

---

**TO:** CHIEF ADMINISTRATIVE OFFICER      **DATE:** 2022 January 19

**FROM:** GENERAL MANAGER ENGINEERING      **FILE:** 90300-20  
GENERAL MANAGER  
PLANNING AND DEVELOPMENT

**SUBJECT: BARRARD INLET RAPID TRANSIT ENDORSEMENT**

**PURPOSE:** To advise public of Council's endorsement of Burrard Inlet Rapid Transit as a new initiative in the Mayors' Council's New Vision.

---

**RECOMMENDATION:**

1. **THAT** Council receive this report for information.

**REPORT**

**1.0 INTRODUCTION**

As a part of TransLink's effort in updating its long range Regional Transportation Strategy, the Mayors' Council has commenced the preparation of a new 10-Year Vision, a key planning document that identifies major initiatives to the regional transportation system in the medium-term. This report seeks Council's endorsement of the Burrard Inlet Rapid Transit Project (BIRT) as a new initiative in the new 10-Year Vision in consideration of the initiative's benefits on the local, regional and national economies.

The endorsement for the inclusion of BIRT as one of the new regional initiatives will highlight the project and strengthen commitment by other orders of government for resource provision in advancing the planning and development of the project.

**2.0 POLICY SECTION**

The endorsement of BIRT aligns with Council policies and direction outlined in the recently approved Connecting Burnaby, Burnaby Transportation Plan (2021). As well, the endorsement of BIRT supports policies outlined in the Climate Action Framework (2020), Corporate Strategic Plan (2017), Environmental Sustainability Strategy (2016), Social Sustainability Strategy (2011) and Economic Development Strategy (2007).

To: Chief Administrative Officer  
From: General Manager Engineering  
General Manager Planning and Development  
Re: Burrard Inlet Rapid Transit Endorsement  
2022 January 19.....Page 2

### **3.0 BACKGROUND**

Currently, TransLink is nearing the completion of the long range Regional Transportation Strategy with the imminent adoption of Transport 2050. The Mayors' Council is concurrently preparing a New Vision of its 10-year transportation priorities that will guide TransLink's development of a medium-term investment plan for the funding and delivery of a full suite of transit and transportation projects in the region. The New Vision is so named in order to differentiate it from the 2014 Mayors' Council Vision.

In 2021 September, the framework for prioritizing projects in New Vision was formulated with investment portfolio reviews planned for spring of 2022. The selection of a preferred portfolio of priority projects is scheduled for 2022 May and the adoption of New Vision in 2022 July. Two sessions of stakeholder and Indigenous engagement are planned for the fall and winter of 2022 as part of the development of New Vision.

It is within this context and the timeline of the planning process that Council's endorsement of major transit projects in Burnaby becomes crucial for their inclusion into the medium-term plan. On 2021 December 13, Council received for information the 2021 November 17 Planning and Development Committee (PDC) Report entitled: New TransLink Mayors' Vision in which the Burnaby Mountain Gondola and BIRT were identified as major transportation projects that could be considered for inclusion into New Vision. A lack of endorsement would erode the support for the inclusion of these projects into New Vision and would likely delay their critical development for the next 10 years.

### **4.0 BIRT PROJECT DEVELOPMENT**

The 2018 Integrated North Shore Transportation Planning Project (INSTPP) initiated a near-term action to investigate the feasibility of rapid transit across the Burrard Inlet connecting the urban centres of the North Shore with the rest of Metro Vancouver. A multi-phased alignment feasibility study was commissioned, and in 2020 September, the second and final phase of the BIRT Feasibility Study was concluded with the identification of multiple rapid transit alignment options that could be further studied. The alignment options included those located generally in the First Narrows corridor, a mid-Inlet option and two options along the Second Narrows crossing. The array of alignment options provided the basis for the subsequent BIRT benefit assessment.

#### **4.1 Alignment Options for Benefit Assessment**

In 2021 August, the BIRT Benefit Assessment study was completed by analyzing the potential benefits of the Gold and Purple alignments located along the Second Narrows corridor, conceptually shown in **Figure 1**. Both options share a common western terminus at Park Royal and the crossing of the Inlet via the Second Narrows. At the proximity of

To: Chief Administrative Officer  
From: General Manager Engineering  
General Manager Planning and Development  
Re: Burrard Inlet Rapid Transit Endorsement  
2022 January 19.....Page 3

the intersection of the Cassiar Connector and Hastings Street, the alignments split with the Gold line continuing westward to Waterfront Station along Hastings Street in Vancouver, and the Purple line traverses east on Hastings Street into Burnaby before turning south at Willingdon Avenue and continuing south to terminate into Metrotown Station.

**Figure 1: BIRT Benefit Assessment Alignments**



The Gold alignment would appear disruptive to existing and future east-west transit services along Hastings Street, forcing a mode change and transfer in the south approach to the Second Narrows Bridge, whereas the Purple alignment provides more grid-like network connections to different transit routes, allowing for a broader range of transit accessibility in Burnaby and beyond. More significantly, the Purple alignment connects directly to Brentwood Town Centre, BCIT and the Metrotown Town Centre. The Purple alignment is highly supportive of Connecting Burnaby.

The Gold and Purple options do not indicate recommended or approved alignments, and further alignment alternative analysis will need to be taken as part of future regional work to determine a preferred BIRT alignment. The alignment options were chosen for purposes suitable to demonstrate benefit assessment. Both alignment options were deemed to provide better regional connection across Metro Vancouver with connections to the Millennium and/or Expo Lines. As well, the Second Narrows crossing provides wider service coverage across the North Shore municipalities and First Nations reserves.

To: Chief Administrative Officer  
From: General Manager Engineering  
General Manager Planning and Development  
Re: Burrard Inlet Rapid Transit Endorsement  
2022 January 19.....Page 4

## 4.2 Summary of Benefits

The benefit assessment shows there would be significant local, regional, provincial and federal benefits from connecting the North Shore to the rest of Metro Vancouver through rapid transit. Generally, the benefits would include strong ridership, improved access to jobs and less regional congestion. The BIRT connection would provide reliable transportation connections, benefitting not only communities and businesses on the North Shore and within Metro Vancouver, but also those along the Sea-to-Sky corridor and Sunshine Coast. A summary and description of BIRT benefits are listed as follows:

- shifting approximately 50,000 daily vehicle trips to transit, resulting in reduced congestion, emissions and collisions;
- \$500 million in annual travel time savings;
- a ridership of 111,000 daily transit trips, close to half of which are new trips, meaning fewer cars on the road;
- \$4.2 billion in GDP and \$7.6 billion in economic output for every \$1 billion spent on this regional project;
- four First Nations reserves directly served on the North Shore;
- an increase of 175,000 jobs for North Shore residents within a 60-minute transit ride; and,
- up to 2,500 more affordable housing units.

The benefit assessment concluded that both alignment options are considered high performing and should be included in the prioritization of regional transit initiatives. A summary of monetized 2050 benefits for the Gold and Purple alignments are summarized in **Appendix 1**.

## 5.0 CONCLUSION

The Gold alignment would appear disruptive to existing and future east-west transit services along Hastings Street, forcing a mode change and transfer in the south approach to the Second Narrows Bridge, whereas the Purple alignment provides more grid-like network connections to different transit routes, allowing for a broader range of transit accessibility in Burnaby and beyond. More significantly, the Purple alignment supports Burnaby's land use framework by connecting directly to Brentwood Town Centre, BCIT and the Metrotown Town Centre along the Willingdon corridor. The Purple alignment is highly supportive of Connecting Burnaby. Connecting Burnaby identifies the Willingdon Corridor as an area for "Transit Priority Measures / study corridor for RapidBus or better" (Burnaby Public Transit Network Priority map). Improved public transit along this corridor would not only bring transit ridership benefits, but would also reinforce and support active transport investment and mode share goals along the route.

At the 2022 January 24 Closed Council meeting, Council endorsed Burnaby Inlet Rapid Transit with preference for the Purple alignment as a new initiative in Mayors' Council's

To: Chief Administrative Officer  
From: General Manager Engineering  
General Manager Planning and Development  
Re: Burrard Inlet Rapid Transit Endorsement  
2022 January 19.....Page 5

New Vision prioritized for project development and implementation in TransLink's next 10-year investment plan.

**6.0 RECOMMENDATION**

It is recommended that this report is provided for public information.



James Lota, P.Eng., MBA, MPA  
GENERAL MANAGER ENGINEERING



E. W. Kozak, GENERAL MANAGER  
PLANNING AND DEVELOPMENT

ALC:JL:EK:jv

Attachment: Appendix 1

Copied to: General Manager Parks, Recreation and Cultural Services  
General Manager Community Safety  
General Manager Corporate Services  
City Clerk

## APPENDIX 1

**Table A** tabulates a selection of monetized benefits estimated for both the Gold and Purple alignment for the 2050 planning horizon. Base Case denotes Business-as-Usual in 2050 without any additional transportation improvements beyond the current regional investment plan. All costs shown in undiscounted 2020 dollars.

**Table A: BIRT 2050 Benefits Assessment Summary**

Attributes	Base Case	Gold Alignment	Purple Alignment
Travel Time Savings	-	\$552.0 M	\$498.0 M
Reliability Impact	-	\$ 74.9 M	\$ 55.2 M
Auto Operating Cost Savings	-	\$ 18.6 M	\$ 18.4 M
Reduced Collision Impact	-	\$ 89.2 M	\$ 88.6 M
Reduced Auto Emissions	-	\$ 1.4 M	\$ 1.4 M
Agglomeration Impact	-	\$106.7 M	\$ 84.3 M
<b>Annual Monetized Benefits</b>	-	<b>\$842.8 M</b>	<b>\$745.9 M</b>

**Source:** *Burrard Inlet Rapid Transit Benefits Assessment*, North Shore Connects Project Working Group, WSP-McElhanney, August 2021