

PUBLIC MEETING AGENDA

Revised: December 4, 2017

December 7, 2017, 9:00AM to 10:30AM

TransLink, Room 427/428, 400 – 287 Nelson's Court, New Westminster, BC

Chair:	Mayor Gregor Robertson Vice-Chair: Mayor Linda Hepner	
9:00AM	 PRELIMINARY MATTERS 1.1. Call to order 1.2. Adoption of agenda 1.3. Approval of Minutes (November 16, 2017) 	Page 1
9:05AM	 2. REPORT OF TRANSLINK MANAGEMENT Update on roll-out of Phase One Plan of the 10-Year Vision 	ORAL
9:25AM Report added Report added	Presentation to Mayors' Council meeting	6 16 45 63
10:10AM	4. ELECTION OF 2018 MAYORS' COUNCIL CHAIR AND VICE- CHAIR	ORAL
10:30AM	5. OTHER BUSINESS5.1. Upcoming Mayors' Council meeting: January 26, 2018	
10:30AM	6. ADJOURN to closed session	

Note that no applications from Public Delegates were received by the deadline.

MEETING OF THE MAYORS' COUNCIL ON REGIONAL TRANSPORTATION PUBLIC MEETING MINUTES

Minutes of the Public Meeting of the Mayors' Council on Regional Transportation (Mayors' Council) held on Thursday, November 16, 2017 at 9:00 a.m. in Rooms 427/428, TransLink Offices, 287 Nelson's Court, New Westminster, BC.

PRESENT:

Mayor Gregor Robertson, Vancouver, Chair

Mayor Wayne Baldwin, White Rock

Mayor John Becker, Pitt Meadows Mayor Malcolm Brodie, Richmond

Mayor Karl Buhr, Lions Bay Mayor Mike Clay, Port Moody Mayor Derek Corrigan, Burnaby

Mayor Jonathan Coté, New Westminster

Mayor Ralph Drew, Belcarra

Mayor Jack Froese, Langley Township Councillor Tom Gill, Surrey (alternate) Director Maria Harris, Electoral Area A Mayor Lois Jackson, Delta Mayor John McEwen, Anmore

Mayor Darrell Mussatto, North Vancouver City

Mayor Nicole Read, Maple Ridge Mayor Ted Schaffer, Langley City Mayor Murray Skeels, Bowen Island Mayor Michael Smith, West Vancouver Mayor Richard Stewart, Coquitlam

Mayor Richard Walton, North Vancouver

District

Chief Bryce Williams, Tsawwassen First Nation

REGRETS:

Mayor Greg Moore, Port Coquitlam

ALSO PRESENT:

Michael Buda, Executive Director, Mayors' Council on Regional Transportation Secretariat

PREPARATION OF MINUTES:

Carol Lee, Recording Secretary, Raincoast Ventures Ltd.

1. Preliminary Matters

1.1 Call to Order

The Chair called the meeting to order at 9:02 a.m. Due notice having been given and a quorum being present, the meeting was properly constituted.

1.2 Adoption of Agenda

Draft Agenda for the November 16, 2017 Public Meeting of the Mayors' Council on Regional Transportation, version dated November 10, 2017, was provided with the agenda material.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the agenda for its Public meeting scheduled November 16, 2017, as circulated.

CARRIED

1.3 Approval of Minutes (October 19, 2017)

Draft Minutes of the October 19, 2017 Public Meeting of the Mayors' Council on Regional Transportation was provided with the agenda material.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the minutes of its Public Meeting held October 19, 2017, as circulated.

CARRIED

2. Report of TransLink Management

Kevin Desmond, Chief Executive Officer, TransLink, and Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, jointly led the review of a presentation titled "TransLink Management Report, November 16, 2017" and highlighted:

- Record ridership for the year to date from January to October 2017
- Launch of the double decker bus trial on November 16, 2017
- Winter preparedness campaign
- Update on transit fare review
- Commitment to fostering innovation in new mobility options in Phase One of the 10-Year Vision for Metro Vancouver Transit and Transportation (10-Year Vision)
- Current and planned pilot projects in vanpooling, on-demand micro-transit and electric battery buses
- Launch of the Mobility Forum on December 4, 2017 and Mobility Agency Working Group.

Discussion ensued on:

- Factors contributing to the ridership growth
- Whether the monthly ridership growth experienced in 2017 is sustainable
- Request that Mayors' Council members be invited to attend the December 4, 2017 Mobility
 Forum event
- Veracity of the ridership growth estimates
- Confirmation that removal of the Port Mann Bridge tolls has not impacted transit ridership.

Action (01): TransLink staff was requested to provide details of the December 4, 2017 Mobility Forum event to Mayors' Council members.

Action (02): TransLink staff was requested to provide a report describing the methodology used to calculate the ridership growth estimates.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation receives the report.

CARRIED

3. Report of the Joint Committee on Transportation Planning and Funding

Mayor Jonathan Coté, Co-Chair, Joint Committee on Transportation Planning and Funding (Joint Committee), reported that the Joint Committee had met once since the prior Mayors' Council meeting to continue work on Phase Two of the 10-Year Vision (Phase Two). Engagement workshops have been held with local government staff, Chief Administrative Officers (CAOs),

members of the Mayors' Council and TransLink Board of Directors and Members of the Legislative Assembly (MLAs) to identify bus improvements to be included in Phase Two.

The Provincial Government has not provided a definitive response to the proposal to allocate a share of the incremental BC Carbon Tax generated within Metro Vancouver to fund Phase Two.

3.1 Phase Two Plan of the 10-Year Vision

Presentation titled "Phase Two Investment Plan" was provided with the agenda material.

Mr. Cross reviewed the presentation provided with the agenda material and highlighted:

- Working timeline for the Phase Two Investment Plan approval
- Update on the regional funding scenarios, including and excluding a share of the incremental BC Carbon Tax
- Bus service expansion identified during the engagement process
- Bus service expansion scope options to be considered for inclusion in Phase Two
- Incremental costs of accelerating bus service expansion in the 10-Year Vision
- Options for additional B-Line infrastructure
- Process for confirming Phase Two bus investments.

Discussion ensued on:

- Recommendation to implement a vehicle levy as the regional revenue source to fund the 10-Year Vision
- Clarification that mobility pricing is not being proposed as a funding source for Phase Two
- Suggestion to factor population growth into Phase One and Two incremental revenues from fares, property tax adjustments, existing sources and BC Carbon Tax
 - Need to clearly communicate the analysis of the impact of population growth on funding sources.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation receives the report.

CARRIED

4. Public Delegations

4.1 Gary Brown

Mr. Brown noted that the record ridership numbers reported by TransLink management do not include HandyDART.

Mr. Brown urged the Mayors' Council to utilize the improved relationships with the TransLink Board of Directors and the Provincial Government and their new governance responsibilities to end the contracting out model used to delivery HandyDART service.

Mr. Brown distributed an article titled "HandyDART Advocate Urges Improvements for Riders with "No Other Options", which is retained with the agenda material.

5. Notice of Motion

Report dated September 21, 2017 from Mike Buda, Executive Director, Mayors' Council Secretariat, regarding "Item 5 – October 13, 2017 Notice of Motion by Major Jackson", was provided with the agenda material.

Mayor Lois Jackson introduced the motion and commented on the need for the Mayors' Council and TransLink to provide input to the Provincial Government's review of the George Massey crossing project.

Discussion ensued on:

- Necessity of the motion, given that the Provincial Government review is already underway
- Metro Vancouver is involved in the review of the George Massey crossing project
- The Mayors' Council and TransLink have a role in providing input to this significant regional transportation infrastructure project
- Need to ensure that the Provincial Government is aware of the willingness of the Mayors' Council and TransLink to work with them
- Importance of taking advantage of this opportunity to collaborate with the Province.

It was MOVED and SECONDED

WHEREAS the Provincial Government has stated they would like advice from the region's mayors on the Massey crossing project; and

WHEREAS TransLink is the regional transportation authority with the mandate to manage the movement of goods and people and to review the transportation implications of major developments including to the provincial highway system within the region; therefore,

BE IT RESOLVED that the Mayors' Council and TransLink, consulting with Metro Vancouver, work collaboratively to provide input to the Provincial Government's review of the Massey crossing project with a focus on how the project fits into long term regional transportation and land use plans.

CARRIED

(Mayors Brodie, Corrigan and Mussatto voting in opposition)

6. Other Business

6.1 Upcoming Mayors' Council Meeting: December 7, 2017

The agenda noted that the next meeting of the Mayors' Council is scheduled December 7, 2017.

7. Adjourn to Closed Session

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation on Regional Transportation Public Meeting held November 16, 2017, be now adjourned.

	CARRIED
(Time:	10:17 a.m.)

Certified Correct:		
Mayor Gregor Robertson, Chair	Carol Lee, Recording Secretary	
	Raincoast Ventures Ltd.	

TO: Mayors' Council on Regional Transportation

FROM: Geoff Cross, VP, Transportation Planning and Policy

Chris Dacre, VP, Financial Services

DATE: November 30, 2017

SUBJECT: ITEM 3.1 – A Proposed Structure and Rates for a Development Cost Charge for Transit

PROPOSED RESOLUTION:

That the Mayors' Council on Regional Transportation:

- Approve the proposed structure and rates for the Development Cost Charge for transit infrastructure as set out in the attached document (Appendix A) dated November 30, 2017, titled "A DCC for Regional Transportation Infrastructure in Metro Vancouver: Proposed Structure and Draft Rates" to serve as the basis for TransLink preparing and adopting a DCC bylaw in late 2018;
- 2) Receive this report.

PURPOSE

The purpose of this report is to present a proposed structure and rates for a new Development Cost Charge (DCC) for regional transportation infrastructure. The report also summarizes the consultation process conducted and the process for bringing the DCC into effect.

BACKGROUND

In 2014, the 10-Year Vision proposed some form of land value capture or development fee as a supporting revenue tool to help deliver the Vision. Following further analysis and stakeholder discussions, the Mayors' Council and TransLink Board approved the Phase One Investment Plan in November 2016 with a new DCC for regional transportation infrastructure as one of the funding sources. In the Plan, the DCC was assumed to come into effect in early 2020 and generate approximately \$15 to \$20 million in annual revenue on average. The DCC revenues would initially be applied to capital projects in the Phase 1 Investment Plan and would continue in perpetuity to fund a portion of capital associated with growth for future investment plans. Additional background is found in Attachment B.

Currently, transit is not an eligible infrastructure category for DCCs and TransLink is not currently authorized to collect a DCC. Legislation would need to be amended to enable this new funding mechanism for transit. A formal request has been made to the Province to introduce legislation enabling this new DCC in the spring 2018 legislative session. The Province is currently considering this request. In anticipation of a favourable response and the need to adopt the 2018-2027 Investment Plan by the first quarter of 2018, TransLink has continued to advance the design of the new DCC and rates to a proposal stage, which is now presented to both the Board and Mayors' Council for approval.

A portion of the expansion contemplated in the 2017-2026 Investment Plan for introduction in 2019 would need to be deferred if the new DCC is not enabled and confirmed by 2018 for implementation in 2020, unless this shortfall is not offset by greater than anticipated revenues from other sources. If the

DCC does not proceed, TransLink would have these options: defer investment, reallocate existing funding or fund through another new revenue source. A DCC can only be used for capital infrastructure but not having the DCC means other revenue streams would have to be reallocated to maintain the service levels as described in the Plan.

DISCUSSION

Objectives for the Design of the DCC

The following were the key objectives for the design and setting of the rates for the DCC:

- Make it easy to understand, simple to administer
- Make it fair
- Have no negative impact on the pace or distribution of development, or on housing affordability
- Raise about \$20 million/year, based on preliminary tests and 10-Year Investment Plan strategy
- Monitor/adjust over time

Consultation Process

Consultation on the concept of a new DCC for funding regional transportation infrastructure occurred in 2016. A Discussion Paper was prepared to support the consultation process (Attachment C). Key activities included:

- Reviewed with all the key development industry associations
- Reviewed with TransLink and Metro Vancouver regional advisory committees
- Discussed with Province
- Consulted with the public as part of the 2017-2026 Investment Plan process in October 2016.

The premise that growth should pay for growth was widely accepted by stakeholders and a DCC was seen as an appropriate funding tool and subsequently included in the 2017-2026 Investment Plan.

Consultation in 2017 has focused on the structure and rates for the DCC:

- In May, a Regional Transportation DCC Local Government Working Group¹ was formed to advise on the structure and rates for the DCC. The Working Group reviewed, discussed and arrived at a preferred approach on most key policy questions which was then reviewed and discussed at workshops with broader stakeholders.
- Two workshops were held in October to review the draft structure and preliminary rates: one with government agencies² and another with developers³.

The key areas of discussion and feedback related to: potential impact on housing affordability, use of funds, rate structure, transparency and the draft rates as discussed below. A second round of staff level review with partners and stakeholders was held on a revised version of the Framework in November. *Potential Impact on Housing Affordability*

¹ The Working Group consisted of representatives from Metro Vancouver, TransLink and 10 municipalities from around the region and comprised planning, engineering and finance staff.

² Agency workshop included staff from almost all municipalities in the region (representing over 95% of future development activity), Metro Vancouver, and Ministry of Municipal Affairs and Housing.

³ Developer workshop included 30 developers and representatives from the Urban Development Institute, Urban Land Institute, NAIOP and Greater Vancouver Home Builders' Association.

A key principle identified by the TransLink Board and Mayors' Council in establishing this new regional DCC is to ensure that it does not affect projected development rates and patterns or have any negative impact on housing affordability by increasing housing prices. As housing prices are set by overall supply and demand in the marketplace, developers cannot unilaterally increase prices on individual projects. Rather, the usual response to an increase in developer cost is to reduce what developers are willing to pay for land. As long as a new cost is small enough, it won't have enough impact to result in reduced availability of development sites and therefore would not affect the sale price of new housing units.

In order to ensure that the new DCC does not slow the pace of redevelopment and hence hurt housing affordability, Coriolis Consulting conducted a survey of all existing and proposed local and regional DCCs in Metro Vancouver and then conducted an analysis of development sites in different markets across the region to understand what rates are affordable. The analysis conducted to date has confirmed that it is possible to raise about \$20M annually from the new DCC under various rate structure scenarios without impacting housing affordability. This analysis is based upon current market prices; any likely housing market price increases above the rate of construction price increases between now and the time the DCC is implemented in 2020 would increase the "financial room" which has already been determined to be sufficient for the proposed DCC. Additional explanation is provided in Attachment D.

Under current legislation, DCCs can be reduced or waived for certain types of affordable rental housing. It is proposed that the DCC be consistent with the waivers for the Greater Vancouver Sewerage & Drainage District (GVS&DD) regional sewer levy which would simplify administration and also support Metro Vancouver's Affordable Housing Strategy. Metro's current definition indicate that DCCs are not payable on a secondary suite or laneway house as part of a single-detached dwelling. There are also certain types of affordable rental housing (both for-profit and not-for-profit) where waivers apply. Metro Vancouver will be reviewing its definitions and waivers in 2018 and TransLink will be participating in the process to ensure a consistent approach.

Use of Funds

The development community expressed concern around possible double-charging for walking, cycling, and road infrastructure which they typically already provide adjacent to their sites or in existing municipal DCCs. Accordingly, it is proposed that the DCC only be applied to new expansion-related transit capital investments identified in TransLink's 10-Year Investment Plans. This will not impact the level of TransLink funding for cost-shared walking and cycling programs.

Uniform vs. Tiered Rates

Uniform rates were preferred by most of the Local Government Working Group, Planning and Funding Committee members and attendees at the partner agency workshop. Uniform rates were also preferred by all of the attendees at the developer workshop. However, there were several municipalities - mayors and staff - as well as the Greater Vancouver Home Builders' Association - who favoured a tiered structure (where the rates are higher in one part of the region and lower in another), arguing that transit benefits are not evenly distributed around the region.

It is proposed that the legislation be crafted to allow TransLink to set different rates in different parts of the region, whether or not it would use this provision. However, to fund the agreed upon portion of the Phase 1 Investment Plan, it is proposed that the DCC be initially established with a uniform rate. This recommendation is based on the following rationale:

- The Phase 1 Plan transit expansion investments are broadly distributed around the region (and contrary to some perception, are not used to fund the two proposed new rapid transit lines)
- Transit infrastructure generates benefits to new development that are not based solely on the municipality that the investment is located in. For example, capacity upgrades to the Canada Line will benefit transit users from beyond the Cities of Vancouver and Richmond.
- All new development benefits not only directly from transit investment, but indirectly from reduced roadway congestion;
- A uniform rate approach is administratively simple and fastest to implement in time to fund Phase 1 Investment Plan;
- Drawing justifiable boundaries for tiered rates will require extensive technical analysis that is
 likely to be contentious and challenged on the basis of fairness and market distortion concerns.
 It would also likely mean that funds collected in specific areas would be required to be spent in
 those areas, despite the benefits not being aligned with the location of the investments;
- Flexibility for tiered rates is preserved should any future Investment Plans want to consider this approach for future capital expansion (and would require consultation with stakeholders).

Accountability and Transparency

The development community expressed concern over checks and balances for the comprehensive review (which is proposed to be at least every 3 years) and rate adjustments. If the DCC is not directly cost-related, what prevents large increases in future rates? Unlike some DCCs, the TransLink DCC would only fund a small percentage of the maximum of 99% of future capital (the maximum allowed in legislation) as existing residents also benefit from new transit capital investment.

The framework now indicates that the DCC is a supporting funding source that would contribute to the regional share of transit capital investments in the 10-Year Investment Plans.

The DCC is proposed to have an annual inflation adjustment, which would be based on a publicly available index for construction prices or local/regional consumer price index. This will avoid steep rate increases to catch up with inflation.

Legislation for other DCCs does not specify a maximum rate increase. It is proposed that legislation include a prescribed process for rate adjustments as well as a requirement to consider impacts on the pace of new development and housing affordability, building upon current DCC legislation that indicates that the charges must consider impact on future land use patterns and may consider whether the charges will deter development or discourage the construction of reasonably priced housing or the provision of reasonably priced land.

Both the development community and municipalities expressed a desire to have greater clarity on the projects that would be funded by the DCC. It is proposed that the transit expansion projects that the DCC would fund be specified and that the use of funds be publicly reported on regularly.

Proposed Framework & Rates

Based on this partner and stakeholder feedback, a revised framework is included as Attachment A with the proposed DCC rates shown in Table 1. The DCC would be levied across the transportation service region except for any lands outside the jurisdiction of the new legislation. UBC and the University Endowment Lands, which are part of Electoral Area A, contribute to the GVS&DD DCC. As they are part of TransLink's transportation service region, a similar approach is expected for these jurisdictions.

Table 1: Proposed DCC Rates for Transit Infrastructure in Metro Vancouver*, 2020

Use	DCC Rate
Single family	\$2,100 per dwelling unit
Townhouse/duplex	\$1,900 per dwelling unit
Apartment	\$1,200 per dwelling unit
Retail/service	\$1.00 per sq.ft.
Office, Institutional,	\$0.50 per sq.ft.
Industrial	\$0.50 per sq.ft.

^{*}TransLink may amend this draft rate structure during 2018, based on updated analysis, but will finalize the rates before the end of 2018 and before the introduction of the bylaw.

Key feedback that partners and stakeholders provided on the draft DCC rates included:

- New industrial developments may not be able to bear the cost of a 50 cent per sq.ft. rate
- Consider combining retail/service and office together in a commercial category with a single rate since some developments are mixed use and it is difficult in advance to know how much floor space would fall into each category

These and other feedback will be reviewed in greater detail in 2018 to make any adjustments to finalize the proposed rates. If there is a material change/increase to the rates as part of this final review, TransLink will consult with its partners and stakeholders in 2018 before a bylaw is introduced. Also, as part of any future reviews of the DCC and rates (beyond inflation) which are proposed at least every 3 years in conjunction with future investment plans, consultation with partners and stakeholders would also be conducted.

IMPACTS

Impact on Growth

The DCC was not overtly designed as a land use policy tool. However, one of the considerations was to not adversely impact the distribution of development within the region. The proposed structure and rates are not anticipated to impact growth distribution since 1) the rates were set to be market-supportable and would not impact the pace of development and 2) the rates are uniform across the region.

Impact on Housing Affordability

The analysis conducted to date has confirmed that it is possible under a variety of scenarios to raise \$20M annually from the new DCC without impacting housing affordability. As noted, it is proposed that

there would be waivers for certain types of affordable rental housing projects, consistent with housing definitions and waivers that are used for the GVS&DD DCC.

Financial Impact

Approximately \$20 million per year on average is estimated to be generated from the DCC beginning in 2020. The DCC is estimated to fund approximately 10% to 15% of the total transit capital expansion costs in the Phase 1 Plan. Revenues will fluctuate from year to year with levels of development activity. An updated revenue forecast for the DCC will be included in the 2018-2027 Investment Plan. Reduced revenues from the proposed waivers will be made up through other TransLink funding sources and were not made up through increases in rates for DCCs for other uses. The revenue estimate excludes revenue associated with the proposed waivers.

Effective Date and Steps Needed to Bring the DCC into Effect

It is proposed that the effective date be mid-January, 2020, to avoid a potential rush of development application at year-end when municipal development counters have lower staffing levels.

The following steps are needed in order to bring the DCC into effect by early 2020:

- The Province needs to pass enabling legislation in the Spring 2018 legislative
- A bylaw needs to be prepared based on the proposed structure and rates and forwarded to the Inspector of Municipalities (or equivalent) for review and approval by late 2018
- The TransLink Board needs to adopt the bylaw for the end of 2018, which would allow for one year's notice of the rates

COMMUNICATIONS IMPLICATIONS

An updated DCC backgrounder and FAQs was prepared and released in October 2017 to support consultation with stakeholders (Attachment B). A key focus of communications will be on explaining why the DCC is not anticipated to impact housing affordability which is discussed in Attachment D. Advance notice of rates will be given so that developers can adjust to the new rates. Staff will continue to liaise with the industry through their development industry associations. Communications materials will be prepared to assist municipalities with incorporating the new DCC into their collection processes (expected timeline in 2019).

CONCLUSION

Based on the technical analysis, it is possible to raise approximately \$20M/year of DCC revenue which is sufficient to fund the prescribed, outstanding portion of the Phase One Investment Plan. The proposed rates are not expected to have any negative impact on housing affordability. The framework proposes that the rates be uniform across the region, that the DCC be used for transit expansion capital, and that reporting in the Investment Plan and use of the DCC funds clearly define this transit expansion capital and projects to ensure greater accountability and transparency. Management is seeking joint approval from the Mayors' Council and TransLink Board of the proposed structure and rates to serve as the basis for TransLink preparing a bylaw by the end of 2018, subject to the Province introducing and passing the necessary legislation.

ATTACHMENTS

- A. DCC for Regional Transportation Infrastructure in Metro Vancouver: Proposed Structure and Draft Rates (November 30, 2017) INCLUDED IN NOV. 30 VERSION OF AGENDA
- B. Regional Transportation DCC Update and FAQs (October 2017) ADDED TO IN DEC. 4 VERSION OF AGENDA
- C. A Possible Regional Development Cost Charge for Regional Transportation/Transit Infrastructure: Discussion Paper (April 2016) ADDED TO IN DEC. 4 VERSION OF AGENDA
- D. Backgrounder: Local Government Development Charges and Housing Prices: Will TransLink's New DCC for Transit Infrastructure Affect Housing Affordability? (November 2017) ADDED TO IN DEC. 4 VERSION OF AGENDA

A DCC for Regional Transportation Infrastructure in Metro Vancouver: Proposed Structure and Draft Rates | 30 November 2017

Introduction

As part of the funding strategy for future investments in regional transportation infrastructure, TransLink is proposing the creation of a new regional Development Cost Charge (DCC). This new DCC would be levied on new development in the region, similar to how municipalities use DCCs to pay for local infrastructure and how the Greater Vancouver Sewerage and Drainage District (GVS&DD) uses a DCC to pay for regional sewer infrastructure. A new regional transportation DCC requires amendments to Provincial legislation to allow funds to be collected for transit investment and to give TransLink the ability to raise funds in this way. This document summarizes the proposed structure of the new DCC, the main elements that should be included in the legislation, and the proposed initial DCC rates for different types of development.

Status

This is currently a proposal for discussion. If approved by the Mayors' Council and the TransLink Board, and subject to the Province passing the necessary legislation, this framework will serve as the basis for preparing a TransLink Board bylaw.

Legislation

TransLink is proposing that the new DCC be enabled through amendments to the *South Coast British Columbia Transportation Authority Act* (British Columbia). Implementation of the DCC may also require amendments to other Acts. To the extent possible, the amendments should be patterned on applicable portions of the GVS&DD DCC legislation.

Agency Responsible for the DCC

TransLink would be responsible for establishing DCC rates, receiving the revenue, and allocating the funds to new capital projects. Local governments within the transportation service region will collect the DCCs as part of their development approval processes and remit the funds semi-annually to TransLink similar to the GVS&DD DCC process. Municipalities may elect to not collect the DCC and instead remit an equivalent amount to TransLink similar to the GVS&DD DCC structure.

Use of Funds

The DCC revenue is proposed to be applied to new transit capital investments identified in TransLink's 10-Year Investment Plans, including new rapid transit lines, capacity increases to existing rapid transit lines, new or expanded transit exchanges and depots and new transit and support vehicles (expansion only). Funds will not be applied to debt incurred before the date specified in legislation or to transit operating expenses. Funds would not be used for pedestrian, cycling, major road network or regional bridge infrastructure or for transit-related infrastructure not funded by TransLink. The funds will initially be used for transit expansion capital projects identified in the 2017-2026 Investment Plan. A list of transit expansion capital projects to be funded by the DCC will be specified.

DCC's Contribution to Regional Share of Expansion Capital

The DCC is intended to be a supporting funding source by which new growth contributes to the regional share of transit capital expansion investments in 10-Year Investment Plans. The proposed DCC rates are intended to generate approximately \$20 million annually, starting in 2020, growing with an annual inflation index (see below). Other funding sources would also contribute to paying for new growth-related capital recognizing that the existing population also benefits from new transit capital investments.

Area of Collection

The DCC will be collected throughout the entire transportation service region (Metro Vancouver), except for any lands outside the jurisdiction of the new legislation.

Types of Development for which the DCC Will Be Collected

The DCC will apply to new residential, commercial, industrial and institutional development. It is proposed that there would be exemptions for agricultural uses and waivers for certain types of affordable rental housing projects (with clear definitions for waivers), as well as statutory exemptions such as for places of worship. The DCC will also apply to fewer than four new self-contained residential units, consistent with the GVS&DD DCC. Wherever possible, housing definitions and waivers will be aligned with the GVS&DD DCC.

Basis of the Charge

For residential uses, the legislation should give TransLink the option of charging per unit or by floor area. In the initial bylaw, TransLink will charge on a per housing unit basis, to be consistent with many local governments and the GVS&DD, with separate rates for single detached, townhouse/duplex, and apartment units. For all other uses, the DCC will be charged based on gross floor area.

Rate Structure

The legislation should give TransLink the option of charging uniform rates across the entire region for each type of development or varying the rates by subarea similar to legislation for other DCCs. However, in the initial bylaw, TransLink intends to adopt uniform charges across the whole region for each type of residential unit and for each type of non-residential space.

Effective Date

The target for commencing DCC collection is January 2020.

Inflation Adjustment

The legislation should allow DCC rates to be adjusted annually for inflation based on commonly used indices for inflation, such as the Vancouver Consumer Price Index or a construction price index, with prior notice of the amount of the annual adjustments.

Periodic Review and Rate Changes

TransLink intends to review the DCC rates at least every 3 years as part of its requirement to prepare a 10-Year Investment Plan at least every 3 years.

Transparency and Accountability

The legislation should contain:

- A requirement to articulate targets for the total amount of DCC revenue to be collected as part of the funding strategy for each 10-Year Investment Plan.
- A clearly defined process for the consideration of any changes to DCC rates (other than annual
 inflationary adjustment), including the factors to be considered and including stakeholder
 consultation.
- A requirement to consider potential impacts on the pace and viability of new development and impacts on housing affordability, building upon current DCC legislation that indicates that the charges must consider impact on future land use patterns and may consider whether the charges will deter development or discourage the construction of reasonably priced housing or the provision of reasonably priced land.
- A clearly defined process for any consideration of varying rates by subarea.
- A requirement to monitor and publicly report out on the use of all DCC revenues on a regular basis.

Draft Initial DCC Rates for 20204:

Use	DCC Rate
Single family	\$2,100 per dwelling unit
Townhouse/duplex	\$1,900 per dwelling unit
Apartment	\$1,200 per dwelling unit
Retail/service	\$1.00 per sq.ft.
Office, Institutional	\$0.50 per sq.ft.
Industrial	\$0.50 per sq.ft.

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⁴ TransLink may amend this draft rate structure during 2018, based on updated analysis, but will finalize the rates before the end of 2018 and before the introduction of the bylaw so there is at least one full year's notice prior to commencement of collections in 2020. If there are any material changes/increases proposed as part of the final adjustments of rates, TransLink will consult with its partners and stakeholders in advance of a bylaw being introduced in 2018.

Additional Attachments for Item 3.1

Added: December 4, 2017

Please find attached the remaining of attachments (B, C and D) to accompany the staff report entitled "Proposed Structure and Rates for a Development Cost Charge for Transit Infrastructure" for the December 7th Mayors' Council meeting.

The first attachment was provided with the staff report and agenda as distributed last week and is included above (no changes). Attachment B was provided at the October 19, 2017 Mayors' Council meeting. Attachment C was previously provided to the Mayors' Council in 2016 but is being provided again so that it is part of the public record. An earlier version of Attachment D was provided to the in camera Mayors' Council meeting on November 16, but has been updated by the consultant and is also being provided so that it is part of the public record.

The added attachments below are:

- B. Regional Transportation DCC Update and FAQs (October 2017)
- C. A Possible Regional Development Cost Charge for Regional Transportation/Transit Infrastructure: Discussion Paper (April 2016)
- D. Backgrounder: Local Government Development Charges and Housing Prices: Will TransLink's New DCC for Transit Infrastructure Affect Housing Affordability? (November 2017)

ATTACHMENT B

Development Cost Charge for Regional Transportation Infrastructure

The Mayors' Council and TransLink are currently seeking approval from the provincial government to implement a Regional Transportation Development Cost Charge (DCC), which is anticipated to come into effect in 2020.

The DCC will help fund the capital portion of our investment plan and ensure the Mayors' 10-Year Vision stays on track. With more than a million people coming to the region in the next 30 years, delivering the 10-Year Vision is critical for keeping the region moving and livable.

A new DCC would allow a fee to be collected from new developments to help pay for new transportation infrastructure required to support growth. DCCs are widely used in BC to help cover growth-related infrastructure costs (such as roads, sewer and water). Transit infrastructure, however, is not currently an eligible cost and would require new legislation.

In anticipation of the Province approving the DCC, we are working with our partners and stakeholders to determine the structure, rates and best way to implement the DCC.

One of our goals is to ensure the DCC is set at a rate that won't curb new developments or increase housing prices. In addition, we're looking at reducing or waiving the DCC to support affordable-rental housing, similar to the programs offered by local governments. We're committed to ensuring that a new DCC will not impact the price or supply of affordable-housing development.

We expect to have a draft framework on the structure and implementation of the DCC completed in early 2018. The draft framework will then go to the Mayors' Council and TransLink Board for input and further review. Our goal is to have a bylaw drafted and adopted by the TransLink Board, including final rates, by the end of 2018. We anticipate that we'd begin collecting the new DCC in 2020.



FAQs

translink.ca

1. Why does TransLink need another revenue source?

We must come up with new regional funding sources to complete the Mayors'
 10-Year Vision, which is critical for keeping the region moving and livable.

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- There is increased demand on Metro Vancouver's transportation network, while some existing funding sources are static or declining.
- Rather than only rely on existing revenue sources such as taxes and fares, we want to find new revenue-generating opportunities to meet the region's growing demands.

2. What is a Development Cost Charge?

- A DCC is a fee that would be applied to new developments in Metro Vancouver, starting in 2020, to help pay for new transportation infrastructure.
- DCCs are widely used in BC to help cover growth-related infrastructure costs (such as roads, sewer and water). Transit infrastructure, however, is not currently an eligible cost and would require new legislation.

3. What are the advantages of a Development Cost Charge?

- It's transparent, easy to understand and easy to administer.
- A DCC obtains revenue from new urban development, which is consistent with the idea that growth should help pay for growth-related infrastructure costs.
- Provided that DCC rates are set carefully, the cost of a DCC tends to be borne
 by land owners who are selling property for development property, rather than
 home-owners or renters.
- It generates a reasonable and relatively reliable stream of revenue.

4. What infrastructure will be funded by the DCC?

- The new DCC will help fund capital projects in the 2017 and future Investment Plans.
- The DCC can only be used for capital purposes, not operating expenses.

5. How much do you expect to charge for the DCC?

 Proposed DCC rates are still being determined and will be informed by stakeholder consultation.

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6. Will the rate of the DCC be higher for developments closer to transit hubs?

Specific options for structuring the DCC will be discussed during the
consultation process with stakeholders. We will have a better sense of how the
DCC will be structured once we have a draft framework in early 2018.

3

7. How much revenue do you expect to be collected by the DCC?

• The structure and rates are still being determined, however, the new DCC is expected to generate between \$15 and \$20 million per year.

8. How can you be sure developers won't download the cost of the DCC to home buyers?

- Housing prices are set by overall supply and demand in the marketplace, so developers can't unilaterally increase prices on individual projects.
- The usual response to an increase in developer cost is to reduce what developers are willing to pay for land. As long as a new cost is small enough, it won't have enough impact to result in reduced availability of development sites. Therefore, it will not affect the sale price of new housing units.

9. What public consultation has TransLink done on the proposed DCC?

• We carried out public consultation on the proposed funding sources, including the DCC, for our 2017-2026 Investment Plan in October, 2016. Now that the investment plan has been adopted, stakeholder consultation will focus on the design decisions of the DCC and preliminary rates.

10. What is the overall process and anticipated timeline?

- In October, we're conducting initial stakeholder consultation to seek input on how to structure the DCC and preliminary rates. We will take the input we receive and create a draft framework, including preliminary rates, by early 2018. The draft framework will then go to the Mayors' Council and TransLink Board for input and further review. Our goal is to have a bylaw drafted and adopted by the TransLink Board, including final rates, by the end of 2018.
- We will inform the development community of the approved DCC throughout 2019.
- We anticipate that we'd begin collecting the new DCC in 2020.

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A Possible Regional Development Cost Charge for Regional Transportation/Transit Infrastructure in Metro Vancouver: Discussion Paper

Prepared for the Mayors' Council on Regional Transportation and TransLink



12 April 2016

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Summary

This discussion paper explores the possibility of using a new regional Development Cost Charge (DCC) to help pay for Metro Vancouver transportation/transit investments, as part of a comprehensive funding strategy.

DCCs enable local governments in BC to collect revenue from new urban development for community infrastructure including water, sewer, roads, drainage, and parks. Existing legislation does not allow the use of DCCs for regional transportation/transit projects, but there are precedents for regional infrastructure development charges, such as the existing GVS&DD regional sewer levy and Ontario legislation that allows development charges for transit.

There are widely accepted principles for applying DCCs in BC: infrastructure should be paid for by those who benefit; charges should be fair and equitable; DCC systems should be transparent and easy to administer; and DCCs should not have negative impacts on affordability.

The main advantages of a DCC for regional transportation/transit include:

- DCCs are transparent, easy to understand, and easy to administer.
- A DCC obtains revenue from new urban development, which is consistent with the idea that growth should help pay for the cost of growth.
- Provided DCC rates are set carefully, the cost of a DCC tends to be borne by developers or land owners
 of development property, rather than transit users or taxpayers at large.
- Administration costs would be small, as there is already a system in place to collect municipal DCCs.

There are disadvantages of DCCs as a funding mechanism including:

- They can only be applied to capital costs, not to operating costs.
- They are a one-time payment, not a recurring revenue stream such as taxes, and revenues will fluctuate depending on the pace of new development.
- They are not linked in any way to transportation patterns, so they do not influence transportation choices.

These disadvantages can be offset by other components of a comprehensive funding strategy.

There are some key policy questions that would have to be addressed to design a regional DCC:

- What infrastructure should be funded this way: the full spectrum of regional transportation projects or a focus on transit?
- Where should the charge be levied: region-wide or in areas that benefit the most from new investment?
- What land uses should pay: all new development or only higher density uses?
- Should DCC rates be uniform across the region or vary based on capital investment or benefit?
- What forms of development should be exempt?
- Who should collect the DCC: municipalities or TransLink?

Preliminary analysis indicates that even a small new regional DCC could generate enough revenue to make it worth considering this idea. For example, a DCC of \$1 per square foot applied to all new urban development in Metro Vancouver could raise over \$500 million over 30 years. This is clearly not enough revenue to fully fund the regional share of capital cost, but it could be a significant component in a comprehensive funding strategy.



There could be some negative impacts if a new DCC is not designed carefully:

- If a new DCC is too large it will have a negative effect on development economics, potentially leading to reduced pace of new construction and upward pressure on housing prices. It is possible, though, to set the rate at a level that does not affect the pace of development or housing prices.
- A new DCC could negatively affect development patterns if it is too high in some areas and deflects market interest away from the places where densification is desirable.
- A new DCC for regional infrastructure will take revenue that could otherwise have been available for other local government infrastructure.

If there is interest in implementing this idea, it is important that regional stakeholders (municipalities, development industry, Mayors' Council, TransLink) reach broad agreement on how a DCC for regional transportation/transit infrastructure should be structured.

If there is broad support, then the Mayors' Council can request the Province to take the necessary steps to enable a regional DCC for transportation/transit. Considerable technical work would then be needed to design the DCC system, set rates, and create a strategy for phasing in the new charge.

Introduction

In June 2014, the Mayors' Council adopted a 10-Year Regional Transportation Investment Vision for Metro Vancouver (Mayors' Vision). The TransLink Board subsequently endorsed the Mayors' Vision as a key element in the Regional Transportation Strategy (RTS).

The Mayors' Council and TransLink are developing a funding strategy for regional transportation investments. One component of the funding strategy will be to seek senior government funding. Through the 2016/17 federal budget, the Government of Canada confirmed its intention to fund up to 50% of eligible capital costs for new transit investments (which is an increase from the historically available funding of 33% for some projects). This will reduce the burden on regional funding sources, but does not eliminate the need for additional regional revenues to cover the remaining capital cost and to fund operating and maintenance costs for new investments.

In 2010, the Province of BC and the Mayors' Council signed the Livable Cities Agreement in which the parties agreed to work together to create a sustainable funding strategy for transportation investment in Greater Vancouver. In 2011, a Joint Technical Committee was formed (made up senior representatives of TransLink, BC Ministry of Transportation

There is a precedent in Metro Vancouver for this method of funding regional infrastructure: there is a region-wide levy on new development to pay for regional sewer works. There are also precedents in other parts of Canada and the United States.

and Infrastructure, City of Surrey, City of Vancouver) to explore possible funding sources. This Committee identified a charge on new urban development as a possible funding mechanism for regional transportation/transit infrastructure. The 2014 Mayors' Vision included this as a revenue source worth considering. The Mayors' Council is now considering the idea in more detail, in consultation with stakeholders.

There is a precedent in the region for this method of funding regional infrastructure. Metro Vancouver (through the Greater Vancouver Sewerage and Drainage District) levies a Development Cost Charge (DCC) on new development to pay for region-wide sewer works. There are also precedents in other parts of Canada and the United States for using similar mechanisms to fund regional works. For example, in Ontario Metrolinx uses a similar mechanism to pay for regional transit infrastructure in the Greater Toronto area.

This discussion paper explores the idea of using a new regional development levy to help pay for regional transportation/transit investments in Metro Vancouver. The objectives of this paper are to explain how such a charge might work, describe the main policy choices that would have to be made in designing a development charge, examine potential impacts and ways to mitigate them, and spark dialogue among stakeholders including municipalities, the development industry, and the public.

This paper does not aim to present a complete funding plan for regional transportation infrastructure. It focuses only on one possible funding source and how it might be applied in this region.

The commentary does not necessarily reflect the views of the Mayors' Council or TransLink.



What is a Development Cost Charge?

BC legislation allows local governments to impose a charge on new urban development, at the time of subdivision approval or building permit, to assist in paying the capital costs of new infrastructure. The underlying premise of the legislation is that growth creates a

Growth creates a need for capital investment in community-wide infrastructure. It is reasonable to require new development to contribute to these costs.

need for capital investment in community-wide infrastructure, such as the road network or water supply system, and it is reasonable to require new development to contribute to these costs. These charges are called Development Cost Charges (except in the City of Vancouver, where they are called Development Cost Levies) and they have been used widely in BC since 1977. There is similar legislation in other provinces, such as Ontario where these are called Development Charges and Alberta where they are called Off-Site Levies.

Section 559 of BC's Local Government Act allows local governments to charge DCCs for basic community infrastructure (sewer, water, drainage, roads) and for the acquisition and development of park land. Section 523D of the Vancouver Charter gives the City of Vancouver a similar power.

In Metro Vancouver, most municipalities collect DCCs from most types of new urban development. These existing DCCs fund municipal roads, sewer, water, and drainage works and park land acquisition and development. Currently, there is not a DCC for regional transportation/transit infrastructure.

To illustrate the magnitude of the existing levies in the region, DCCs for an apartment unit of say 1,000 square feet in almost all Metro Vancouver municipalities are in the range of \$5,000 to \$16,000 for the municipal DCC plus \$600 to \$1,100 for regional sanitary sewer infrastructure, depending on location within the region.

DCCs are applied to all new urban development whether or not any rezoning is involved, unlike Community Amenity Contributions which are only obtained when sites are rezoned or where bonus density is available in exchange for amenities. DCCs are established in bylaws and are not negotiable. The BC legislation allows DCC rates to vary by type of development, by density, and by location within a municipality provided there are sound reasons for the variation. Legislation also allows exemption from DCCs for some types of affordable housing.

While DCC rates vary across the region, in large part because there are different needs for new infrastructure to accommodate new urban development, the process of setting DCC rates is consistent because it is prescribed by the provincial legislation. The main steps in determining DCC rates are as follows:

- The local government identifies the capital projects that are needed to extend or expand community infrastructure.
- Capital costs are estimated for the infrastructure projects.
- The local government must decide what proportion of future capital works should be paid by existing taxpayers in general and which should be paid by new development, based on the purpose and nature of the capital costs.
- The legislation states that DCCs can be charged to "assist" local government in paying the capital costs
 of growth, so the local government must decide on the "assist factor" it will apply to the growth related
 costs.



- The local government then estimates how much new development will be served by the capital works. Dividing the cost by the amount of new development produces the rate to be charged to new development on a per unit or per square foot basis. There is public consultation about this rate and there is usually analysis to confirm that the rate can be absorbed by new development without significant negative market impacts. The rates must be adopted in a bylaw and approved by the Inspector of Municipalities.
- Funds collected from DCCs must be deposited in special accounts and used only for the purposes for which they were collected. The use of DCCs is very carefully regulated and monitored.

The legislation in BC would have to be amended to allow DCCs for capital expenditures on regional transportation/transit.

Principles and Good Practices

The legislation includes direction for the design of DCC programs. The Province also publishes a Development Cost Charge Best Practices Guide which provides detailed guidance on the content and implementation of DCC bylaws. The Guide sets out some principles and recommended practices that should be incorporated into any DCC program. Extensive experience with DCC systems in BC has also resulted in a list of generally acknowledged attributes that a DCC program should have. Some of the main "rules" for designing sound DCC systems are:

• Benefiter pays: The Guide advocates the principle that "infrastructure costs should be paid by those who will use and benefit from" the infrastructure. In a discussion about transit infrastructure it is noteworthy that those who use the system (i.e. riders) are only a subset of those who benefit (which includes riders as well as drivers who benefit from reduced road congestion and shorter travel times).

Infrastructure costs should be paid by those who will use and benefit from the infrastructure. In a discussion about transit infrastructure, it is noteworthy that those who use the system (i.e. riders) are only a subset of those who benefit (which includes riders as well as drivers who benefit from reduced road congestion and shorter travel times).

- Fairness and equity: The Guide recognizes that all parties do not benefit equally from any given investment in infrastructure, so DCCs should aim to distribute costs fairly between existing users and new development, and between different kinds of development.
- Accountability: DCC systems should be transparent and understandable and there must be clear accountability for how the rates are determined and how the money is used.
- Certainty: DCC systems should provide certainty to the development industry, meaning stable rates and
 an orderly progression of infrastructure construction, and certainty for local government, meaning
 sufficient funds to support timely construction of necessary infrastructure.
- Consultation: there should be ample opportunity for full discussion about DCCs among all stakeholders and advance notice of any changes to rates.



 Consideration of possible impacts on the pace of development or affordability: the legislation requires local governments to consider whether a DCC is "excessive in relation to the capital cost of prevailing standards of service", will "deter development", or will "discourage the construction of reasonably priced housing".

The legislation requires local governments to consider whether a DCC is "excessive in relation to the capital cost of prevailing standards of service", will "deter development", or will "discourage the construction of reasonably priced housing".

- Monitoring: DCC programs should be monitored to ensure that they are not causing negative market impacts and that the system is facilitating the orderly construction of infrastructure at the pace needed to accommodate growth.
- Administrative ease and efficiency: DCC systems should be simple and inexpensive to manage. On the collection side, it should be easy to determine the rate to be paid for each type of project in each relevant location. Because DCC funds must be segregated based on the purpose for which they were collected and for the geographic boundary in which they were collected, there is a general preference for not creating too many small pots of money that are not large enough to fund projects on a timely basis. For this reason, municipalities tend to charge the same rates across the municipality.

Policy Questions

The creation of a new DCC for regional transportation/transit infrastructure raises several policy questions that would have to be addressed in the design of the system:

- What regional infrastructure should be funded by a new DCC?
- Where should a new regional transportation/transit DCC be levied?
- What land uses or forms of development should pay the new DCC?
- Should DCC rates be the same across the region or vary?
- Should residential DCCs vary by type of housing unit?
- How should rates be determined?
- Should any development be exempt?
- Who should collect the DCC?

What Regional Infrastructure Should Be Funded by a New DCC?

A DCC is a cost-recovery mechanism, so it is necessary to identify the specific regional infrastructure that is to be funded by the new DCC. Options include using a new regional DCC for:

- All regional transportation/transit infrastructure, including transit, major roads, regional bridge crossings, bicycle networks, and pedestrian routes.
- Only regional transportation/transit investments that can be considered "green". This could, for example, include transit, walking, and biking investments similar to how the City of Vancouver defines these modes as "green transportation" in its Greenest City 2020 Action Plan and Transportation 2040 Plan.
- Only transit investments. This could include the entire transit system, or only the Frequent Transit Network (i.e. high frequency bus routes as well as rapid transit), or only new rapid transit and upgrades to existing rapid transit lines (e.g. station expansions). The eligible capital costs could include fixed infrastructure or vehicles to expand the transit fleet.
- Only new rapid transit line construction.

This decision would affect the capital costs that could be included in the determination of the DCC rate.

DCC legislation also requires consideration of what portion of a capital expenditure should be paid for by existing users and what portion should be paid by growth. This will be a complex allocation for transportation and transit, in which some expenditures will mainly serve the existing population while other expenditures will mainly serve new development.

Where Should a New Regional Transportation/Transit DCC be Levied?

A new DCC would require the definition of the geographical area in which the DCC would be charged. There are several options for how this boundary could be defined:

 The entire region. This could mean literally all of Metro Vancouver or perhaps the large area served by the Frequent Transit Network and Major Roads Network. The argument in favour of a large DCC collection boundary is that new transportation/transit infrastructure benefits everyone in some way. For



example, a DCC being used to fund regional transit investments would benefit transit users directly, but people and businesses in areas with limited transit service would also benefit from reduced road congestion, shorter travel times, cleaner air, and the gradual extension of the regional transit network. Other advantages are that if the DCC is applied broadly there is more flexibility on where to spend the funds and a broad reach means that the DCC rate could be lower than it would be if it only applied to some new development.

- The parts of the region that will receive most of the new capital spending. For example, in the context of a DCC being used to fund regional transit investments, the costs of rapid transit expansion and upgrading are high relative to the costs of other transit improvements, so a new DCC could be applied only to the areas directly served by the rapid transit network. As another example, if the DCC funds regional road networks, it could be applied only in the part of the region served by a new major road or crossing.
- The areas that benefit most directly from the transportation/transit upgrades. A DCC area could be
 defined, for example, very narrowly as say the areas around existing or future rapid transit stations plus
 the corridors receiving major bus upgrades on the premise that these locations are receiving the most
 direct improvement in accessibility.
- A combination. It would be possible to structure a DCC with a base rate across a large geographic area
 and a higher rate in defined directly benefitting areas. This approach probably maximizes the potential
 revenue while helping keep rates lower than if the charge is only applied to small benefitting areas, but it
 is not as simple to administer as a flat rate.

The question of where the new levy should be charged is closely tied to the regional transportation/transit infrastructure that is included in the determination of the DCC rates, as the nature of the investments helps define the benefitting areas.

It is also worth noting that the regional shares of past major investments in regional transportation/transit infrastructure have been funded using broad-based, regionally-applied mechanisms such as property tax or fuel tax. A region-wide DCC would be consistent with past approaches, whereas a DCC applied in only part of the region would be a departure from past funding strategies.

What Land Uses or Forms of Development Should Pay the New DCC?

The principle of "benefiters pay" would suggest that all urban development (except the exemptions allowed under legislation) should contribute to regional transportation/transit improvements. Housing, retail, office, industrial, and institutional uses all benefit to some degree from improved regional accessibility.

However, different forms of development benefit in different ways from various regional transportation/transit investments, so the decision about what land uses or forms of development should pay the new DCC is closely related to the infrastructure that is included in the determination of the DCC rates.

For example, if the new DCC is intended to fund transit expansion and upgrades, higher density uses will tend to benefit most, as these uses tend to be located near transit and tend to generate the most riders. Some may argue that low density residential uses should not pay a DCC that is mainly funding regional transit investments if they are in areas not well served by transit. However, transit service is being expanded and will eventually reach all neighbourhoods (albeit at different service levels). More significantly, low density areas that remain auto-oriented will benefit from reductions in road congestion and shorter travel times due to increased transit mode share. These same arguments, pro and con, could be applied to low density commercial and industrial uses. Shopping centres and big box retail concentrations are often not transit-oriented, but they would benefit from the expansion of transit service, reduced road congestion and shorter travel times, and in some cases from future densification and redevelopment supported by expanded transit.



Different forms of urban development will have different abilities to absorb the cost of a new DCC. While DCCs are a cost-based levy, rather than a charge based on ability to pay, it is essential to ensure that the amount of the charge can be absorbed without impairing the viability of residential, commercial, and industrial projects.

Should DCC Rates be the Same Across the Region or Vary?

There could of course be different rates for different kinds of development (e.g. low density residential, high density residential, commercial, industrial). This is allowed under legislation and is common in Metro Vancouver municipalities.

The challenging question is whether the rate for a specific type of development (an apartment unit, say) should be uniform across the region or should vary depending on some factor.

The challenging question is whether the rate for a specific type of development (an apartment unit, say) should be uniform across the region or should vary depending on some factor. One such factor could be location relative to transit investment.

One such factor could be location relative to the transportation/transit investments. For example, should a new apartment unit on the North Shore, where no new rapid transit is proposed, pay the same transportation/transit DCC as a new apartment unit in the Broadway Corridor where a new subway line is proposed? Should a new apartment unit on future rapid transit lines in municipalities South of the Fraser pay the same DCC as a new apartment unit on existing rapid transit lines? Should a new unit in a rapid transit station area pay the same DCC as a new unit not near a station, even if it is in the same municipality?

There are two broad policy options:

- All similar development (e.g. all apartments or all retail space) in the DCC collection area pays the same DCC rate.
- DCC rates for particular types of development vary across the region depending on the degree of direct benefit or the allocation of capital cost. DCCs are essentially a cost recovery mechanism based on the principle of benefiters pay, so DCC rates in specific areas could be set based on the capital costs to be incurred or benefits enjoyed in those areas. However, legislation requires that DCCs collected in a specific area must be spent in that area, an argument against a large patchwork of DCC districts that would limit flexibility in capital spending.

One consideration in this debate is the ease of setting and defending DCC rates. It would be very easy to come up with a uniform regional DCC rate for each form of development, although it might be hard to defend this in terms of benefits. It would be extremely difficult to come up with a DCC rate scheme that varied widely across the whole region based on some complex analysis of capital costs and direct and indirect benefits. Such a scheme could have a sound technical rationale, but it might be hard to achieve broad acceptance because there are so many perspectives on benefits and fairness; it may also lead to the challenge of too many small reserve accounts without enough money to build projects on a timely basis. Between these bookends, it would not be too difficult to come up with a DCC rate scheme that distinguished areas that will enjoy broad regional benefits versus areas that will enjoy direct significantly increased accessibility from transit investment, such as areas around rapid transit stations.

The question of uniform or varying rates will generate debate about relative fairness, ease of implementation, level of simplicity, the relationship between benefits and costs, and the pros and cons of having to administer



one capital budget for the whole region versus different capital budgets for different areas. If the infrastructure to be funded benefits the entire region, then there is a simplicity and fairness to uniform DCC rates across the region. On the other hand, if there is a material difference in benefits then this lends support to the idea that DCC rates should vary.

If the infrastructure being funded by a new DCC benefits the entire region, then there is a simplicity and fairness to uniform DCC rates across the region. On the other hand, if there is a material difference in benefits then this lends support to the idea that DCC rates should vary.

Should Residential DCCs Vary by Type of Housing Unit?

For most DCCs in Metro Vancouver, the rate varies by type or size of unit, based on the premise that larger units tend to be occupied by larger households so there is a greater load on infrastructure. For transit, though, there is possibly a different relationship between dwelling type, household size, and transit load. Larger units (e.g. single detached dwellings) tend to be in lower density areas with lower transit use.

There are several different approaches that could be used to set DCC rates for residential uses:

- All residential units pay the same flat rate.
- The rate varies by type of unit (e.g. separate rates for single detached, townhouse, or apartment units).
- The rate is charged per square foot of space rather than per unit.

Charging per unit is probably an easier system to administer, but whether the rate should be the same for all units or differ by unit type warrants careful consideration. The question is whether the DCC should be based on household size, propensity to use the infrastructure being funded by the DCC, or benefit from investment (both directly and indirectly), as each of these factors would lead to a different rate structure.

How Should Rates Be Determined?

DCCs are a cost recovery mechanism, so ultimately the rate must be linked to the cost of the eligible capital items. However, based on preliminary analysis it is highly likely that the total regional share of eligible capital costs allocated over the likely amount of new development during the next 30 or 40 years would produce a DCC rate that is too high to be absorbed by the market. This would also not be in keeping with the principle of distributing costs fairly between existing users and new development. So, to determine an appropriate DCC, the following steps are needed:

- Determine the capital cost for the regional transportation/transit investments to be funded by the DCC.
- Consider the share of the capital cost that should be attributed to new development. This might not be
 an easy exercise, considering that almost all transportation/transit infrastructure will benefit new
 development as well as existing residents and businesses. However, a regional DCC will have an upper
 limit on revenue, based on the ability of new development to absorb a cost, so the share attributed to new
 development may be prescribed by this limit.
- Decide on the assist factor that should be applied to growth-related costs.
- Decide on the time frame over which the cost should be recovered.
- Estimate the total amount of urban development likely to occur in this time frame.
- Calculate the resulting rate per square foot or per unit of new development.



Evaluate whether this calculated rate can be digested by the market with no impact on the pace and/or
location of development or no impact on affordability and (if necessary) make adjustments to produce a
final DCC rate structure.

Should Any Development Be Exempt?

Existing legislation states that no DCC is payable in cases where the development does not impose new capital cost burdens, so any new residential units or employment space that replace demolished units or space should not be charged.

Legislation requires exemptions for places of worship and allows (but does not require) exemptions or reductions for multifamily projects with 3 or less units, not-for-profit rental housing, for-profit affordable rental housing, or developments that have low environmental impact. A new DCC system would require a decision about whether to waive or reduce the charge for these kinds of projects.

Who Should Collect the DCC?

TransLink is responsible for capital investment in regional transportation/transit projects, so ultimately the proceeds from a new DCC should flow to TransLink. There are two main ways this could be implemented:

- Municipalities could collect the new DCC at the same time they collect their municipal DCCs. The
 municipalities would forward the money to TransLink. This is how the current regional sewer DCC works
 (with the funds forwarded by municipalities to the GVS&DD).
- The new DCC could be paid directly to TransLink.

The first approach uses existing administrative systems and is efficient for all parties. Creating a new DCC collection system in which funds are paid directly to Translink would add new costs that would reduce the DCC proceeds.

Could There Be Enough Revenue to Make a New Regional DCC Worthwhile?

The revenue from a new regional DCC obviously depends on where the charge is levied (i.e. the whole region or only sub-areas) and the rate structure. Financial forecasts can be produced for a variety of scenarios, showing how much revenue might be derived from a new DCC. For the purpose of this discussion paper, which does not include detailed forecasts based on a specific proposed DCC framework, it is interesting to simply demonstrate whether the idea of a new regional DCC could generate enough revenue to be worth careful consideration.

The potential magnitude of DCC revenues can be roughly estimated for illustrative purposes using some simple assumptions:

- Assume the DCC is levied on all residential, office, and retail development in the region but not industrial
 development as preliminary testing suggests it is unlikely to be able to bear the additional cost.
- Over the next three decades, the annual pace of new residential development (excluding replacements
 of demolished units) averages out to about 16,000 units per year based on regional population
 projections. At an average of 1,000 square feet per unit, this works out to 16 million square feet of new
 residential space each year.



- The estimated annual pace of commercial construction averages out to about 2 million square feet per year, based on recent trends.
- For illustrative purposes, assume an arbitrarily small DCC rate¹ of \$0.50 (fifty cents) per square foot.
- These figures yield DCC revenues of \$9 million per year on average, or more than \$270 million over 30 years. At \$1 per square foot, the yield would be \$18 million per year on average or more than \$500 million over 30 years.

This should not be interpreted to mean that fifty cents or a dollar per square foot is the "right" number. The figure is used simply to show that a relatively low regional DCC charge applied across the region can generate a significant amount of revenue over several decades.

A relatively low new regional DCC charge applied across the region can generate a significant amount of revenue over several decades.

Clearly a regional DCC will not raise all of the necessary regional share of future capital spending, but it has the capability of generating a significant amount of revenue as part of a comprehensive regional funding strategy.

Possible Impacts

Adding a new cost to urban development always impacts the market in some way. If the new cost is very small, relative to the price or construction cost of new development, then the impact may be hard to define and difficult if not impossible to trace. But if the charge is significant, then it will affect the real estate market in ways that are somewhat predictable.

This section explores the nature of potential impacts of a new regional transportation/transit DCC on:

- Housing affordability.
- Development patterns.
- Local government revenues.

Housing Affordability

It is common to hear that "a DCC just gets added directly to the price of new units", the inference being that local governments concerned about housing affordability should not charge levies for infrastructure. But that is a flawed characterization of how the market reacts. Developers do not set housing prices by just adding up the costs, tacking on a profit, and expecting the buyer to pay whatever this works out to, regardless of whether this figure is above market value. If they could do that, why would they worry about controlling any costs?

What does "small" mean in a Metro Vancouver real estate context? Suppose a new concrete apartment unit sells for \$500 per square foot and the all-in cost (not including profit or land) is \$350 per square foot. If inflation on construction costs is say 1.5% per year, then costs will rise for this unit by say \$5 per square foot over a year. If the market is rising by say 3% per year, the sales price will go up by \$15 per square foot in a year. In this market context, a new cost that is in the range of (say) fifty cents per year is a small number that could have little or no observable impact on the market. Whether it affects developer profit, land acquisition cost, comes out of the project contingency budget (or even if it affects unit prices as some stakeholders claim), there is not much impact. Obviously a single change in cost at the margin must be looked at in the context of other costs. Adding up a lot of individual small cost increases can result in a large cost, with the possibility of significant impacts, so it is important to keep in mind that existing municipal and GVS&DD DCC rates will likely rise.



Housing prices are set by the interaction of local supply and demand. Market housing prices in turn drive land value. Think of the financial performance of a proposed new project this way: start by estimating the revenue from selling finished units at market value, deduct all the costs (except land) to build and sell the project, and then deduct the target for profit. What is left over is the

Developers do not set housing prices by just adding up the costs, tacking on a profit, and expecting the buyer to pay whatever this works out to, regardless of whether this figure is above market value.

amount the developer can pay for land. When faced with any sort of cost increase, developers cannot arbitrarily bump up sales price and expect their units to sell as if nothing had happened. Nor do they happily settle for a lower profit margin. What happens is that they try to reduce the amount they pay for development sites. This view of market reaction is consistent with the view of the Province of BC's local government guide for amenity contributions, which states "Developers know that they cannot simply raise their asking prices when faced with additional costs; that the selling price is set by the market...a developer faced with increased costs...will try and find savings in the cost of land, offering less than they would have otherwise."²

This downward pressure on land value is at the heart of the levy impact question.

At any given time, a property in an urban area is either more valuable as a redevelopment site (say high density residential) or more valuable in its current use (say single family houses or older low density retail). Redevelopment only happens if developers can pay enough for sites to outbid the value supported by the existing use and to entice existing land owners to sell. If rising development costs reduce the amount developers can pay for land, then some owners will become unwilling to sell their property for redevelopment. If this happens on a large scale, reduced availability of sites means a slower pace of new construction. Constraining new supply in the face of strong demand means housing prices will rise...not just on new units, but on all stock.

Developers who already own land at the time of a new or increased DCC have a different problem. They can't reduce land cost, because they already bought it. They may get stuck with a lower profit or they may slow their project schedule if they think market price is rising, unless the levy is small enough that it is smarter to develop than to wait.

So, if development levies are too high the pace of new development could fall, with potentially severe impacts on affordability. This is a much bigger problem than just increasing the price of new units. However, not using DCCs (or some other way to collect revenue from new development projects) means everyone pays more property tax (or some other tax or fee) than they otherwise would. This affects affordability in a different way.

The key to avoiding impacts on housing affordability from a new regional transportation/transit DCC (or any DCC for that matter) is to make sure the charge is low enough that it does not reduce the flow of land into the market for new residential development.

This threshold – the size of a new DCC that would be large enough to reduce the ability

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² Ministry of Community, Sport, and Cultural Development, "Community Amenity Contributions: Balancing Community Planning, Public Benefits, and Housing Affordability." March 2014, page 15.



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of developers to acquire redevelopment lands – varies across the region. Housing prices (and therefore land values for development sites) in Vancouver, for example, are already so high that a new cost of several thousand dollars per unit would likely have little impact on the pace of development. On the other hand, because housing prices (and therefore residential development site values) are so much lower in Surrey a new cost of say \$1,500 per unit could lead to a reduced pace of new residential development in some areas, with resulting increases in house prices.

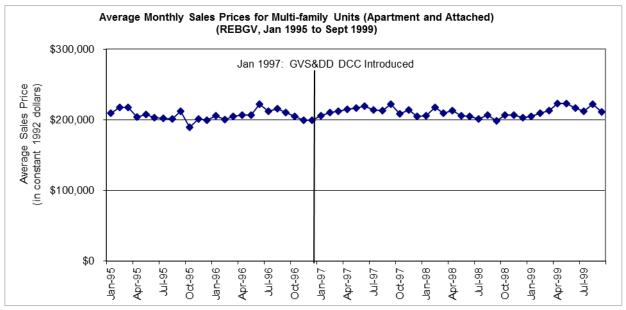
Complicating the impact assessment further is the likelihood that new transportation/transit infrastructure will open up new areas for densification and redevelopment, particularly around rapid transit stations. There could be more land designated for high density development in these areas, enabling a more rapid pace of development which helps ease market price growth and could offset impacts of the DCC. There is also the possibility that new developments near transit nodes can reduce the amount of parking, which reduces the cost of construction. And there is some potential for increased accessibility in some areas to cause purchasers to be willing to pay more for units, which helps offset the impact of the new DCC on developers buying land. Such price increases would be due to increased demand associated with the transportation/transit upgrade not the DCC per se. Is this an impact on affordability? Yes, in the sense that someone is paying more for the unit, but no if those purchasers can now significantly reduce their transportation costs by using rapid transit.

This is a high level treatment of a complex subject, with the intent of indicating that analyzing the impact of DCCs is significantly more nuanced than "it gets added to house price", which is not a good characterization of market response.

In considering the idea of a new regional transportation/transit DCC, a careful land economics analysis could help set DCC rates that avoid negative impacts on the pace of development or housing prices.

The introduction of the regional sewer DCC offers an interesting case study. The GVS&DD introduced the regional DCC for sewer infrastructure in 1997. The charge was in the range of about \$600 to \$1,100 for apartment units and a little more for townhouses (and has not changed since then but is under review).

The chart below shows monthly average sales prices for multifamily units for a couple of years before and after the new sewer DCC was introduced. The chart shows seasonal fluctuations (with prices in spring and summer tending to be a little higher than in winter), but also shows that average price in January 1998 and January 1999 was almost identical to the price in January 1995 and January 1996.



Source: Real Estate Board of Greater Vancouver data. Note that sales prices are in constant 1992 dollars.



Many factors affect housing prices and it would be easy to read too much into this one example, particularly considering that the provincial economy had periods of weakness and volatility during the late 1990s and early 2000s. However, this example is interesting in that it does not support the view that a new DCC necessarily results in price increases.

Another perspective on this issue is provided by comparing housing price increases and construction cost inflation over the last decade. Cost index information suggests that the cost of new apartment construction increased by a total of about 25% during 2005 to 2015 (a compounded rate of about 2.2% per year). Over the same time frame, average sales prices for apartments in Metro Vancouver went up by at least 50% in many submarkets and as much as 100% in some of the strongest areas. Clearly, price (i.e. market value) growth is being driven by something other than cost increases. And this price growth was happening during a decade when total apartment construction was considerably higher than in the previous decade: a total of about 68,000 apartment units were built in the region during 1996 to 2005, while 107,000 units were built during 2006 to 2015, so the pace of development increased even though costs increased.

Housing prices in this region are rising for many reasons including population growth, low interest rates, international investment, intergenerational wealth transfer, and economic growth. Concern about affordability requires a cautious approach to any new costs, but it is possible to set a new DCC for regional transportation/transit at a level that does not have material negative impacts on the housing market.

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Impacts on Development Patterns

Regional transportation/transit investment affects development patterns when local governments plan accordingly. The rapid pace of multifamily development in places such as the Cambie Corridor in Vancouver, Brentwood in Burnaby, and central Richmond shows what can happen when transit investment, supportive municipal policy, and market interest align.

Future regional road, crossing, rapid transit, or Frequent Transit Network (FTN) investments can be expected to influence development patterns, provided that the municipalities adopt land use and density policies that take advantage of the infrastructure.

If a new DCC is imposed across the region, then it is not likely to alter development patterns as there is no way to avoid the charge. In fact, a region-wide DCC probably encourages densification because transit-served areas offer potential to offset the new cost with parking cost savings or increased buyer interest.

If the new DCC is only levied in defined benefitting areas, or if the rate is much higher in benefitting areas than in the rest of the region, there is a risk that development patterns are distorted. There are two ways to avoid this risk: make the charge uniform across the region or ensure that any difference in the rate is small enough to not materially alter the economics of new development. For illustrative purposes, a DCC of \$1 per square foot across the region versus \$2 per square foot in defined high density benefitting areas such as rapid transit station areas is probably not a big enough difference to distort development patterns. On the other hand, a rate of \$1 per square foot across the region and a charge of \$10 per square foot in station areas is probably big enough in some submarkets such as New Westminster, Surrey, or Coquitlam to deflect some development interest away from stations to peripheral locations.



Impacts on Municipal Finance

Financial analysis of new urban development projects easily demonstrates that there is a limit to how much local governments can charge for application fees and DCCs without impairing the pace or viability of new development.

Because there is a limit on the total municipal fee load, a new regional charge can reduce the amount that could otherwise have been collected for some other civic purpose, such as higher municipal DCCs or (in the case of rezonings) Community Amenity Contributions. If transit reduces the need for municipal road expenditures, then a new DCC could be seen as swapping a regional charge for a local road charge, with no net difference in total development cost or municipal net revenue. But if there is no reduction in the municipal roads program, even after transit investment, then the new regional DCC will take funds that could have been applied to municipal projects.

Advantages and Disadvantages of a DCC as a Means of Funding Regional Transportation/Transit Infrastructure

DCCs are a one-time charge levied on new urban development at the time of construction (either at subdivision approval or at issuance of building permit), which makes them very different from other ongoing funding sources such as property tax, fuel tax, fares, or road pricing.

The main advantages of DCCs include:

- A DCC framework is transparent, easy to understand, and easy to administer. The process of setting DCC rates and then accounting for how the money is spent are tightly defined by legislation.
- A DCC is a means of obtaining revenue from new urban development that benefits from new infrastructure, meaning it is consistent with the principle that growth should help pay for the cost of growth.
- Provided DCC rates are set carefully, the cost tends to be borne by land owners of development property, which is a different group of benefitting parties than transportation users or property taxpayers.
- Administration costs for a new DCC are small, as there is already a system in place to collect municipal DCCs and the existing regional sewer DCC.
- There is no risk of leakage of potential revenue, as all development that occurs in the region would contribute.

There are potential disadvantages pertaining to the risk of impacts:

- If DCCs are set too high, there is a risk of housing market impacts.
- A new regional DCC will take funds that could otherwise have been available to local governments for other kinds of infrastructure.

These potential impacts can be addressed by careful design of the DCC system and a careful approach to rate-setting.

There are also potential disadvantages due to the nature of DCCs as a funding tool:

- They can only be applied to capital costs, not to operating costs.
- They are a one-time payment, not a recurring revenue stream such as taxes, and there will be fluctuations
 in annual revenue, depending on the pace of new development which is linked to population growth,
 employment, interest rates, and other factors.



 They are not linked in any way to transportation patterns, so they do not influence transportation behaviour or choices (as distinct from road pricing, for example, which can generate revenue and influence mode share).

These disadvantages can be offset by other components of a comprehensive funding strategy designed to produce funding for ongoing operating costs, produce stable ongoing funding, and influence travel patterns.

Implementation

The first step in implementing a new DCC is to see if regional stakeholders support the idea. The Mayors' Council, the individual municipalities, TransLink, and the development community will all need to be satisfied that any concerns are acknowledged and addressed. If there is not broad support among regional stakeholders, it will probably be difficult to obtain the support of the Province (which must make the legislative changes) or the general public. To secure broad agreement, it will be necessary to address the policy questions raised in this discussion paper, agree on a DCC framework that is acceptable, and conduct financial analysis to support a proposed rate structure that is defendable in market terms.

If there is broad support from regional stakeholders, the Mayors' Council would have to decide if it supports including a regional DCC as part of the comprehensive funding strategy. If so, the Council would submit a proposal to the Province, which would have to draft legislation if it agrees with the idea. The principal necessary amendments are to add transit infrastructure as an eligible DCC item and to give TransLink the authority to collect and spend DCC funds, by changing the Local Government Act (Section 559(2)) and the Vancouver Charter (Section 523D) or the provincial legislation that governs TransLink's powers.

After the legislation is approved, a substantial amount of technical work is needed, including:

- Designing systems for collecting, monitoring, and allocating the funds to capital projects.
- Confirming the DCC rate structure with the stakeholders.
- Deciding on an approach to periodic review and adjustment of DCC rates based on inflation or changes to the capital budget.
- Working with the development industry regarding the phasing in of the charge.

It must be remembered that a new regional transportation/transit DCC is not something that can be examined in isolation. Other changes to development costs (such as increases in existing municipal or regional DCC rates) need to be taken into consideration, as these will affect the regional transportation/transit DCC rate that is feasible.

The immediate next steps are for the Mayors' Council and TransLink to decide if they want to propose including a DCC as a component of a regional transportation and transit funding strategy and to enter into consultation with the Metro Vancouver municipalities and development industry.

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Local Government Development Charges and Housing Prices: Will TransLink's New DCC for Transit Infrastructure Affect Housing Affordability?

November 2017 Coriolis Consulting Corp.

A New DCC for Regional Transit

TransLink is proposing a regional Development Cost Charge (DCC) to help pay for new capital investment in transit. This new DCC is being considered at a time when other agencies are also increasing infrastructure charges: the Greater Vancouver Sewerage and Drainage District (GVS&DD) is increasing its levy on new development to pay for regional sewer infrastructure and many municipalities throughout Metro are raising their DCCs to pay for local road, water, sewer, drainage, and park networks. As well, many municipalities expect Community Amenity Contributions (CACs) from new development to pay for daycare, affordable housing, recreation facilities, and other public benefits.

Imposing these costs on new urban development stems from the idea that new residential and employment spaces need and benefit from expanded services and amenities, so should help pay for them. Urban development benefits from improved transit service in various ways, including making more locations available for high density development, reducing the need for parking (which is very expensive to build), and attracting buyers who want increased accessibility. Even low density development areas benefit from reductions in road congestion resulting from better transit. Therefore, it is reasonable to expect development to contribute to the costs of providing transit. At the same time, though, there are worries that increasing the cost of new construction, especially for housing, will push up prices. In a region where housing affordability is a major concern, any new upward pressure on price is unwelcome.

Will a New DCC Affect Housing Prices?

This concern about local government infrastructure charges is usually expressed in this way: "new costs are just passed on to buyers and renters of new units, making housing less affordable". This sounds logical and it is certainly repeated frequently. But is it true? If an agency like TransLink starts collecting a DCC to help pay for regional transit, does this new charge necessarily lead to increased housing prices?

Certainly, local and regional levies add to the construction cost of new residential and employment space. For uses that are created by governments and non-profits, such as housing for low income households, public schools, university buildings, and hospitals, increases in development charges add directly to the cost that must be borne by users and taxpayers. However, most forms of urban development - condominiums, market rental units, office space, retail stores, industrial work places - are created for profit and offered at a market price that is not the same as the cost of construction. To consider whether a new DCC affects affordability, it is necessary to look at the factors that drive prices in the housing market and then see which of the participants in the market bears the new cost.

To start, it is worth looking at some demonstrations of why market price and construction cost are not as tightly linked as is often suggested:



- In Metro Vancouver over the last few years, condominium prices have been rising at over 10% per year. While construction costs and some local government charges have been rising, increases in market price have far outpaced increases in the cost of building new units.
- If new housing prices were determined just by adding up the costs and then adding a profit, why aren't prices across the region more uniform for similar types and sizes of units? New units in Vancouver sell for two or more times the price of same-sized units in Surrey; while some construction costs are higher in Vancouver, they are not double (or more) the costs in Surrey. Something other than construction cost is driving the price differences across the region. Areas experiencing the greatest market demand have the highest prices and these prices are far in excess of construction cost.
- Suppose two adjacent, virtually identical new condo projects on adjacent sites come to market at the same time. One seeks a price that is 10% higher than the one next door, which offers units at the prevailing area price. The explanation offered by the sales rep is that the higher priced project cost more to build because of an expensive soil remediation requirement. Would condo buyers pay the extra 10% because of this higher cost? Or would they go next door and buy the unit that is selling at the prevailing market price? When people buy a unit (or a new stove, for that matter) they generally don't know what it cost to construct. What they know is the market price and they know what they are willing and able to pay. They won't (or can't) pay more just because the seller claims to have absorbed a higher cost.
- Suppose a developer completes a new condo project. The total of all costs (construction, marketing, land, municipal charges) plus a typical allowance for profit all come to \$700 a square foot. But new units in the neighbourhood are selling for \$800 a square foot. Does the new developer offer the new project at \$700 a foot or at the prevailing market price?

These points ought to create some skepticism about the premise that any new costs, such as DCCs, are simply directly passed on to new home buyers or renters in the form of higher prices.

So, if the charge is not simply added to price, what happens when a new government charge is imposed for infrastructure or amenities?

The answer is different for levies such as DCCs, that are imposed on all projects, and for CACs, that in BC are only applicable to projects involving rezoning.

Community Amenity Contributions and Housing Prices

Community Amenity Contributions (CACs) are collected by many BC municipalities when property is rezoned to change the allowable uses and/or allowable density for new development. This type of rezoning has two key consequences:

- By increasing the capacity for new housing or employment growth, rezonings lead to increased loads on a wide range of community amenities and infrastructure, such as daycare, recreation facilities, or emergency services.
- By changing the allowable use and by increasing the allowable density, rezonings almost always result in higher land value because of the increased development opportunity.

Without a mechanism such as CACs, the impacts of growth are absorbed by the community and the municipality, while all the benefits of increased land value are enjoyed by the property owner. A CAC is a



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means for converting some of the increased land value into public benefits that help the community deal with the impacts of growth. A well-designed CAC system results in the land value gains from rezoning being allocated among land owners (so they have an incentive to sell their land into the development market), developers (so they have an incentive to develop the additional density), and the community (in the form of amenities that help address the impacts of change). Because CACs are always associated with an increase in density, CACs do not have a negative impact on housing price. Local governments obtain CACs in exchange for allowing new density (i.e. new capacity for development), meaning CACs help encourage expansion of housing supply. Generally, the cost of CACs associated with obtaining new density is less than the market value of this density, so the all-in cost of new units can be lower than the cost of new units that are built on already-zoned land. New units sell for market value, though, and sales data indicates that units in projects that paid a CAC are priced the same as comparable units in projects that did not pay a CAC (because they did not involve rezoning).

Development Cost Charges and Housing Prices

DCCs are very different from CACs. These infrastructure costs are levied on all projects, not just those involving rezoning, so they are a cost that is not offset by an increase in development density.

To explain the impact of DCCs in the urban market, it is important to understand a unique feature of land as a form of capital. Labour, money, and materials can all move around based on where they will obtain the optimum value or return. Land can't move, so its value is based on what it can be used for in its local market context.

In an urbanized region such as Metro Vancouver, almost all properties that have redevelopment potential based on zoning or community plan policies have at least two candidates for what an appraiser would call the highest and best use, or the use that supports the highest land value in an open, competitive marketplace:

- One candidate is the amount that a user (e.g. a home owner, a business owner) or an investor would
 pay for the property to keep it in its present use. This use might be a single detached home, an older
 low density rental apartment building, an older retail space, or a strip mall. This existing use supports a
 value based on what users or investors are willing to pay, to keep and use the property as is (to live in,
 to run a business in, or to collect the rent from).
- The second candidate is the amount a developer is willing and able to pay to acquire the property, demolish the existing use, and profitably build something new, typically at a higher density. The amount a developer can pay depends on the market value of the completed new use and the cost of creating this new use.

When the value supported by the existing use exceeds the value a developer can pay, the property generally remains as is. This is the case for many properties that appear as though they "ought" to be development sites, because some older low density commercial properties or older single detached homes in places zoned for higher density are simply more valuable in their current use than a developer can afford to pay for them. On the other hand, when the land value supported by redevelopment of a site exceeds the value of the existing use, then redevelopment usually occurs. As an aside, this is why it is possible and important to calculate the minimum allowable new density that is necessary to encourage redevelopment in areas selected for densification: a developer needs sufficient new density to support enough land value to compete a site away from those who want to own the property for its current use.



What determines how much a developer can afford to pay for a site? For residential development, it works like this:

- How much will the new units sell or rent for in the open market? This market price determines the total amount of money that will be available to pay for construction costs, profit, and land.
- What is the cost to construct the new project? Developers pay all the hard costs (e.g. concrete, lumber, labour, appliances) and soft costs (e.g. municipal fees, insurance, marketing, professionals) of creating a development and bringing it to market.
- What is the profit margin achievable in the local market? Development takes time, ties up capital, and involves risk, so developers of new condos or rental units need to achieve a level of profit that makes the business worthwhile. Developer profit margins are set by the competitive marketplace: there is a basement rate of profit set by the fact that developers are not willing to do projects below some minimum threshold of profitability (and lenders are not likely to lend money for projects that are too "thin") and a ceiling rate set by competition from other developers (a developer who tries to extract too much profit will have to try to achieve higher unit prices than other similar projects, try to obtain labour or materials at less than market price, or try to buy development sites for less than market value, none of which are sustainable business strategies).
- Starting with the market value (the revenue from developing the project), deducting the construction cost and deducting the target profit leaves the amount that can be paid for land. This "residual" land value is the maximum a developer can pay for a site and still have a viable, profitable project. This amount must be higher than the value of the site supported by the existing use, or the developer will not be able to buy it for redevelopment.

Based on the above explanation, understanding what drives the market price of new housing is at the heart of understanding the impact of a new cost in the urban marketplace. Classic microeconomics tell us that price is set by the interaction of supply and demand. The demand for residential units in Metro is a function of population growth, employment growth, household incomes, mortgage rates (which have been at historic lows for a long time), intergenerational wealth transfer, investors (local and non-local), second home owners...all of which generate demand for owned and rented housing in this very attractive region. This total demand for units is higher than the demand generated by population growth alone.

The supply of residential units in the region consists of existing inventory (which is fixed) and new inventory, which requires new development. The pace of new development is affected by the availability of land, infrastructure (particularly transportation), municipal approvals processes, and the capacity of the regional industry to build new product. Land availability in this region is one constraint on new housing supply. Mountains, ocean, and the US border limit the total supply of land, the Agricultural Land Reserve and open spaces account for a large area, and low density single detached neighbourhoods account for another large swath, leaving a relatively small total area available for high density urban use. Another constraint is the rate at which new projects are approved.

Strong demand and constrained land supply have combined to push housing prices upward at a pace that far exceeds the rate of inflation in construction costs or increases in local government fees. The difference between growth in market price and increased construction cost becomes growth in land values. New construction costs in a rising market, therefore, tend to take some of the money that would otherwise have become added to land values.



Prices will not keep rising at recent rates forever, but in the absence of significant government intervention or a major economic downturn they are not likely to collapse either.

So, what does all this mean for DCCs?

Adding a new DCC, such as the one proposed by TransLink, will not directly increase the market price of housing. Prices in a region with strong demand and constrained supply are not determined just by adding up the costs.

What a new DCC does do is reduce the amount developers would otherwise be able to pay for land. Developers cannot arbitrarily increase the market price of new units just because a cost went up¹. They are price-takers for construction costs (i.e. they cannot try to drop their price for concrete to counter an increased DCC). And they have a target for profit that needs to be met to justify the risk of taking on a project. So, the new DCC has only one place to go: it pushes down development site values (which does not necessarily result in an absolute decline; it could show up as a slower rate of growth in land values than would otherwise have occurred).

Back to the idea that every parcel of land has at least two candidates for setting its market value: for a parcel of land to be a development site, developers must be able to pay more for land than the value set by existing uses. If a new (or increased) DCC lowers developers' bid price for land, but this price is still sufficiently higher than the value set by the existing use, there is no impact on the housing market. Land owners still have an incentive to sell into the market, developers can outbid users or investors who want the existing use, and new units still flow to the market at the pace they would have. But if the DCC (or any new cost) drives developers' bid price below the value set by existing use, developers will not be able to obtain development sites. Sites that should have been development sites remain in their existing use. If this reduction in the availability of development sites is large and widespread, it has serious consequences for the housing market because it results in a reduced flow of new units in a market with a continuing surge in demand. The result is market-wide increases in all housing prices, which is of far greater concern regarding housing affordability than the simplistic fear that the DCC gets added to the price of new units.

There are three housing market risks if DCCs (or any new cost imposed by government) are too high:

- For market strata housing, if DCCs put too much downward pressure on what developers can pay for land, the flow of land to the redevelopment market will slow (because more properties will be kept in their current use), the pace of new unit creation will slow, and strata prices will rise faster than they otherwise would have.
- New market rental housing in Metro Vancouver already has financial difficulty competing for development sites because rental supports a lower land value than strata development. To make rental more financially viable, the land cost must be lowered by expanding development capacity (through density bonusing, for example, or by allowing higher density only if rental is included) and costs imposed by government must be managed very carefully, particularly in submarkets where new rental is just barely viable. Fortunately, the cost of a new DCC for transit can be offset by cost savings such as reduced parking requirements.

¹ The Province of BC published a guide for local government in 2014 that stated, "Developers know they cannot simply raise their asking prices when faced with additional costs; that the selling price is set by the market." Community Amenity Contributions: Balancing Community Planning, Public Benefits, and Housing Affordability, Ministry of Community, Sport, and Cultural Development, March 2014, page 15.



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For non-market rental projects, which are usually built or incented by non-profits and governments who
are trying to deliver new units at the lowest possible cost, any new costs just add to the challenge. This
is why TransLink, like others in Metro, will exempt some kinds of affordable rental housing from the new
DCC.

Avoiding these negative impacts requires caution in setting the amount of any new cost imposed by local or regional agencies and also requires giving ample notice of new or increased costs so the land market has time to adjust.

Getting it Right

DCCs are a two-edged sword. Set appropriately, they are a way to have new development contribute to infrastructure by capturing some value that otherwise would have gone to increases in land value. Set too high, they can lead to a reduction in the availability of development lands and impair the viability of new rental projects, with consequences for affordability.

TransLink, like the GVS&DD and all local governments in Metro, must use caution in setting DCC rates. The combined total cost of these charges must be at a level that does not impair the economics of new development or impede the flow of development sites and new units to the market.

TransLink's proposed new DCC is being designed to achieve a careful balance². Over time, the DCC will generate significant revenue for transit infrastructure that will come from urban development, a new source that is different from property tax, fuel tax, or transit fares. The DCC will be a mechanism whereby some of the benefits for new development that flow from better transit will be channeled into investment in new transit. The proposed DCC rates have been communicated with more than two years notice and have been set at a modest level³ that, after accounting for other recent and proposed increases in development charges in the region, will not have any significant negative impact on the Metro Vancouver housing market, provided appropriate exemptions are made for affordable rental housing.

³ The proposed rates are \$2,100 per single detached unit, \$1,900 per townhouse unit, \$1,200 per apartment unit, \$1 per square foot for retail, and \$0.50 per square foot for office, industrial and institutional. These rates are subject to further review prior to final adoption.



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² For an overview of the proposed DCC, see "A DCC for Regional Transportation Infrastructure in Metro Vancouver: Proposed Structure and Draft Rates", TransLink, November 2017.



Mayors' Council on Regional Transportation

December 7th, 2017



Proposed Resolution

 Approve the proposed structure and rates for the DCC for transit infrastructure as set out in the attached document...to serve as the basis for TransLink preparing and adopting a DCC bylaw in late 2018

 Also seeking joint approval from TransLink Board on December 14th

Phase One Investment Plan



- Over \$1 Billion of expansion capital in Phase 1 Plan
 - About \$980M for transit expansion
- Plus additional funding needed for
 - incremental operating expenses
 - expansion capital for future investment plans

Completing the 10-Year Vision for Metro Vancouver Transit & Transportation



ENTIRE 10-YE	AR VISION	FUNDED IN PH 1 INVESTMENT PLAN	IMPLEMENTED BY 2017
BUS SERVICE	25% increase12 B-Lines10 new service areas	10% increase5 new B-Lines5 new service areas	5% increase1 new B-Line5 new service areas
SEABUS SERVICE	1 new SeaBus 10-minute peak frequency; 15- minute all day	1 new SeaBus 10-minute peak frequency 15-minute all day frequency	15-minute all day frequency
HANDYDART SERVICE	30% increase	• 15% increase	8% increase
SKYTRAIN & WEST COAST EXPRESS (WCE)	164 Expo/Millennium Line cars 24 Canada Line cars 10 WCE cars + new locomotive Upgrades of power and control systems, stations	 56 Expo/Millennium Line cars 24 Canada Line cars 2 new + 6 refurbished WCE locomotives Upgrades to Expo/Millennium & Canada Line stations and systems 	Business cases to be submitted to provincial government for approval in Fall 2017
MAJOR PROJECTS	Millennium Line Broadway Extension South of Fraser Rapid Transit (SOFRT) Pattullo Bridge Replacement Burnaby Mountain Gondola	Pre-construction of Broadway Extension Pre-construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT) Design for Pattullo Bridge Replacement	Business cases to be submitted to provincial government for approval in Fall 2017
A MA IOD DOAD METIMODIC	MRN upgrades: \$200M	• \$50M (25% of Vision)	\$13.6M allocated to municipalities
MAJOR ROAD NETWORK (MRN)	MRN seismic: \$130M MRN expansion: 1% annual increase + one-time 10% increase	\$32.5M (25% of Vision) MRN expansion: 1% annual increase + one-time 10% increase	MRN expansion: 1% annual increase
	Regional Cycling: \$131M	• \$41.3M (32% of Vision)	\$7M allocated to municipalities
* WALKING & CYCLING	TransLink-owned Cycling:\$34M	• \$12M (35% of Vision)	
	Walking Access to Transit: \$35M	• \$12.5M (36% of Vision)	\$2.5M allocated to municipalities
TRANSIT EXCHANGES	13 new or expanded transit exchanges	4 updated transit exchanges	
MOBILITY INNOVATION	 Integrated travel planning and payment New technologies and services Page 4 	Vanpool pilot Innovation Lab to explore mobility Ocologicals Ocologicals	Vanpool pilot in progress

How are we funding Phase One?

New Investment



Federal Government \$370 million



Provincial Government \$244 million



Metro Vancouver Region \$1.3 billion

New Regional Funding Sources



Gradual, annual increases to transit fares



Property tax: \$3 per year for average homeowner



Regional development cost charge (DCC)*



Contribution from existing sources and savings

*The DCC would contribute about 10-15% to the transit expansion capital of the Phase 1 Plan

Why consider a Regional DCC for transit/regional transportation?

Fair

In a rapidly growing region, growth should help pay for growth

Sustainable

Delivers capital revenue matched to pace of regional growth

Minimal impact on existing residents

 Provided rates set carefully, cost borne by landowners selling property for development, rather than end users

Simple

Transparent, easy to understand and administer

Guiding Directions on DCC from 2017 Investment Plan

- Design and preliminary rates should
 - be fair, sustainable, simple to understand and administer, and have no negative impact on affordability
 - be decided in 2017 following consultation
 - take effect by January 2020, with at least one year's advance notice; and
 - generate about \$20 million per year

Current Status of Proposed DCC

- Requires approval & legislation by Province
- Mayors' Council and TransLink Board have asked the Provincial Government to
 - provide written confirmation that they support the new DCC
 - introduce legislation preferably in the Spring 2018 session

Proposed DCC Framework

1. What should funds be used for?	New transit capital investments
2. Where should the DCC be collected?	Entire Metro Vancouver region (except lands outside the jurisdiction of the new legislation)
3. What land uses should pay?	Residential, commercial, industrial, and institutional (exempt affordable rental housing, agriculture, and statutory exemptions such as places of worship)
4. Should rates for each use be uniform across the region or vary by location?	Uniform

Proposed DCC Framework (continued)

5. Should rates be charged per unit or per square foot?	Per unit for residential; Per square foot for all other uses
6. Who collects the DCC?	Local governments will collect and remit to TransLink
7. What legislation should enable the DCC?	Amendments to the South Coast British Columbia Transportation Act
8. Should rates change over time?	Annual inflationary adjustments + Periodic rate reviews timed with each new 10 Year Investment Plan

Proposed Rates for 2020 to generate \$20M/year

Single family	\$2,100 per unit
Townhouse/duplex	\$1,900 per unit
Apartment	\$1,200 per unit
Retail/service	\$1.00 per sq.ft.
Office, Institutional	\$0.50 per sq.ft.
Industrial	\$0.50 per sq.ft.

^{*} Subject to further analysis prior to introduction of bylaw in late 2018. If any increases are proposed as part of the final adjustments of rates, TransLink will consult again with partners and stakeholders.

2016-2017 Consultation on DCC

Government agencies:

- Met with all key regional advisory committees, Mayors' Council, TransLink Board, Province
- Regular meetings of local government working group
- Fall 2017: broader workshop for local government staff

Development Industry:

- Met with UDI, GVHBA, ULI, NAIOP Executives
- Fall 2017: developers workshop

Public:

Consulted as part of Phase 1 Investment Plan

Key Feedback from Consultation

Clarify use of funds

to be for transit only, not roads or active transportation

Ensure accountability and transparency

- Establish expansion capital program and DCC revenue target;
- Regularly monitor & report on use of DCC revenues

Set rates carefully

Consider lowering industrial rate, may still be a bit high

Structure:

- Developers predominantly supported uniform structure
- Staff from most local governments supported uniform structure,
 however 4-5 municipalities strongly prefer a tiered structure

Uniform vs. Tiered Structure

Recommendation:

- Adopt a region-wide uniform rate structure for the introduction of the DCC
- Acknowledge some partners prefer a tiered structure
- Include in legislation the power to set different rates in different parts of the region (with appropriate consultation)

Rationale for introducing with uniform structure 15

- Phase 1 transit expansion is **broadly distributed** around region
- As residents travel to all parts of the region, benefits to new development are not limited to immediate area around that development
- Development also gets **indirect benefits** from reduced roadway congestion
- Administratively simple
- Drawing justifiable boundaries for tiered rates will be labourintensive, contentious and challenged on the basis of fairness and market distortion concerns
- However, flexibility for tiered rates is preserved for future

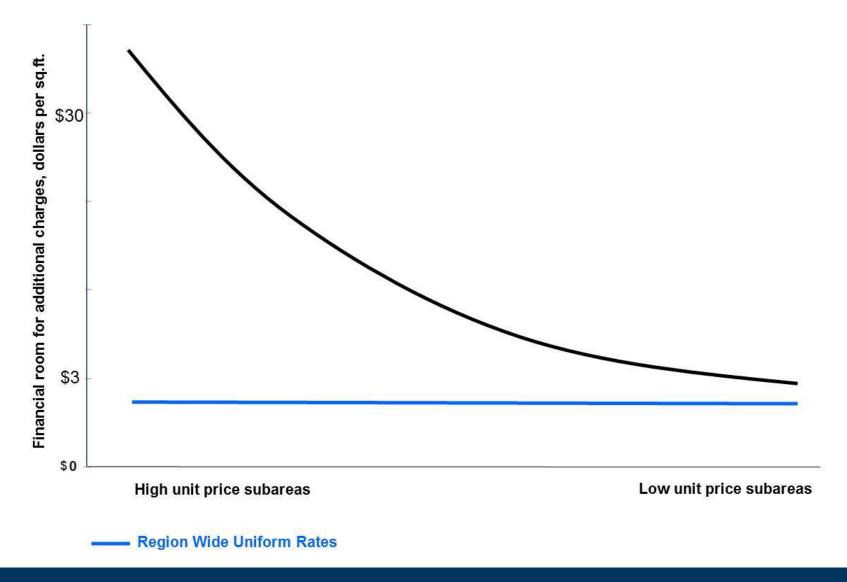


The proposed rates will not impact housing affordability

- Housing prices for new units are set by supply and demand, not by small increases in development cost
- Rather, new costs reduce what developers can pay for land
 - As long as developers can outbid value of existing use, no reduction in flow of land or pace of development
- Proposed DCC is less than about one half of 1% of market price in lowest housing price markets and less than 1% of construction cost
 - If demand pushes housing prices up by >1%, DCC is absorbed by price growth
 - If housing prices stabilize, proposed DCC still leaves redevelopment land value higher than existing use value, so no reduction in flow of land
- Careful pro-forma analyses concluded that proposed rates should have no significant impact on the pace of redevelopment and hence housing affordability



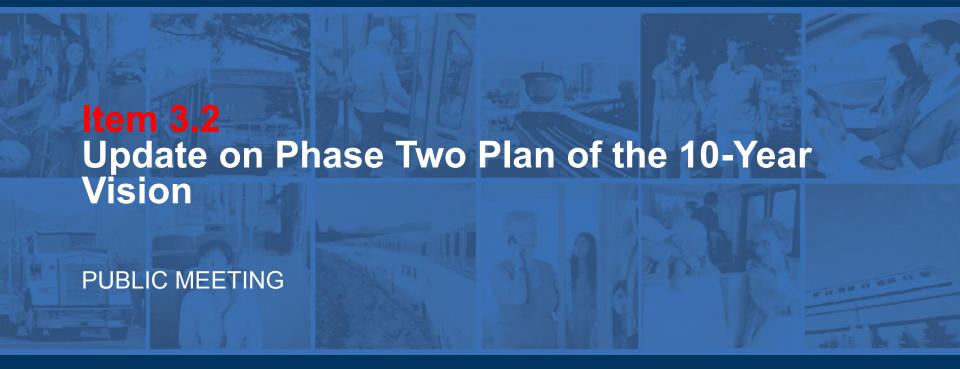
Summary of Apartment Analysis





Final Steps to Bring DCC into Effect

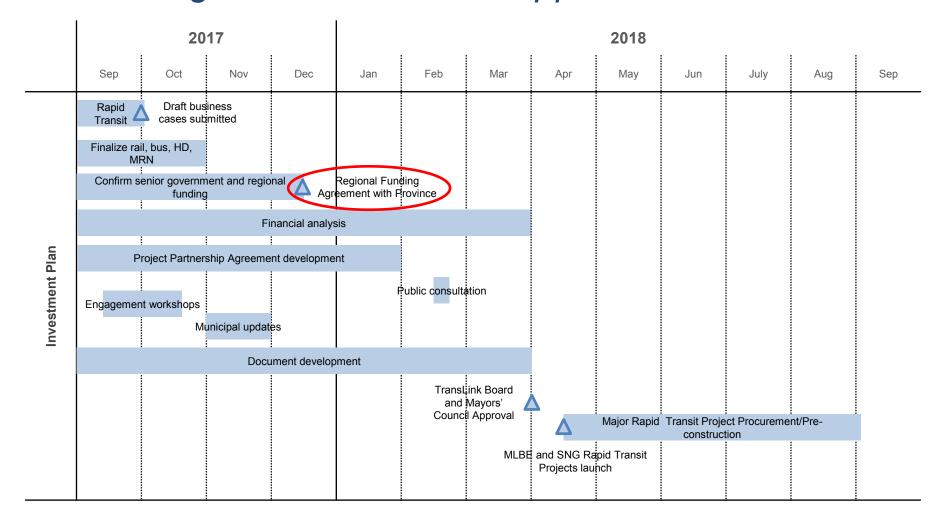
- Province to pass necessary legislation in Spring 2018
- TransLink to prepare draft bylaw
- Inspector of Municipalities to review and approve
- TransLink Board to adopt bylaw by end of 2018
- Implement with effective date of January 2020



Dec 7th, 2017



Update on Phase Two Plan *Working Timeline for Plan Approval*





Completing the 10-Year Vision for Metro Vancouver Transit & Transportation



ENTIRE 10-YEAR VISION		FUNDED Phase One Plan (approved)	NOT FUNDED Phase Two Plan (in progress)	NOT FUNDED Phase Three Plan (in 2020)
BUS SERVICE	25% increase 12 B-Lines 10 new service areas	10% increase5 new B-Lines5 new service areas	6% increase 2 new B-Lines New service areas to be confirmed	9% increase 5 new B-Lines Any remaining new service areas
SEABUS SERVICE	1 new SeaBus 10-minute peak frequency; 15- minute all day	1 new SeaBus 10-minute peak frequency; 15-minute all day		,
HANDYDART SERVICE	30% increase	• 15% increase	• 7% increase	8% increase
SKYTRAIN & WEST COAST EXPRESS (WCE)	164 Expo/Millennium Line cars 24 Canada Line cars 10 WCE cars + new locomotive Upgrades of power and control systems, stations	56 Expo/Millennium Line cars 24 Canada Line cars 2 new + 6 refurbished WCE locomotives Upgrades to Expo/Millennium & Canada Line stations and systems	108 Expo/Millennium Line cars (including Broadway Extension) 10 WCE cars Upgrades to Expo/Millennium & Canada Line stations and systems	Upgrades to Expo/Millennium & Canada Line stations
MAJOR PROJECTS	Millennium Line Broadway Extension South of Fraser Rapid Transit (SOFRT) Pattullo Bridge Replacement Burnaby Mountain Gondola	Pre-construction of Broadway Extension Pre-construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT) Design for Pattullo Bridge Replacement	Construction of Broadway Extension Construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT) Construction of Pattullo Bridge Replacement Pre-construction of Stage 2 of SOFRT (Surrey-Langley Line) Project development for Gondola	Construction of Stage 2 of SOFRT (Surrey-Langley Line) Potential construction of Burnaby Mountain Gondola
	MRN upgrades: \$200M	• \$50M (25% of Vision)	• \$40M (20% of Vision)	• \$110M (55% of Vision)
MAJOR ROAD NETWORK (MRN)	MRN seismic: \$130M MRN expansion: 1% annual increase + one-time 10% increase	\$32.5M (25% of Vision) MRN expansion: 1% annual increase + one-time 10% increase	• \$26M (20% of Vision)	• \$71.5M (55% of Vision)
	Regional Cycling: \$131M	• \$41.3M (32% of Vision)	• \$23.8M (18% of Vision)	• \$65.9M (50% of Vision)
WALKING & CYCLING	TransLink-owned Cycling:\$34M	• \$12M (35% of Vision)	• \$13M (38% of Vision)	• \$9M (27% of Vision)
	Walking Access to Transit: \$35M	• \$12.5M (36% of Vision)	• \$10M (29% of Vision)	• \$12.5M (36% of Vision)
TRANSIT EXCHANGES	13 new or expanded transit exchanges	4 updated transit exchanges	2 upgraded transit exchanges	7 upgraded transit exchanges
MOBILITY INNOVATION	Integrated travel planning and payment New technologies and services	• Vanpool pilot • Innovation Lab to explore mobility ୟ କ ୍ରେମ୍ବି :of 83	Mobility pricing development	 Mobility pricing implementation

Update on Phase Two Plan Working scope of bus expansion options

- "Minimum" vs "moderate" scope projects to be finalized <u>after provincial funding level</u> is confirmed.
- Staff recommendation is to consider Moderate projects before Moderate-plus, however additional projects can be added to Phase 2 in any order, if additional regional funding is found.

	"Minimum" scope	"Moderate" scope	"Moderate-plus" scope
Annual cost and funding source	Anticipated to fit within \$60-90 M regional gap (i.e., carbon tax funding)	May require additional regional revenue source.	Would require additional regional revenue source (i.e., in addition to anticipated carbon tax funding)
Bus service and vehicles	6% service increase in 2020-21 Associated low carbon fleet	 Additional 2% service increase in 2020-21 Associated low carbon fleet 	 Multiple service options identified through engagement and technical analysis Associated low carbon fleet
B-Line infrastructure	\$30 M for two new B-Lines	Additional \$48 M (\$6M/year over 8 years) for an annual cost- sharing program to upgrade B- Line infrastructure	Additional \$15 M for one new B- Line

Note: Figures are preliminary estimates provided for discussion purposes, and do not account for fare revenues.



Update on Phase Two Plan *B-Line or Better Framework*

	B-Line	Better 1	Better 2	Better 3
Standard	Status quo	Customer amenities Limited transit priority	Customer amenities Significant transit priority	Significant customer amenities Significant transit priority
Service features	FTN or Better Limited Stops Direct Routing	FTN or Better Direct Routing Limited Stops All Door Boarding	FTN or Better Direct Routing Limited Stops All Door Boarding	FTN or Better Direct Routing Limited Stops All Door Boarding
Fleet features	Standard fleet	Branded fleet	Branded fleet	Branded fleet
Stop or station features	Standard stops Municipality-provided shelters	Information kiosks Real-time info Municipality-provided shelters	Information kiosks Real-time info Municipality-provided shelters	Custom shelters Real-time info CVMs at select locations
Running way features	Limited & inconsistent transit priority measures	Targeted priority measures (queue jump lanes where easy)	Bus lanes & priority treatments for majority of corridor Transit Signal Priority	Bus lanes & priority treatments for majority of corridor Transit Signal Priority
Cost per corridor	\$1-5 M	\$10-25 M	\$20-40 M	\$40-60 M



Update on Phase Two Plan *B-Line or Better Framework*

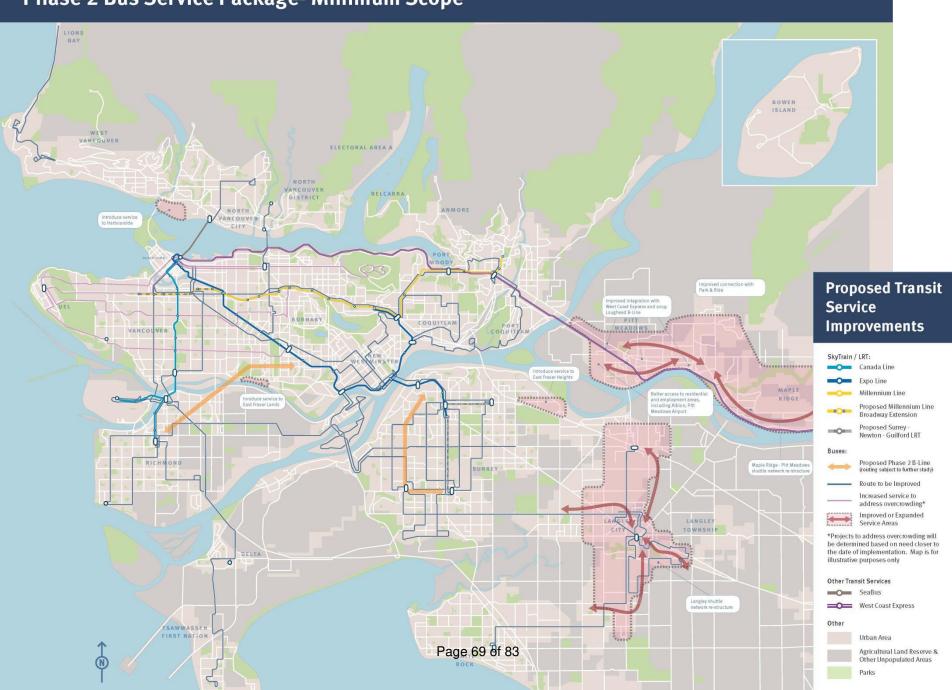
	B-Line	Better 1		ı	Better 2	Better 3
Standard	Status quo	Customer amenities Limited transit priority		Customer amenities Significant transit priority		Significant customer amenities Significant transit priority
Service features	FTN or Better Limited Stops Direct Routing	FTN or Bette Direct Routing Limited Staps All Door Boardi	g s	D L	TN or Better irect Routing imited Stops Door Boarding	FTN or Better Direct Routing Limited Stops All Door Boarding
Fleet features	Standard fleet Approved Phase One	Branded fleet	\$6 M / ye		randed fleet	Branded fleet
Stop or station features	Two "minimum" sco achieve between "sta "Better" infrastruct	ope would tion hos tus quo and by ure on four term	sks achiev between diatatus of and "Bett	en F quo'luni ter 1"	rmation kiosks eal-time info cipality-provided shelters	Custom shelters Real-time info CVMs at select locations
Running way features	Phase 1 and two Phase Limited & inconsistent transit priority measures	se 2 B-Lines. Targeted priority me (queue jump lanes easy)	on all B-L eas corrido where	orş _{reatm}	lanes & priority ents for majority of corridor sit Signal Priority	Bus lanes & priority treatments for majority of corridor Transit Signal Priority
Cost per corridor	\$1-5 M	\$10-25 N			\$20-40 M	\$40-60 M

Minimum Scope

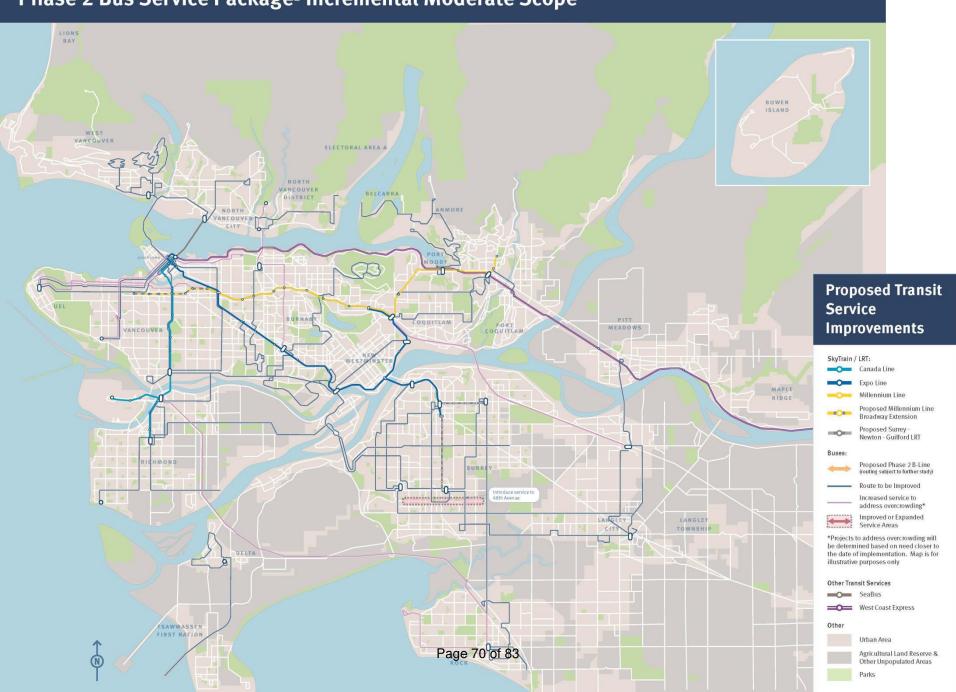
Moderate Scope (Staff Recommendation)



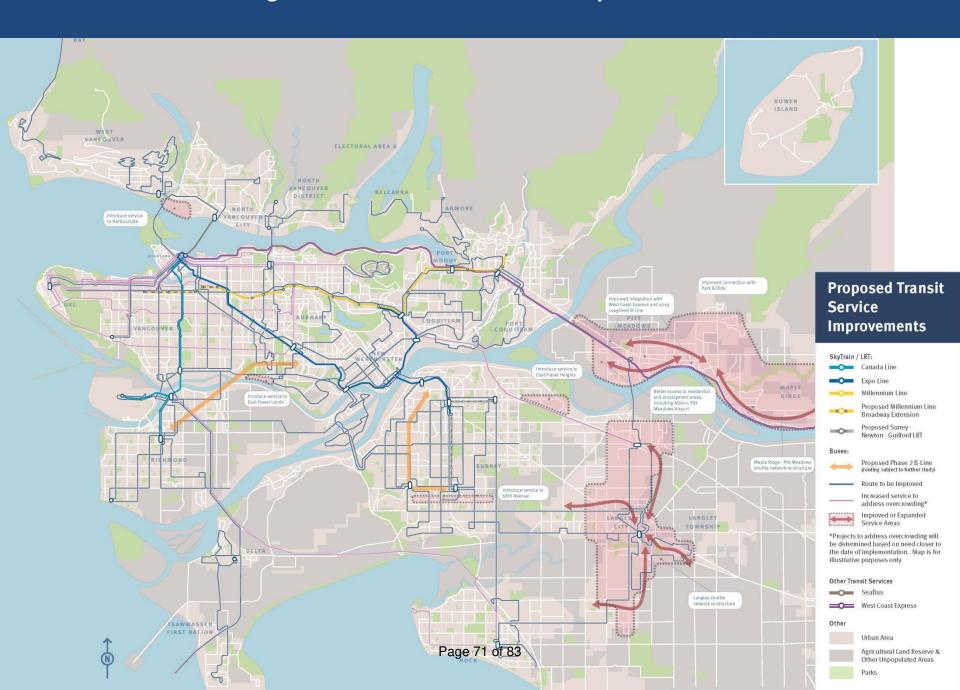
Phase 2 Bus Service Package- Minimum Scope



Phase 2 Bus Service Package-Incremental Moderate Scope

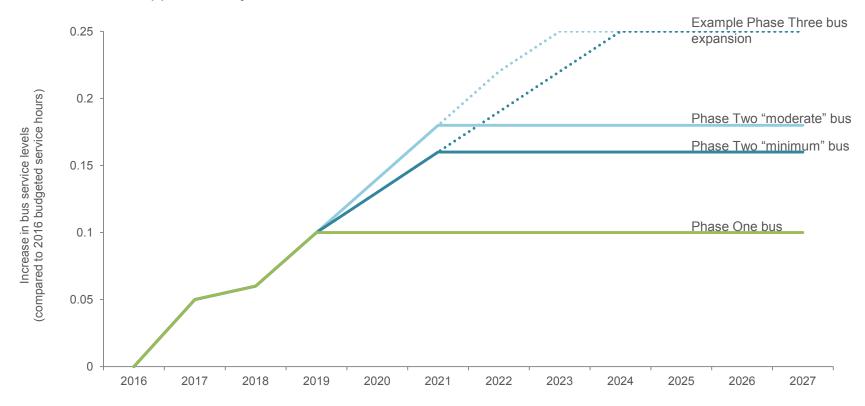


Phase 2 Bus Service Package – Minimum and Moderate Scope Combined



Incremental costs of accelerating bus service expansion

- Delivering "moderate" bus service projects in Phase Two instead of Phase Three would cost an ongoing operational amount of \$10 M / year
- When Phase Three is delivered with new funding sources, this acceleration would become a one-time investment of approximately \$35-40 M



Notes: % of bus service levels current as of Nov 16, 2017. Phase Three levels shown in chart above are intended to illustrate various expansion rates for discussion purposes only. Service levels in chart do not account for fiscalization.



Update on Phase Two Plan *HandyDART service expansion*

Proposed HandyDART service expansion principle:

- Implement full 10-Year Vision expansion over ten years through steady annual increases
- Consider accelerated expansion if new senior government funding for custom transit becomes available

In addition to expanding HandyDART service, the Phase Two Plan will also implement measures identified in the Custom Transit Service Delivery Review to maximize availability of trips when needed (e.g., Family of Services, Eligibility Changes, Travel Training Program).

Working assumptions for HandyDART service expansion in the Phase Two Plan

Budget			Phase One Plan			Phase Two Plan		Phase Three Plan		
	2016		2017	2018	2019	2020	2021	2022	2023	2024
Total trips	1,100,000	Expansion trips	85,500	47,500	38,000	38,000	38,000	38,000	38,000	22,000
Total hours	578,947	Expansion hours	45,000	25,000	20,000	20,000	20,000	20,000	20,000	11,579
		% increase over 2016	8%	4%	3%	3%	3%	3%	3%	2%

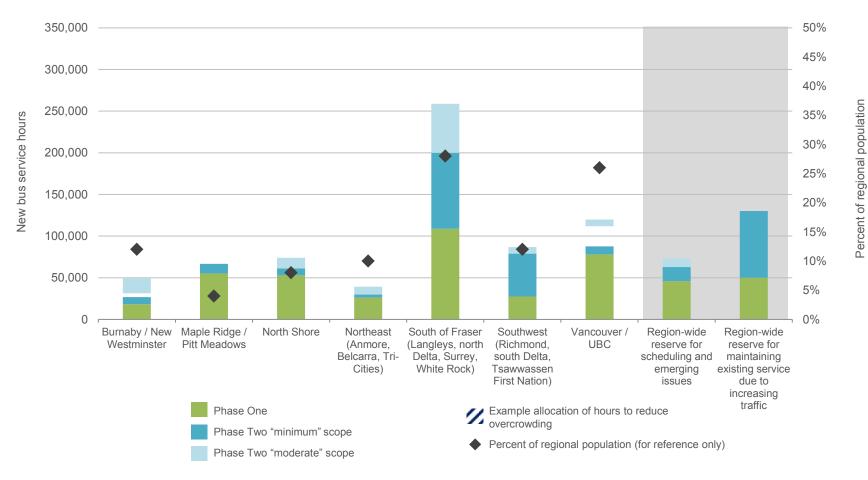
Working distribution of new bus service hours

	Burnaby/ New Westminster	Maple Ridge/ Pitt Meadows	North Shore	Northeast Sector	South of Fraser	Southwest	Vancouver/ UBC
Total Bus Service Hours in Ph 2 "Minimum Scope"	13,136	11,500	8,447	3,612	91,234	51,555	33,735
Total Bus Service Hours in Ph 2 "Moderate Scope"	32,866	11,500	21,071	12,950	152,895	59,453	50,477
% of Bus Service Hours in the region (Ph 2 only)	6-14%	5%	4-9%	2-6%	40-66%	22-26%	15-22%
% of Bus Service Hours in the region after Ph 2 is implemented	12%	3%	10%	8%	20-21%	10-9%	37-36%
% of regional population (for reference only)	12%	4%	8%	10%	28%	12%	26%

Notes: Where a range is shown, the first number indicates the Phase Two "minimum" scope and the second number indicates the Phase Two "moderate" scope. Figures for Vancouver / UBC, Burnaby / New Westminster, and South of Fraser include an example allocation of hours for overcrowding based on 2016 data; final allocation of those hours will be determined based on future overcrowding data. Service increase percentages use 2016 budgeted service hours as a baseline for comparison. Figures may differ from previous estimates due to exclusion of run time and schedule reserve hours. Percentage of total new bus service hours shown in chart does not add to 100% due to schedule reserve hours. Totals may not add due to rounding.

TRANS LINK

Working distribution of new bus service hours in Phase One and Phase Two



Notes: Hours to reduce overcrowding are an example allocation based on 2016 data; final allocation of these hours will be determined based on future overcrowding data. Service hours shown do not include run time or schedule reserve hours and are subject to change after the development of final project specifications and scheduling. Both vertical axes are scaled to approximately 50% of total.

Performance-based evaluation process

Need

 Developed "maximum" list of 200 potential projects for each bus service objective based on technical analysis of regional need and existing plans

Funding

 Projects prioritized according to "peoplebenefitting" measures, to fit within minimum and moderate funding envelopes. We maintained the same distribution between service objectives as "maximum" list

Refinement

 Based on engagement workshop results, the project lists have been further refined to incorporate feedback

Consultation

 Present minimum and moderate scenarios to Mayors' Council for direction on Phase Two scope for public consultation

Update on Phase Two Plan Metrics for evaluating bus service improvements

Bus service objective



Reduce overcrowding



Reduce customer wait times



Extend hours of service



Improve network directness



Expand the Frequent Transit Network (FTN)



Expand to new service areas



Implement new B-Lines

Primary technical metrics for evaluating projects

- Peak passenger load during crowded hours
- Population and jobs with access to improved service
- Population and jobs with access to improved service
- · Network reviews
- Population and jobs with access to improved service
- Population and jobs with access to improved service
- · Identified in the 10-Year Vision
- Population and jobs with access to improved service
- · Identified in the 10-Year Vision



Update on Phase Two Plan Potential projects for "moderate plus" scope

Bus service objective	Specific project	Description	Incremental service cost / year	Incremental vehicle and infrastructure cost / year
Reduce overcrowding	Additional service hours to reduce overcrowding	 Identified through technical analysis Would provide resources in 2020-21 to address overcrowding, while delivering other 10-Year Vision commitments 	Depends on affordability – for example, 2016 data suggests a maximum investment of \$8.7 M would address overcrowding on 60 routes	Depends on affordability – every 3,200 ASH would require a new peak vehicle
Extend hours of service	Provide earlier SeaBus service	 Identified through engagement Ensure SeaBus meets first SkyTrain trip to YVR on weekdays Not specifically outlined in 10-Year Vision 	\$260 K, w/ potential additional costs to adjust bus schedules to meet SeaBus	-
Improve network directness	Extension of 240 to Lynn Valley	 Identified through engagement High priority route from North Shore ATP Pre-cursor to B-Line from 10-Year Vision 	\$1.5 M	\$320 K
Implement new B- Lines	New Willingdon B-Line	 Identified through engagement High-performing route that connects major regional centres B-Line from 10-Year Vision 	\$6.3 M	\$2.8 M, not including additional cost of on- street B-Line infrastructure

Note: Figures are preliminary estimates provided for discussion purposes, and do not account for fare revenue or other funding.



Update on Phase Two Plan Process for confirming Phase Two bus expansion

- October to December 2017
 - ☑ Partner engagement on Phase Two working scope
 - ☑ Update of Phase Two working scope based on engagement results
 - ☐ Discussion with Mayors' Council on level of bus service and infrastructure expansion desired in Phase Two

Increases to existing regional revenues sources may be considered under two scenarios:

- Scenario 1 the province provides new revenue sources to close the \$60-80M regional funding gap, but we want to do more than "minimum scope"
- Scenario 2 the province provides new revenue sources that falls short of closing the entire \$60-80M regional funding gap, requiring existing sources to make up the shortfall; we may also want to do more than "minimum scope"

Update on Phase Two PlanPhase Two Public Consultation Approach

- Pending a provincial funding announcement, public consultation would begin in January 2018 using a digital and in-person approach:
 - online survey promoted via social media, brochures, and on the tenyearvision.translink.ca website
 - Up to 7 open houses across the region
- Public consultation plan to go to TL Board on December 14 for approval
- Present Ph 2 Investment Plan to Metro Vancouver Regional Planning Committee in Jan or Feb 2018



Looking Beyond the Phase Two Plan Transit Security Program

- Based on recommendation from the Joint Planning & Funding Committee, this item should be removed from Phase Two and deferred until Phase 3 (but before new transit expansion lines open)
- Proposed language in Phase 2 Investment Plan: "A detailed review of security needs to support the Surrey-Newton-Guildford light rail line in Surrey, and a detailed review of security requirements for the Millennium Line-Broadway Extension, will be conducted in coordination with the municipalities."

Looking Beyond the Phase Two Plan Green Infrastructure Fund Projects

- Allocations for the GIF have been set, but the bilateral agreement with the Feds-Province are still pending.
- GIF will be application-based, so need to get gondola, EV charging, and other "beyond Phase 2" projects earmarked for funding and show how they will reduce GHG emissions.



Looking Beyond the Phase Two Plan Regional Transportation Strategy

- Planning for Spring 2018 consultation
- Joint Planning & Funding Committee will need to include the RTS as a standing agenda item.

