wide Curb Lane	2 \$	19,125.00	Low	
Thermal	Baker Dr	Port Moody	0.72	1 Marked Wide Curb Lane	2 \$	10,860.00	Low	Remove parking from one side
Fawcett	United Blvd	Hartley	0.31	l Bicycle Lane	2	n/a	Low	Implement with Waterfront road network
Hartley	Fawcett	King Edward	2.215	5 Bicycle Lane	2	n/a	Low	Implement with Waterfront road network
Unnamed Road Waterfron	n/a	n/a		Local Bikeway	1	n/a	Low	Implement with Waterfront road network
			55.399		TOTAL \$	21,481,450.00		



APPENDIX C

Transit Facilities Priorities and Costs

Summary of Transit Estimates

Short Term					High	
ltem	Unit	Ur	nit Cost	Quantity		Cost
Bus Shelter	each	\$	15,000	70	\$	1,050,000
Passenger Information DMS with Shelter	each	\$	60,000	35	\$	2,100,000
Traffic Signal Priority	each	\$	60,000	13	\$	780,000
Sub-Total:					\$	3,930,000
Contingency Allowance:			30%		\$	1,179,000
Sub Total Direct Costs					\$	5,109,000
Administration:			5%		\$	255,450
Engineering:			10%		\$	510,900
Total Estimated Cost:					\$	5,876,000
Med Term					Med	
ltem	Unit	Ur	nit Cost	Quantity		Cost
Bus Shelter	each	\$	15,000	50	\$	750,000
Passenger Information DMS with Shelter	each	\$	60,000	51	\$	3,060,000
Sub-Total:					\$	3,810,000
Contingency Allowance:			30%		\$	1,143,000
Sub Total Direct Costs					\$	4,953,000
Administration:			5%		\$	247,650
Engineering:			10%		\$	495,300
Total Estimated Cost:					\$	5,696,000
Long Term					Med	
Item	Unit	Ur	nit Cost	Quantity		Cost
Bus Shelter	each	\$	15,000	335	\$	5,025,000
Sub-Total:					\$	5,025,000
Contingency Allowance:			30%		\$	1,507,500
Sub Total Direct Costs					\$	6,532,500
Administration:			5%		\$	326,625
Engineering:			10%		\$	653,250
Total Estimated Cost:					\$	7,513,000
Total Estimated Cost:					\$	19,085,000

Notes

Unit Cost taken from 2003 98 B-Line Rapid Transit Evaluation Study

Notes

Unit Cost taken from 2003 98 B-Line Rapid Transit Evaluation Study

Notes