

From: "Johnston, Sadhu" <Sadhu.Johnston@vancouver.ca>

To: "Direct to Mayor and Council - DL"

CC: "City Manager's Correspondence Group - DL"
"Nelms, Cheryl" <Cheryl.Nelms@vancouver.ca>

Date: 12/9/2019 12:09:26 PM

Subject: Memo - Streetcar and Planning Update

Attachments: ENG - Memo to Mayor Council - Streetcar and Planning Update.pdf

Dear Mayor and Council,

Please see the attached memo from Cheryl Nelms regarding the Streetcar Study and Planning update. A short summary of the memo is as follows:

- A downtown streetcar feasibility study has recently been completed. This builds on the last major study, completed in 2005, since which time significant development and transportation system changes have occurred.
- In some areas and corridors along the planned network, changes have or will occur which may impact the amount of dedicated right-of-way opportunities for future streetcar implementation.
- The study builds upon past phasing recommendations and provides high-level ridership and cost estimates. The network could be implemented incrementally or multiple phases could be implemented at once.
- The study's findings will:
 - a) Provide input into broader planning processes, including the Vancouver Plan, the Climate Emergency Response and future updates to Transportation 2040.
 - b) Help to determine the potential role of streetcar in helping to provide access to the proposed Squamish Lands development.
 - c) Allow the City to continue preserving right of way where appropriate, to help facilitate future streetcar implementation.

If you have any questions, please feel free to contact Cheryl Nelms at 604-873-7348 or cheryl.nelms@vancouver.ca.

Best,
Sadhu

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Pronouns: he, him, his



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the Musqueam, Squamish, and Tsleil-Waututh peoples.

MEMORANDUM

November 27, 2019

TO: Mayor and Council

CC: Sadhu Johnston, City Manager
Paul Mochrie, Deputy City Manager
Lynda Graves, Administration Services Manager, City Manager's Office
Rena Kendall-Craden, Civic Engagement and Communications Director
Katrina Leckovic, City Clerk
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office
Anita Zaenker, Chief of Staff, Mayor's Office
Gil Kelley, General Manager, Planning, Design and Sustainability
Lon LaClaire, Director of Transportation

FROM: Cheryl Nelms
Acting General Manager, Engineering Services

SUBJECT: Streetcar Study and Planning Update

The purpose of this memo is to provide a summary of the 2019 Streetcar Study (recently finalised) and a general update on the City's streetcar planning efforts. A streetcar network could contribute towards several strategic City goals, including Climate Emergency Response, Transportation 2040, and Vancouver Plan.

Background

The City has been studying and exploring opportunities to implement a modern streetcar network since the mid-1990s. The last major study, completed in 2005, confirmed the conceptual network and provided further definition around key technical aspects, including implementation phasing, right-of-way, operational priority, operations & maintenance facility requirements, and station locations. Council endorsed the network in 2006. Since then, significant development and transportation system changes have occurred along and around the planned network. Streetcar technology has also evolved. The 2019 Streetcar Study was commissioned to assess the potential effects of these cumulative changes. It provides streetcar planning and design guidance to facilitate potential future implementation.

Summary

The following points summarize the study's key technical findings:

- The study reviewed the latest advances in streetcar vehicle technology and suggested a number of options which are available in the Vancouver context. For example, recent technological advances are allowing more systems to be implemented without the need for overhead wires.
- The study reviewed track design options, including the use of green tracks. This type of track design supports the Rain City Strategy by placing the rails in a vegetated trackway (such as grass or sedum) which has several benefits over typical track designs including improved retention of rainwater, lower noise emissions, and enhanced aesthetics.
- A comprehensive set of design guidelines were developed as part of the study. These will allow the City to consistently apply right-of-way and design standards for new developments and other capital projects in the vicinity of the planned alignments as opportunities arise.
- In some areas and corridors along the planned network, including Olympic Village and NEFC, changes have or will occur which may impact the amount of dedicated right-of-way opportunities for future streetcar implementation. The study investigated minor deviations to the alignment and other potential priority measures which could be used to retain a high level of streetcar service in the future.
- The study built upon past phasing recommendations (see Appendix A). It provided high-level ridership and cost estimates which range considerably depending on the phasing strategy: The network could be implemented incrementally or multiple phases could be implemented at once. Phasing and the commensurate cost and ridership impacts would be reviewed as implementation timelines become clearer. In the current 10 Year Investment Plan, there is no regional commitment to fund and implement any phase of the conceptual streetcar network.
- Given the planned completion of the Broadway Subway to Arbutus St. by 2025, opportunities for connecting the planned streetcar network from the future Arbutus Station via the Arbutus Greenway Corridor to Main Street-Science World Station were also explored, such that this was considered to be the most feasible initial phase.
- Analysis into ridership estimates noted that a majority of streetcar trips would be short distance in nature, indicating that the network would serve a local access function as well as the tourist market.
- The study assessed opportunities to site an Operations and Maintenance Facility and provided estimates of approximate space required. Several potential sites were identified, generally located within the False Creek Flats area. As streetcar implementation timelines becomes clearer, it will be necessary to reassess these and other potential locations, including use of trackside storage.
- The study provides a basis for which other potential alignment options and corridor extensions can be compared to in future phases of the work.

Next Steps

The study's findings will provide input into broader planning processes, including the Vancouver Plan, the Climate Emergency Response and future updates to Transportation 2040. The City's staff submission into TransLink's Transport 2050 Regional Transportation Strategy process included the Downtown Streetcar network concept. These citywide and regional processes will provide a more defined direction which will guide future streetcar planning efforts. Near term next steps include:

- Incorporating design and planning guidance into future developments and ongoing planning processes where warranted and when opportunities arise.
- Continuing to incorporate streetcar network planning as part of TransLink's Transport 2050 Regional Transportation Strategy process and explore integration within the regional transportation system.
- Investigating the potential role streetcar could play in helping to provide access to the proposed Squamish Lands development at the south end of the Burrard Bridge.

The finalised streetcar reports are available for review within the VanDocs system with the following document numbers:

- Design Considerations Report: DOC/2019/301094
- Feasibility Study Report: DOC/2019/301096

If you have any questions, please do not hesitate to contact me directly at 604.873.7348 or cheryl.nelms@vancouver.ca.



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Appendix A: Planned Streetcar Network, Study Extent, and Potential Future Considerations

