CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Supports Item No. 1
Special T&T Committee
Agenda
June 6, 2006

Report Date:	May 29, 2006
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Meeting Date:	June 6, 2006

TO: Standing Committee on Transportation and Traffic

FROM: General Manager of Engineering Services

SUBJECT: Gateway Program Pre-Design Phase – Highway 1 Corridor

RECOMMENDATIONS

A. THAT Council support the recommendations contained in the GVTA (TransLink) staff's April 10th, 2006 report titled "Regional Transportation Implications of the Provincial Gateway Program" (attached as Appendix A), with the exception of GVTA Staff Recommendation C which recommends conditional support for Highway 1/Port Mann Bridge widening, as this support would be contrary to existing City policy.

Should the Provincial Government decide to proceed with the changes to the Highway 1 corridor noted in the Gateway Program Definition Report, staff recommend:

B. THAT Council support only the conditions to the GVTA staff recommendation C, that the Gateway Program include:

(i) the introduction of tolls and other transport pricing mechanisms to fund, manage demand and promote efficiency in the use of the transportation system;

(ii) the introduction of a system of road user priorities to be reflected in the designation of specific lanes, priority access and other measures to promote the movement of transit, high-occupancy and goods movement vehicles ahead of single-occupant vehicles;

(iii) the Province does not promote the Patullo Bridge as a free alternative to the Port Mann Bridge, due to the traffic diversion effects that may arise;

C. THAT Council request that the GVTA Board include in their recommendations:

- examination of distance-based tolls between the Port Mann and Second Narrows bridges;
- completion of a regional HOV strategy;
- consideration of additional cost-sharing for the westerly extension of rapid transit along the Broadway corridor;
- identification of strategic transit system needs between 2021 and 2031; and
- examination of opportunities to enhance regional transportation modelling, as listed in Appendix B.

D. THAT Council endorse the recommendations from the GVRD April 21st, 2006 staff report titled "GVRD Response to the Provincial Gateway Program" (attached as Appendix C) supporting:
- the Ministry of Transportation being advised of support for the Gateway Program's overall goals;
- the need for a regional demand management strategy; and
- the need for a regional goods movement strategy, as listed in Appendix D.

E. THAT the Ministry of Transportation and the Gateway Program be requested to fund integration, mitigation and safety improvements that may be needed on city streets as a result of Gateway Program projects.

F. THAT the scope of the Gateway Program Cycling Plan be defined to include funding for cycling and pedestrian infrastructure in the vicinity of Highway 1's Cassiar Connector, including connections to Burnaby and North Vancouver.

G. THAT Council support the Gateway Program's proposed inclusion of safety improvements to Highway 1 on-ramp and off-ramps, and that the Gateway Program be requested to consult with the City and the GVTA on the details of these proposals.

H. THAT Council direct staff to forward copies of this report to the GVTA Board, the GVRD Board, the Ministry of Transportation, the Gateway Program and federal ministers responsible for Canada's Pacific Gateway Strategy.

COMMENTS OF THE GENERAL MANAGER OF ENGINEERING SERVICES

As stated at the end of the Policy section of this report, Vancouver Council has passed a specific motion opposing the widening of Highway 1 and the twinning of the Port Mann Bridge. Also, the Vancouver Transportation Plan indicates that there will be no addition of road capacity for general purpose traffic entering Vancouver.

Nonetheless, it appears that the Provincial Government intends to proceed with the Gateway Program, including the widening of Highway 1 and twinning of the Port Mann Bridge.

In this context, this report puts forward recommendations designed to ensure the best use of the added capacity on the Highway 1 corridor, in line with Vancouver's priorities, through lane allocation, road pricing, and demand management strategies to maximize long term benefits from the project, and to minimize negative impacts.

The General Manager recommends approval of recommendations A through H. The Ministry of Transportation and the Gateway Program are being advised by City staff that, consistent with Vancouver's Transportation Plan, Vancouver will not be increasing general purpose vehicle capacity within the city to match any increases resulting from the Gateway Program's plans for the Highway 1 corridor.

COUNCIL POLICY

The City of Vancouver Transportation Plan (1997) provides the following fundamental directions regarding the city's and region's road network:

- The Vancouver Transportation Plan supports and implements "the Regional Transportation Policy (Transport 2021), the Livable Region Strategic Plan, and CityPlan". This includes supporting the Regional Transportation Plan's directions to expand rail transit lines in the region, "expansion of the regional freeway network only for High Occupancy Vehicle (HOV) lanes, with no additional bridge capacity leading to the City", and "increased charges for cars, to discourage unnecessary use and to raise revenues for the transit system";
- The Vancouver Transportation Plan notes that "growth in demand for transportation would be met within the existing road network". "Changes to the road network would be designed so as not to increase road capacity, with the exception of the Port Road.";
- Demand would be accommodated by improving alternatives to the car, primarily transit, but also walking and cycling; and
- "The importance of good truck access in the city is recognized by maintaining the existing truck network. Improving access to the Port of Vancouver and the Vancouver Airport, would be pursued where this can be achieved without unreasonable impacts on local neighbourhoods".

Vancouver Transportation Plan policies include:

- Maintaining peak road capacity from the region at no more than the present level. Council's policy is for no further significant investment to expand motor vehicle capacity into Vancouver in terms of adding additional capacity;
- Continuing to promote car-pooling while bus-only lanes may be appropriate for the city. High Occupancy Vehicle Lanes will generally not be used for car-pools, except for short queue jumpers. In these situations, an occupancy minimum of three people for private vehicles will be promoted;
- The City supports a minimum of three new rapid transit lines, including a Broadway line to Granville and eventually to UBC; and
- The City will work to ensure the quality of access for goods movement is maintained, especially for routes which are essential for access to the Port.

When reviewing TransLink's 10-Year Transportation Outlook and Three-Year Financial Strategy in November 2003, Council passed a motion that they advise TransLink, in accordance with the Vancouver Transportation Plan's objective of opposing increases in traffic into the city, that Council opposes twinning of the Port Mann Bridge or expansion of Highway 1 as proposed by the Province.

SUMMARY

This report proposes that, should the Provincial Government proceed with the changes to the Highway 1 corridor noted in the Gateway Program Definition Report, the City clarify with the Ministry of Transportation that the Vancouver Transportation Plan does not support increases in road capacity for single occupant vehicles. Staff also suggest that the City coordinate its response on the Gateway Program with the GVTA (TransLink) and the GVRD. Many of the issues raised have regional implications and are best managed at the regional level. Staff suggest that the City continue to work with the Region and the Provincial Government to try to ensure that the Gateway Program fits as closely as possible with City and regional plans for transportation and land use.

The staff recommendations to Council recognize Council's 2003 motion opposing expansion of the Highway 1 corridor. However, the recommendations also recognize that the Gateway Program is a high priority initiative for a senior level of government, and that plans to proceed with the Highway 1 corridor widening are continuing to be developed. Based on the information available to date on the Program, staff feel that these recommendations will help address the City's interests. The content of the staff recommendations can be summarized as follows:

A. Suggests that Council support recommendations made by GVTA (TransLink) staff in their April 2006 report to their Board (Appendix A), with the exception of the GVTA staff recommendation to give conditional support for the Gateway Program's proposed widening of the Highway 1 corridor.

B. Suggests that Council support the conditions noted in the above GVTA staff report related to tolls and transportation pricing, road-user priorities that place other modes ahead of single occupant vehicles and avoiding traffic diversion from tolling.

C. Suggests changes to the GVTA staff recommendations to better address the City's issues(Appendix B), including the importance of transit service expansion for Vancouver (including, for example, TransLink and Provincial Government cost-sharing for the westerly extension of rapid transit along the Broadway corridor).

D. Suggests endorsement of the GVRD staff recommendations (Appendix D) that are supportive of City objectives.

E. Requests that the Ministry of Transportation include Gateway Program funding to address impacts on Vancouver's streets.

F. Requests that the Ministry of Transportation include cycling and pedestrian improvements in the vicinity of the Cassiar Connector in the Gateway Program.

G. Supports the concept of proceeding with safety improvements at the Highway 1 on- and off-ramps.

H. Suggests sharing Council's recommendations and this report with other levels of government.

Vancouver's Transportation Plan notes that growth in demand for transportation would be accommodated by improving alternatives to the car, primarily transit, but also walking and cycling. The Gateway Program Definition Report proposes a detailed highway improvement plan for the region up to 2031, a corridor-related Bicycle Plan (which includes some pedestrian improvements), and corridor-related transit improvements that primarily benefit suburban municipalities.

Although the Gateway Program Definition Report's introduction specifies the requirement for a "comprehensive and integrated response that addresses the need for both goods and people movement", the Program would benefit from further integration with other regional transit and goods movement plans. For transit, staff suggest that the Provincial Government and the GVTA continue to work with the City on completing the westerly extension of rapid transit along the Broadway corridor. As well, staff suggest that the GVTA work with the Provincial Government and municipalities on completing a high level review of major transit improvements that will be needed in the region between 2021 and 2031. For goods movement, further exploration of opportunities for rail and marine transportation modes, in partnership with TransLink and the Federal Government, would be desirable.

Some of the other key issues related to the Gateway Program are:

- The potential for increased general traffic from municipalities south of the Fraser is a concern, due to increases in road capacity on the Port Mann Bridge;
- The potential for increased general traffic is also a concern from Burnaby and Coquitlam, due to increases in road capacity between the Port Mann and Second Narrows bridges;
- The extent of the impacts of increased road capacity will depend on the details of the Gateway Program's tolling plans and ways in which the new road capacity is allocated. Further review with the Provincial Government, GVTA and GVRD is required to better understand potential impacts;
- The opportunity for the GVTA to partner with the Provincial Government on advancing its tolling policy, in a comprehensive manner with Transportation Demand Management objectives, and an updated regional HOV strategy; and
- The need for the Ministry of Transportation to clarify whether they will fund changes to municipal and regional roads, and the transit system, that are needed to integrate with or complement the Gateway Program.

PURPOSE

The purpose of this report is to provide Council with some high level comments and recommendations, relating to proposed changes to the Highway 1 corridor contained in the Provincial Government's Gateway Program. Documents reviewed include the Gateway Program Definition Report (January 31, 2006), companion documents, and related reports from TransLink and Greater Vancouver Regional District staff to their boards in April 2006.

BACKGROUND

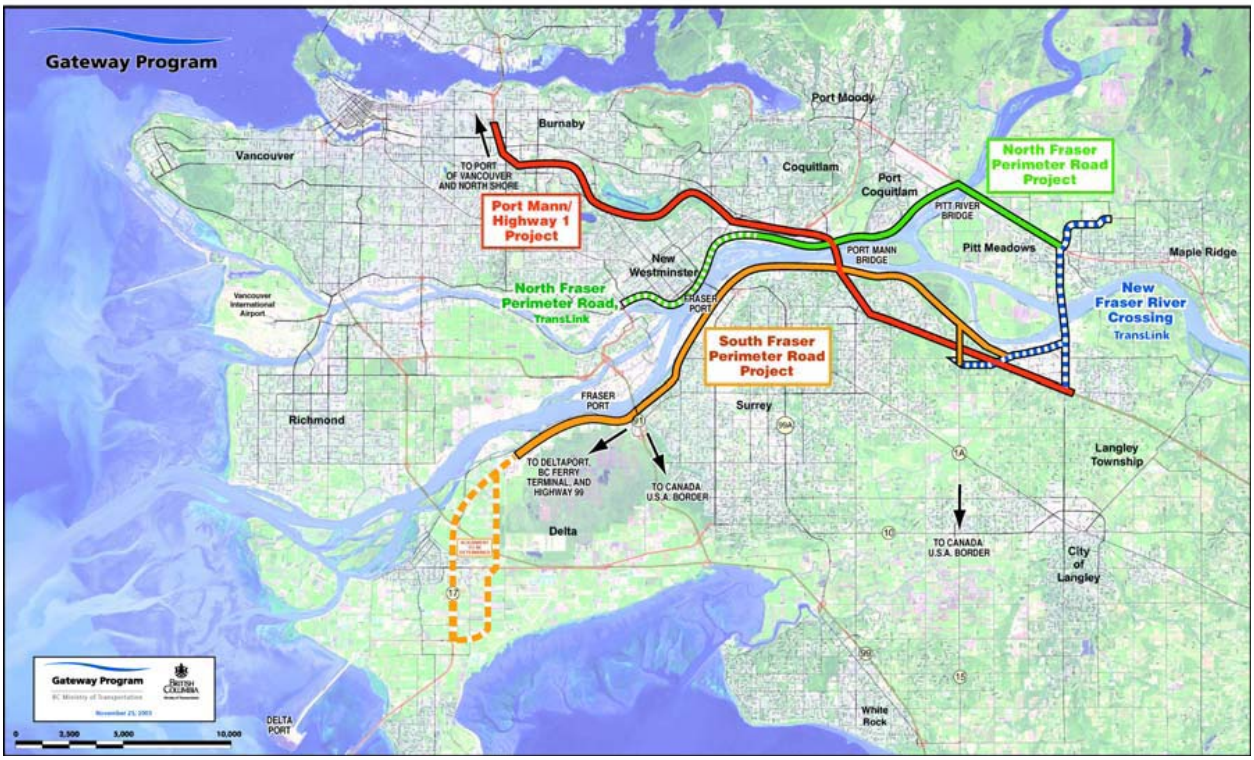
Gateway Program – Project Descriptions

The Gateway Program is an initiative being developed through the Provincial Government's Ministry of Transportation. It focuses on addressing road congestion on three priority corridors:

1. Along the south shore of the Fraser River – referred to as the South Fraser Perimeter Road (SFPR);
2. Along the north shore of the Fraser River – referred to as the North Fraser Perimeter Road (NFPR); and
3. The Highway 1 corridor from Vancouver to Langley, including the Port Mann Bridge.

The scope of the program that is being considered is outlined in Figure 1 below.

Figure 1. Gateway Program Projects (Source: Ministry of Transportation)



The Gateway Program's objective for the Highway 1 corridor is to relieve the congestion impacting commuters and the commercial vehicles that rely on this route, the Lower Mainland's primary truck route. Plans for the Highway 1 corridor are of particular interest to the City of Vancouver, since the corridor:

- Enters the northeast corner of the city; and

- Provides the main highway connection from Vancouver to other Burrard Peninsula municipalities, to Greater Vancouver suburbs south of the Fraser River, and to the Fraser Valley.

The proposed definition for the Port Mann/Highway 1 Project includes:

a) McGill St. in Vancouver to Port Mann Bridge
   - Adding one more lane in each direction (total of six to eight lanes);
   - Extra lanes in the Cassiar Tunnel would be accommodated within the existing structure. Widening east of the Tunnel in Vancouver is expected to be accommodated within the existing highway right-of-way; and
   - Adding an additional auxiliary (collector-distributor) lane in each direction in the vicinity of the Willingdon interchange in Burnaby.

b) Port Mann Bridge
   Twinning the Port Mann Bridge to add three extra lanes (total of eight lanes on opening day). The new bridge would have four lanes, and the existing bridge, which currently has 5 lanes, would be changed back to four lanes.

c) Port Mann Bridge to 200th St. in Langley
   Adding two additional lanes (one general purpose and one HOV) in each direction (total of eight lanes).

d) 200th St. to 216th St. in Langley
   Adding an additional lane in each direction (total of six lanes).

e) General
   Upgrading interchanges and improving access and safety.

TransLink staff note that the project provides for extending the existing HOV lanes through Burnaby and Coquitlam to Surrey and Langley, allowing the potential for transit over the Port Mann Bridge, enhanced bus service on Highway 1 from Langley to Surrey and New Westminster, as well as cyclist facilities across the new bridge structure.

The Highway 1 project is estimated to cost $1.5 billion. The preliminary schedule calls for design and construction to begin in 2008, with construction to be completed in 2013.

Gateway Program - Process

The Provincial Government has been involved in planning the Program since 2002. In general, Gateway Program work on the South Fraser Perimeter Road and North Fraser Perimeter Road projects has been more advanced in terms of both design and stakeholder consultation. Staff and Council have received periodic updates on Gateway's general plans for the Program's Highway 1 project since 2003.

More detailed information on the Province's plans for the Highway 1 corridor was provided to municipalities and the Region with the Gateway Program's release of their "Program Definition Report" at the end of January 2006. The Project Definition Report is posted on the Gateway Program website at www.th.gov.bc.ca/gateway/reports/Gateway_PDR_013106.pdf. The Gateway Program has also released about 14 companion and background reports, which are also posted on their website.

The release of the Program Definition Report started the Ministry's formal public consultation process, from February to April 2006, on their "Pre-Design" phase. For the Port Mann Bridge and Highway 1 portions of the project, the Provincial Government requested feedback on "goals for interchange upgrades and draft options for congestion reduction measures such as HOV lanes, HOV and transit priority for on-ramps, commercial vehicle priority access to on-ramps, potential tolling, and improvements to the cycling network".

In Vancouver, Gateway's consultation included hosting two Open Houses (one at the Hastings Community Centre and one at the Roundhouse Community Centre), and smaller meetings with various stakeholder groups. Consultation with the City has included a presentation to Vancouver City Council at their February 14th 2006 meeting, and representatives from the Gateway Program attending the Bicycle Advisory Committee's May 2006 meeting. In addition, Gateway Program staff have been meeting with municipal and regional staff to brief them on the Program.

All three corridors, including the Port Mann/Highway 1 project, will be subject to a harmonized federal/provincial environmental review process. This will include a review of potential air quality, socio-community and noise impacts. The Provincial Government is proceeding with their environmental assessment pre-application for Highway 1. An order from the Provincial Environmental Assessment Office was received in May 2006, notifying the Ministry that they may not proceed with the project without an assessment. The Ministry of Transportation will be preparing a terms of reference for its environmental assessment certificate application, and will also need to specify a process for the review and approval of these terms of reference. A public comment period on the terms of reference will be required.

Further formal community consultation is tentatively planned by the Gateway Program as follows:

- Preliminary Design Consultation – 2007
- Detailed Design Consultation – 2008

Gateway staff have advised that municipal input can continue to be received throughout their design process.

The Federal Government announced in October 2005, that Transport Canada will be supporting a new Pacific Gateway Strategy to support goods movement for international trade, including measures to address congestion in BC's Lower Mainland. A total federal investment of up to $590 million was noted for strategic infrastructure investments, maintaining secure and efficient border services and related support to businesses and labour markets. Funding directed to Gateway Program projects included infrastructure spending for the Pitt River Bridge (North Fraser Perimeter Road) and a contribution to the environmental assessment costs for the South Fraser Perimeter Road.

Regional Government Responses to Gateway Program

Both the TransLink and GVRD Board of Directors have recently referred staff reports on the Gateway Program to regional municipalities for comment. Copies of these reports, which include proposed recommendations that the Boards will consider at upcoming meetings, are appended to this report. The City's staff recommendations to the Standing Committee on

Transportation and Traffic include specific references to these two regional reports, which are discussed in more detail below.

Appendix A. – TransLink Staff Report on Regional Transportation Implications of the Provincial Gateway Program (April 10, 2006)

The purpose of this report was to provide the GVTA (TransLink) Board of Directors with a high level overview of the regional transportation implications of the Provincial Gateway Program, as outlined in the Program Definition Report. The report assumes that the Gateway Program as described in the Program Definition Report will proceed much as outlined.

It includes a review of the proposed physical facilities and how they are to be funded, as well as preliminary commentary on their implications and relationships to the regional transportation network, including the Major Road Network (MRN) and the transit services and facilities funded by TransLink. In addition, the report comments on where additional work will need to be undertaken to fully respond to issues such as tolling, lane allocation and priority use for transit, HOVs and trucks, as well as cycling needs.

Some of TransLink staff's comments made in its "Conclusion" section are as follows:

- Much of the project, in a physical sense (e.g. NFPR and SFPR), is compatible with approved regional plans;
- The exception to this is the proposed widening of the Port Mann Bridge and Highway 1. However, with an appropriate tolling regime in place, combined with defined lane priority allocation to transit, HOVs and goods vehicles ahead of single occupant vehicles and complementary transit investment, the program can be supported;
- The Highway 1 proposal will allow improved transit service along Highway 1 and across the Fraser River in general, and between Surrey and Coquitlam Regional Town Centres in particular;
- Even though the Highway 1/ Port Mann Bridge is a very challenging public policy issue, now is the time to start a broader dialogue on tolling and other road user charges as a means to both manage demand and to fund the region's transportation needs including additional transit services; and
- Any such policies will need to be crafted giving due consideration not only to revenue and demand-side management effects, but also to the potential secondary effects of tolling such as traffic diversion to 'free' alternatives.

Appendix C. - 2006 GVRD Staff Report, GVRD Response to the Provincial Gateway Program (April 21, 2006)

The purpose of this report was to provide a preliminary GVRD Board response to the Provincial Government's Gateway Program proposals. The report provides a high-level analysis of how the proposals relate to adopted plans, policies and mandates of the GVRD. A subsequent report is proposed to address the more detailed implications of these proposals on regional land use, air quality and transportation.

Some of the GVRD staff's main points made in its "Conclusion" section are as follows:

- Many elements of the Gateway Program are to varying degrees supportive of the directions contained within the Livable Region Strategic Plan, and will help to improve accessibility, reduce congestion, and improve the movement of goods and transit;
- The increased general-purpose road capacity proposed on the twinned Port Mann Bridge, new Pitt River Bridge and widened Highway 1 west of the Port Mann Bridge is not consistent with the directions of the LRSP; and
- It is recommended that the Board advise the Provincial Government of those aspects of the Program that are compatible with regional plans, as well as the outstanding areas of concern that require additional consultation and analysis to properly assess their impacts on regional interests.

Appendix E.– Comparison of GVRD and GVTA Staff Recommendations Regarding the Provincial Gateway Program

Regional staff have also provided a summary table, attached in Appendix E, that provides a comparison between the GVRD Staff Response, GVTA Staff Response and some commentary for Gateway items that are addressed in both of their reports. The majority of staff recommendations from the two regional agencies are complementary. Where there is some difference is that the GVTA staff report assumes that the Gateway Program, as described in the Province's Program Definition Report, will proceed much as outlined. On the other hand, the GVRD's staff report asks for analysis and advice from the GVTA on the proposals to twin the Port Mann Bridge and widen Highway 1 ahead of the timing assumed within the regional growth management strategy.

DISCUSSION

Introduction

Highway 1 provides direct connections to the Vancouver street system through ramps on the following City arterial streets:

- McGill Street;
- Hastings Street;
- 1st Avenue;
- Boundary Road; and
- Grandview Highway.

Accordingly, these streets, and other arterials which connect to them, have potential for being impacted by the Highway 1 project. The Highway 1 project has also generated considerable local and regional discussion on its potential impacts on land use, traffic patterns, the transit system and the environment.

Impacts on Vancouver's transportation system could range from increased traffic on some streets, decreased traffic on other streets (at least on an interim basis), and shifts (up or down) in mode shares for transit and car-pooling. Improving truck access to and from

Vancouver's Port is a possible opportunity presented by the Program. The Program is also offering the opportunity for increased Provincial Government funding for cycling and pedestrian infrastructure related to the highway corridor.

Actual impacts on Vancouver will depend on factors such as:

- What type of vehicle tolls are put in place;
- How new road capacity is allocated between transit, high occupancy vehicles, goods movement and general traffic;
- What complementary transit investments are made in the region;
- How well land use in Greater Vancouver and the Fraser Valley can be managed to reduce the need for vehicle travel; and
- How the costs of vehicle ownership evolve in terms of rising international fuel prices, movement towards distance-based insurance premiums, etc.

At this time, detailed assessments of the range of future traffic impacts that might be expected on individual Vancouver streets are not available. As described further in this report, staff can work with TransLink and the Gateway Program to provide this information to Council at a later date. Staff recommend that Council request the Ministry of Transportation fund changes on all municipal roads that are needed to address impacts generated by Gateway Program projects. GVTA staff is recommending a similar funding commitment from the Ministry for the Major Road Network.

City and Regional Policy Context

Vancouver's 1997 Transportation Plan contains policy directions to limit expansion of the freeway network to High Occupancy Vehicle (HOV) lanes with no additional bridge capacity leading to the City. The Transportation Plan was founded on and reinforces the Transport 2021 Long Range Transportation Plan (1993) for Greater Vancouver. Transport 2021 also provides the transportation context for the Greater Vancouver Regional District's long term land use plan – the Livable Region Strategic Plan (1996).

Vancouver City Council passed a specific motion relating to the Gateway Program in 2003. At that time the Provincial Government had announced general plans to twin the Port Mann Bridge and widen Highway 1. Due to its possible impacts on the regional transportation system, reference to the Gateway Program was made in TransLink's draft 10-Year Transportation Outlook and Three-year Financial Strategy, which was submitted for Council review and comment in October 2003.

When reviewing this document, (now referred to as the "2005-2007 Three-Year Plan & Ten-Year Outlook"), Council passed a number of recommendations including a recommendation to "advise TransLink, in accordance with the Vancouver Transportation Plan objective of limiting increases in traffic into the city, that Council opposes the twinning of the Port Mann Bridge or expansion of Highway 1 as proposed by the Province".

Transport 2021 provides some important context for considering future transportation challenges as the region grows. It notes that there are four major policy levers available to move the transportation system towards desired goals:

1. Control land use (e.g. by zoning regulations):

    - Land-use is one of the most important drivers of the demand for travel;
    - Transportation can shape land use by selectively providing access; and
    - Greater transit usage is proportional to greater density.

2. Apply transportation demand management (TDM) to change travellers' behaviours:

    - TDM can postpone capital investment and reshape travel demand to boost transit and car-pool use; and
    - TDM requires a package of mutually supportive "carrot" and "stick" measures (i.e. incentives to use alternative modes and disincentives to driving alone); a peak hour toll, for all bridges leading into the Burrard Peninsula was cited as an example of a road pricing "stick" to reduce congestion.

3. Adjust transportation service levels (e.g. by letting congestion worsen):

    - Make transit and car-pooling more competitive with driving; and
    - Permit truck traffic to bypass congestion wherever feasible.

4. Supply transportation capacity (e.g. by building more roads and transit):

    - Invest in transit linking dense urban areas and a network of HOV lanes.
    - Favour long-haul road capacity and restrain single occupant vehicles commuting from Fraser Valley municipalities.

Table 1 below shows how the lane and bridge capacity for the Gateway Program compares to current conditions (2006) and Transport 2021.

Table 1. Highway 1 Lanes – Transport 2021 and Gateway Program

Section	2006	Transport 2021	Gateway Program
McGill St. to Port Mann	4-6 (incl. 2 HOV)	4-6 (incl. 2 HOV)	6-8 (incl. 2 HOV), plus 2 auxiliary lanes in vicinity of Willingdon interchange
Port Mann Bridge	5 (incl. 1 HOV)	6 (incl. 2 HOV)	8 (incl. 2 HOV)*
Port Mann to 216th St.	4-6	6 (incl. 2 HOV)	6-8 (incl. 2 HOV)

* 5-lane cross section on existing bridge would revert back to 4 lanes

The current road capacity and number of HOV lanes on the Highway 1 corridor is less than what was envisioned in Transport 2021. The Gateway Program is proposing road capacity on the Port Mann Bridge, and Highway 1 that goes beyond that envisioned in Transport 2021. This has raised concern that the additional road capacity could lead to greater levels of single occupant vehicle use on Highway 1 and some of the other corridors connected to it.

Transport 2021 was accompanied by a Medium Range Transportation Plan for Greater Vancouver that offered guidance in developing transportation policies, infrastructure and services to 2006. The current status of these shorter term objectives is summarized in Table 2 below.

Table 2. Transport 2021, 2006 Medium Range Plan – Regional Transit, Roads and TDM (Source: TransLink)

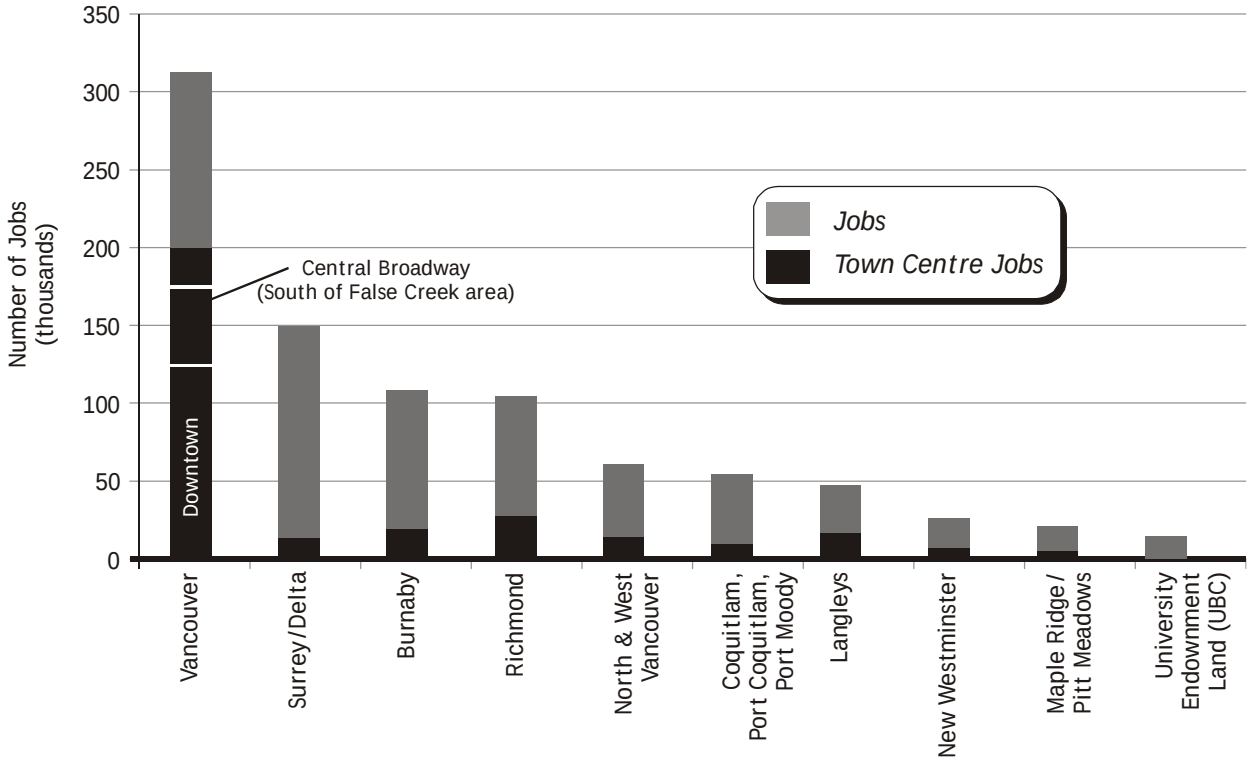
	2006 Target	**2006 Status**
Rapid Transit	• New Westminster – Coquitlam • Broadway – Lougheed • Vancouver - Richmond	Millennium Line complete to VCC Canada Line by 2009 Coquitlam LRT by 2009
Bus Fleet	Approximately 1800	1300
Transit Share (rush-hour)	17%	11-12%
Transportation Demand Management (TDM)	• Regional Parking Plan • Bridge tolls/congestion fee • Higher fuel taxes • Extensive HOV • Extensive bus lanes	• Limited implementation of financial TDM measures • U-Pass, etc. introduced

The table shows that progress towards providing additional regional transit and TDM services envisioned in the medium and long term Transport 2021 documents has been slower than anticipated. In particular, the westerly extension of the Millennium Line, along the Broadway corridor, is still outstanding. Further study of this extension is planned by TransLink and the City in 2007. Although the growth of the bus fleet has been slower than anticipated, the Vancouver and UBC Transit Plan (2005), acknowledged the high demand for bus service in Vancouver by including the following projection for the number of peak period vehicles in 2010:

- 428 Conventional buses (11 per cent increase since 2004)
- 26 City/community shuttles (325 per cent increase since 2004)

There have also been some challenges with progress towards the land use objectives of the Livable Region Strategic Plan (LRSP). Although regional residential growth has largely occurred in targeted areas, regional jobs growth has occurred largely outside town centres (see Figure 2 below). This job growth, especially where it has occurred in suburban office parks, has resulted in more dispersed work trips that are more difficult to serve by transit. While some of job locations outside of Town Centres are accessible by transit, most are not well-served by non-auto modes.

Figure 2. Regional Employment Distribution
Job distribution in the region



Source: Statistics Canada, 2001 Census

Tolling

The Gateway Program Definition Report notes that tolling on the Port Mann/Highway 1 improvements is a potential action to reduce congestion, limit traffic growth and generate revenue to pay for construction. It also notes that without congestion-reduction measures such as tolling, congestion would reach current levels five to ten years after project completion.

Further commentary on Gateway related tolling issues that warrants highlighting is contained in a companion document to the Program Definition Report titled "Road Pricing Review, 25 July 2005":

4.3 It is generally acknowledged that road pricing has two objectives, revenue generation and congestion management, where the congestion management objective is generally part of a transport demand management (TDM) strategy. In fact this is a specific policy area of TransLink's Transport 2021 strategy which says:

"The Province should apply road pricing tolls with the long run purpose of shaping travel demand in addition to obtaining revenues. The Province should not remove tolls unless it is clear that the external costs the automobile have otherwise been accounted for and are recognised by the user."

4.4 This contradicts the Ministry of Transportation's tolling guidelines where revenue generation is the only objective explicitly mentioned (see paragraph 2.1.7). This is

particularly important as the public perception of road pricing improves considerably when viewed as part of an overall transport strategy rather than a revenue generating project alone. This is expanded in the following sections where the concerns of road pricing are covered.

The road pricing/tolls (on major bridges) referenced in the above Transport 2021 Plan policy form a key part of the package of identified TDM measures. TDM will play an increasingly important role, not only in addressing future regional transportation impacts, but also within the City. For example, traffic modelling work done for the Downtown Transportation Plan looked at the differences in AM peak hour trips to downtown for 2021 both with and without Transport 2021's TDM measures. The results showed that without regional TDM, there would be:

- 15 per cent more vehicle trips to downtown;
- 8 per cent fewer transit trips; and
- Average vehicle speeds would be 11 per cent slower (indicating greater congestion).

Another companion document to the Program Definition Report titled "Analysis of Tolling Options" considered various tolling scenarios. The scenarios included different blends of a Port Mann Bridge point toll and a distance-based toll. Staff recommend that Gateway and TransLink give further consideration to a distance-based toll west of the Port Mann Bridge. A distance-based toll between Port Mann Bridge and McGill St. would help control future traffic growth from municipalities located north of the Fraser River (i.e. Vancouver, Burnaby and Coquitlam). Benefits for this section would be similar to those that the Program's proposed point toll on Port Mann Bridge would provide for limiting future traffic growth from municipalities south of the Fraser River.

The report from GVTA staff also raises the issue of Highway 1 traffic being diverted to regional and municipal roads due to the current provincial tolling policy requirement to provide a "free alternative" to tolled corridors. The Program Definition Report notes that if Highway 1 is tolled, the South Fraser Perimeter Road could be used as the free alternative, since there are no plans to toll this corridor. GVTA staff note that this could result in traffic being diverted to the Patullo Bridge, which already has significant congestion and safety issues. Traffic diverted over the Patullo Bridge, or possibly the Queensborough Bridge, could also increase congestion on Vancouver arterials such as Kingsway and Marine Way. Accordingly, City staff support the suggestions in the GVTA Board report to re-examine the desirability of the Provincial Government's tolling policy requiring a "free alternative" in urban areas.

Regional tolling was also discussed in TransLink's 2005-2007 3-Year Plan and 10-Year Outlook (2004). This plan identified a need to further review regional road pricing, including the need to:

- Define a detailed tolling policy for the region that allows the flexibility for the region to eventually evolve to a congestion pricing / tolling system for the entire region;
- Work to achieve municipal and provincial consensus on the tolling policies to be applied to any facilities in the region by 2006; and
- Explore other forms of road-user fees, including vehicle charges, as necessary.

Although there appears to be considerable consensus on the general benefit of tolls, there are still many important details that need to be resolved, including:

- Confirming that the Gateway Program will include tolls that incorporate TDM congestion pricing principles;
- Harmonizing the current provincial tolling policy with the broader road pricing/tolls described in Transport 2021; and
- Determining a tolling regime (base amount, peak period surcharge, HOV discounts, distance-based components, etc.).

Until these details are resolved, it will be difficult to narrow the range of possible impacts from the Gateway Program.

Lane Allocation and Priority

Similar to the issues raised about details of the Gateway Program's tolling proposal, there could be a wide range of potential impacts to the road and transit system, depending on how new road capacity is allocated. New space assigned to general traffic, would generate more single occupant vehicle use, and make transit and car-pooling less effective. This is especially true where the program is proposing new road capacity that goes beyond that noted in Transport 2021. If space is assigned and maintained for transit, HOVs and goods movement, traffic and environmental impacts could be expected to be much lower. Furthermore, the objectives of the Gateway Program and the Vancouver and regional transportation plans would be much more likely to be met.

The Gateway Program Definition Report proposes a number of conceptual features to accommodate alternative modes on Highway 1, including:

- Expansion of HOV lanes;
- Transit priority measures; and
- Queue jumper lanes or dedicated ramps for HOV, transit or commercial vehicles.

City staff recommends support for the GVTA's proposed Board recommendation to confirm the allocation of new road capacity for HOVs, transit and goods movement, including the designation of space for these uses ahead of single occupant vehicles. It is hoped that the next design phase for the Gateway Program will show details of the extent of these measures, as well as timelines for implementation and the length of time that measures are planned to be kept in place.

Transit Supply

Vancouver's Transportation Plan notes that growth in demand for transportation would be accommodated by alternatives to the car, primarily transit. The Gateway Program Definition Report proposes a detailed highway improvement plan for the region out to 2031, along with corridor-related transit improvements. Potential transit benefits include potential for transit over the Port Mann Bridge and enhanced bus service on Highway 1 from Langley to New Westminster. Both the Gateway Program and GVTA staff do not support the Highway 1 corridor being the right location for a high capacity rail service. Staff suggest that an alternative that may warrant further consideration is a connection between the Surrey and Coquitlam Town Centres.

Although the program may offer some significant transit benefits to other parts of the region, it does not appear to address the City's transit overcrowding or transit growth needs. Overcrowding has affected a number of transit routes in Vancouver. Service levels would improve and ridership would increase if transit capacity was increased closer to the levels proposed in the Transport 2021 Medium Range Plan. The review process for the Vancouver and UBC Transit Plan (2005) highlighted that bus service along the Broadway corridor is reaching capacity, as the #99 and the #9 bus routes carry a combined 60,000 passengers a day. The Vancouver and UBC Transit Plan recommended that a review of the extension of rapid transit along the Broadway corridor, west of Commercial Drive, be initiated no later than 2006.

The need for this rapid transit extension is also identified in both the Vancouver Transportation Plan and Transport 2021. Accordingly, City staff suggest that extension of rapid transit along the Broadway corridor west from Commercial Drive be added to the GVTA staff recommendation that calls for their Board to request the Provincial Government provide 50 per cent cost-sharing for capital expenditures on the Evergreen Line and fast bus transit on Highway 1.

The Gateway Program Definition Report acknowledges that significant investments are required in transit services, roads and facilities to accommodate other modes of transport. The body of the report provides considerable information focused on roads, with highway infrastructure needs projected to 2031, preliminary alignments and cost estimates completed, and tolling identified as a potential funding source for Highway 1.

Although the Gateway Program has developed plans for the region's highway system up to 2031, there is no similar information for the regional transit system. The transit system in the region's current long range plan, Transport 2021, has 2021 as the planning horizon year. City staff suggests that the GVTA prepare a high level review providing further information on the future rail service network and bus fleet size needed to meet the needs of the region up to 2031. Having this information for the transit system would allow the Gateway Program to carry out more comprehensive planning, as well as more accurate transportation forecasting for the 2031 horizon year. This information could also be used for the GVTA's planned update of Transport 2021 (process is scheduled to begin later this year).

Cycling

The Gateway Program Definition Report, and a companion document titled "Gateway Program Cycling Plan Overview", call for cycling to continue to be prohibited on Highway 1, except for the Port Mann Bridge and at highway crossings and interchanges. The Cycling Plan Overview also calls for an estimated $50 million funding allocation for commuter cyclist and pedestrian improvements on all three corridors (i.e. Highway 1 plus the two Fraser River perimeter roads). In addition, the Gateway Program proposes up to $10 million in funding to cost-share off-corridor projects that improve the overall effectiveness of the regional cycling network.

In their report GVTA staff request that the Province work with the GVTA and municipalities to clarify the level of resources available for cycling related improvements, and to consider the optimum use for the funding. City staff recommend that Council endorse this recommendation, as well as request that the Ministry of Transportation work with the City on ensuring the scope of eligible Highway 1 projects includes improvement in the vicinity of the Cassiar Connector in Vancouver. This addition would help the City complete bicycle and

pedestrian projects that were identified but not funded by the original Cassiar Connector project, or new projects providing improved connections to routes in Vancouver, Burnaby and North Vancouver.

The Bicycle Advisory Committee, at its meeting on May 17, 2006, passed a resolution recommending that Council reject the proposed Gateway Program. The full text of their resolution, as well as Questions and Comments on the Gateway Program is attached in Appendix F.

High Occupancy Vehicles

High Occupancy Vehicle (HOV) lanes allow car-pool vehicles and buses to save time while travelling compared to general purpose traffic. The Gateway Program Definition Report proposes a significant Provincial Government investment to expand the HOV network on Highway 1. In general, these proposals are supportive of the HOV network envisioned in Transport 2021, and should help offer an enhanced alternative to single occupant auto use on the corridor. However, despite recent expansion of the HOV network in the lower mainland, recent transportation monitoring data collected by TransLink, such as their Trip Diary Studies and Screen Line Counts has shown a trend of declining car-pooling.

Further study of HOVs was proposed in TransLink's 2005-2007 3-Year Plan and 10-Year Outlook. This document notes the following HOV related actions to 2007, to support regional Transportation Demand Management:

- Develop agreements with the Province and municipalities to develop and implement a process determining HOV lane needs and regulations for all HOV facilities in the region, giving due consideration to the fact that needs may vary across the region and between facilities;
- Include practical means to provide priority treatment to both HOV and High-Priority Vehicles, goods vehicles and buses ahead of single occupant vehicles.

City staff suggest that TransLink integrate their planned HOV review with HOV measures being proposed as part of the Gateway Program. City staff also suggest that this review include discussion with municipalities, the Ministry of Transportation, the RCMP, and other stakeholders involved in HOV lane monitoring and enforcement. HOV lane "cheating" (use by vehicles that do not meet occupancy requirements) reduces the effectiveness of these facilities. Lack of regular monitoring and enforcement may be part of the reason why HOV mode use has been lower than anticipated. The Gateway Program will also need to determine what the anticipated occupancy requirements will be for the proposed Highway 1 HOV lanes (current HOV lanes occupancy requirement is one passenger).

Vancouver's Transportation Plan supports promotion of car-pooling, but notes that designated lanes will generally be used to give priority to transit rather than car-pool vehicles. However, the Plan does support the concept of short queue jumpers for HOVs. The Gateway Program Definition Report includes the concept of HOVs being given priority at Highway 1 on-ramps. Accordingly, should the Provincial Government decide to proceed with their plans for Highway 1, there may be some opportunities to provide HOV queue jumpers on City arterial streets that connect to the Highway's HOV lanes. Staff can review these opportunities further, and report back to City Council on any HOV queue jumpers that warrant more detailed planning.

Goods Movement

The Gateway Program Definition Report notes key impacts of growth in road congestion include longer trip times, increased annual costs and increased fluctuation in service levels that make road travel more unpredictable. This report also notes that in addition to the population and employment growth expected in Greater Vancouver, there is also expected to be high growth in containerized goods movement due to the emergence of China as an increasingly important trade partner.

The Program Definition Report proposes to address goods movement on the Highway 1 corridor by increasing road capacity to reduce congestion, and by providing truck priority measures at highway ramps and interchanges. The McGill St. on- and off-ramps are one location being considered for truck priority access to Vancouver and the Port. Upcoming phases in Gateway's design consultation process are expected to provide more details on this proposal.

The GVTA and GVRD staff reports on the Gateway Program address two concerns that City staff also share about the Program's strategy for goods movement:

1. Inclusion of goods movement modes besides trucking:

    - Opportunities may exist to provide for effective and efficient goods movement through the use of rail and marine (e.g. barges) transportation modes. However, these do not appear to have been fully explored in the Gateway Program Definition Report. Some potential benefits of rail and marine modes could include capital and operating cost savings, lower impacts on an already congested regional and municipal road system and lower impacts on the environment (common air contaminants, greenhouse gases, etc.).

    - Accordingly, the Provincial Government could work together with the Federal Government to develop a complementary component for rail and marine improvements. Examples of potentially beneficial rail projects include grade separation of rail and vehicle traffic at a Powell Street overpass in Vancouver, and replacement of the 100+ year-old federal rail swing bridge between New Westminster and Surrey.

2. Preservation of truck travel time and reliability benefits:

    As noted in previous sections, tolling and lane allocation to priority modes such as transit and HOV will play a key role in how single occupant vehicle growth is constrained. This will also determine how well identified truck travel time and reliability benefits are maintained over the medium to long term.

Growth Management

Transport 2021 and the Livable Region Strategic Plan (LRSP) provide Greater Vancouver's policies for mutually supportive transportation and land use directions to accommodate future growth (2021 planning horizon). Limiting road capacity increases across the Port Mann Bridge to only two additional HOV lanes was seen as an important strategy for helping to

focus future residential and employment growth near the urban core, and to control sprawl up the Fraser Valley.

This raises concerns about the Gateway Program's proposed additional road capacity on the Port Mann Bridge, and the section of Highway 1 between the Port Mann and Second Narrows bridges. This improved access could create increased pressure for development, outside the LRSP's designated growth areas, which in turn could lead to increasing single-occupant vehicle use. TDM and transit supply measures proposed in Transport 2021 could help control this undesirable growth, especially if complementary measures are also supported in the Gateway Program.

However, should progress towards these TDM and transit supply measures lag, municipalities, the GVRD and the Provincial Government may need to review whether changes to land use plans and regulations might be needed to better manage resulting growth pressures. The GVTA's staff report notes that the process to update the GVRD's Livable Region Strategic Plan, which recently started, may be one opportunity to examine this issue further.

Safety

Many of the Highway 1 on- and off-ramps were designed and built several decades ago and do not meet current design criteria for features such as the length of acceleration and deceleration lanes, lane widths, minimum curvature, etc. Accordingly, City staff suggest that should the Provincial Government proceed with their plans for Highway 1, that Council support developing safer designs for the Highway 1 on and off ramps, in consultation with municipalities and the GVTA.

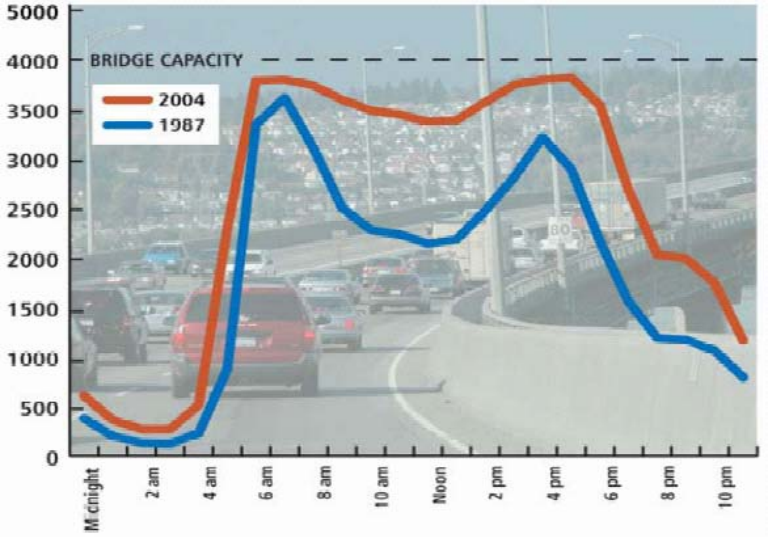
Transportation Modelling

The EMME/2 AM peak hour computer model, with transportation network and land use inputs to the year 2021, is the tool used by the Region and most municipalities and consultants to predict future vehicle and transit use. The Gateway Program has made a considerable investment in enhancing their EMME/2 model by adding the capability to also analyse the PM peak hour, and extending the horizon year for modelling to 2031.

Although a significant amount of modelling work has been carried out by Gateway, it has been focused at a higher level and results for individual arterial streets in Vancouver have not yet been released. City staff has requested AM and PM peak hour model results for Vancouver arterial streets that could be impacted by Gateway's plans for Highway 1. Staff is also in the process of reviewing transportation network and land use assumptions that the Gateway Program has used in developing their EMME/2 model.

Although the peak hour projections provide some useful information on expected impacts, a limit of the current model is that it does not provide any data for the mid-day period. Mid-day data is of increasing interest since it can help provide more accurate forecasts. When roads are close to or at capacity in the peak hour, there is little ability to take additional increases in traffic volumes in the peak hour; rather the additional traffic is spread either before or after the peak, or during the mid-day period (see Figure 3 below).

Figure 3. – Changes in Traffic Volumes on Port Mann Bridge, 1987 to 2004 (Source: TransLink)



Although the above figure is for the Port Mann Bridge, street segments that are near capacity can also exhibit similar characteristics. Other reasons to consider modelling the mid-day period are that truck volumes usually peak in the mid-day period, and that recent Trip Diary data has shown that the greatest increases in trips are occurring during mid-day. Having the capability of mid-day modelling would also improve the accuracy of emissions forecasts. Accordingly, staff suggest that the GVTA work with the Gateway Program and the Federal Government to extend the time periods available for the EMME/2 model used in the region.

Gateway Overall Goals

The overall goals for the Gateway Program, as noted in the GVRD staff report, are supportive of most municipal and regional transportation and land use plans. However, there have been some differences in how the Provincial Government, the region, some municipalities and various interest groups have interpreted the implementation of these goals. Staff suggest having common agreement by various stakeholders on Gateway's overall goals, would help guide discussion on resolving issues that have been raised about the Program.

Funding

Elements identified in the Gateway Program Definition Report could require the City and the GVTA to provide measures that integrate and complement the Gateway Program, resulting in cost impacts. The Program Definition Report has provided a general outline for proposed cost-sharing of improvements to the municipal cycling network. Staff support this proposal for cycling infrastructure and agree with the GVTA staff recommendation that there be further discussion with the Province to clarify how this cost-sharing program could function most effectively. Staff also support the GVTA staff recommendation to ensure the Gateway program budget includes funding for the GVTA's Major Road Network (MRN) and transit and cycling infrastructure that may be directly affected by the Gateway Program. City staff also suggest that Council approve a similar recommendation for non-MRN roads in Vancouver that may also be directly affected by the Gateway Program.

Regional and Federal Liaison

Recommendations in this report rely on continued coordination with the GVTA and GVRD, so staff recommend this report be forwarded to these regional agencies for their information and response. Since the Federal Government has also expressed in interest in participating in the Gateway Program through their Pacific Gateway Strategy, staff recommend that they also be copied with this report.

FINANCIAL IMPLICATIONS

At this time, it is too early in the process to know what the financial impact of the Gateway Program on the City might be. Further information will be required on the Program details, as well as the Provincial Government's willingness to fund or share costs for mitigation, and integration with city's transit, bicycle and road networks.

CONCLUSION

This report provides a high level review of the Gateway Program Definition Report, and related companion and background documents. It also references recent reports on the Gateway Program from GVTA (TransLink) and GVRD staff.

The Program Definition Report describes the Provincial Government's plans to address road congestion on three priority corridors through to year 2031:

1. The South Fraser Perimeter Road;
2. The North Fraser Perimeter Road; and
3. The Highway 1 corridor from Vancouver to Langley, including the Port Mann Bridge.

The Provincial Government carried out a related public consultation process in the region between February and April 2006. Consultation on the Highway 1 corridor included asking for feedback on interchanges, draft options for congestion reduction measures, commercial vehicle priority and improvements to the cycling network.

The Highway 1 corridor is of most interest to the City of Vancouver, since it provides direct links to Vancouver arterial streets, acts as the main road connection to eastern municipalities and the Fraser Valley, and contains road capacity increases that were not envisioned in Transport 2021 (the region's current long range transportation plan to year 2021).

The Highway 1 corridor's road capacity increases have raised concerns about possible impacts on growth of single occupant vehicle use and more sprawling regional growth patterns. Vancouver's Transportation Plan does not support road capacity increases for single occupant vehicles. Accordingly, to be consistent with its Transportation Plan, the City would not increase single occupant vehicle capacity on any of its streets to match any increases proposed by Gateway Program projects.

Vancouver's Transportation Plan also notes that growth in demand for transportation would be accommodated by improving alternatives to the car, primarily transit, but also walking and cycling. The Gateway Program Definition Report proposes a detailed highway improvement plan for the region out to 2031, a corridor related Bicycle Plan, which includes some

pedestrian improvements, and corridor-related transit improvements. Although the Program may offer some significant transit benefits to other parts of the region, it does not appear to address the city's transit overcrowding or transit growth needs.

The Program Definition Report has identified conceptual demand management measures such as tolling, and allocating lanes and providing priority access for transit, HOV and goods movements, ahead of single occupant vehicles. The Program also proposes to provide new cycling infrastructure and to cost-share off-corridor improvements that improve integration with the regional bicycle network.

Further coordination, discussion and analysis with the Provincial Government, GVTA and GVRD is required to better understand potential impacts of the Gateway Program's plans for Highway 1. The type of tolling system put in place, and allocating new road capacity for priority modes such as transit, HOVs and goods movement could have a large impact on limiting future single occupant vehicle growth. Details that would allow the range of potential impacts to be narrowed will hopefully be provided by the Gateway Program as they proceed with the next steps of their design process.

Some other key issues related to the Gateway Program that staff has identified for further consideration are:

- The need for the Provincial Government and the GVTA to continue working with the City on developing a funding plan for construction of the westerly extension of rapid transit along the Broadway corridor;
- Opportunities to advance the development of the regional tolling policy, and an enhanced regional HOV strategy, which have been identified in the region's Transport 2021 long range transportation plan and TransLink's 3-Year Plan and 10-Year Outlook; and
- The need for the Ministry of Transportation to clarify whether they will fund changes to municipal and regional roads, and the transit system, that are needed to integrate with or complement the Gateway Program.

* * * * *

Appendix A.

To: GVTA Board of Directors

From: Glen Leicester, Vice-President, Planning

Date: April 10, 2006

Subject: Regional Transportation Implications of the Provincial Gateway Program

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Staff Recommendations:

That the GVTA Board:

A. Receives this report for information;

B. Advises the Minister of Transportation that the GVTA supports moving forward with the South Fraser Perimeter Road and North Fraser Perimeter Road as outlined in the Gateway Program Definition Report dated January 31, 2006 and that the Board request:

   (i) the Province take steps to ensure the improvements to moving goods on the SFPR and NFPR are maintained over the long term as congestion increases; and

   (ii) the Province assume responsibility for the delivery of the North Fraser Perimeter Road from Maple Ridge to the Queensborough Bridge using the GVTA's currently committed contribution of $60 million towards the cost of the NFPR;

C. Advises the Minister of Transportation that the GVTA's support for the Highway #1/ Port Mann Bridge improvements as outlined in the Gateway Program Definition Report dated January 31, 2006 is conditional on the following:

   (i) the introduction of tolls and other transport pricing mechanisms to fund, manage demand and promote efficiency in the use of the transportation system;

   (ii) the introduction of a system of road user priorities to be reflected in the designation of specific lanes, priority access and other measures to promote the movement of transit, high-occupancy and goods movement vehicles ahead of single-occupant vehicles;

   (iii) the Province does not promote the Patullo Bridge as a free alternative to the Port Mann Bridge, due to the traffic diversion effects that may arise; and

(iv) the Province and the GVTA developing a long term strategy for the Patullo Bridge including possible replacement prior to a final decision on the Port Mann Bridge improvements;

D. Advises the Minister of Transportation that the Board agrees with the Gateway Program's conclusion that Highway #1 is not the right location for a high capacity rail service and as an alternative, request that the Province include in its funding the provision of 50% cost sharing with the GVTA for capital expenditures on two major transit infrastructure projects that enhance the effectiveness of the Gateway Program including:

(i) Evergreen LRT Line between the existing Millennium Line and Coquitlam City Centre; and

(ii) Fast bus transit along Highway #1 with Park and Ride lots and exclusive bus only access and egress to and from park and ride lots and the highway;

E. Requests that the Province ensure the budget for the Gateway Program includes funding for expenditures on the GVTA-funded Major Road Network and transit and cycling infrastructure that may be directly affected by the Gateway Program;

F. Requests that the Province work with the GVTA to initiate a regional dialogue on the role of transport pricing in the region, with the intent that a single pricing policy be developed for the metropolitan region to reflect the regional system of roads operating as one network with several owners and operators including the Province, GVTA and municipalities;

G. Advises the Province that it supports investments in cycling as part of the Gateway Program and requests that the Province work with the GVTA and municipalities to clarify the level of resources available for cycling related improvements and to determine the optimum use of the funding including consideration of enhancing parallel traffic separated cycling routes such as the Central Valley Greenway and the BC Parkway;

H. Requests that the Province examine opportunities with the Federal Government to expand the use of rail and marine transportation to move goods into, out of and around the region thereby enhancing the efficiency of the Gateway Program;

I. Requests that the Province consult with the GVRD to ensure that the GVRD has adequate powers to ensure that the increased road capacity across the Fraser River does not spur development that is contrary to the Livable Region Strategic Plan and any subsequent updates to the LRSP; and

J. Directs staff to forward a copy of this report to the Greater Vancouver Regional District and the member municipalities.

PURPOSE

The purpose of this report is to provide a high level overview of the regional transportation implications of the Provincial Gateway Program as outlined in the Province's Program Definition Report (PDR) dated January 31, 2006. The Greater Vancouver Transportation Authority Act Part 1, Section 4 subsection (1)(f) states one of the responsibilities of the GVTA is to *review and advise the GVRD, the municipalities and the government regarding the implications to the regional system of (iii) major development proposals and provincial highway infrastructure plans in the transportation service region.*

It should be noted that this report assumes that the Gateway Program as described in the Project Definition Report (PDR) will proceed, much as outlined. This report includes a review of the proposed physical facilities and how they are to be funded, as well as preliminary commentary on their implications and relationships to the regional transportation network, including the Major Road Network (MRN) and the transit services and facilities funded by TransLink. In addition, the report comments on where additional work will need to be undertaken to fully respond to issues such as tolling, lane allocation and priority use for transit, HOV's and trucks as well as cycling needs.

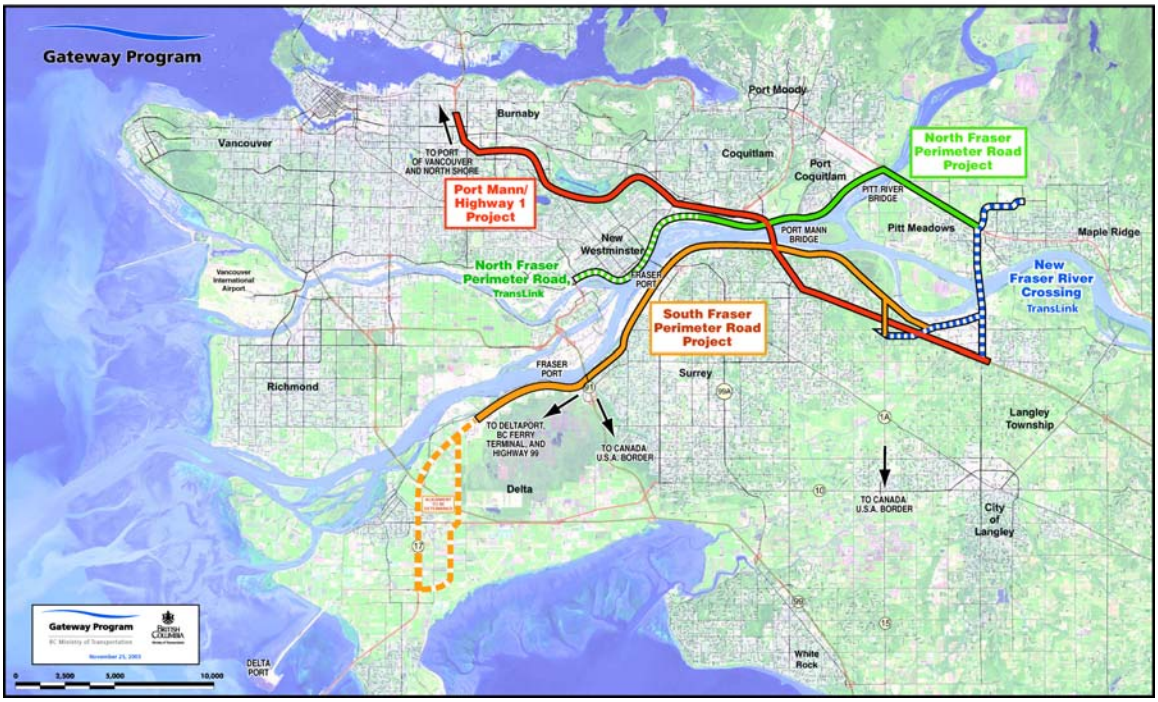
BACKGROUND

1. Introduction

Work on the Gateway Program started in earnest in 2002 as a provincial initiative to respond '*to the impact of growing regional congestion, and to improve the movement of people, goods and transit throughout Greater Vancouver'*. The package of Gateway road and bridge improvements are proposed by the Ministry of Transportation (MoT) to complement other regional road and transit improvements already planned or underway. Together they are intended to create a comprehensive, effective transportation network that supports improved movement of people and goods facilitating economic growth, increases transportation choices and provides better connections to the region's designated growth areas. Components of the Gateway Program are also complimentary to the Federal Government's Pacific Gateway Strategy[1], which was announced in October, 2005.

The physical scope of the program that is being considered is shown below:

[1] The Pacific Gateway Strategy *'includes up to $590 million in specific measures and commitments in several interconnected areas that impact the effectiveness of the Pacific Gateway, and how well Canada takes advantage of it. These measures and commitments include investments in transportation infrastructure, secure and efficient border services, and deeper links with the Asia-Pacific region'*.



Source MOT website

2. Gateway Program Goals

The stated goals for the Gateway Program as identified in the PDR are as follows:

- Relieve congestion;
- Improve the mobility of goods and people in and through the region;
- Improve access to key economic gateways through improved links between ports, industrial areas, railways, the airport and border crossings;
- Improve the regional road network;
- Improve quality of life in communities by keeping regional traffic on regional roads instead of local streets;
- Reduce vehicle emissions by reducing congestion-related idling;
- Facilitate better connections to buses and SkyTrain, cycling and pedestrian networks; and
- Reduce travel times along and across the Fraser River during peak periods.

3. Scope of the Gateway Program

The physical components are, at present, the most fully defined aspects of the program. However, as discussed later, other aspects of the program such as how the project is to be funded and lane allocations are also critical considerations. As currently configured, the Program comprises of three core highway initiatives:

a. **Port Mann/Highway #1 Project** – This includes twinning the Port Mann Bridge, upgrading interchanges and improving access and safety on Highway #1 from Vancouver to Langley. The project provides for extending the existing HOV lanes through Burnaby and Coquitlam to Surrey and Langley, allowing the potential for transit over the Port Mann Bridge, enhanced bus service on Highway #1 from Langley to Surrey and New Westminster as well as cyclist facilities across the new structure. MoT's objective is to relieve the severe congestion impacting commuters and the commercial vehicles that rely on this route – the Lower Mainland's primary truck route. It is understood that Highway #1 would be expanded to six lanes from McGill Street in Vancouver to Grandview Highway in Vancouver and eight lanes from Grandview Highway to 200th Street in the Township of Langley and six lanes from 200th Street to 216th Street in the Township of Langley. The project is estimated to cost $1.5 billion and would be completed in 2013.

b. **North Fraser Perimeter Road** – This is not really a new road as such. Rather it is a proposed set of improvements on existing roads to provide an efficient, continuous route from New Westminster to Maple Ridge. TransLink is responsible for the section through New Westminster (NFPR West), while the Ministry is responsible for the segments from King Edward Avenue (Coquitlam) to Maple Ridge, including a new Pitt River Bridge to replace the aging swing bridges[2] (NFPR East). The new Pitt River Bridge calls for a high level crossing featuring six through lanes and auxiliary truck lane in the eastbound direction. Other proposed upgrades will improve safety and reliability along this key goods movement corridor to better serve these growing communities. The Pitt River/ Mary Hill Interchange project is estimated to cost $400 million and would be completed in 2009 to coincide with the opening of the Golden Ears Bridge.

c. **South Fraser Perimeter Road** – The SFPR comprises a new four-lane, 80 km/h route along the south side of the Fraser River extending from Deltaport Way in southwest Delta to the Golden Ears Bridge connector road in Surrey/Langley. It will provide a continuous and efficient route to serve the port facilities, rail yards and industrial areas along this key economic corridor, and will also benefit commuters. The route will provide an alternative route connecting the BC Ferry terminal at Tsawwassen with Highway #1 and Highway #15. The project is estimated to cost $800 million and would be completed in 2012.

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[2] The development of a new Pitt River Crossing has been shown by TransLink analysis to complement the Golden Ears Bridge.

The Gateway Program PDR report concludes that consideration should be given to using tolls on the Pot Mann/ Highway #1 corridor as a congestion reduction measure and a way of defraying the costs of the improvements. Two alternatives are identified; first a point toll on the bridge itself and second, a reduced bridge toll in combination with a distance based toll on Highway #1. The PDR appears to support the point toll over the distance based toll. Tolling of the NFPR (including the Pitt River Bridge) and SFPR is not recommended in the PDR due to lack of untolled alternatives in the case of the former and the traffic diversion impacts of the latter.

In total, the proposed Gateway Program will add a significant amount of road capacity to a particularly congested and rapidly growing sector of the region. The program cost is estimated at $3 billion, including contingency. As discussed more fully later, the program's components all relate to varying degrees to a number of major TransLink initiatives, as well as ongoing programs such as funding the Major Road Network.

DISCUSSION

1. Road and Bridge Components

a. Highway #1/ Port Mann Bridge

Dealing first with Highway #1/Port Mann Bridge, these facilities experience the most severe congestion in the region. According to the Gateway Program report, the Port Mann Bridge has the highest daily traffic volumes per lane among all major water crossings in the region. Current traffic volumes are 127,000 vehicles per day, an increase of 65% since 1985 during a time when rapid transit was extended across the Fraser River to Surrey City Centre. The bridge is now congested 13 hours per day and there are significant traffic queues in both directions during peak hours. Bus service across the Bridge was discontinued in the early 1990's and current congestion precludes operating a direct link between the Surrey and Coquitlam regional centres due to congestion which impacts service reliability.

While Highway #1/ Port Mann Bridge is the busiest highway in the Province, much of the traffic is regional in nature. Increasingly the traffic is north-south reflecting the significant growth in population and employment that is occurring on both sides of the Fraser River. A recent survey showed about 30% of the northbound trips using the Port Mann Bridge in the AM Peak are trips going to the Northeast Sector. Today the river divides the fastest growing parts of the Livable Region Strategic Plan's (LRSP) Growth Concentration Area (North Surrey/North Delta and the Northeast Sector). The LRSP seeks to concentrate 68% of the region's population in the Growth Concentration Area.

It may be argued that improvements to Highway #1/Port Mann will assist in supporting areas planned for above-trend growth in population and employment (North Surrey/ North Delta and the Northeast Sector). TransLink staff feels that some form of widening of the Port Mann is needed for this reason alone and so, in principle, support the twinning of the facility, provided there are tolls and other transport pricing mechanisms to fund, manage demand and promote efficiency.

Furthermore there is a need for consideration of a system of road user priorities and lane allocations that places the movement of goods, transit and high-occupancy vehicles ahead of single-occupant vehicles.

In addition to the widening, the proposal also includes significant upgrades to existing interchanges and ramps. These facilities were developed in the early 1960's and for the most part have seen relatively little change over the past 40 years. The interchanges were not designed for today's traffic volumes and there are safety concerns. On this basis alone, many of these improvements are long overdue and should be supported.

While widening Highway #1 and twinning the Port Mann Bridge are not identified on this scale in earlier plans such as Transport 2021 and the LRSP, given its critical role for goods movement and severe congestion levels at this location, it is considered that widening of this facility as outlined in the PDR (six through-lanes and two HOV lanes) is supportable. This support is conditional on the Port Mann facility being tolled, and tolls recognized as a critical demand management tool as well as the development of appropriate allocations of road space to support efficient use of the facility and offer attractive alternatives to commuters.

b. South Fraser Perimeter Road (SFPR) and North Fraser Perimeter Road (NFPR)

The SFPR and sections of the NFPR have been in regional and municipal plans for many years. Both were identified as priorities in Transport 2021 and the LRSP, primarily to serve goods movement.

While previous plans for the NFPR did not include increased general purpose traffic capacity at the Pitt River, it is noted that with the current reversible lane system, the only additional capacity is in the reverse peak direction, where there is currently significant delays and these are projected to grow with the introduction of the Golden Ears Bridge. According to the Gateway report daily traffic volumes over the Pitt River Bridge have tripled since 1985. This occurred during a period when substantial transit capacity was added first with buses, and then later with the West Coast Express commuter rail service.

In summary, as the new Pitt River Bridge will assist in the functioning of TransLink's Golden Ears Crossing, the proposal to develop a new high level crossing seems reasonable and supportable. In addition, the eastern part of the North Fraser Perimeter Road will complement the section from the Queensborough Bridge to United Boulevard that will be funded by TransLink as part of the current Three-Year Plan and 10-Year Outlook.

Turning to the SFPR, the province's planned implementation of this road is long overdue. It has been identified in the LRSP for a decade or more and current local and regional roads carry high volumes of traffic and trucks in particular in this economic corridor. These roads were not designed for these volumes of

traffic and there is considerable impact on neighbourhoods in North Delta and North Surrey.

The new route will provide a continuous east-west route that will offer connections to Highways #1, 15, 17, 91, 99 and the Golden Ears Bridge. The development of the SFPR will also facilitate the development of the NFPR system and help to reduce any concerns that only developing the NFPR might compound some of the traffic challenges in the New Westminster area.

Staff note the importance of the NFPR and SFPR corridors for goods movement and the proposal not to toll the facilities. Nonetheless the MoT will need to ensure that these two routes do not fill up with automobile commuters to the detriment of trucks. Moreover priority should be given where appropriate to alternative modes such as transit and cycling.

2. Tolling and the Gateway Program

a. Gateway Tolls to Fund and Manage Demand

The Gateway Program is more than a series of highway projects. Rather, embedded within the project is a major shift in philosophy regarding the role and function of Provincial Highways in the region and how they should be managed and funded. The Province is to be commended for recognizing the critical role of pricing and acknowledging its importance not only as a funding mechanism but also as a key tool to manage demand and promote more efficient use of road space. Indeed, this latter consideration may be as significant over time, as the physical facilities themselves.

It is understood that tolls could take the form of point-tolls, distance-based or other tolls. Any form of tolling should be reviewed for its suitability in the region, potential impact on other parts of the network and other regional objectives[3]. Irrespective of the form of toll or user fees, unless the system is priced, its benefits cannot be fully realized. This is because any unpriced road facility will be quickly overwhelmed. Indeed the PDR states that without tolls the traffic congestion on the expanded facilities (Highway #1/ Port Mann Bridge) would increase to today's levels within five to ten years of opening the new facility.

It is preferred that the pricing regime should be based on when, where and how a vehicle uses the facility. The system of tolling should also consider the effects on the overall urban transportation network and be designed to mitigate any undesirable traffic diversion to a 'free' facility. In this latter regard, one area where staff does depart from the proposals is the suggestion that the Pattullo Bridge be seen as a 'free' alternative to a tolled Port Mann Bridge.

- [3] It should be noted that in two other areas in North America where tolls are used in an urban context, i.e. San Francisco and New York, public authorities collect tolls on a whole network of bridges and tunnels, and use the revenues to fund bridges, roads and some transit programs.

As is discussed more fully later, the current provincial policy of there being a free alternative may not be well-suited to an urban environment where tolling one facility, while another remains free can possibly lead to undesirable traffic diversion. In the case of the Pattullo Bridge, which is a TransLink-owned former Provincial facility that is at capacity during peak periods and has experienced a number of high profile fatalities.

b. Tolling and Congestion Pricing

Often the terms 'Tolling' and 'Congestion Pricing', etc., are used and each of these is a variant of what the public might refer to as 'tolling', although they are somewhat different concepts.

Historically, tolls have been a common way to fund highway and bridge/tunnel improvements on which the fee is charged and they are often dedicated to fund only the capital and operating costs of the facility from which the revenues are generated. Greater Vancouver had a number of toll bridges, which were phased out in the early 1960's. On the other hand, 'congestion pricing' typically involves the charging for road use to achieve a wider range of objectives that may include funding specific facilities, encouraging changes in the time, mode or composition of travel and funding other road and transit investments.

In simple terms, congestion pricing is based on the economic theory that road space is a valued and scarce commodity and that anything that is perceived as 'free' at the point of use, is likely to be over-used. To balance demand to available capacity, users must be provided with the right 'price signals' by charging where, when and for how long users use a facility to encourage more efficient use. The toll revenue could be used to provide a funding stream to improve both the roads on which the tolls are applied and other road and transit services, as is the case in London and several other cities.

The following table summarizes some of the key differences between the revenue generation and congestion management aspects of road user pricing.

Objectives	
Revenue Generation	**Demand Management**
• Generates funds • Rates set to maximize revenues or recover specific costs • Revenue often dedicated to specific roadway projects • Shifts to other routes and modes not necessarily desired (because this may reduce revenues)	• Reduces peak-period vehicle traffic • Influences travel patterns and choices • Revenue not necessarily 100% dedicated to roadway projects • Requires variable rates (higher during congested periods) • Travel shifts to other modes and times considered desirable

The province is correct in seeing pricing as absolutely key to the project. Moreover the pricing schemes in central London, UK, Stockholm, Oslo, Bergen,

Singapore, New York and other international examples appear to be meeting the twin goals of generating funds to make improvements to the transportation system and achieving broader transportation policy objectives.

c. Challenge of Tolling in Urban Areas

Transport 2021 and the Livable Region Strategic Plan assumed as one of their fundamental premises that a broad tolling/pricing regime would be in place by now. The assumption was that there would be some form of tolling in place on all the major water crossings in the region and that the revenues would be used to fund both road and transit investments and to manage travel demand. To date little action has been taken on tolling in the region, but the release of the PDR offers an opportunity to start to think about pricing in general to both fund and manage the overall transportation network. This is because ultimately unless pricing is applied, more and more facilities will need to be built to cope with demand and potentially the system may always be insufficient to meet demand. The only way this can be addressed is to price scarce road space in relation to when, where and how much it is used.

d. Tolling Policy for Greater Vancouver

The issues raised by tolling are many, but there will probably be no better time to start a regional dialogue about how to fund and manage future transportation requirements. Staff are of the view that such an approach should see the transportation system in the region as one coherent whole and any approach to developing pricing regimes and policies should be tailored to the specific needs of this region and give due consideration to the overall funding needs of the transportation system as a whole.

While the Gateway Program is clearly a Provincial initiative, it is primarily the residents of Greater Vancouver who will bear most of the costs, rather than individuals in other parts of the province. This being the case, there are a number of questions that could be addressed in a regional dialogue. Some of the issues that might be explored are:

(i) What should the policy framework be for pricing in an urban area like Greater Vancouver which relies on a network of facilities?

(ii) If existing movements that can be made 'free' are tolled, even if there are improvements made to those facilities, how can any undesirable effects such as traffic diversion to free roads be avoided?

(iii) Is it equitable to charge only users of the Port Mann Bridge or should the costs of new road and other facilities and services be shared more broadly?

(iv) With urban areas relying on a network of facilities, should the overall network be funded and managed as one coherent whole, even though it has many several owners? (e.g. MoT, TransLink, Municipalities)

(v) If pricing is to be used, what is the most appropriate form to use in this region and for particular facilities? (e.g. point tolls vs. per kilometre charge).

3. Impacts on the Regional Transportation System

There are several key impacts of the Gateway Program on the overall regional transportation system. These include the effects such as those on general traffic both in a sub-region through which the Gateway Program runs and in the region more broadly. In addition there are effects on other features of the transportation system including goods movements and access to industrial areas, the transit system and cycling. Each of these is discussed below.

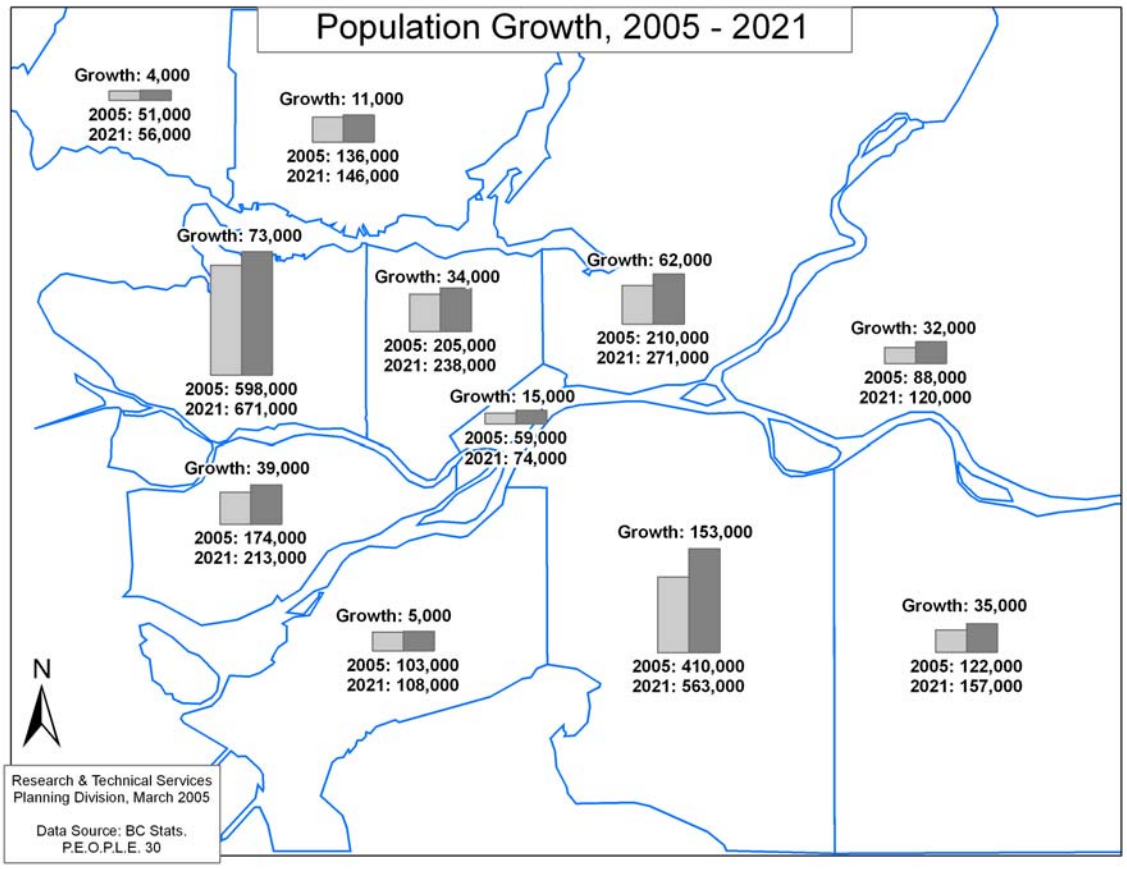
a. General Traffic

The area served by the Gateway Program, particularly the Northeast Sector, Pitt Meadows and Maple Ridge, as well as the entire area South of the Fraser are experiencing some of the most rapid population and employment growth in the region. The Figure below shows the projected population growth over the next two decades.

The significant growth that has already taken place coupled with the forecasted growth will clearly strain existing road infrastructure. The infrastructure needs of these developing areas are different from the needs in the City of Vancouver[4] and the more mature inner suburbs. The delays to general-purpose traffic and goods movement by truck across the Fraser are substantial. This is the case not just in rush hours, but also increasingly in the middle of the day, and conditions on the Port Mann Bridge are clearly the worst. Moreover the delays are compounded by their unpredictability, as they can vary substantially from day to day.

Much of this growth was anticipated in the Transport 2021 Long Range Transportation Plan (prepared jointly by the Province and the GVRD), which became one of the foundations of the 1996 Livable Region Strategic Plan (LRSP). Both of those plans anticipated significant transit and road development to meet the needs of the growing population and evolving distribution of activity centres. However, neither the road or transit investment has kept pace with the targets that were anticipated in the Livable Region Strategic Plan.

[4] It is notable that there are 20 lanes for general traffic across False Creek into downtown Vancouver while only 19 lanes including one HOV lane across the south arm of the Fraser River.



For example, by 2006 it was anticipated that there would be a transit fleet in the range of 1700 to 1800 buses, and that three new rapid transit lines would have been completed (Broadway-Lougheed, Coquitlam-New Westminster and Richmond-Vancouver). Overall it was expected that transit would carry 17% of peak period trips (as opposed to 12% today).

It was also anticipated that a number of key road investments would have been made – the particular focus on both the needs of goods movement and transit/HOV. These included HOV lanes in both directions across the Port Mann Bridge, the North and South Fraser Perimeter Roads and other miscellaneous road investments.

In addition to transportation investments lagging behind targets planned for the region, travel patterns are also not exactly as planned. It was anticipated in the early 1990s that more office jobs would be located in the designated regional town centres than has actually occurred.

Over the past decade the majority of office employment growth outside of downtown Vancouver and Central Broadway has occurred in auto oriented business parks rather than transit oriented town centres. As a result, an increasing number of trips are taken from suburb to suburb and are very challenging – if not impossible in some cases – to serve by efficient transit. This has inevitably led to

mounting congestion on the regional road system, as traffic volumes are higher and transit use lower than originally projected in Transport 2021.

As noted earlier, both the Northeast Sector and North Surrey/North Delta are included in the LRSP Growth Concentration Area (GCA). While the GCA has a population growth target of 68% of the region's population, the GCA's share of the region's population has remained at 65%. The growth in population and employment in the Northeast Sector and North Surrey has led to the need for more travel across the Fraser River, however this is one of the most challenging movements to make because the Port Mann Bridge is now congested 13 hours a day and the Pattullo Bridge is not an attractive or realistic option for many of these trips.

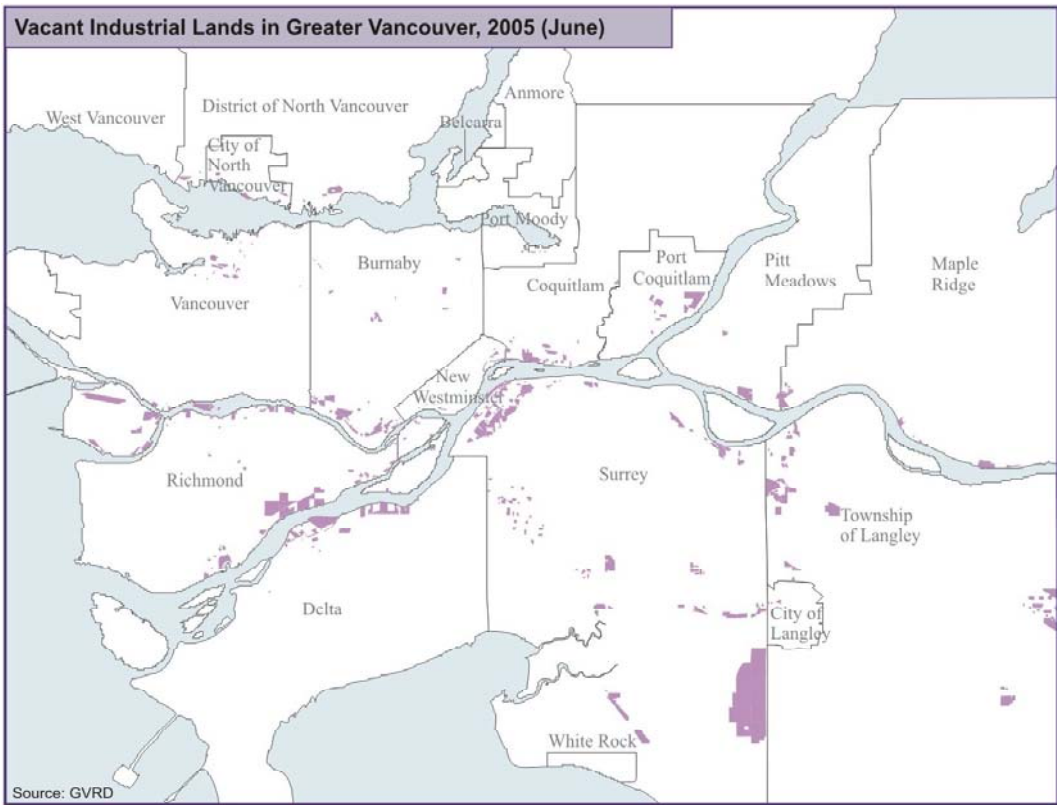
Given today's reality of transportation investment being behind the targets assumed in the LRSP, and employment and activity centre development being somewhat different than anticipated in the mid-1990's, staff is of the view that the Gateway Program represents an appropriate response to today's reality. It is important however, that the expanded highway facilities be combined with a comprehensive demand management strategy that includes lane allocation, pricing measures on some components and transit investment.

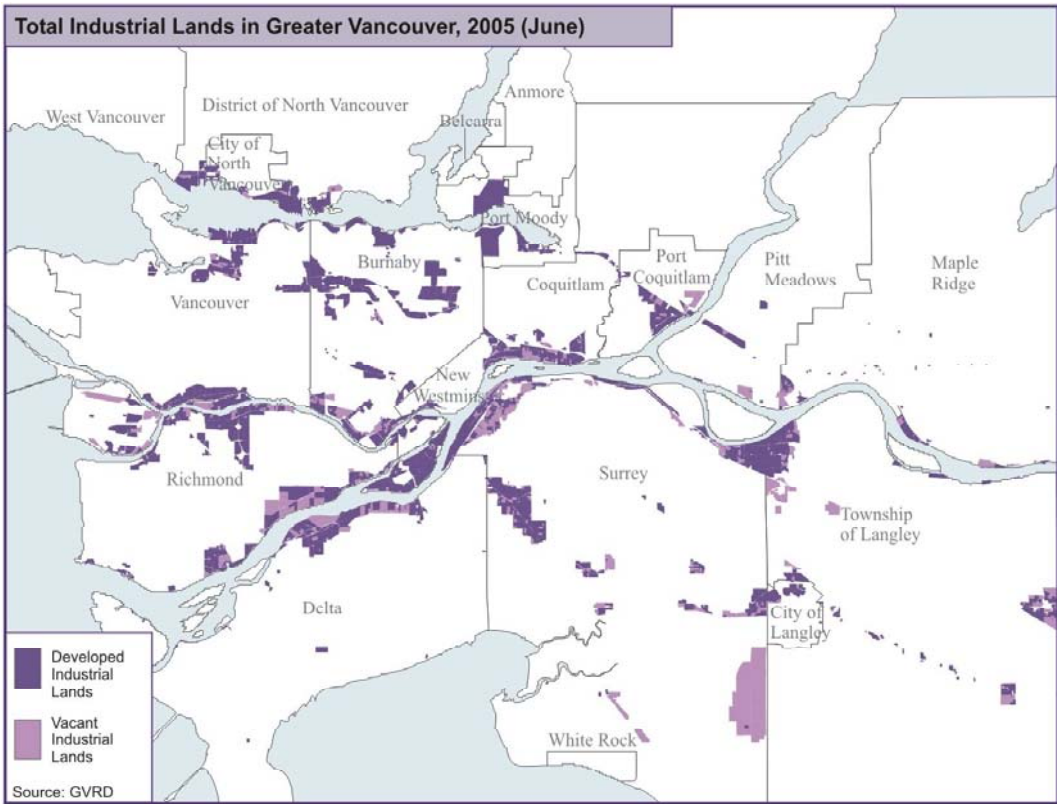
b. Goods Movement/Industrial Access

As shown in the Figures, much of the region's developed and future industrial facilities are located in the areas served by the Gateway Program. These include industrial areas on both sides of the Fraser River, the Deltaport and the Port of Vancouver. Much of the remaining available industrial land is concentrated in areas served by the Gateway Program, particularly in the southeast quadrant of the region in areas such as Campbell Heights in Surrey and in Langley. The latter two areas in particular have experienced rapid employment growth over the past decade, as some industries and trade-related activities locate to south of the Fraser River, where land is more available, generally lower-priced and the resident labour force is rapidly growing.

There has also been considerable growth in port traffic, with the number of containers alone being expected to triple in the next 15 years. Much of this growth has prompted increases in industrial and warehouse activity in the eastern and southeastern part of the region. In turn, this is resulting in increased truck movements particularly through Delta and Surrey as well as New Westminster and Coquitlam.

Increasingly much of the goods movement is being driven by port activity and the ports in the GVRD have a natural advantage over many of its US competitors by being up to one day closer in sailing time to many Asian gateway destinations. In order to capture the benefits of this natural advantage, a concerted effort is needed to improve truck access to key goods and industrial destinations both along the Fraser River, in other parts of the region and to destinations east of Greater Vancouver.


Vacant Industrial Lands in Greater Vancouver, 2005 (June)
West Vancouver
District of North Vancouver
City of North Vancouver
Belcarra
Anmore
Port Moody
Burnaby
Coquitlam
Port Coquitlam
Pitt Meadows
Maple Ridge
Vancouver
New Westminster
Richmond
Surrey
Township of Langley
Delta
City of Langley
White Rock
Source: GVRD


Total Industrial Lands in Greater Vancouver, 2005 (June)
West Vancouver
District of North Vancouver
Anmore
Belcarra
Port Moody
Burnaby
Coquitlam
Port Coquitlam
Pitt Meadows
Maple Ridge
Vancouver
Richmond
Surrey
Township of Langley
Delta
City of Langley
White Rock
Developed Industrial Lands
Vacant Industrial Lands
Source: GVRD

Investments that assist trucking and associated secondary warehouse and other activities will yield benefits both in terms of travel time for shipments and (often more importantly) the reliability and predictability of travel and delivery times. Today the levels of congestion, particularly on Highway #1/Port Mann are such that travel times can vary widely due to the instability of traffic conditions.

While the Gateway Program will lead to benefits for the goods movement industry, as has been noted an accompanying management strategy and pricing regime will need to be implemented to ensure that the travel time benefits and improved reliability for trucks can be sustained over time.

A management strategy that includes pricing can be used to encourage trucks to travel at particular times of day. This will increase the efficiency of the use of the overall facility and this potentially can be combined with preferential allocation of road space, at certain times of day, to provide greater incentives for trucks to move at times other than the commuter peak hours. This approach could be taken a step further by encouraging more industry to move away from a nine to five operation to variable hours or 24/7 service to further maximize the potential benefits.

Finally while the plan offers much for trucks, the multi-modal nature of goods movement needs to be reinforced. Staff note, that the Province (and Federal Government) could also encourage greater use of alternatives such as rail transport and short sea shipping (e.g. barges) in addition to the investments in roads.

c. Effects on Transit Services

The development of the Gateway project provides an opportunity to ensure complementary transit infrastructure is provided as an alternative for commuters to ensure a more efficient transportation system.

TransLink staff agrees with the Gateway Project's conclusion that a high capacity rail system is not viable on Highway #1 and that other transit elements are needed to improve transit's opportunity to become an increasingly viable mode of choice for more trips.

With the rapid growth in the eastern parts of the region, there is an increased need for expanded transit on both sides of the Fraser River. Some of the needed services include the Evergreen LRT Line in the Northeast Sector, high quality bus connections across the Port Mann Bridge between Surrey and Coquitlam and a comprehensive strategy for bus transit on Highway #1, potentially including Busway segments, HOV lanes and Park and Ride. The following provides an overview of the complementary transit projects as well as an assessment of the Gateway Program on some existing and future projects.

(i) Evergreen LRT line

The Evergreen Line LRT has long been a regional priority linking the Lougheed Town Centre with the rapidly growing Northeast Sector. A key element of TransLink's 10-Year Outlook, the $800 million LRT line will provide a transit option for trips within the Northeast Sector and for trips to other parts of the region, notably Burnaby, New Westminster and Surrey through connections to the existing SkyTrain system. The line is currently planned for completion in late 2009 at the same time as NFPR.

Ridership projections for the line have already assumed tolls on a widened Port Mann Bridge as well as the NFPR, SFPR and new Pitt River Bridge by 2021 however; they have not considered a widened Highway #1 between Coquitlam and Vancouver. This additional highway capacity will need to be further analyzed to determine if there is any impact on the line's projected economic performance. The Evergreen Line provides an attractive alternative to the automobile for travel to and from Coquitlam City Centre reducing potential commuter traffic on both the Highway #1/ Port Mann Bridge and North Fraser Perimeter Road than if the line were not constructed. Moreover the line is expected to help shape urban development in the Northeast Sector.

While the initial line in 2009 will terminate at Coquitlam City Centre, potential future extensions have been identified to Port Coquitlam and Northeast Coquitlam beyond 2021. The Gateway Program PDR notes that the new high level bridge over the Pitt River will be capable of accommodating a future LRT extension, presumably from Port Coquitlam to Maple Ridge/ Pitt Meadows. While such an extension is not currently contemplated in TransLink's or the GVRD's long range plans, TransLink supports the Province's proposal to construct the bridge to accommodate LRT in the future. TransLink staff will work with the Gateway Program designers to ensure the bridge could structurally support a future LRT crossing and the grades meet LRT standards.

(ii) Coquitlam-Surrey Bus Service (via Port Mann Bridge)

Today there are no bus services connecting Surrey and Coquitlam and this is a significant gap in the regional transit network. Service is not feasible across the Port Mann Bridge due to congestion on the Bridge's approaches. TransLink's Three-Year Plan and 10-Year Outlook has identified the need for direct routes to connect North Surrey with Coquitlam Centre and Surrey/ Langley with Braid Station in New Westminster. These links are contingent upon transit priority facilities being provided at the Port Mann to ensure reliable service. The PDR and other materials have made a significant commitment to ensure the return of an efficient bus transit service across the Bridge as envisaged in TransLink plans. To ensure the success of these services TransLink staff will work with Gateway Program staff to develop specific measures that are attractive to customers and operationally feasible.

In addition, the PDR indicates that the construction of the bridge foundations should allow for the accommodation of light rail transit expansion in the future. While LRT on the Port Mann corridor is not contemplated in TransLink's or the GVRD's long range plans, TransLink staff support the Province's proposal to construct the bridge so that it is capable of accommodating LRT in the future. Staff will work with the Gateway designers to ensure the bridge could structurally support a future LRT crossing and the grades meet LRT standards.

(iii) Highway #1 Transit Service

As noted earlier, TransLink staff support the Gateway Program's conclusion that a high capacity rail service would not be viable on Highway #1. As an alternative, staff suggests that significantly improved bus transit infrastructure would be an appropriate response. In particular, the Program provides an opportunity for an attractive express bus system that offers a high quality of service to users and an alternative to the single occupant vehicle by stitching together a network of special lanes, bus only ramps and Park-ride lots.

Buses offer a high level of operational flexibility and with special lanes and ramping can provide fast service for customers. Buses from Surrey, Langley, Abbotsford (which is outside the GVTA service area), Maple Ridge and Pitt Meadows could collect passengers in existing and future neighbourhoods, travel direct to the Highway #1 park and ride lots and then quickly travel as Express Buses into Surrey City Centre or New Westminster/ Burnaby via special bus ramps and lanes where they would connect with SkyTrain and other transit services

TransLink staff will work with the Province to identify a high quality bus system plan and to include the facilities in the Program's scope.

(iv) Transit Priority Lanes and Queue-Jumpers

Staff also notes that a number of transit priority measures will be required within the Program's projects including, among others, special lanes or other measures on the approaches to the Pitt River Bridge, the Mary Hill Bypass and Highway #17. With respect to the latter, the SFPR proposal to relocate Highway #17 east of Ladner with a new interchange with Highway #99 will potentially increase bus travel times. Alternatives including keeping dedicated bus only ramps to and from the existing Highway #17 and #99 need to be considered in detail. The Program also needs to consider transit access and operations in the design of various roadway elements to ensure pedestrian access to transit services and efficient operation of the services.

(v) Existing SkyTrain Service

The introduction of tolls at the Port Mann Bridge coupled with HOV and transit priority measures along Highway #1 is likely to limit traffic growth and make transit alternatives, including SkyTrain, more attractive.

Increased general-purpose traffic across the Fraser River without tolls will potentially have the reverse effect and may reduce transit use.

The SkyTrain between Surrey and New Westminster across the Fraser River already carries in excess of 60,000 passengers per day. TransLink plans to increase capacity on the system with the purchase of 34 additional cars to be delivered in 2008-2009. As the Gateway Program proceeds TransLink will need to study and manage the effects of Port Mann Bridge/ Highway #1 capacity increases on existing and planned SkyTrain service.

(vi) Future Surrey Rapid Transit Extensions

Transport 2021 and the Livable Region Strategic Plan call for extensions to the region's rapid transit network from Surrey City Centre east to the Guildford Municipal Centre and south to the Newton Municipal Centre and Surrey City Hall by 2021. TransLink has included in its 10-Year Outlook the introduction of Bus Rapid Transit service including a busway along King George Highway in Surrey starting in 2013 subject to cost sharing agreements with senior levels of government.

It is not known what the impact of the Gateway Program would be on the need for these future extensions. The sizable addition to general-purpose traffic capacity in Surrey could potentially delay the timing for providing rapid transit extensions in Surrey. TransLink staff feel more work is required to make this assessment.

d. Major Road Network (MRN)

One of TransLink's mandates is to co-manage the Major Road Network (MRN) with the municipalities. TransLink provides 100% of the cost toward the annual operations, maintenance and rehabilitation of the MRN and also funds up to 50% of the cost of minor capital improvements. The intent is to maintain and increase the people-moving capacity of the MRN, to promote transit use and to facilitate goods movement throughout the region.

The additional capacity proposed for the three Gateway Program corridors may result in some increase in traffic depending in part, on decisions around tolling/pricing. In turn, this may have implications for the sections of MRN and municipal roads that are directly or indirectly connected to the provincial facilities including:

- increased traffic volumes en-route to the Gateway facilities may warrant some capacity or other improvements on the affected MRN roads;

- new access points on the Gateway facilities may result in changes to traffic patterns on the regional network which may require new MRN sections to be added; and

- new truck routes may also need to be established to enhance the efficiency of truck traffic operations as a result of the Gateway Program.

TransLink staff will need to analyze the information on the projected traffic conditions of the regional roadway network in the opening year, 2021 and 2031. It is also important that the Gateway Program include in its budget resources to fund MRN improvements that will be required to complement the changes on the Provincial network.

Over the coming year, staff plans to conduct a review and update of the MRN in conjunction with the municipalities through the Major Road and Transportation Advisory Committee (MRTAC). The review should take into consideration the Gateway Program.

e. GVTA Bridges

In addition to the MRN, the Gateway Program may have effects on two bridges that are funded by TransLink – the Golden Ears Bridge and the Patullo Bridge. Each of these is discussed below.

(i) Golden Ears Bridge

As noted earlier, the Gateway Program in general and the completion of the North Fraser Perimeter Road and the changes at the Pitt River Bridge in particular will assist in ensuring that the transport benefits associated with the Golden Ears Bridge may be optimized.

At present the Pitt River Bridge experiences substantial congestion in rush hour periods and the facility uses reversible lanes to give priority to westbound traffic in the morning rush-hour period and eastbound traffic in the afternoon. Forecasts of traffic on the Golden Ears Bridge suggest that under any scenario, (including with or without a tolled or untolled and twinned Port Mann Bridge) there will be increased demand for traffic in both directions across the Golden Ears Bridge. The 'pinch-point' in these movements will be the Pitt River crossing due to the limited capacity in the non-peak direction arising from the current rush-hour period lane-reversal system.

In the future, with the NFPR in place and the Pitt River Crossing widened, movements in both directions will be better facilitated and there will be a more balanced traffic flow in both directions across the Pitt River River/Golden Ears Crossings as a single system connecting the Northeast Sector with the Township and the City of Langley as well as eastern Surrey. While the Golden Ears Bridge project will provide significant benefits on its own, the transportation system and economic development influence will be greater when the Gateway Program is implemented. The combined initiative with the Gateway Program will greatly improve access to inter-modal yards, ports and other trade gateways as well as access to industrial lands along the Fraser River.

(ii) Pattullo Bridge

The Gateway Program already recognizes the fact that widening the Port Mann/Highway #1 would have an impact on the adjacent Pattullo Bridge.

Any one of the tolling options on Port Mann/Highway #1 would be likely to result in some road users being either unwilling or unable to pay the toll and, as a result, diverting to a "free" Pattullo alternative. Conversely, other users may make a switch the other way, choosing to use a widened and tolled, but quicker Port Mann facility. It may be that the demand on the Pattullo Bridge could go down, stay the same, or increase relative to the scenario where the Port Mann/Highway has not been widened or tolled.

The extent to which traffic may or may not be redistributed between the bridges would depend on a number of factors, including the level of a toll on the Port Mann/Highway #1 corridor, how that toll might vary through the day or by direction of travel, as well as the level of congestion on either facilities.

In considering the potential impact of tolling the existing free Port Mann/Highway #1 corridor on the Pattullo Bridge, the following are noted:

- The Pattullo Bridge is 69 years old. Its lane widths are narrower than those of a similar bridge built today and it is currently operating at full traffic capacity in the peak direction during peak periods.

- Depending on the relative value of time and income levels, etc. of people who wish to drive across the Fraser River, especially those who have less disposable income may tend to use the "free" alternatives; while those who have more disposable income may start using Port Mann Bridge.

- Any potential traffic redistribution of users choosing between the Port Mann and Pattullo Bridges may have implications on the driving patterns and traffic network on both sides of Fraser River. While the 'net' difference in traffic volume on the bridges is forecasted to be small by the Gateway Program, the amount of traffic movements involved in any redistribution would have impacts on the adjacent road networks at the bridgeheads.

- Given that the Pattullo Bridge is heavily congested during rush-hour periods, any increases in volume due to tolling the Port Mann may only be physically possible outside rush-hour periods.

Staff conclude it is an appropriate time to consider the future of the Pattullo Bridge. The scope to be considered in any review of the Pattullo should, by necessity be very broad and include the following considerations:

- The need to replace the structure itself and to deal with the connections on both the north and south approaches, including their connections to the local road system and the proposed NFPR and the SFPR;

- On the northern end to consider whether or not a replacement structure might be combined with the so-called 'Stormont-McBride' connection to Highway #1; and

- Potential synergies with a replacement for the 100+ year-old federal rail swing bridge that is located slightly upstream from the Pattullo Bridge.

In summary, it is concluded that given its current condition, it is not supportable to promote the Pattullo Bridge as "free" alternative, yet it is difficult to see how any potential for increased use could be prevented or managed short of making physical or other changes.

f. Cycling Infrastructure

The PDR has included provision for cycling/ pedestrian facilities as part of the project. The goal of the proposed pedestrian/cyclist improvements is to provide cycling and pedestrian access along and across the three Gateway corridors. Improvements focus on accommodating commuter cyclists. Specifically, cyclists will:

- Be accommodated on the highways or on parallel local routes along the SFPR and NFPR;

- Be provided facilities on most crossings of all corridors to provide access to and from the local road network, or to complete connections across the corridor;

- Continue to be prohibited from using Highway #1, except for the Port Mann Bridge where a separated path for pedestrians and cyclists will be provided.

The Gateway Program proposes $50 million for the above improvements. In addition, $10 million is identified for cost-sharing improvements with municipalities for off-corridor projects that will enhance the overall effectiveness of the regional cycling network. It is important to note that the program also appears to include crossings of Highway #1 and segments of road on and parallel to the NFPR and SFPR. However, it also appears as though the Gateway Program has not included construction of cycling facilities parallel to Highway #1 or cycling facilities that cross either the SFPR or sections of the NFPR.

Staff support the commitment made to cycling improvements in the PDR however, there may be opportunities to increase the benefit of cycling investments and to mitigate impacts on local road networks by applying a portion of the funding allocated for Gateway cycling improvements to cycling network improvements between the Gateway routes and local destinations.

Gateway cycling improvements are generally targeted at experienced cyclists who are comfortable cycling in traffic. However, the success of Vancouver's Bikeway

Program and the Galloping Goose Trail in the Capital Regional District suggest that cyclists prefer to travel on routes that are separated from traffic or on quiet residential streets. In order to maximize the benefit of Gateway related cycling improvements, staff suggest that MoT look at investing in creating parallel corridors that are comfortable, direct, and separated, to the greatest extent possible, from vehicle traffic. Such a network would serve a broader cross-section of the region's residents and may have some potential to provide a draw for tourists.

A potential east-west route that would parallel Highway #1 through Burnaby is the Central Valley Greenway (CVG) project. In Coquitlam, the Gateway report refers to Lougheed Highway as the cycling Gateway to Vancouver. Lougheed through Coquitlam has recently been changed, with numerous access points and driveways constructed along the route and the removal of shoulders to safely accommodate bikes.

Finally the report indicates that the $10 million for complementary facilities could be released before construction begins.

4. Complementary Investment Strategy

In addition to the investments proposed to be undertaken by the MoT as components of the Gateway Program there are a large number of other complementary investments that need to be made to ensure that the network of roads and transit services in the region function as one optimal network. The importance of the concept of a regional network cannot be understated, because in urban areas there are multiple origins and destinations for both passenger and goods movement and no single facility or service can address all the issues. Moreover the vast majority of both passenger and goods movements are made within the region alone.

As a result, to some degree the network is only as strong as its weakest components and a broad, holistic approach is needed to improving the overall system. Such a view also needs to explicitly recognize the relationship and dependencies between passenger and goods movement, transit and private vehicles, etc. The following sections briefly discuss some of these considerations in relation to the physical, policy and funding aspects of the Gateway Program proposals.

a. Evergreen Line

TransLink is currently working with the Province and the directly affected municipalities to develop the Evergreen LRT line from Lougheed Town Centre in Burnaby to Coquitlam City Centre in the Northeast Sector. Combined with the opening of the Canada Line in 2009 this line will substantially complete much of the region's 2006 rapid transit network and connect many of the designated Regional Town Centres (RTCs) by fast, reliable rail-based transit.

The Evergreen Line will provide an attractive alternative for travel in the Northeast Sector as well as travel to Burnaby, Vancouver, New Westminster and Surrey through connections to the existing SkyTrain system. At present there is a

shortfall in funding for the Evergreen Line that is estimated to be in the range of $230 million. It is critical that this link be completed at the same time as the significant investment being made in road infrastructure.

In the past the Provincial contribution to other rapid transit lines has either been 100% (Expo and Millennium Lines) or matched that of TransLink (Canada Line) and without increased funding the Evergreen Line may not be able to be completed. It is proposed that the TransLink cost share up to 50% of the capital cost of the Evergreen Line with the Province.

b. Pattullo Bridge

The current provincial tolling policy calls for a 'free' alternative to a tolled facility. This approach is well suited to some situations, particularly in relation to rural point-to-point intercity travel such as the Coquihalla Highway. However in urban areas like Greater Vancouver it presents a considerable challenge in relation to the Pattullo Bridge as a possible 'free' alternative to a widened but priced Port Mann/Highway #1 corridor.

Nonetheless if the Pattullo Bridge does, by default, become a free alternative, then the Province should contribute to improving the facility (or bridge replacement) and the approaches and connections on either end as part of the Gateway Program. TransLink staff propose that a dialogue should begin on the future of the bridge and that no action on the Port Mann Bridge widening be undertaken until a longer term strategy has been agreed on for the Pattullo Bridge.

c. North Fraser Perimeter Road

The NFPR is something of an anomaly in that the western section (Queensborough Bridge to United Boulevard.) is currently in TransLink's Three-Year Plan (approved Strategic Transportation Plan), while the eastern section from United Boulevard to Maple Ridge is in the Gateway Program. TransLink staff believe there would be efficiencies in coordination of planning, delivery and management of the project if it were delivered by one agency.

The current TransLink financial commitment to the project is $60 million, which was based on the estimate prepared by the City of New Westminster in 2002. TransLink staff propose that the $60 million that has been committed be transferred to the Province if it is willing to takeover the entire project. Unless the western section, is completed concurrently with the eastern Provincial component the system will clearly not meet its objectives.

5. Impact on Regional Growth Strategy

One of the consequences of the Gateway Program will be to significantly improve access from either side of the Fraser River to the other. The GVRD Livable Region Strategic Plan and the joint GVRD/Provincial Transport 2021, Long Range Transportation Plan (1993), both assumed that there would only be HOV lanes added to the Port Mann Bridge. As a result, without appropriate land use plans in place, the increased general capacity could have some impact on regional land use and potentially encouraging increased amounts of low-density development into the Fraser Valley. In turn, this could lead to increased traffic volumes and place greater pressure on the improved road system and Port Mann Bridge, earlier than it may otherwise occur. This would occur much sooner if the Highway #1/Port Mann corridor was 'untolled'.

This serves to highlight the need for the Province, GVRD, FVRD and affected municipalities to examine the degree to which land use plans and controls may need to be reviewed as part of the Gateway Program. It may be that more definitive plans will be needed to determine the nature, phasing and location of growth to minimize the risk of the newly expanded system quickly reaching saturation in terms of congestion. This could potentially be addressed as part of the update to the GVRD's Growth Management Plan (currently referred to as the LRSP). It may also serve to highlight the need for a new economic development strategy for the region that explicitly addresses the needs of industry. This could be both in terms of location for activities but also in ensuring that the improved movement of goods in the region is not quickly overwhelmed by commuter and other automobile traffic.

CONCLUSION

This report provides a high-level review of the Province's Gateway Program 'Project Definition Report' and related documents. Given that the project has been underway for over two years, it is not possible to comment in more detail at this time. Overall staff have assumed that the program should be treated as a 'given', and much of the project, in a physical sense (e.g. NFPR and SFPR) is compatible with approved regional plans.

The exception to this is the proposed widening of the Port Mann Bridge and Highway #1. However, with an appropriate tolling regime in place, combined with defined lane priority allocation to transit, HOV and goods vehicles ahead of single occupant vehicles and complementary transit investment, the program can be supported. Moreover it will allow improved transit service along Highway # 1 and across the Fraser River in general and between Surrey and Coquitlam Regional Town Centres in particular.

Staff conclude that, even though the Highway #1/ Port Mann Bridge is a very challenging public policy issue, now is the time to start a broader dialogue on tolling and other road user charges as a means to both manage demand for and to fund the region's transportation needs including additional transit services. Any such policies will need to be crafted giving due consideration not only to revenue and demand-side management effects, but also to the potential secondary effects of tolling such as traffic diversion to 'free' alternatives.

Appendix B. – List of City's Requested Changes to GVTA Staff Report (for Recommendation B.)

i) Include in the proposed review of tolls and other transport pricing mechanisms with the Ministry, further evaluation of distance-based tolls on Highway 1, west of the Port Mann Bridge;

ii) Include a GVTA recommendation for the province, GVTA and municipalities to work together on a regional HOV strategy, including a review of possible actions for implementing a more effective HOV lane monitoring and enforcement program;

iii) (iii)Amend GVTA Recommendation D., which requests the Province provide 50% cost-sharing with the GVTA on capital expenditures for the Evergreen Line and Fast Bus transit on Highway #1, to also request similar support for cost-sharing between the GVTA and Province for the extension of Rapid Transit along the Broadway corridor west from Commercial Drive;

iv) Include a GVTA report back on a high level review of future rail transit service and bus fleet expansion, needed to serve the region between 2021 and 2031; and

v) Include a GVTA recommendation that the GVTA consider a partnership with the Ministry of Transportation and the federal government, to expand the region's transportation model to include the PM peak and mid-day period.

Building A Sustainable Region
www.gvrd.bc.ca
Greater Vancouver Regional District
4330 Kingsway, Burnaby, BC, Canada V5H 4G8
Greater Vancouver Regional District • Greater Vancouver Water District
Greater Vancouver Sewerage and Drainage District • Greater Vancouver Housing Corporation

Board Meeting Date: April 21, 2006

To: GVRD Board of Directors

From: Land Use and Transportation Committee

Date: April 10, 2006

Subject: GVRD Response to the Provincial Gateway Program

Recommendation:
That the GVRD Board:
a) receive and refer the report dated March 30, 2006, titled "GVRD Response to the Provincial Gateway Program" to member municipalities for comment; and,
b) request Gateway Program representatives to meet with the GVRD and GVTA Boards.

The attached report titled "GVRD Response to the Provincial Gateway Program", dated March 30, 2006, was considered at the April 7, 2006, meeting of the Land Use and Transportation Committee, following discussion at a special joint meeting of the Committee and the Greater Vancouver Transportation Authority (GVTA) Board.

It was agreed during the Committee discussion that prior to the GVRD Board considering its position on the provincial Gateway Program, the staff report should be forwarded to GVRD member municipalities for comment on its content and recommendations. The resulting feedback would be compiled and summarized in a report back to the Board through the Land Use and Transportation Committee, as input to the ensuing Board discussion.

The Land Use and Transportation Committee also requested staff to arrange a Council-of-Councils to discuss the Gateway Program.

Attachment:
GVRD staff report titled "GVRD Response to the Provincial Gateway Program", dated March 30, 2006

Committee Meeting Date: April 7, 2006

To: Land Use and Transportation Committee

From: Hugh Kellas, Manager
Policy and Planning Department

Date: March 30, 2006

Subject: GVRD Response to the Provincial Gateway Program

Recommendations:

a) That the GVRD Board advise the Minister of Transportation that the Board:
   1. Supports the overall goals of the provincial Gateway Program to improve the movement of people and goods in and through the region, improve access to key economic gateways, reduce vehicle emissions, facilitate better connections to transit and other alternative modes, improve the quality of life in communities, and improve road safety and reliability;
   2. Finds that the provincial Gateway Program proposals to increase general purpose traffic capacity on the twinned Port Mann Bridge, the widened Highway 1 west of the Port Mann Bridge, and the new Pitt River Bridge are not consistent with the Livable Region Strategic Plan;
   3. Supports the proposed North Fraser Perimeter Road, the new Pitt River Bridge, the South Fraser Perimeter Road, the widening of Highway 1 east of the Port Mann Bridge, and the extension of HOV lanes in the Highway 1 corridor, provided that:
      i) The New Pitt River Bridge includes dedicated HOV capacity, or an appropriate commitment to introduce HOV capacity on the new bridge when congestion levels warrant it and when a contiguous HOV system is established;
      ii) Prior to proceeding with the South Fraser Perimeter Road project, a strategy is developed, in consultation with the GVRD and affected communities, to mitigate and compensate for the impacts of this facility on agricultural and regional Green Zone lands, including regional parks;
      iii) A comprehensive regional demand management strategy is developed, including regional transport pricing and tolling, in collaboration with the GVTA;
      iv) A regional goods movement strategy is developed in collaboration with the GVTA and other regional partners to ensure that improvements to the movement of goods achieved through new or expanded roads and highways are maintained in the long-term as congestion levels rise;
      v) Early and on-going consultation with the GVRD is undertaken regarding the impacts of Gateway Program projects on regional utilities, and that prior to these projects proceeding, agreements are reached between the province and the GVRD regarding measures to protect, relocate and/or compensate for impacted regional utilities;

b) That the GVRD Board request the GVTA Board to advise the Board on the implications of the proposals to twin the Port Mann Bridge and widen Highway 1 ahead of the timing assumed within the regional growth management strategy, specifically with regards to:
   1. Whether proceeding with these projects in a similar time frame as other provincial government transportation projects within Greater Vancouver, and regional transportation priorities identified in the GVTA's Strategic Transportation Plan and 10-Year Outlook, is the most efficient and cost-effective phasing of these initiatives for achieving regional transportation objectives;
   2. Whether deferring these projects and proceeding with the currently committed Golden Ears Bridge, replacement of the Pitt River Bridge, improved transit connections to the regional rapid transit system and the introduction of transportation demand management measures such as tolls, would adequately address the need to improve the movement of people and goods in this corridor;
c) That the GVRD Board request the provincial Gateway Program to provide the GVRD with the land use and growth management assumptions used in the development of Gateway Program proposals;
d) That the GVRD Board direct staff to report back on the results of the GVTA's analysis of the Port Mann Bridge and Highway 1 projects, the information provided by the Gateway Program on land use and growth management assumptions, and the implications of advancing these projects on:
   1. The timing and funding of regional utility programs;
   2. What new measures may be required to ensure that regional growth management objectives will be achieved in the affected parts of the region;
   3. The implications for Greater Vancouver's air quality and greenhouse gas objectives;
   4. The implications for regional parks and the regional Green Zone.

1. PURPOSE

This report provides a preliminary GVRD Board response to the provincial government's Gateway Program proposals to build or expand three major roads/highways in Greater Vancouver. The report outlines the proposals described in the Gateway Program's Program Definition Report, which was released in January 2006, and provides a high-level analysis of how the proposals relate to adopted plans, policies and mandates of the GVRD.

This report is brought forward at this time in order for the Board to be fully apprised of the province's intentions, and to ensure that regional interests and concerns are identified prior to the end of the Gateway Program's current round of public consultation (which is understood to end in late April/early May). A subsequent report is proposed to address the more detailed implications of these proposals on regional land use, air quality and transportation.

2. CONTEXT

Board Resolutions and Consultation

The GVRD has several key interests in the Gateway Program projects, including their relationship with regional growth management objectives, the implications for local and regional air quality, the impacts on regional sewer and water utilities, and the impacts on the regional Green Zone and regional parks.

The GVRD Board has passed resolutions on the Gateway Program on four separate occasions over the last two years. These resolutions are included in Attachment A. A GVRD

staff report on the preliminary Gateway Program proposals was presented to the Board on February 25, 2005. In consideration of that report, the Board requested a meeting with the Minister of Transportation and Gateway Program staff to discuss the Board's interests in the Gateway Program. That meeting did not proceed.

Gateway Program staff have been meeting with municipal staff and the GVTA about the overall Program and site specific issues, and have been working with the GVTA to identify potential transit improvements that could be developed as a result of the proposed projects. GVRD staff have attended several meetings of the Gateway Program Municipal Advisory Committee, and have advised that Committee on the regional growth management and transportation priorities for the subject corridors. That Committee has not met since mid-2005. Gateway Program staff briefed the GVRD's (former) Planning and Environment Committee on October 20, 2004.

The Gateway Program is conducting pre-design public consultation through April of this year regarding the proposals for the Port Mann Bridge and Highway 1 (which can be considered as one large project made up of many components). This consultation is focusing on the proposed interchanges, HOV expansion, transit and commercial vehicle priority measures, cycling improvements, and the potential use of tolls. The project will be subject to the harmonized federal and provincial environmental review process, with the pre-application process expected to begin this year. GVRD staff will likely participate in that review.

The South Fraser Perimeter Road project is also subject to a harmonized environmental assessment under federal and provincial legislation. The pre-application process is nearing completion, and the formal application process is expected to begin in the near future. GVRD staff have participated on the environmental assessment working groups which provided input to this process. Pre-design public consultation on individual elements of the project are either complete or underway.

Pre-design public consultation has been undertaken on the Pitt River Bridge and Mary Hill Interchange proposals. These projects are only subject to review under the *Canadian Environmental Assessment Act,* which is currently underway.

Overview of Gateway Program Proposals

Gateway Program proposals are described in detail in the *Program Definition Report*, published on January 31, 2006. This is the first public document to outline the full Gateway Program and its rationale. The summary report is included in Attachment B; the full report and background papers are available on-line at www.gatewayprogram.bc.ca. The following is a summary of the proposals.

Highway 1

- While there are some variations, the basic proposal is to add 2-4 lanes between McGill Street in Vancouver and 216th Street in Langley, resulting in a mix of 6-8 lanes in the expanded highway;
- Extension of continuous eastbound and westbound High Occupancy Vehicle (HOV) lanes are proposed for most of the corridor;
- Transit/HOV queue jumpers and commercial vehicle priority measures are being considered at several interchanges.

Port Mann Bridge

- The proposal is to construct a new, 4-lane bridge on the downstream or west side of the existing bridge. The new bridge would handle eastbound traffic, and the existing bridge would handle westbound traffic. Eastbound and westbound HOV lanes are proposed. A barrier-separated pedestrian and cycle path across the bridge is also proposed.
- The new bridge's foundations would be designed to accommodate a potential light rail facility in the future.
- The province is proposing, but not yet confirming, that the bridge would be a tolled facility, with an initial suggestion of a $2.50 toll in each direction for passenger cars. Trucks may pay more and motorcycles may pay less. Reduced rates for High Occupancy Vehicles and off-peak periods are being considered.

North Fraser Perimeter Road

- The provincial government's portion of this project stretches from King Edward Street in Coquitlam to Maple Meadows Way near the border of Pitt Meadows and Maple Ridge. The GVTA portion extends west through New Westminster.
- The existing Pitt River swing bridges on Highway 7 would be replaced with a new, high level 6-lane bridge, with an additional auxiliary truck lane in the eastbound direction. The foundations would be designed to accommodate additional width in the event light rail transit is extended across the bridge in the future. HOV lanes are not included in the bridge proposal.
- A new Mary Hill Interchange would be constructed.
- The balance of the project is in earlier stages of planning, but may include intersection improvements at various locations, extension of the westbound HOV lane in Pitt Meadows, and widening of the Lougheed Highway to six lanes between Harris Road and the Golden Ears Bridge.

South Fraser Perimeter Road

- This new facility is conceived as a 4-lane, divided roadway/expressway along the south shore of the Fraser River through Delta and Surrey, including connections to adjacent industrial sites, highways and the new Golden Ears Bridge.
- All lanes will be open to general purpose traffic.
- There are two remaining alignment options for the southwest end of the facility in Delta where it connects to Highway 17 and provides access to Deltaport Way.

Estimated Program Costs

The Gateway Program's initial estimated project costs are as follows:

Highway 1 and Port Mann Bridge:	$1.5 billion
South Fraser Perimeter Road:	$800 million
North Fraser Perimeter Road:	$400 million
Contingency:	$300 million
Total estimated cost:	$3 billion

Gateway Program Status

The Program Definition Report outlines the proposed timing of each project element, as described in Table 1 below. It should be noted that the three projects represent a major period of construction in the region going out to 2013, in some cases concurrent with other major transportation projects, such as those associated with the 2010 Olympic Winter Games, rapid transit expansion in two corridors, and other projects identified in the GVTA's

3-Year Strategic Transportation Plan and 10-Year Outlook. The timing and funding of Gateway Program projects may have implications for these other initiatives.

Table 1: Gateway Program Development Preliminary Schedule

	Port Mann Bridge/ Highway 1	**SFPR**	**Pitt River Bridge Project**
Pre-design consultation	2006	2006	Complete
Environmental Assessment	2006 - 2007	2006	2006
Start of Procurement	2007	2006	2006
Design and Construction	2008 - 2013	2007 - 2012	2006 - 2009

Source: Gateway Program Definition Report, January 31, 2006

Jurisdictional Context

The Gateway Program proposes bridge and highway projects that are primarily part of the provincial highway system, and therefore within provincial jurisdiction. Projects of this scale have significant implications for connecting roads and other facilities that are within local and GVTA jurisdiction, as well as the overall function of the regional transportation system.

The *Local Government Act* states that all bylaws, works and services of the GVRD Boards (including the GVS&DD and GVWD Boards) must be consistent with the regional growth strategy. This requirement may have implications for how the Board responds to specific elements of the Gateway Program.

In 1996 the GVRD Board and the provincial government entered into a "Master Implementation Agreement," in which both parties agreed to work together in a coordinated manner to ensure their mutual involvement in "program proposals that will affect the Greater Vancouver region," and to "work towards the implementation of the Livable Region Strategic Plan." The status of this agreement is unclear.

The *Greater Vancouver Transportation Authority Act* says that the GVTA must review and advise the GVRD, the municipalities and the provincial government regarding the implications to the regional transportation system of major development proposals and provincial highway infrastructure plans in the transportation service region. This responsibility would appear to apply to the Gateway Program.

Growth Management Implications of Gateway Program Proposals

Overall Comments

Gateway Program literature identifies a range of goals the Program is trying to achieve, including congestion relief, improving the movement of people and goods, improving access to key economic gateways, reducing vehicle emissions associated with congestion-related idling, facilitating better connections to transit and other alternative modes, improving the quality of life in communities by keeping regional traffic on regional roads, and improving road safety and reliability. These goals are consistent with regional growth management objectives and principles of economic, social and environmental sustainability.

The Gateway Program is primarily, though not exclusively, a supply-side approach to addressing these goals. However, the Livable Region Strategic Plan and Transport 2021, adopted in 1996 and 1994 respectively, together pursue the vision of a more livable region through a balanced application of several policy "levers", including land use management, transportation supply and transportation demand management (TDM). It is this last pillar of

managing regional growth, transportation demand management, that has seen the least progress over the decade since the LRSP was adopted, and does not appear to be a fundamental building block of the Gateway Program. In particular, the road capacity increases being proposed by the province are not being brought forward in context with a comprehensive regional strategy for managing transportation demand to make the best use of existing and new transportation infrastructure, reduce auto-dependency and reinforce regional growth management objectives. In addition, there is no clear strategy for maintaining the anticipated gains for goods movement over the longer-term as congestion levels on the new/expanded highways rise. As noted in the Transport 2021 Long-Range Transportation Plan, all of the policy levers must operate successfully and consistent with the Plan in order to achieve the region's objectives for growth management and transportation. If not, the Plan would require amendment.

North Fraser Perimeter Road
The proposed North Fraser Perimeter Road is generally consistent with the LRSP and associated GVRD mandates, although the additional general purpose traffic capacity over the new Pitt River Bridge is not part of the LRSP, and the province is not including HOV capacity on the bridge as called for in the Plan. These variances from the growth strategy could be addressed through the inclusion of dedicated HOV capacity on the new Pitt River Bridge, or an appropriate commitment to introduce HOV capacity when congestion levels warrant it and when a contiguous HOV system is established.

Concerns have been expressed about the possible impacts of this facility on downtown New Westminster. This is an important regional town centre which is expected to continue to grow as a job, service and housing centre for the region. As such, design and implementation of the proposed road should protect, and ideally enhance, the livability and attractiveness of this centre.

South Fraser Perimeter Road
The South Fraser Perimeter Road is generally consistent with the LRSP. However, there are several outstanding areas of concern: efficiency of the route for goods movement, Green Zone impacts (discussed later in this report), and impacts on waterfront accessibility.

The LRSP identifies the South Fraser Perimeter Road as an important goods movement corridor linking industrial areas to Deltaport, regional highways and other destinations. A large portion of the region's future industrial land supply is located south of the Fraser River, so this facility will play a key role in the future of these lands. The province's proposal does not at this time include significant priority measures for goods movement in this corridor (ie. dedicated lanes). While goods movement will no doubt be enhanced by this facility in the near term, the fact that it is being designed as a general purpose roadway/expressway, which may also function as an untolled alternative commuter route to the new Port Mann Bridge, draws its long-term effectiveness as a goods movement corridor into question. A clear strategy to maintain the goods movement improvements in the longer-term would be desirable, and should be part of a broader regional goods movement strategy.

Long stretches of this road would run adjacent to the Fraser River. While there are existing impediments to waterfront access in this corridor (eg. the railroad tracks), the proposed road could further sever the adjoining urban areas from the River's edge. While accessibility to the Fraser River waterfront is not an explicit GVRD mandate, building accessible, livable communities is a regional objective. It would therefore seem appropriate for this project to be designed in a manner that responds to this objective and offer adjacent communities the most accessibility to the waterfront that can practically be achieved.

Port Mann Bridge and Highway #1

The Gateway Program proposals for extending the HOV system and providing additional highway capacity east of the Port Mann Bridge are consistent with the LRSP. The proposed additional general purpose traffic capacity on the twinned Port Mann Bridge, and the widening of Highway 1 west of the Bridge, are not consistent with the LRSP. These latter components of the Gateway Program present the greatest challenge to the objectives for a compact metropolitan region and increasing transportation choice. The Board has previously identified a number of questions and concerns it believes should be addressed before these projects proceed (Attachment A). To date, the province has not directly responded to the Board's requests. The Program Definition Report and its supporting studies provide some relevant information, but there has been insufficient time to thoroughly review and assess the available information and identify the specific implications of these projects for regional priorities and the review of the Livable Region Strategic Plan.

The Port Mann Bridge and Highway 1 proposals appear to be based upon several assertions directly related to implementation of the Livable Region Strategic Plan: that the distribution of employment growth is not proceeding in a manner consistent with the LRSP, that emerging commuting patterns and congestions levels were not anticipated by the Plan, and that the region's transportation plans and priorities are either insufficient or inappropriate to address the region's travel and economic development needs. These assertions do not tell the complete story. For example:

- The ratio of jobs to labour force in the sub-region containing Surrey, White Rock, Delta and the Langleys increased during the 1990s, and the percentage of people who lived and worked within the sub-region grew between 1996 and 2001. Working towards a balance of jobs to labour force is an objective of the LRSP, since a good match between where people live and work decreases the need for long distance commuting. Having over 62% of the region's total industrial land supply and over 80% of the vacant industrial land located south of the Fraser River should reinforce this objective.
- The continued growth of major centres, such as Surrey City Regional Town Centre, will further reduce the need for people to travel out of their home sub-region. Surrey City Centre is likely to become one of Greater Vancouver's largest regional town centres, as evidenced by the over 800,000 square feet of occupied office space in the Central City Tower, the presence of SFU Surrey Centre, and continued demand for housing near this key growth centre for the region.
- The LRSP and Transport 2021 anticipated more complex travel patterns within the region, and called for new roads and transit investments to support these patterns and improve the links between major centres and sub-regions.
- Substantial investments in transportation infrastructure have been made by the GVTA since its establishment in 1999. While some transit targets established in the early 1990s have not yet been met, plans are in place and projects are underway to respond to the region's transportation needs through road and transit improvements consistent with the LRSP.

Notwithstanding the progress in managing regional growth and improving the regional transportation system, many issues remain and much work needs to be done. The issues raised in the Program Definition Report are real, and the underlying assertions require close examination, since they raise fundamental questions about the Board's growth management strategy, and the outcome will have a significant impact on the future growth of the region.
Transport 2021 acknowledged that in the long-term there may be a need to add additional lanes to various water crossings and highways within Greater Vancouver, including the Port Mann Bridge/Highway 1 corridor. However, within the 30-year time frame of the plan (ie. to 2021) the balanced application of land use controls, transportation supply and demand

management was seen as the priority before such projects should be contemplated. Advancing the Port Mann Bridge and Highway 1 projects far ahead of the timing assumed within Transport 2021 and the LRSP may in the end prove necessary, but should not proceed until the implications of this change on the Board's growth management objectives are thoroughly examined, and it has been demonstrated that there are no practical alternatives which are more consistent with established priorities.

Air Quality and Greenhouse Gas Implications

The Program Definition Report notes that the proposed projects may result in a small increase in vehicle emissions in 2021 over what would otherwise be expected if the projects did not proceed. This is likely the result of the emission improvements resulting from reduced engine idling being offset by increased traffic volumes induced by the expanded road capacity. While the increase may be small relative to the entire region's emissions, there is potential for these projected increases to have a disproportionate impact at the local level (ie. neighbourhoods in close proximity to the proposed routes). In addition, vehicles represent about a third of greenhouse gas production in Greater Vancouver. Minimizing the region's contribution to global climate change will be difficult without addressing transportation. It may be that the emission impacts could be further reduced through transportation demand management measures, such as the proposed tolls.

The GVRD is currently in compliance with the federal Canada-Wide Standard for ozone. However, future increases in emissions arising from transportation or other sources may lead to exceedances of this standard. Therefore, the potential impacts of the Gateway Program on the region's compliance with the Canada-Wide Standards should be evaluated.

To properly assess future air quality in the region, it will be important to understand how the projects will affect future growth and transportation patterns. A regional air quality assessment should provide estimates of future emissions and ambient air quality based upon scenarios with and without the Gateway Program. The assessment should also evaluate the implications of the projects for the objectives of the new Air Quality Management Plan (AQMP) adopted by the Board in October 2005. Staff understand that a regional air quality assessment of the entire Gateway Program is being prepared, and will advise the Board on the results when they are available.

Regional Utilities

The Gateway Program includes the construction of roads and bridges that could impact existing and planned GVRD utilities, unless proper coordination takes place. The best way to avoid negative impacts is for the Gateway Program to initiate and coordinate a process for the timely exchange of information and decisions regarding conflicts with regional utilities. In addition, an agreement should be reached between the GVRD and the province prior to any related construction in order to protect regional utilities, avoid service disruptions, identify and develop opportunities to pre-build some utility crossings, and address compensation to the GVRD as appropriate.

A preliminary list of locations where Gateway Program construction could affect existing or planned GVRD utilities includes:

- The Highway 1 widening project crosses the Douglas Road Water Main, the Barnston Island Water Main, and the Still Creek-Brunette River Drainage Area facilities. Also, unless the Gateway program properly manages additional rainwater runoff from the new pavement, there will be more runoff, which could result in a higher risk of flooding.

- The North Fraser Perimeter Road will likely cross the existing Port Mann Water Main, the planned Port Mann Water Main Crossing #2, and the existing Braid Street Sewer Overflow.
- The Pitt River Bridge replacement will likely be close to the existing Haney Water Mains #1, 2, 3.
- The new South Fraser Perimeter Road will likely be close to the existing River Road Water Main, the existing Port Mann Water Main, the planned Annacis Water Main #3, and the existing North Surrey Sewer Interceptor.

It will also be important for best management practices and standards to be agreed to prior to construction and operation of Gateway Program projects, in order to address runoff, sediment, erosion and other potential impacts on the environment.

Regional Parks and Green Zone

Gateway Program projects will have varying implications for regional parks. Proposed facilities such as the Pitt River Bridge could be an asset for the development and use of regional greenways. The South Fraser Perimeter Road raises concerns about impacts on the Burns Bog Ecological Conservation Area and access to Deas Island and Tynehead Regional Parks. The proposed widening of Highway 1 could impact Burnaby Lake and Colony Farm Regional Parks. These matters should be the subject of early and on-going consultation with the GVRD and municipalities during the design and implementation of these facilities, if they proceed.

An agricultural impact study has been commissioned as part of the environmental assessment process associated with the South Fraser Perimeter Road project, but the results are not yet available. Preliminary work undertaken by the Gateway Program suggests that up to 80 hectares of agricultural land may be required for the new road, and several farms may be severed by the right-of-way. A strategy should be developed in consultation with the GVRD and affected communities to mitigate and compensate for the impacts of the facility on agricultural and regional Green Zone lands, and to enhance habitat connectivity in the vicinity of the project.

In addition to regional parks, the Highway 1/Port Mann Bridge projects will pass through or adjacent to important agricultural, habitat and wetland areas. Potential impacts have not yet been determined, so it is not possible at this time to identify appropriate measures to mitigate these impacts.

The Pitt River Bridge and Mary Hill Interchange elements of the North Fraser Perimeter Road could potentially impact Green Zone and riparian areas along the Fraser and Pitt Rivers. Based on the associated *Canadian Environmental Assessment Act* Screening Level Report submitted in July 2005, and consultations with Gateway Program representatives, it would appear that appropriate measures are being taken to minimize these impacts.

3. ALTERNATIVES

The GVRD Board may:

a) Provide a preliminary response to the provincial Gateway Program, in order to identify GVRD interests within the province's current round of public consultation, confirm which aspects of the Gateway Program are consistent with these interests (and under what conditions), and to indicate that the Board intends to provide further input once additional information is available and more detailed assessments of the Gateway Program proposals are complete. The staff recommendations reflect this approach.

OR

b) Defer offering a preliminary GVRD response, pending more comprehensive analysis and discussion between the GVRD, GVTA and municipalities. This would enable a more complete response to the Gateway Program proposals, but would not provide early notice to the province on areas of agreement and concern within the current round of consultations.

OR

c) Accept the full scope of the Gateway Program as presented by the provincial government in its Program Definition Report. Accepting the full scope of the Gateway Program now would reflect the fact that many aspects of the Program are generally consistent with established regional priorities. At the same time, it would require the GVRD Board to accept elements of the Program that have not been thoroughly assessed from a regional perspective, and which are not fully consistent with the Livable Region Strategic Plan. In addition, accepting all Gateway Program proposals outright may be seen as an indication that the Board intends to adjust its growth management and transportation objectives to accommodate the proposals without seeking further commitments from the province.

4. CONCLUSION

The Gateway Program is a provincial government initiative which proposes several major transportation projects within Greater Vancouver. Many elements of the Gateway Program are to varying degrees supportive of the directions contained within the Livable Region Strategic Plan, and will help to improve accessibility, reduce congestion, and improve the movement of goods and transit. The increased general purpose road capacity proposed on the twinned Port Mann Bridge, new Pitt River Bridge and widened Highway 1 west of the Port Mann Bridge is not consistent with the directions of the LRSP. Since the current round of public consultation on the Gateway Program is nearing completion, it is recommended that the Board advise the provincial government of those aspects of the Program that are compatible with regional plans, as well as the outstanding areas of concern that require additional consultation and analysis to properly assess their impacts on regional interests.

Attachments:
A. Resolutions of the GVRD Board Regarding the Provincial Gateway Program
B. Program Definition Report Summary, dated January 31, 2006

004364639

Attachment A

RESOLUTIONS OF THE GVRD BOARD REGARDING THE PROVINCIAL GATEWAY PROGRAM

On Friday, April 1, 2005, the Board resolved:

"WHEREAS:
The BC Ministry of Transportation Gateway Initiative has identified urgent transportation needs in the Lower Mainland, including:

- economic costs in the range of $1.5 billion/yr. from road congestion
- growing and intolerable congestion on the Port Mann Bridge
- constraints to goods movement by road in the Lower Mainland

Various initiatives are being proposed as a solution, including twinning the Port Mann Bridge and adding two lanes to the #1 Trans-Canada Highway between McGill St. in Vancouver and Langley.

The cost estimate of all the initiatives is between $3-5 billion, or approximately $2,000 per person in the Lower Mainland.

Evidence in other cities shows that adding road capacity does not solve congestion except in the short term.

The highway widening will have a direct impact on traffic volumes along the east-west arterials in the City of Vancouver.

THEREFORE BE IT RESOLVED THAT:
The GVRD Board requests answers to the following questions from the Ministry of Transportation Gateway team, before committing to accommodating the proposed increase in road supply:

- Based on what evidence will twinning the Port Mann Bridge and widening the #1 freeway solve the congestion problem?
- How does this project fit with the priorities in TransLink's Strategic Transportation Plan, the GVRD Livable Region Strategic Plan, the GVRD Sustainable Region Initiative, the Vancouver City Transportation Plan and the Vancouver Climate Change Action Plan?
- Will the additional traffic on an expanded freeway add to air quality problems and greenhouse gas emissions? If air quality is reduced, have the resulting health costs been factored into the cost of the project?
- What will be the impact of added freeway capacity on financial returns from bridge and transit infrastructure improvements already committed or under construction?
- What transportation demand and other alternative options, costs and benefits have been assessed and compared with the proposals to increase road supply?
- Is there an expectation of widened arterial streets in adjacent municipalities to access the expanded freeway? If so, are the costs of these widenings included in the proposed budget?
- How does this project meet the commitment to sustainability in the Vancouver 2010 transportation plan? ("We will reduce energy use, minimize local air pollution and congestion, limit greenhouse gas emissions, and showcase new technologies while ensuring safe, reliable and efficient movement of people and goods during the Games.")
- How are the impacts of the Gateway Program on the Regional and Provincial economy and specifically the movement of goods in our region being addressed?"

On February 25, 2005, the Board resolved:

That the GVRD Board:

a) Request the Ministry of Transportation and Gateway Program staff to consult with the Board on the following issues regarding the provincial Gateway Program prior to finalizing the scope of specific projects:
   - Short and long-term impacts on land use and development within the affected corridors;
   - The extent of Green Zone and agricultural lands impacted by individual projects, and mitigation measures that may be required to reduce or offset such impacts;
   - Local and regional air quality impacts and Greenhouse Gas emissions associated with changes in traffic flows, patterns and mode shares, and measures to ensure air quality will not be reduced through net increases in emissions;
   - Potential impacts of increased general purpose vehicle capacity on regional High Occupancy Vehicle (HOV), transit, single-occupant vehicle and transportation demand management objectives;
   - The regional traffic impacts of tolls on a twinned Port Mann Bridge, and what additional demand management measures may be required to address these impacts and achieve an efficient and equitable regional transportation system;
   - Measures to protect goods movement capacity as congestion levels rise over time;
   - Measures to mitigate potential traffic increases in the affected communities;

b) Request a meeting between the Minister of Transportation, Gateway Program staff and the Board to discuss the Board's interests in Gateway Program proposals, and the process to engage the Board in the further development of these proposals;

c) Forward the report titled "Provincial Gateway Program", dated January 25, 2005 to the GVTA Board for information, together with a request that representatives of the GVTA Board participate in the suggested GVRD delegation to the Minister of Transportation;

d) Include the Gateway Program in an upcoming Council of Councils meeting.

Additional resolutions of the GVRD Board regarding the Provincial Gateway Program:

- On October 1, 2004, the GVRD Board resolved:
  "That the GVRD Board express its concerns with the province's unilateral approach to regional transportation planning and urge the province to return to a regional transportation planning process that involves the collaboration of municipalities, the GVRD, the GVTA and the province."
- On July 30, 2004, the GVRD Board passed the following motion:
  "BE IT RESOLVED THAT the GVRD request the Provincial Government to delay any decision to proceed with the twinning of the Port Mann Bridge and the widening of Highway 1 to eight lanes until both the GVTA and the GVRD have assessed the impacts of the proposed increase in the capacity of the Trans Canada Highway on the transportation system of this region and on its Livable Region Strategic Plan and initiate a dialogue with the Provincial Government on the impact of the planned project on the Livable Region Strategic Plan (LRSP)."

Appendix D. – List of Items to Support in GVRD Staff Report
(for Recommendation C.)

i) "The overall goals of the provincial Gateway Program to improve the movement of people and goods in and through the region, improve access to key economic gateways, reduce vehicle emissions, facilitate better connections to transit and other alternative modes, improve the quality of life in communities, and improve road safety and reliability" (GVRD Recommendation a 1);

ii) "A comprehensive regional demand management strategy is developed, including regional transport pricing and tolling, in collaboration with the GVTA" (GVRD Recommendation a 3 iii); and

"A regional goods movement strategy is developed in collaboration with the GVTA and other regional partners to ensure that improvements to the movement of goods achieved through new or expanded roads and highways are maintained in the long-term as congestion levels rise" (GVRD Recommendation a 3 iv).

Appendix E.

COMPARISON OF GVRD AND GVTA STAFF RECOMMENDATIONS REGARDING THE PROVINCIAL GATEWAY PROGRAM

GATEWAY PROPOSALS	GVRD STAFF RESPONSE	GVTA STAFF RESPONSE	COMMENTARY
Context	GVRD staff examined Gateway proposals and supporting materials in relation to approved GVRD Board policies and its various mandates.	GVTA staff examined the Gateway proposals from the perspective that the project was likely a 'given'.	Each staff's suggested frame of reference influences the nature of the each report and recommendations
Facility -South Fraser Perimeter Road	Support, subject to development of strategies to address impacts on the Green Zone and agricultural lands, and regional strategies for transportation demand management, goods movement and regional utilities.	Support, with a request of the Province to ensure goods movement improvements are maintained over time.	Both staff support the project. Both express concern about retaining the gains made for goods movement. GVRD's support is subject to several regional strategies being put in place.
Facility - North Fraser Perimeter Road	Support, subject to: (i) HOV capacity on the new Pitt River Bridge, or commitment to introduce HOV capacity in the future; (ii) development of strategies for Green Zone and agricultural land impacts, TDM, goods movement and regional utilities.	Support, with a request of the Province to: (i) Assume responsibility for GVTA portion of NFPR; (ii) Ensure goods movement improvements are maintained over time.	Both staff support the project. Both express concern about retaining the gains made for goods movement. GVRD's support is subject to several regional strategies being put in place, and responding to the region's objectives for the HOV network.
Facility- Highway 1 and Port Mann Bridge	Support HOV aspects and highway widening east of Port Mann Bridge. Further information and analysis sought on the implications of Port Mann twinning and Highway 1 widening west of the Bridge with respect to regional interests.	Support, subject to; (i) introduction of tolls and other transport pricing mechanisms; (ii) introduction of road user priority system; (iii) not promoting Patullo Bridge as a free alternative, and (iv) a long-term strategy for the Pattullo.prior to final decision on Port Mann	GVTA staff support the entire project conditional upon tolls, priority measures, and dealing with the Patullo Bridge. GVRD staff support elements that are consistent with the LRSP and seek more analysis before the GVRD takes a final position.
Policy – Tolling	Prepare regional strategy for bridge tolls and road pricing. Existing Board policy supports bridge tolls.	Support tolls/road pricing on Port Mann/Highway 1, and initiate a dialogue on the roll of transport pricing in the region.	Both staff recommend a broader examination of regional transport pricing.
Policy – Road User Priority (Goods, Transit, HOV)	Prepare a regional approach to TDM, including a regional goods movement strategy.	Identify need to ensure that transit and goods movement have a high priority on any widened Port Mann/Hwy #1,	Both staff note need for road user priority incl. HOV, etc. GVTA staff detail need for transit on Port Mann/Hwy #1 and to protect truck movements from general congestion.
Funding Implications	Agreements and strategies are required to address the financial implications for regional parks and regional utilities.	Request 50% provincial cost sharing for Evergreen LRT and fast bus/park and ride services along Highway 1.	Both staff highlight the need for the Province to address the implications of the projects on the cost of regional infrastructure.
Other Regional Needs	Notes the potential implications for established regional growth management objectives.	Request Province to budget for addressing impacts on the Major Road Network and regional transit/cycling infrastructure.	Both reports recognize the implications for other regional needs. GVTA specifically identifies 'Evergreen Line'.

Note: Only those items that are addressed in both reports are included in this matrix.

Appendix F. – Bicycle Advisory Committee Resolution on the Gateway Program (May, 2006)

CITY OF **VANCOUVER**
CITY CLERK'S DEPARTMENT
Public Access and Council Services

File Number: 08-3000-11

MEMORANDUM

May 18, 2006

TO: Don Klimchuk, Transportation Monitoring Engineer

FROM: Nicole Ludwig, Meeting Coordinator

SUBJECT: Bicycle Advisory Committee Resolution on the Gateway Program

At its meeting on May 17, 2006, the Bicycle Advisory Committee

RESOLVED

WHEREAS

1. Council has adopted the Bicycle Advisory Committee's recommended target of a 10% cycling mode split for the City of Vancouver by 2010.

2. The Bicycle Advisory Committee met with Gateway Program staff on May 17, 2006, to request responses to the attached list of questions regarding the Program's potential impact on cycling in Vancouver.

3. No new information was presented by Gateway staff to indicate the Gateway Program would support the achievement of the 10% cycling mode share target, or that the Gateway Program Cycling Plan would mitigate negative impacts caused by freeway expansion on existing cycling facilities or on current mode share in Vancouver.

THEREFORE BE IT RESOLVED THAT

The Bicycle Advisory Committee recommends that Council reject the proposed Gateway Program.

CARRIED UNANIMOUSLY
(Jack Becker absent for the vote)

Nicole Ludwig
Meeting Coordinator
Phone: 604.871.6399
Fax: 604.873.7419

Questions and Comments Gateway Program
May 17, 2006 Bicycle Advisory Committee Meeting

1. Vancouver City Council approved the Bicycle Advisory Committee's recommended target of a 10% cycling mode split by 2010. How will the Gateway project support this goal? Are the proposed designs adequate to support this level of use?

2. What is the mode share target for cycling that Gateway foresees as a result of Gateway improvements and additions to cycling facilities?

3. What design standards will be used for developing cycling facilities? Will the designs be at a suitable level to attract people to cycle or combine cycling and transit instead of driving, and be safe and attractive for a wide range of users including children and less confident cyclists?

4. How many additional vehicle trips are projected, and where? What will the impacts be on City streets - arterials, collectors and residential?

5. What will the air quality effects of the Gateway project be, including any additional vehicle trips? What will the air quality impacts be on cyclists along the corridor?

6. Will the Gateway Program make available funding for traffic calming to discourage rat-running through nearby residential neighbourhoods and ensure that existing cycling facilities are not degraded?

7. Will there be funding available for motorist education to deal with any added motorist/cyclist conflicts caused by increased motor vehicle traffic on the already congested Vancouver street network?

Funding Commitment

8. Is Gateway committed to delivering the improvements in the Cycling Plan Overview dated Sept., 2005, or as may be enhanced though consultation with the cycling community, no matter the cost, or will Gateway only deliver cycling infrastructure enhancements in the plan to a $50 million maximum?

9. Will the $50 million funding for cycling be directed only to the incremental cost of providing cycling infrastructure or are other project elements included?

10. How much of the $50 million will be targeted for sidewalk improvements?

11. Will Gateway commit to a 5 year timeframe for delivery of the cycling infrastructure within a finalized Cycling Plan after consultation with the cycling community?

12. As some of the infrastructure improvements currently within the Cycling Plan, or as may be added through consultation with the cycling community, are not contingent on the start of the Gateway Program corridors plan, will Gateway agree to start the implementation of the Cycling Plan this year?

Cost-Sharing Funding

13. Is the intent of the $10 million cost-sharing program to be an expansion of the municipalities' current cycling investment programs (i.e. new projects not within the current municipal plans for next 5 years), or is the intent of the $10 million cost-sharing program to help fund already planned implementation of the municipalities' approved cycling programs?

14. Municipalities have approved capital plans in place. How does Gateway see the municipalities adding additional capital into their plans to match the provincial cost-sharing portion?

15. Will Gateway require an equal cost-sharing arrangement or will Gateway allow a flexible sharing arrangement between partners? Flexible sharing arrangements could result in provincial contributions ranging up to 100% for any specific project.

16. Will Gateway allow for three or more cost-sharing partners?

17. Will the funds raised by a municipality be considered that municipality's contribution regardless if the funding comes from taxes, development fees, in-kind contributions, private sectors contributions or participation with other locally based organizations such as Translink?

18. Will Gateway work with TransLink in administering cost-sharing funding, thereby reducing the bureaucracy and improving the flexibility and coordination of municipal applications – i.e. one-stop application for funds?

19. Will Gateway allow funding for multi-year projects under the $10 million cost-sharing program?

Gateway Highway #1 project, proposed cycling facilities for Vancouver section

Around 1992 the Cassiar Connector was built and subsequently the 2nd Narrows Bridge underwent minor upgrading. At that time sidewalks weren't widened nor other major works such as a connection between sidewalks done because it was anticipated that the bridge would undergo major reconstruction in 20 years. This reconstruction appears not to be scheduled in the near future so it is appropriate to consider upgrades

to the cycling and pedestrian facilities on the 2nd Narrows Bridge as part of the Gateway Highway #1 project.

The following improvements are proposed:

- Widened sidewalks on 2nd Narrows Bridge;
- Connection between east and west sidewalks at or near the south end of the 2nd Narrows Bridge;
- Improved connections for cyclists at McGill (direct access to and from 2nd Narrows Bridge);
- Improved connections for cyclists at Hastings/Collectors (ramps to and from Hwy 1) (direct cycling specific routing rather than current pedestrian crossings);
- Improvements to Williams Street pedestrian overpass to accommodate cycling;
- Cycling/pedestrian connection along Hwy 1 corridor between Central Valley Greenway and 2nd Narrows Bridge;
- Resolution of difficult traffic conditions for cyclists at Boundary Road on and off ramps (see note below).

Note re ramps: Currently freeway style off ramps, such as the Boundary Road Exit 28A cause problems for cyclists, as motor vehicles often exit at high rates of speed and cyclists must often merge right to cross back to the curb lane. Exit 28A is particularly bad, as cyclists are on an uphill grade and sight distance is very limited. Similar difficulties exist at on ramps, where cyclists must merge left across the on ramps. Are there plans to upgrade these types of ramps to regular intersection configurations at locations where they intersect regular city streets and if not, what plans are there to reduce conflicts between motor vehicles and cyclists at these locations?