

From: ["Mochrie, Paul" <Paul.Mochrie@vancouver.ca>](mailto:Paul.Mochrie@vancouver.ca)

To: ["Direct to Mayor and Council - DL"](#)

Date: 5/3/2022 4:57:51 PM

Subject: [Council Memo - Millennium Line UBC Extension Design Development and Integration - RTS# 15117](#)

Attachments: [ENG - Council Memo - Millennium Line UBC Extension Design Development and Integration - RTS# 15117.pdf](#)

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire. A short summary of the memo is as follows:

- UBCx Investment within Regional Transit Context:** It is expected that TransLink's 2022 Investment Plan and the Transport 2050: 10-Year Priorities plan will include a wide and balanced range of investments for transportation across the region. More information on the public engagement on [TransLink's 2022 Investment Plan and Transport 2050: 10-Year Priorities](#)
- GHG Reductions from SkyTrain:** TransLink's preliminary estimate is that UBCx would reduce GHG emissions by between 40 and 120 kilo tonnes over a 25 year project lifecycle considering mode shift, changes in operating emissions, and embodied emissions of infrastructure. More detailed work will be completed as part of the next phase of work.
- COVID's Impact on Ridership Projections:** TransLink has carefully assessed ridership recovery given the significant impacts to its operational revenue and project planning. Overall, TransLink is forecasting 80% of 2019 ridership levels for Fall 2022 with a full recovery expected to take a few years. The ridership is expected to meet project projections by the time the line opens.

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclaire@vancouver.ca.

Best,
Paul

Paul Mochrie (he/him)
City Manager
City of Vancouver
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The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x^wməθk^wəyəm (Musqueam), Sk̓wəx̓wú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Nations.

MEMORANDUM

May 3, 2022

TO: Mayor and Council

CC: Paul Mochrie, City Manager
Armin Amrolia, Deputy City Manager
Karen Levitt, Deputy City Manager
Katrina Leckovic, City Clerk
Lynda Graves, Administration Services Manager, City Manager's Office
Maria Pontikis, Director, Civic Engagement and Communications
Anita Zaenker, Chief of Staff, Mayor's Office
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office
Theresa O'Donnell, General Manager, Planning, Urban Design & Sustainability
Chris Robertson, Assistant Director, City-Wide & Regional Planning
Matt Shillito, Acting Director, Special Projects Office
Paul Storer, Director, Transportation
Steve Brown, Manager, Transit Integration & Projects

FROM: Lon LaClaire
General Manager, Engineering Services

SUBJECT: Millennium Line UBC Extension Design Development and Integration

RTS #: 15117

This memo is in response to Council's request for more information related to the Millennium Line UBC Extension (UBCx) Alignment and Integration report to Council dated March 17, 2022 (RTS 13021). This is the first of two memo and responses to questions on the SkyTrain extension itself. A separate memo from Planning Urban Design and Sustainability will respond to the land use-related questions.

The key issues on which Council requested information were:

- How UBCx fits into the regional context
- How SkyTrain construction affects GHG reduction targets, and
- How the COVID-19 pandemic has affected ridership projections

UBCx within regional transit context

Transport 2050, TransLink's long range strategy for regional transportation system, was adopted in January 2022. TransLink is currently engaging on a new 10-Year Priorities plan which will outline which projects and initiatives within Transport 2050 should be prioritized over the coming decade, recognizing funding limitations, and an associated 10-Year Investment Plan.

Investments are expected to include both transit initiatives (local bus and Bus Rapid Transit, SkyTrain, HandyDART and customer experience) and non-transit initiatives (safety infrastructure, Major Road Network expansion, walking and cycling infrastructure, new mobility and infrastructure resilience). Several projects in the City of Vancouver are included for consideration over the next decade, such as UBCx and several bus infrastructure investments. It is expected that the 10-Year plans will include a wide variety and scale of investments across Metro Vancouver to serve the diversity of needs in the region.

Following public engagement, the 10-Year Priorities and Investment Plan are expected to be endorsed by the Mayors' Council in mid-2022. More information about the public engagement is on [TransLink's 2022 Investment Plan and Transport 2050: 10-Year Priorities](#) webpage.

GHG impact of SkyTrain construction on GHG reduction targets

Reducing emissions is a key goal of the UBCx. While SkyTrain operation and construction generate GHGs, they are more than offset by emissions reductions due to people shifting from driving to energy-efficient transit.

The current estimate from TransLink's study is that a Millennium Line SkyTrain Extension to UBC would reduce GHG emissions by over 40 kilotonnes over a 25-year project lifecycle. This estimate includes embodied carbon emissions from concrete. A more refined and detailed GHG estimate will be completed as part of the Environmental Review to be undertaken when the project enters its Business Case phase.

How COVID has affected ridership projections

TransLink has assessed ridership recovery post-pandemic, given the significant impact this has on operational revenue and planning for future investments. New forecasting approaches were used to assess this uncertainty in ridership based on a variety of factors such as vaccine rollouts and new commuting patterns. To do this, TransLink explored multiple scenarios with high medium and low ridership including how likely it would be for them to occur. These forecasts were used to consider impacts on ridership for proposed major projects.

Overall, TransLink is forecasting 80% of 2019 ridership levels for Fall 2022 with a full recovery expected to take a few years.

In February 2022, TransLink reported that bus ridership within the City of Vancouver had recovered to 64% with overcrowding still experienced on 5% of trips - the highest in the region.

UBC has also reported that Fall 2021 screenline data shows total trip volumes to/from the Vancouver campus were recovering quickly and at 89% of Fall 2019 levels, with transit trips at 82% of 2019 levels.

It is expected that by the time the UBCx is constructed it should be in line with previous estimates; however, this will be updated as the project proceeds to a more detailed business case.

If you have any questions about this information, please contact me directly.

A handwritten signature in blue ink, appearing to read 'Lon LaClaire', with a stylized flourish at the end.

Lon LaClaire, M.Eng., P.Eng.
General Manager, Engineering Services

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