



Corporate Report

NO: R192

COUNCIL DATE: September 29, 2008

REGULAR COUNCIL

TO: Mayor & Council DATE: September 29, 2008
FROM: General Manager, Planning and Development FILE: 8630-01
General Manager, Engineering 7907-0058-00
7908-0222-00
SUBJECT: Newton Town Centre Planning Study

RECOMMENDATION

It is recommended that Council:

1. Receive this report as information; and
2. Endorse the Terms of Reference for the Newton Town Centre Land Use, Urban Design and Transportation Plan, attached as Appendix I to this report.

BACKGROUND

At its July 28, 2008, Regular Meeting, Council endorsed a Memorandum of Understanding ("MOU") between the City of Surrey and the South Coast British Columbia Transportation Authority ("TransLink"). The MOU, attached as Appendix II, establishes a working relationship between the City and TransLink, to collaborate in a joint urban design and transit planning study for the core of the Newton Town Centre area. The planning study has the goal of developing a safe, liveable, sustainable, transit-oriented, high-density, mixed-use urban centre in the Newton Town Centre area, in concert with significant enhancements to transit facilities and service in the area.

As a means to achieving these goals and objectives, the MOU sets out an agreement between the City and TransLink to jointly commission, fund and manage a land use, transportation, transit and urban design study, including a public consultation process.

DISCUSSION

Terms of Reference, Timeline and Next Steps

City and TransLink staff have jointly developed the Terms of Reference for this study, attached as Appendix I to this report. The planning process will generally follow the typical Neighbourhood Concept Plan ("NCP") process and will be conducted in two stages. Stage 1, leading to a Council-approved Land Use Plan is expected to be completed by June 2009. Stage 2, including more detailed urban design guidelines, engineering servicing and financing plans is expected to be completed in late 2009. The project study area (shown as in Appendix I) is bounded by 72 Avenue, 138 Street and the BC Hydro Railway Right-of-Way.

If Council endorses the attached Terms of Reference, a Request for Proposals ("RFP") will be issued, with the intent of retaining a qualified consultant team to produce a preferred Land Use Plan for the project study area, supported by detailed urban design and transportation plans, plus servicing and financing plans at an appropriate level of detail for a conceptual plan. The project will be managed by a steering committee made up of senior staff from the City and TransLink.

CONCLUSION

The City and TransLink are working together to develop a transit-oriented land use, urban design and transportation plan for the Newton Town Centre area, with the goal of creating a safe, liveable, sustainable, transit-oriented, high-density, mixed-use urban centre, in conjunction with significant enhancements to transit facilities and service in the area. It is recommended that Council endorse the Terms of Reference for the Newton Town Centre Land Use, Urban Design and Transportation Plan, attached as Appendix I to this report; and

Jean Lamontagne
General Manager,
Planning and Development

Vincent Lalonde, P.Eng.
General Manager, Engineering

DL:saw

Attachments:

Appendix I Terms of Reference, Newton Town Centre Planning Study

Appendix II Memorandum of Understanding

h:\wpcentre\winword\pdf\corporate reports\2008 corporate reports\september 29, 2008\r192.doc
RB 9/29/08 8:59 AM

Terms of Reference

for

Newton Town Centre

Land Use, Urban Design & Transportation Planning Study

City of Surrey

and

South Coast British Columbia Transportation Authority (“TransLink”)

September 2008

The Project

The City of Surrey and TransLink intend to retain a consultant team to deliver a transit-oriented land use, urban design and transportation plan for the Newton Town Centre area that meets the goals and objectives set out in these Terms of Reference.

Background

Newton Town Centre Plan

Surrey City Council adopted the Newton Town Centre Plan in 1990. The Town Centre Plan covers an area between 76 Avenue and 68 Avenue, and between King George Highway and 138 Street (see attached Map 1). It proposed a range of civic, recreational, library, transit, retail, commercial and high-density residential uses for the area. Since the adoption of the Plan there has been significant commercial and residential development in the area north of 72 Avenue. Much of the area south of 72 Avenue was designated for civic uses in the 1990 Plan, along with commercial uses along 72 Avenue, and high-density residential development south of 70th Avenue. While a number of civic and recreational facilities have been built, key sections of the plan south of 72 Ave have not yet been implemented.

Newton Transit Exchange

Located in the approximate geographic centre of Surrey, next to a well-used community facility - the Newton Wave Pool, Newton Exchange serves as a key focal point for the transit system in the South of Fraser. Two of the region's Frequent Transit Network (FTN) routes, the 319 Scott Road Station/Newton Exchange and the 321 Surrey Central Station/White Rock Centre serve Newton Exchange. These routes operate a minimum 15 minute service, 15 hours a day, seven days a week. The latter route, the 321 is one of the most frequent and well-used bus routes in the South of Fraser, operating every 7.5 minutes between Newton Exchange and Surrey Central Station. In addition, Newton Exchange acts as a terminus for regional services like the 301 Richmond Centre/Newton Exchange and the 341 Guildford/Langley Centre. Three of Surrey's core bus routes, the 323, 324 and 325 also terminate at Newton Exchange, as does the C75 Scottsdale/Newton Exchange.

Given the high number of routes terminating at Newton Exchange, and the frequencies of those routes, Newton Exchange can be congested during peak periods. The current facility has very limited room for expansion and is becoming increasingly challenging to operate in an efficient and effective manner. Newton Exchange is also frequently the subject of public scrutiny regarding issues of perceived safety and security. The expansion and re-location of Newton Exchange is required if the transit improvements planned in the South of Fraser Area Transit Plan are to be implemented.

Current Land Uses

The primary Study Area is an area of approximately 20 ha within the Newton Town Centre Plan, bounded by the BC Hydro Railway on the west and south, 138th Street on the east, and 72nd Avenue on the north (see attached Map 2). Community facilities within the Study Area include:

- Newton Wave Pool (including a fitness/exercise area, and new gymnasium under construction);
- Newton Recreation Centre (arena with single ice sheet);
- Newton Community Hall;
- Surrey Public Library Administration Centre;
- Newton Branch, Surrey Public Library;
- Newton Seniors Centre;
- Former Fire Hall #10 (recently designated for use as a Performing Arts facility);
- A small wooded park area, and a memorial cenotaph;
- The Newton Transit Exchange

The City has recently completed a Strategic Plan for Parks, Recreation and Culture, which will guide future improvements and investments in its facilities. The Surrey Public Library is currently in the process of defining its plans regarding its facilities.

The City also owns several parcels of land, some of which are vacant, and some of which are single-family houses rented on a month-by-month basis. A site has also been identified for a housing facility on City lands to be constructed by BC Housing and operated by the YWCA.

In addition to the current Newton Transit Exchange along 72nd Avenue, TransLink also owns a vacant parcel of land along King George Highway (see below).

Private land holdings in the Study Area include two multi-tenant shopping centres, one of which includes a large grocery store, an office building on 72nd Avenue, and several small commercial sites (including a service station) west of King George Highway.

Concerns have been expressed around issues of public safety and image in the Newton Town Centre area. In response, a coordinated set of ongoing efforts has been launched by the City, the RCMP, the Coast Mountain Bus Company, other landowners and stakeholders to improve the image of the Newton Town Centre, and to address the perception and reality of public safety in the area. These efforts are specific, and are focused on addressing pressing issues in the immediate time frame. While these efforts are an important part of the revitalization of the Newton Town Centre, the future success of the Town Centre as a liveable and sustainable place is dependent on achieving a “critical mass” of residents, public amenities, facilities and commerce.

Transit Plans

In recent years there has been an increased commitment to enhance transit service and transit facilities within the City of Surrey. TransLink's South of the Fraser Area Transit Plan, along with its Transport 2040 strategic plan and the Province's recently announced Provincial Transit Plan envision an aggressive expansion of transit based on a high-frequency bus network, "Bus Rapid Transit" service and stations, and ultimately, high-capacity rapid transit in the King George Highway corridor. These plans position the Newton Town Centre as a key node in the transit system. In addition, the BC Hydro Railway, which runs through Newton may have future potential as a passenger rail corridor.

The South of Fraser Area Transit Plan

The South of Fraser Area Transit Plan process commenced in 2006, and differed from TransLink's previous Area Transit Plans in that it undertook a 25-year horizon. The Plan was developed based on significant public and stakeholder input, and focused on three key foundational elements:

- Shifting to a more urban grid-based (versus suburban focal point) transit network, which works best with corridor (rather than nodal) development and densification;
- Developing the sub-region's Frequent Transit Network; and
- Improving service internal to the South of Fraser sub-region, in particular the previously undeveloped west-east connections.

The transit network envisioned through the South of Fraser Area Transit Plan process was developed to serve the needs of a population of one million. The route network features a number of key layers including a Frequent Transit Network comprised of (a) Rapid Transit (bus or rail, depending largely on service demand and area development) and (b) the Frequent Bus Network (service operating at a minimum of 15 minutes per day, 15 hours per day, 7 days per week). Underlying this Frequent Transit Network will be the Local and Neighbourhood Bus services, designed to provide a more grid-based network with far more east-west connections than currently exist.

Critical to the phased delivery of this new transit network is a system of upgraded facilities (transit exchanges and depots) and dedicated rapid transit bus ways. Without such infrastructure, the proposed new services cannot be implemented as proposed due to space constraints and traffic congestion.

The scope of the South of Fraser Area Transit Plan (which is anticipated to serve a population of one million in the future) includes the following:

- 375 additional buses
- 36 km of Bus way (a TransLink cost)
- 23 km of Provincial Highway Curb side Bus ways (Highways 91 and 99)
- Highway 1 Median Bus way (Provincial)
- 17 new or upgraded facilities (transit exchanges)
- 2 new Transit Centres
- 4 Park and Rides

Since the development of the South of Fraser Area Transit Plan, the Ministry of Transportation has announced the Provincial Transit Plan calling for \$14 billion worth of investments by 2020. While much of the Provincial Transit Plan's vision for the South of Fraser was in line with the

South of Fraser Area Transit Plan, the Provincial plan timeline represents a significant acceleration of TransLink's plan and includes a SkyTrain extension.

The Provincial Transit Plan will have a number of key impacts on the South of Fraser Area Transit Plan, including expanding the scope of planned improvements and accelerating the timeline of those improved services. Both of these will impact requirements for fleet and facilities, including exchanges and depots, staffing and infrastructure. As well, there will be increased opportunities to introduce new services sooner, improve existing routes ahead of schedule and advance targets for the reduction of greenhouse gas emissions.

Urban Bus Rapid Transit (BRT) Study

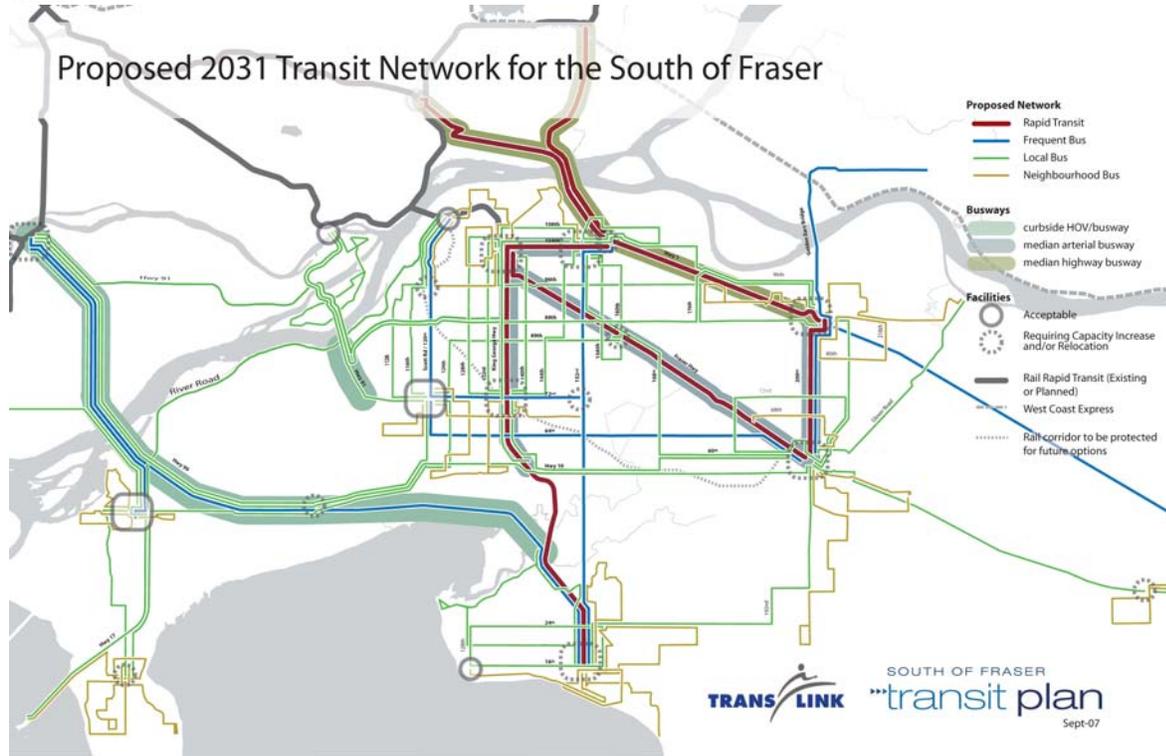
This long-term transit network for the South of Fraser identifies the need for rapid transit on the King George Highway corridor linking White Rock/Semiahmoo, Newton, Surrey Central and Guildford. The BRT station at Newton Exchange and the alignment of the BRT route on King George Highway will be planned and constructed in a manner that allows for future conversion to Light Rapid Transit (LRT) or Automated Light Rapid Transit (ALRT/SkyTrain). This possible future conversion of the King George Highway BRT to LRT or ALRT should be considered a key component in developing options for land use and integration of the exchange with the surrounding urban form.

The potential to convert the proposed King George Highway BRT to LRT or ALRT in the future will be informed by two independent studies currently under development at TransLink: 1) the Urban Bus Rapid Transit Study which will look at the key elements of BRT in urbanized areas and 2) the Surrey Rapid Transit Study, which will review the current rapid transit network and examine potential options for extending rapid transit in the South of Fraser area. The findings of these two studies, along with the other material indicated in the Policy and Background Information Review section should be incorporated into the Newton Town Centre Land Use, Urban Design and Transportation Planning Study.

The Role of Newton Exchange in the South of Fraser Transit Network

The South of Fraser transit network proposed for a population of one million (by approximately 2031) identifies Newton as a key node in the transit system. Located in the geographic centre of Surrey, Newton Exchange will serve as an important transfer facility and end destination, connecting many local and neighbourhood routes with the Frequent Transit Network and proposed King George Highway Bus Rapid Transit (BRT). The map below outlines the Proposed 2031 Transit Network for the South of Fraser.

MAP 1



Key Dates and Projects for Transit Improvements Impacting Newton Exchange

Full implementation of all the transit improvements outlined in the South of Fraser Area Transit Plan will be staged over time. Some of the key dates and proposed projects impacting Newton Exchange are as follows:

Milestone	Project(s)	Required Capacity at Newton Exchange (est.)
2013	<ul style="list-style-type: none"> <input type="checkbox"/> King George Highway Median BRT¹ <input type="checkbox"/> New Community Shuttle route on 68th Avenue <input type="checkbox"/> Service improvements on local routes 	10
2021	<ul style="list-style-type: none"> <input type="checkbox"/> King George Highway BRT/LRT offers at least 5 minute peak service <input type="checkbox"/> Scott Road/72nd Avenue FTN improved to at least 6 minute service <input type="checkbox"/> Service improvements on local and neighbourhood routes 	12
2031	<ul style="list-style-type: none"> <input type="checkbox"/> King George Highway BRT/LRT improved to at least 4 minute peak service <input type="checkbox"/> New limited stop service introduced on Scott Road/72nd Avenue in addition to existing FTN service <input type="checkbox"/> All local and neighbourhood routes offer at least 15 minute service, most at 10 minutes or better 	18

¹ BRT with potential future conversion to LRT or ALRT

In support of these transit improvements, TransLink has purchased a 2 ha. (4.9 ac.) property within the Newton Town Centre Plan area, with the intention of relocating the transit exchange function to this site. The site (see attached Map 2) is located along King George Highway and connects directly to the Bus Rapid Transit Line planned for the King George Highway corridor. The site is also adjacent to the BC Hydro Railway, which may present passenger rail service opportunities in the future. The new TransLink site is large enough to accommodate an integrated transit exchange and layover facility, as well as a number of additional complimentary land uses.

Under its new mandate regarding transit supportive real estate development, TransLink plans to develop its land holdings (including transit-related facilities, SkyTrain stations, etc.) with compatible and integrated land uses to achieve densities that support transit ridership. Furthermore, the comprehensive development of TransLink land holdings will also ensure a return on public investment and ideally provide opportunities for reinvestment in additional transit improvements. TransLink's emphasis on transit-oriented development (TOD) aligns well with the City of Surrey's objective to increase densities and promote vibrant and safe communities.

Memorandum of Understanding

On July 28, 2008, Surrey City Council endorsed a planning process for the Newton Town Centre area in partnership with TransLink. On September 8, 2008, TransLink and the City of Surrey signed a Memorandum of Understanding to work together to create a new plan for the core of the Newton Town Centre, focused on a new Newton Transit Exchange. This plan is a key component of TransLink's and Surrey's plans to significantly enhance transit services and facilities in Surrey, and to support these enhancements with higher density, transit-oriented development along major corridors.

Project Goals and Objectives

The goal of the Project is to produce a land use, urban design and transportation plan that will guide the development of a mixed-use, high-density, transit-oriented Newton Town Centre, fully integrating new and enhanced transit facilities into a high quality, safe, vibrant and sustainable urban centre.

Specific project objectives include:

- Improved transit service and customer experience through increased frequency, quality, reliability, safety and convenience;
- Full integration of the new/relocated Newton Transit Exchange with the surrounding urban form, creating convenience and comfort for passengers through the availability of retail services and quality urban space.
- To create a safe and secure transit exchange through quality urban design which adheres to CPTED principles
- A concentration of high-density employment and residential development, service and civic amenities in proximity to a new, relocated Newton Transit Exchange;
- Mixed-use urban development, including residential, commercial (office and retail), civic, recreational and community service uses that provide a "complete" urban neighbourhood;
- Improved urban design and streetscapes, with a focus on a high-quality pedestrian experience, creating identity and "place making"

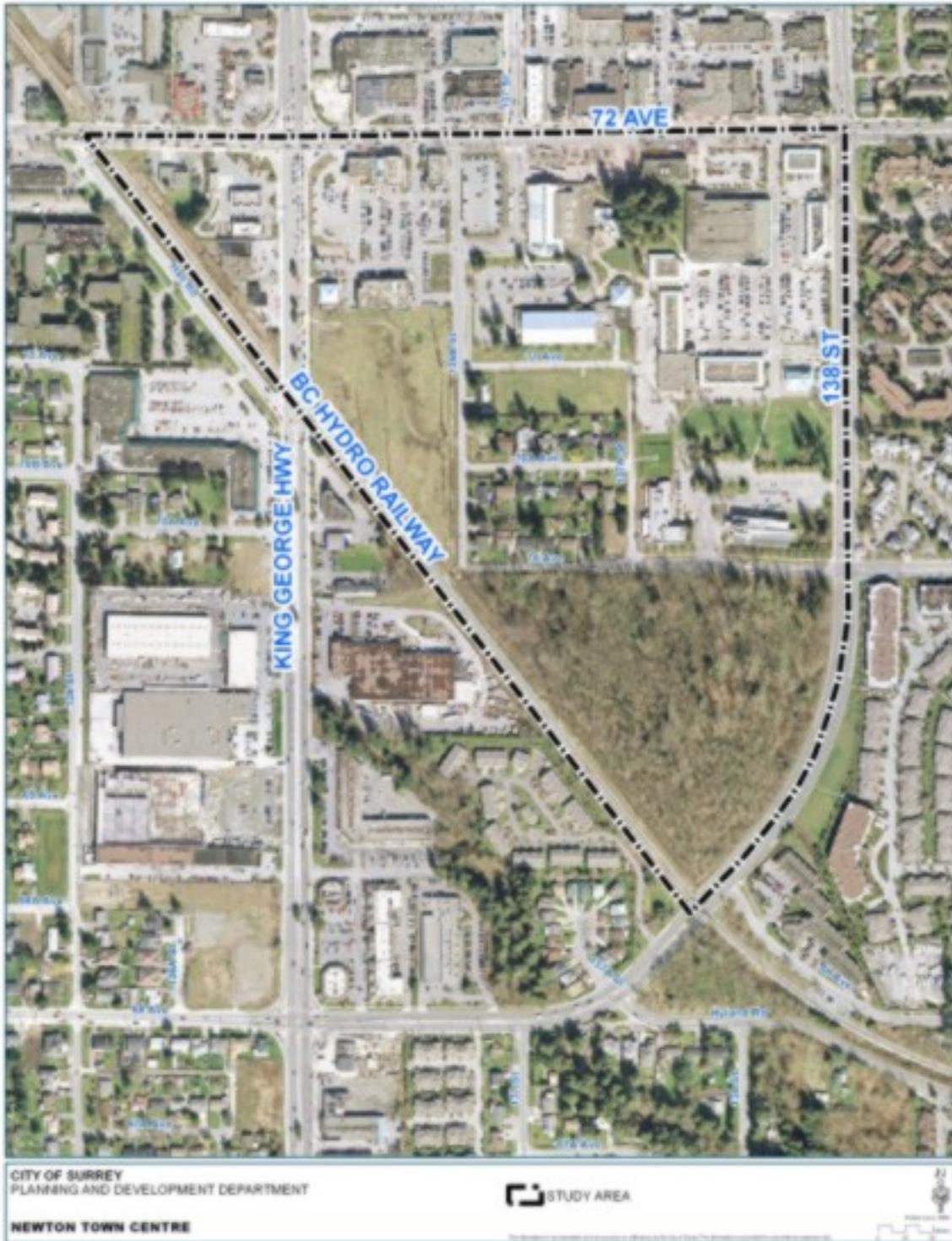
- Improved perception and reality of public safety within the Town Centre area building on recent initiatives by the City, the RCMP and Coast Mountain Bus Company;
- Land uses and densities within the Study Area that support TransLink's capital investment in land and transit improvements and that serve as a catalyst for private sector redevelopment;
- Road network and transit exchange design that allows for efficient and cost-effective transit service
- Improved integration of transit, road, cycling and pedestrian networks within and connecting beyond the Study Area, including bike lanes and off-street greenways;
- Enhanced environmental performance achieved through reduced vehicle dependency and greenhouse gas emissions, increased energy efficiency and green development features; and
- Allowance for the potential future use of the BC Hydro Railway as a passenger rail corridor.

Project Study Area

The Project Study Area is approximately 20 ha. in size and is bounded by the BC Hydro Railway on the west and south, 138th Street on the east, and 72nd Avenue on the north (see Map 2). The Study Area includes the current and proposed locations for the Newton Transit Exchange, future Bus Rapid Transit station and a number of civic facilities including the Newton Wave Pool, the Newton Library and Library Administration Centre, Newton Seniors Centre, Newton Recreation Centre and Community Hall and former Fire Hall #10. The Study Area also includes a number of private properties, notably several shopping centres and an office building, along with the key "gateway" intersection of King George Highway and 72nd Avenue.

Consideration must also be given to the transitions and connections between the Project Study Area and surrounding areas and infrastructure networks, including transit and transportation routes, key intersections, greenways, cycling, pedestrian, drainage, water and sewer networks that are directly affected by land use and density changes within the Project Study Area.

MAP 2: PROJECT STUDY AREA



Project Components

The Project involves the development of a Preferred Land Use Plan for the Project Study Area, supported by detailed urban design and transportation plans, plus servicing and financing plans at an appropriate level of detail for a conceptual plan. The project is divided into two stages. Stage 1 leads to an approved Land Use Plan (including densities) and Transit Exchange Concept for the Project Study Area, and Stage 2 involves the completion of urban design guidelines; area transit, pedestrian, bicycle and road network plans; and servicing and financing plans necessary to implement the approved Plan.

Stage 1:

(a) Policy & Background Information Review

The Consultant shall review and summarize all policies from City of Surrey and TransLink that might affect the direction of this study. The following is a list of policy documents that the Consultant shall review:

- City of Surrey Official Community Plan
- Newton Town Centre Plan
- South of Fraser Transit Plan documents completed to date, (with more details provided by TransLink through the project)
- 1999 KGH Rapid Bus Study
- Hyland Creek Integrated Stormwater Management Plan – final draft report, Urban Systems Ltd., 2008
- Hyland Creek Master Drainage Plan, UMA Ltd., 1995
- Hyland Creek Drainage and Erosion Feasibility/Functional Study, Dillon Consulting Limited, 2000
- 10-Year Servicing Plan
- Corporate Report No. R101: Strategy to Address Concerns in the Newton Town Centre
- Strategic Plan for Parks, Recreation and Culture
- TransLink 10-Year Transportation Plan
- 2007 South of Fraser Area Transit Plan and Supplements
- TransLink Urban Bus Rapid Transit Study (currently under development)
- TransLink Rapid Transit Network Review (currently under development)
- Other studies as determined by Surrey or by TransLink

(b) Consultation

- Project Team meetings (bi-weekly meetings) and Project Steering Committee meetings (3 meetings);
- Meetings with land owners and business owners in and adjacent to the Study Area (2 meetings);
- A design charrette with City and TransLink staff and other key stakeholders (proponents to suggest innovative and appropriate formats for charrette);
- Community meetings with local residents and the public at large (2 meetings);
- Soliciting input and feedback from public and civic facility users in the area (displays, questionnaires and other opportunities for public comments);

- Meeting(s) with agencies and public authorities with interests in the area (RCMP, BC Hydro and other utility agencies, BC Housing, Surrey School District, Surrey Public Library, etc.).

(c) **Land Use Options**

The consultant will develop a set of Guiding Principles for the creation of a Land Use Plan for the study area.

Based on these Guiding Principles, the development of three distinct Land Use Options for the study area, including:

Land Use Planning & Urban Design

The consultant will develop land use plans and urban design concepts for the Project Study Area, including:

- Future land uses, including the mix of uses, densities, building heights and massing;
- Provision for the expansion and evolution of civic and recreational facilities;
- Urban design principles and conceptual treatment of streetscapes, pedestrian areas and gathering places, building design elements, landscape design concepts and opportunities for public art;
- Environmental protection and enhancement opportunities, including the protection of significant trees;
- Greenways, parks and trails networks within the study area, including connections to City networks in the adjacent areas, particularly to the planned Hazelnut Greenway;

Real Estate Market Information

For Stage 1, the consultant is to obtain sufficient market information to establish the level of market demand and an estimated rate of absorption for each of the uses contained in the three land use options. No market information will be required for land uses which will not be exposed to the market (i.e. land to be used for municipal and transit facilities).

Transportation and Transit Plan

The consultant is to develop and test road network options related to the land use options and will identify the requirements for a transportation system that will support the newly generated trips, transit and the needs of pedestrians and cyclists. The scope of the study will include documentation and consideration of current land use and transportation plans, analysis of the existing system, and an assessment of the impact of traffic generated by the transit exchange, rapid bus station and by increased density and uses recommended in the preferred plan.

The deliverables of the Stage 1 Transportation study shall include:

- Proposed street network including functional road classification maps for the street network within the study area, and connecting to surrounding City streets in adjacent neighbourhoods incorporating both the surrounding approved road network and a new development road network. This will include consideration of the operation and functionality of intersections adjacent to the Project Study Area;
- Proposed pedestrian and cycling networks connecting to surrounding City streets, activity centres, adjacent neighbourhoods and on-street transit services;

- Potential for a future integration of a passenger rail station along the BC Hydro rail corridor;
- On street parking and traffic calming plans;
- Consideration of safety at major access points and intersections within and around the Project Study Area.
- A report documenting methodology, options considered, findings, analyses, evaluations, rationales, conclusions and recommendations
- This component of the transportation servicing plan should be considered as an early deliverable within the project.

For each distinct land use option, an appropriate accompanying transit exchange option should be developed. Options should respond to elements of the transit service plan and the proposed urban structure while adhering to the objectives for an efficient and integrated facility that enhances the transit experience.

Key elements of the new Transit Exchange that will need to be considered in the design are:

- BRT integration and accompanying platforms on King George Highway, including consideration of anticipated future conversion to Light Rail Transit (LRT);
- Adequate number of bays for conventional bus service needs to 2031, phased over time;
- Layover requirements to 2031, phased over time;
- Adequate space allocated for passenger queuing and waiting areas, including surge space for peak times;
- Continuous weather protection for passengers: from waiting to boarding;
- Convenient and safe pedestrian and bicycle connections;
- Routing, circulation, signalization and service design;
- Full incorporation of CPTED principals for all options (particularly natural surveillance).

Engineering Services

Drainage

In general, Stage 1 of the servicing study must include all servicing requirements that may have an impact on land use. Requirements such as detention facilities and other surface drainage features are strongly influenced by topography and should be incorporated into the land use plan as early as possible. The proposed road network can also affect the layout of the proposed drainage network. All drainage and sanitary sewer routes should be chosen such that rear and side yard servicing will not occur and that all properties are to be serviced by gravity wherever possible.

The Newton Town Centre drains south into Hyland Creek via storm outfalls on King George Highway and 138 Street. The drainage system in this NCP area currently consists of storm sewers and roadside ditches.

- Stormwater drainage plan in conformance with the Hyland Creek Integrated Stormwater Management Plan (ISMP), including:
 - o Review information on the existing drainage system in the Town Centre Plan area including reports and as-built drawings. Confirmation of existing and future drainage catchments.

- o Identification of downstream constraints associated with the Town Centre area according to the City's Design Criteria Manual. This includes impacts onto downstream watercourses. Assess the performance of the existing drainage system based on the future proposed land uses for the 5-year return period and the 100-year return period rainfall events. This assessment includes the storm trunks and overland flow areas.
- o Recommendation of mitigation measures required to deal with downstream constraints and details on how these may differ from other previous drainage plans. This includes conveyance upgrades for minor and major flows, detention facilities, and low impact development best management practices. Consideration is to be given to the draft recommendations of the Hyland Creek ISMP and to opportunities to decrease runoff where possible such as the use of "green" designs for impervious surfaces. Previous reports on the Hyland Creek watershed have recommended a stormwater detention pond south of 70 Avenue between the BC Hydro ROW and 138 Street. The Consultant is to assess if this detention pond is still required.

Water Servicing

The Project Study Area is located within the existing 135m HGL pressure zone and can be serviced by the existing Newton Pump Station supplemented by the Kennedy Pump Station. The consultant shall provide an overall plan of the water system to service the Project Study Area.

The plan shall include but not be limited to:

- Review of the North Surrey Water Supply report dated January 2008.
- Review with City staff regarding the proposed network improvement in the proposed 10-Year Plan and their proposed schedule.
- Coordination with land use plans to provide a utility corridor, as needed, so that all water mains are looped.

Sewer Servicing

Currently, the Newton Town Centre area is serviced by the City's sanitary sewer system.

The plan shall include but not be limited to:

- Identify downstream constraints for any sewer capacity issues.
- Review the road layout, if there is any change to the road network, to meet the following guideline for sewer design:
 - o Avoid down-slope cul-de-sacs
 - o Avoid sewer flow against ground or road grades
 - o Align roads to follow contours whenever possible
 - o Provide maintenance access for all sewer lines
 - o Provide gravity services to all properties

(d) Preferred Land Use Plan

Based on feedback received on the Land Use Options, a Preferred Land Use Plan will be prepared, including all of the components listed under "Land Use Options" above. This Preferred Land Use Plan will be presented to Surrey City Council and TransLink for endorsement prior to proceeding with Stage 2.

Stage 2:

(a) **Land Use Plan Refinements**

The consultant may be required to make minor adjustments to the Stage 1 Land Use Plan, as necessary.

(b) **Urban Design**

The consultant will prepare a set of illustrated development and design guidelines, with an emphasis on:

- Public gathering places and opportunities for public art;
- Streetscapes and transit facilities;
- The relationship of buildings to public spaces;
- Building heights and massing;
- Microclimate, energy conservation and weather protection considerations;
- Urban landscape design;
- The pedestrian, cyclist and transit user experience;
- Full connectivity and integration between the development and surrounding Town Centre for all modes of transportation.

(c) **Transportation and Transit Plan**

The Stage 2 Transportation and Transit Plan will consist of refining the selected and approved functional road network in the approved Land Use Plan and land use concepts, with details of road cross-sections, a detailed evaluation of the operation of the network and identification of mitigation and improvement measures required. It will also include detailed pedestrian, greenway and bike networks.

The plan shall include:

- An assessment of the integrated operation of the new transit exchange, the transit layover facility and the KGH Bus Rapid Transit (BRT) corridor (as well as local and community transit services including recommended ultimate Transit Priority improvements) walking and cycling linkages. Identify issues, and necessary mitigation measures, that will provide the functional requirements for the transit exchange, layover facility and KGH corridor.
- Evaluation and assessment of the background traffic growth on the strategic road network and the traffic (including pedestrians) generated by the transit exchange, BRT station and preferred land use plan. It will identify the impact on the adjacent road and pedestrian networks, and the functional requirements for a transportation system that will support the newly generated trips, transit routing and the needs of pedestrians and cyclists.
- Review of draft City road network options and develop alternatives related to the land use options and examine the future connections and adjustments between the study site and to the wider Newton road network.
- A parking management plan appropriate for a transit-oriented development.

The scope of the study shall include:

- Travel demand forecasts based on the Stage 1 approved functional road network for the transportation study area. The consultant is recommended to use a combination of the EMME Surrey sub-area model (incorporating full build out of the town centre), supplemented by historical, current and new traffic survey data applying appropriate traffic growth assumptions and engineering judgment to provide future background area traffic projections on the network. The consultant may recommend alternative or supplementary methodologies considered to be of value to the assessment for consideration by the City and TransLink.
- The area should be large and detailed enough to identify all transit priority measures, possible cross section modifications, and functional requirements of the new transit exchange / layover facility. The network should be appropriately sized to include adjacent and affected complimentary corridors and intersections.
- Analysis of the operation of the proposed transit exchange and layover facility concept along with the KGH BRT corridor by means of VISSIM, to confirm feasibility, taking into consideration factors such as bus queuing at the proposed bus stops, passenger queuing areas, potential conflict with pedestrians, layover capacity, and transit priority measures.
- Documentation of current land use and transportation plans.
- Analysis of the existing transportation system, and an assessment of the impact of traffic generated by increased density and uses recommended in the approved Land Use Plan and additional transit services using VISSIM. The assessment will include:
 - Analysis of intersection capacities with the preferred land use development traffic and additional transit services.
 - Development of detailed road layouts including laning, access control (medians etc) and traffic control options for accommodating additional development and transit traffic.
 - An estimate of costs to upgrade the existing road system to accommodate the additional traffic
 - Analysis and recommendation of any interim Transit Priority measures that could be facilitated prior to the implementation of the ultimate cross section for KGH.
 - Evaluation of on- and off-street parking requirements, access and circulation.

The primary study objectives include:

- Identify the challenges of achieving the ultimate BRT cross section on KGH and recommend possible interim cross sections prior to 2013 (the expected implementation date of median BRT);

- Assess and define access and ease of connection (car, transit, pedestrian and cycling) between the proposed development, KGH median rapid bus and the Newton Town Centre area;
- Define all detailed functional requirements (including but not limited to intersection operation and capacity, geometric improvements, traffic management and transit priority measures) for the transit exchange and the proposed covered layover facility to ensure efficient and safe operations for transit and pedestrians.

Road Network & Transit Improvements

- Peak hours are anticipated to be 7:00 – 9:00 AM Weekday, and 3:30 – 6:30 PM Weekday and the Saturday peak hour.
- The City will provide available existing and proposed geometrics of all affected intersections and a summary of possible future Town Centre road network changes.
- The consultant is expected to make recommendations on variations to laning where appropriate that will optimize transit and BRT operations while balancing the objectives for improved pedestrian circulation of the Newton Town Centre Plan.
- Geometrics (laning, channelization, and traffic control) of any intersections and proposed road network improvements planned by the City, that are outside the Newton Town Centre area are to be identified in the information provided by the City.
- TransLink will provide all available transit information, including current and planned frequencies, and the most recent Automated Passenger Count (APC) data for each bus route. The APC data will include bus arrival time at each stop, on and off at each bus stop, bus ridership, etc.
- Future service improvements as identified in the South of Fraser Area Transit Plan will be provided by TransLink and will include the addition of a Bus Rapid Transit (BRT) corridor on KGH, incorporating existing routes into the Frequent Transit Network (FTN) and an expanded local and community shuttle network. TransLink will provide details of the projected service developments and growth.

Data Collection and Methodology

- Additional data for auto and transit travel time, transit travel time reliability, running time, bus stop time, link speed, delays (by types) and queue length, for AM peak, mid day and PM peak periods of a week day are required (to be confirmed by the City of Surrey and TransLink before proceeding).
- Identify all transit travel time and reliability issues and safety concerns within the study area. All transit operational problems should be categorized for solution identification purposes in conjunction with TransLink/CMBC and the City of Surrey.
- The most current traffic volumes counts and signal timing along the study corridor at the signalized intersections will be provided but other counts will be required to supplement the information for evaluation of future area traffic projections and model calibration.

- Clearly establish and document the base traffic volumes, development and transit volumes and the combined volumes at all intersections and access points.
- Using trip generation rates established by the ITE identifying traffic generation volumes for the preferred land use/density. Other trip generation studies for similar developments or based on consultant experience will be considered as a replacement subject to the approval of the City and TransLink.
- Analyze and document the distribution of traffic with methods approved and described within the report.
- Clearly demonstrate and document the assignment of traffic using existing and proposed road network. For any computer modelling used, clearly document the principles and assumptions made.

Network and Transit Exchange Operations Analysis

- Calibrate the VISSIM model for AM, PM and Mid-day periods against the current traffic and transit operation conditions.
- Using methods and procedures outlined in the Canadian Capacity Guide, or the Highway Capacity Software (HCS), calculate the volume/capacity ratios, and Levels of Service of all intersections and access points for each horizon year for background traffic and combined volumes. Identify all locations having a volume/capacity ratio exceeding 0.80 or 35 seconds average intersection delay with PCU factor applied.
- Develop an optimized traffic management scheme that includes signal timing plans and transit priority measured.
- Evaluate both the traffic network and KGH for all modes from a multiple accounts perspective, including safety and all the parameters noted above. Evaluation criteria to be reviewed and approved by the Steering Committee prior to undertaking the full evaluation. All impacts on the adjacent community and other stakeholders shall be identified, mitigated, and included in the overall cost of the scheme, wherever applicable.
- Analyse the operation of the transit exchange from both transit operations and passenger experience standpoints. Identify all constraints associated with the exchange and the layover arrangement. Suggested areas of capacity and geometric constraints including, but not limited to, arrival bus bays, arrival passenger areas, entrance to covered layover, ramp vertical grade, layover area, exit ramp from covered layover, traffic signal at exchange exit, departure passenger waiting area, departure bus bays. Recommend measures to eliminate or mitigate any constraints.

(d) **Engineering Servicing Plan:**

Drainage

Review the drainage servicing including but not limited to:

- A preliminary layout with size and profiles of critical sections of the storm sewer system.

- Identification and integration of opportunities for stormwater best management practices (BMPs) to protect the hydrologic regime of the downstream watercourse and minimize the risk of water quality degradation.
- Confirmation that watercourses will not be negatively impacted by proposed land use changes with respect to channel stability and capacity.
- Develop an implementation strategy and cost estimates for the recommended measures and improvements and breaking out DCC eligible costs.
- Recommend mitigation measures and improvements needed to provide adequate drainage servicing to the approved Land Use Plan area.
- Highlight sustainable stormwater drainage features for review and comment by the City's Engineering, Parks and Planning Departments and key stakeholder groups.

Water:

Review the water supply servicing including but not limited to:

- Provide layout and size of on-site (within the Project Study Area) and off-site (outside the study area) feeder mains to service this area and adjacent areas.
- The on-site and off-site water mains shall be looped to provide redundancy.
- The feeder mains shall be of adequate capacity to provide the required fire flow and domestic demand for the Project Study Area and other adjacent areas.
- The feeder mains shall be designed for the ultimate build-out condition within this Study Area and adjacent areas. Refer to City's proposed 10-Year Plan and consult with City staff.
- Provide the Maximum Day Demand and Peak Hour Demand of the study area.
- Provide a network of water mains within the Project Study Area to provide sufficient domestic demand and fire flow (supported with calculations) to the study area for the proposed land uses in accordance to the City's Design Criteria.
- Provide a cost estimate, funding strategy, and phasing/sequence for this area.
- Recommend, in particular, the funding strategy for the off-site feeder mains, PRVs, and off-site looped connections.
- Recommend all practical interim supply scenarios if development occurs before the completion of feeder mains that are planned in this and around the Project Study Area.

Sewer:

Review the sanitary sewer servicing including but not limited to:

- Identify downstream constraints for sewer capacity issues, sewer sections having cleansing velocity issues, and any odour issues.
- Define and depict the sewer collector system for the Project Study Area and within the Sewer Catchment areas including the profiles for the proposed system. All drainage and sanitary sewer routes should be chosen such that rear and side yard servicing will not occur and that all properties are to be serviced by gravity wherever possible.
- Prepare sewer design calculation sheet including showing the actual flow velocities, highlighting constraint sections and proposed upgrade sections, and showing the sewer sub-catchment in a map.
- Identify and depict the proposed sewer and facilities upgrades (both new and upgrades) within the Study Area and sewer catchment areas and for all downstream constraints.

- Prepare preliminary cost estimates for the upgrades (both new and upgrades) that qualify for DCC reimbursement.
- Prepare projected Sewer DCC revenue.
- Prepare a comprehensive cash flow for the sanitary sewer servicing.
- Minimize the number of individual pump connections and area to be serviced by low-pressure system or individual pump connections in the whole sewer catchment.

(e) **Financing and Staging Plan:**

A funding strategy is required to link the servicing costs with the proposed implementation plan. Preliminary cost estimates will be developed by the consultant for all identified infrastructure. All Development Cost Charges (DCC) eligible infrastructure will be identified and an assessment of the financial balance sheet for the approved Land Use Plan will be provided.

As is the case for most Local Area Plans within the City of Surrey, the following principles for engineering infrastructure financing will apply:

- The DCCs collected in the Plan area must balance or exceed required expenditures for the total build out of the Plan.
- The City will not fund any interim infrastructure or measures through DCCs.

The financial evaluation must take into consideration the staging of the Land Use Plan implementation to ensure the required infrastructure can be constructed using logical phasing that will be financially viable with the DCC funding and administrative procedures. This includes DCC credits and front-ender agreements.

Deliverables

Stage 1:

- Preparation and delivery of 2 (two) stakeholder meetings and 2 (two) public meetings, including the preparation and delivery of PowerPoint presentations, public response forms and display panels;
- Facilitation and delivery of a design charrette including City and TransLink staff, along with other key stakeholders;
- At least 4 (four) consultation meetings with government and non-government agencies having interests in the area, as determined by the Project Steering Committee;
- Regular (bi-weekly) meetings with the Project Team, and up to 3 (three) meetings with the Project Steering Committee;
- Mountable display panels and public response forms for public displays at the Newton Wave Pool and at the Newton Library;
- 3 (three) alternative “Stage 1” Land Use Options acceptable to the Project Steering Committee, defining the overall vision and planning principles including land uses, development densities, building height “envelopes”, market data with respect to anticipated demand and absorption rates for the various market land uses within each of the three land use options, descriptions and illustrations conceptually showing the

desired form, character and relationship, public and private realms including street, transit, pedestrian and cycling networks, parks, plazas and open spaces (including provision for a stormwater detention pond and opportunities for public art), sustainable development concepts, transit facility locations and configurations, and servicing concepts;

- Preferred Land Use Plan, including the components listed above, illustrated in plans, diagrams, explanatory text and a 3-D computer model (AutoCAD, Sketch-Up or equivalent);

Stage 2:

- Detailed urban design guidelines and illustrations, including schematic cross-sections for each street type, urban landscape guidelines, building heights and massing, streetscapes (particularly the relationship of adjacent building to streets), “green development” and public art opportunities;
- Phasing options for the approved Land Use Plan, reflecting the current infrastructure and future plans of TransLink, Coast Mountain Bus Company and the City of Surrey (Engineering, Planning & Development and Parks, Recreation and Culture Departments);
- Final Report, including the Land Use Plan with supporting demand and absorption information for the various market land uses, transportation, drainage, water and sewer servicing plans, urban design guidelines, phasing plan and financing plan, along with supporting text, illustrations and data. The report shall document all findings, analyses, evaluations, conclusions and recommendations.
- Five copies of the Final Report will be submitted, along with a digital copy in pdf format, and a digital copy of all the model files.

Roles and Responsibilities

City of Surrey

- jointly manage the project along with TransLink through representation on the Steering Committee and the Project Team;
- provide air photography, base mapping, GIS data, background reports, plans and maps as necessary;
- provide information on development applications and other contexts within the Project area and surrounding area;
- assist in the identification of stakeholders, and send out mailings, project updates and invitations to stakeholders and members of the public;
- arrange venues for meetings, charrette and open houses;
- provide key staff participation in the design charrette;
- provide timely review and feedback on all draft materials prepared by the consultant;
- seek the approval of the Final Land Use Plan from City Council.

TransLink / Coast Mountain Bus Company

- jointly manage the project along with the City of Surrey through representation on the Steering Committee and the Project Team;

- provide technical information, scheduling and route information, transit service plans, background reports and data as necessary;
- provide for liaison with and input from the Coast Mountain Bus Company;
- provide key staff participation in the design charrette;
- provide timely review and feedback on all draft materials prepared by the consultant;
- seek the approval of the Final Land Use Plan from TransLink.

Consultant

- Provide all deliverables agreed upon;
- organize and conduct stakeholder and public meetings, project team meetings, and a stakeholder/staff design charrette;
- compile and summarize all feedback and responses from stakeholders and members of the public
- prepare all diagrams, plans, illustrations, display panels, survey materials and reports for use in meetings, reports, displays, etc.
- prepare and publish in electronic (PDF) and bound (5 copies, suitable for colour reproduction) form a Final Report for Stage 1 and for Stage 2 as detailed above.

Project Timing

October 2008

Contract award and project start-up.

October - December 2008

Initial public and stakeholder consultation conducted and summarized; design charrette conducted.

February 2009

“Stage 1” Land Use Options complete and presented to stakeholders and to the public.

May 2009

Preferred Land Use Plan complete and presented to stakeholders and the public; draft phasing plan and form and character guidelines complete.

July 2009

Stage 1 Report complete and presented to Surrey City Council and TransLink for approval.

Note: At this point, the City may receive Development Applications within the Project Study Area while Stage 2 is completed.

December 2009

Stage 2 complete; Final Land Use Plan and Report presented for approval by Surrey City Council and TransLink.

Project Budget

The budget established for this project is \$(budget to be confirmed), including disbursements.

Proposal Submission Requirements

Consultant teams responding to the Request for Proposals will be required to include (at a minimum):

- A statement of understanding of the project and project requirements and any proposed augmentations to the terms of reference to ensure that the objectives of the study will be fully met;
- The proposed approach to undertake the project;
- Proposed work plan with project phases, detailed listing of project tasks, key deliverables, and milestone dates;
- The qualifications of the Consultant Team, including team leaders and all personnel to be used in carrying out the various components of the project;
- A list of similar projects the consultant has completed, with a brief description of these projects along with reference contacts for no less than 3 of these projects;
- A description of how the team adds value to the project beyond simply complying with the Terms of Reference; and
- Project budget, including fees (broken down by individual staff, including time commitment to each task, and the hourly billing rate for each staff), disbursements and expenses (including travel and direct project expenses).

MEMORANDUM OF UNDERSTANDING

Between

THE CITY OF SURREY

And

**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
("TransLink")**

Regarding

THE NEWTON TOWN CENTRE URBAN DESIGN AND TRANSIT PLANNING STUDY

September 2008

WHEREAS:

1. The City of Surrey and TransLink are committed to the delivery of increased transit services and high quality transit facilities to the residents of Surrey;
2. Increased transit service leads to, and is in turn enhanced by, increased transit ridership levels;
3. Transit ridership increases are supported by the development of employment and residential neighbourhoods at transit-supportive densities close to transit facilities - particularly those served by high-frequency transit;
4. High-density, transit-oriented, mixed-use development contributes to safer, more vibrant, liveable and sustainable urban neighbourhoods;
5. Public investments in transit infrastructure increase the value of surrounding private lands and commercial enterprises and serve as a catalyst for further private sector development;
6. Returns on significant public investments in transit infrastructure can be realized through the public acquisition and development of lands around transit facilities at densities that support transit ridership and allow reinvestment in further transit system enhancements;
7. TransLink's "South of the Fraser" plans, Transport 2040 Plan and the Provincial Transit Plan call for significant transit enhancements in Surrey;
8. TransLink and the City of Surrey have significant land holdings with development potential in the Newton Town Centre area immediately around the Newton Transit Exchange;
9. The City of Surrey has an interest in immediate improvements to the current situation in the vicinity of the Newton Transit Exchange; and
10. The City of Surrey and TransLink share the objective of the redevelopment of the area in the vicinity of the transit exchange as a safe, vibrant, high quality, high-density, mixed use, transit and pedestrian-oriented urban neighbourhood:

The City of Surrey and TransLink agree to collaborate in a joint urban design and transit planning study for the Newton Town Centre area that meets the goals and objectives set out in this Memorandum of Understanding.

PURPOSE:

The purpose of this Memorandum of Understanding (“MOU”) is to ensure a documented, clear, and common understanding between the City of Surrey and TransLink as to general goals and objectives, project scope, roles and responsibilities, management, funding and timing for the Newton Town Centre land Use, Urban Design and Transit Planning Study (the Project). It is understood that the details of the Project will be developed through a Terms of Reference to be submitted for approval to Surrey City Council and TransLink in September of 2008.

GOAL AND OBJECTIVES

The goal of the Project is to produce a land use and transportation plan that will guide the development of a mixed-use, high-density, transit-oriented Newton Town Centre, fully integrating new and enhanced transit facilities into a high quality and sustainable urban centre.

Specific objectives include:

- Improved transit service and facilities serving the residents of Surrey, and of Newton in particular, through increased frequency, quality, reliability, safety and convenience of service;
- Increased transit ridership levels and share of trips, through the concentration of high-density employment and residential development, service and civic amenities in proximity to a new, relocated Newton Transit Exchange;
- Mixed-use urban development, including residential, commercial (office and retail), civic, recreational and community service uses that provide a “complete” urban neighbourhood;
- Improved urban design and streetscapes, with a focus on a high-quality pedestrian experience, creating identity and “place making,” and on the full integration of transit facilities into a high-quality urban environment;
- Improved perception and reality of public safety within the Town Centre area, and particularly in and around transit facilities, building on recent initiatives by the City, the RCMP and Coast Mountain Bus Company;
- Land uses and densities within the Study Area that support TransLink’s capital investment in land and transit improvements and that serve as a catalyst for private sector redevelopment;
- Improved integration of transit, road, cycling and pedestrian networks within and connecting beyond the Study Area, including bike lanes and off-street greenways; and
- Enhanced environmental performance achieved through reduced vehicle dependency and greenhouse gas emissions, increased energy efficiency and green development features.

STUDY AREA

The Project Study Area is approximately 20 ha. in size and is bounded by the BC Hydro Railway on the west and south, 138th Street on the east, and 72nd Avenue on the north (see Map 1). The Study Area includes the current and proposed locations for the Newton Transit Exchange, future Bus Rapid Transit station and a number of civic facilities including the Newton Wave Pool, the Newton Library and Library Administration Centre, Newton Seniors Centre, Newton Recreation Centre and Community Hall and former Fire Hall #10. The Study Area also includes a number of private properties, notably several shopping centres and an office building, along with the key “gateway” intersection of King George Highway and 72nd Avenue.

MAP 1: STUDY AREA



PROJECT MANAGEMENT

The Project will be jointly commissioned and managed by TransLink and the City. A Consultant will be retained, whose work will be directed by a Steering Committee made up of senior staff of the City and TransLink, and guided by a Technical Advisory Committee including key representatives from each organization. The scope, budget, tasks and requirements of the consulting contract, along with the membership and working relationships of the Steering and Technical Advisory Committees will be developed in a Terms of Reference presented to City Council and TransLink for approval in September 2008.

All recommendations, reports and plans developed through the Study will be subject to approval by Surrey City Council and TransLink.

PUBLIC CONSULTATION

A public consultation process for the Project will be developed as part of the Terms of Reference. Stakeholders, including land owners, business interests, facility users, agencies and authorities, local neighbourhood residents and the public at large will be consulted at key points in the planning process. Recommendations that result in Official Community Plan or Zoning Bylaw amendments will be subject to all statutory requirements related to public consultation as set out in the *Local Government Act* and the *Community Charter*.

PROJECT FUNDING

The City of Surrey and TransLink will share funding for the Project. A Project budget agreed upon by both parties will be developed as part of the Terms of Reference, and proposals will be sought from Consultants qualified to do the work through the City of Surrey's Request for Proposals (RFP) process.

PROJECT TIMING

A detailed schedule for the Project, including a timeline for completion of the Project and key milestones with target dates will be developed as part of the Terms of Reference.

PUBLIC COMMUNICATIONS

The parties to this MOU agree that:

- Any public communication related to the Project will be reviewed and agreed to by each party before being made public.
- Public comment on aspects of the Project will be referred to the party directly responsible for the issue for a response.

Dated this 8th day of September, 2008.

Signed on behalf of the City of Surrey by:

Dianne L. Watts
Mayor

*Signed on behalf of the South Coast
British Columbia Transportation Authority (TransLink):*

[NAME]
[POSITION]