

TO: CHIEF ADMINISTRATIVE OFFICER **DATE:** 2022 November 16

FROM: ACTING GENERAL MANAGER **FILE:** 37500 02
ENGINEERING

SUBJECT: PEDESTRIAN-CYCLIST OVERPASS OVER HIGHWAY 1 – UPDATE

PURPOSE: To seek Council direction to proceed with the detailed design of the project.

RECOMMENDATION:

1. **THAT** Council direct staff to proceed to the detailed design of Option 1 for the proposed Pedestrian-Cyclist Overpass, as described in this report.

REPORT**1.0 INTRODUCTION**

At the January 24th, 2022 Council meeting, staff presented the results of the Feasibility Study of four Pedestrian-Cyclist Overpass options. Council directed staff to carry out a transportation assessment of the options.

Subsequently, staff completed a technical transportation assessment in evaluating the four Overpass options across the Trans-Canada Highway (Highway 1). Currently, the segment of Highway 1 between Kensington Avenue and Cariboo Road acts as a barrier for pedestrians and cyclists to connect to the regional networks and to access key destinations and neighborhoods on both side of Burnaby Lake Park. The proposed pedestrian-cyclist overpass will help bridge communities within the City by providing a safe and comfortable crossing for residents, commuters, and visitors.

2.0 PROJECT CONTEXT

The proposed pedestrian-cyclist overpass will support multiple regional initiatives and strengthen the broader regional active transportation network. This includes improving connectivity with the Central Valley Greenway, which is part of Metro Vancouver's Regional Greenway system, and TransLink's Major Bikeway Network such as the BC Parkway. The proposed project will also help bridge existing gaps in the City's active transportation network and contribute to the development of the City's Priority Cycle Network as identified in *Connecting Burnaby*, the City's Transportation Plan.

3.0 OVERPASS OPTIONS COMPARISON

The four options developed in the technical work are shown in **Attachment A** and listed in the table below. All four options were presented to the Ministry of Transportation and Infrastructure (MoTI). In response, significant MoTI concerns were identified for Options 3 and 4. These include conflicts with future expansion plans for Highway 1, poor geotechnical conditions, significant in-ground disturbance, and jurisdictional impacts to relocate existing BC Hydro infrastructure which will negatively impact project feasibility, delivery schedule, and result in high construction costs. With these significant MoTI constraints / jurisdictional conflicts, Options 3 and 4 are not recommended.

Table 1: Overpass Options

Option 1	Claude Avenue
Option 2	Claude Avenue and Wilton Avenue
Option 3	Sperling Avenue Perpendicular Crossing (<i>Not recommended due to MoTI constraints / jurisdictional conflicts</i>)
Option 4	Sperling Avenue North-South Crossing (<i>Not recommended due to MoTI constraints / jurisdictional conflicts</i>)

Option 1 takes advantage of the natural topography and relatively stable geotechnical conditions to significantly reduce the required ramp lengths, which results in a lower cost and reduced environmental impacts when compared to other options. At this time, existing geotechnical conditions for Option 2 are not known and may impact feasibility and cost. In terms of jurisdictional impacts, Option 1 and 2 would not require any relocation of existing BC Hydro infrastructure. Both Options 1 and 2 would accommodate future Highway 1 expansion plans, i.e., two additional lanes along Highway 1.

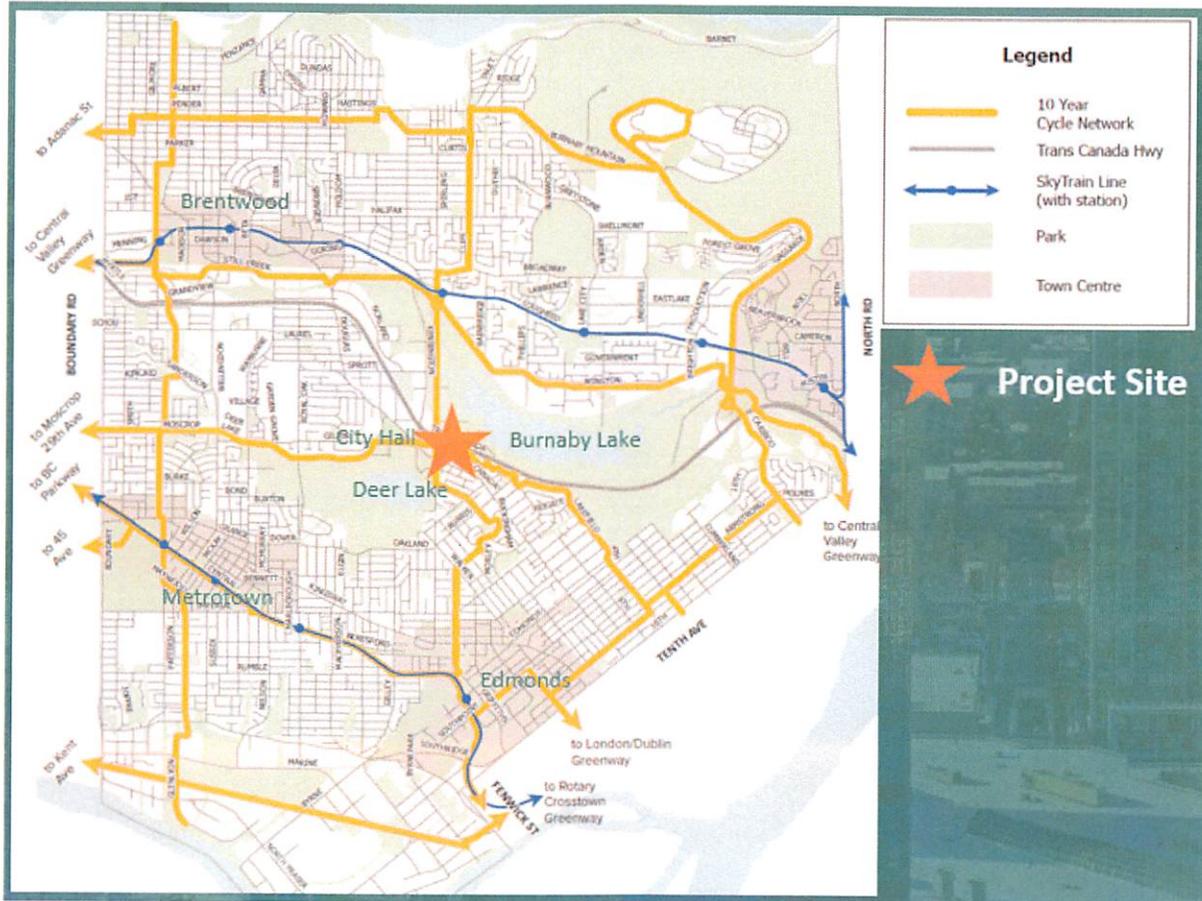
4.0 TRANSPORTATION ASSESSMENT

The proposed pedestrian-cyclist overpass will improve connectivity across the regional cycling network and will support TransLink’s Transport 2050, which was recently adopted and serves as the new Regional Transportation Strategy for Metro Vancouver. As part of that Strategy, additional cycling corridors in the City have been identified as part of TransLink’s Major Bikeway, which will connect with the proposed overpass to provide improved access to both local and regional key destinations. In addition, the proposed overpass will strengthen connectivity between Metro Vancouver’s existing Regional Greenways Network and the City’s Priority Cycle Network.

As described in *Connecting Burnaby*, the City’s Transportation Plan, the City is committed to developing the Priority Cycle Network up to an all ages and abilities standard. The proposed overpass is a key component of the Priority Cycle Network and will provide an additional north-south crossing opportunity across Highway 1 to connect with planned

future cycling upgrade initiatives and expand active transportation options for both the local community and across the region as a whole.

Figure 1: Priority Cycling Network



5.0 PUBLIC ENGAGEMENT

Throughout April 2022, the City engaged with the community for feedback on the proposed pedestrian-cyclist overpass. There were four in-person events with a total of 203 participants and 1,043 survey responses.

5.1 Feedback Received

The online survey was set up through the City's "Your Voice" project website. Approximately 88% of survey respondents were local residents. The survey included a range of questions to better understand existing travel patterns, key destinations, potential barriers and priorities for residents in terms of the values and features to consider when designing the new overpass.

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Results received during the in-person events closely resembled those from the online survey. Key highlights from public engagement are shown in **Attachment B**. In general, participants expressed enthusiasm and interest at the prospect of a new overpass crossing and confirmed the popularity of the selected key destinations in the area, and the desire for additional active transportation access.

6.0 FINANCIAL CONSIDERATIONS

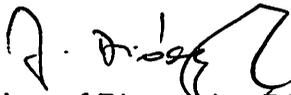
The current estimated cost for Option 1 is \$16M, while Option 2 is estimated at \$19M. The City has a shared-cost agreement with the provincial and federal governments through *Investing in Canada Infrastructure Program (ICIP) – Community, Culture and Recreation Project* for \$6.87M. The remaining costs for this project are expected to be funded through the City's capital budget and third party contribution.

7.0 CONCLUSION

All four options for the proposed pedestrian-cyclist overpass would benefit the community by providing a safe, comfortable, and convenient active transportation crossing over Highway 1. Based on MoTI's feedback, Options 3 and 4 are not recommended as they presented a number of jurisdictional impacts related to structural and operational challenges, including potential impacts on future widening of Highway 1, maintenance and upgrades to the on- and off-ramps, poor geotechnical conditions, and the relocation of overhead BC Hydro infrastructure. Of the remaining Options 1 and 2, the technical review indicates that Option 1 offers the greatest benefit with the lowest costs, lower geotechnical risks, and least project footprint and environmental impacts.

8.0 RECOMMENDATION

Staff recommend that Council authorize staff to proceed to detailed design of Option 1.



Jozsef Dioszeghy, P.Eng.
ACTING GENERAL MANAGER ENGINEERING

PS/ALC:sla
Attachments (2)

Copied to: General Manager Planning and Development
General Manager Community Safety
General Manager Corporate Services
Director Transportation
Director Legislative Services

ATTACHMENT A – Overpass Options

- 1 Claude Ave
 - 2 Claude Ave & Wilton Ave
 - 3 Sperling Ave Perpendicular Crossing *
 - 4 Sperling Ave North-South Crossing *
- * (Not recommended due to MoTI constraints / jurisdictional conflicts)

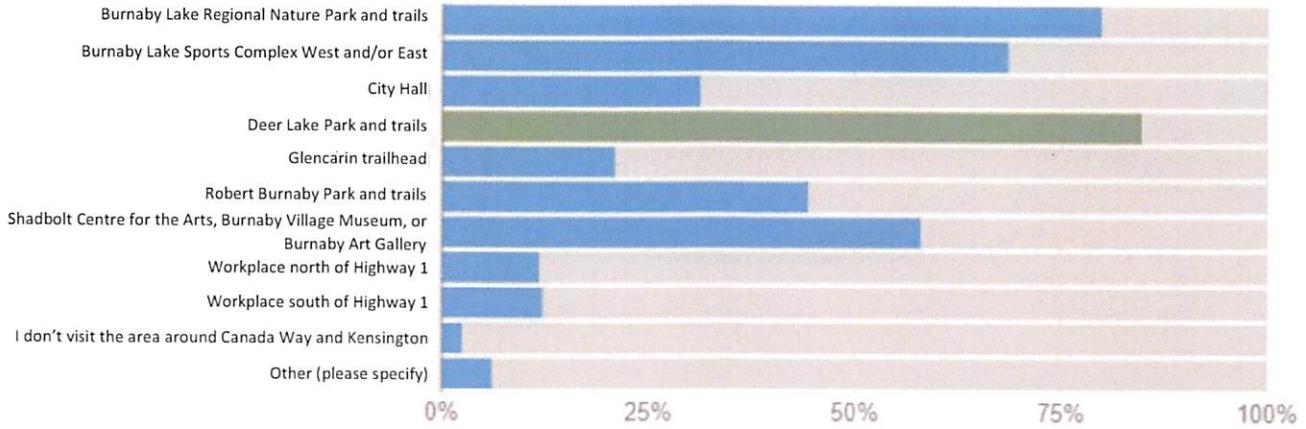
Legend

- Existing Trail
- Proposed Trail
- Overpass Options

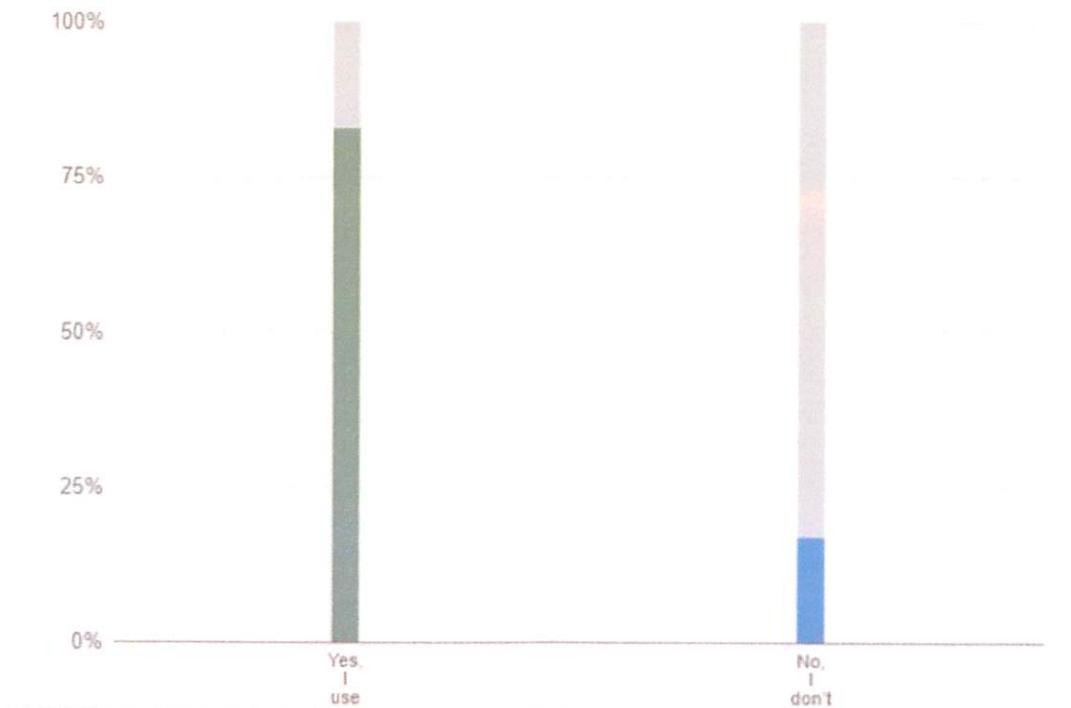


ATTACHMENT B – Engagement Summary

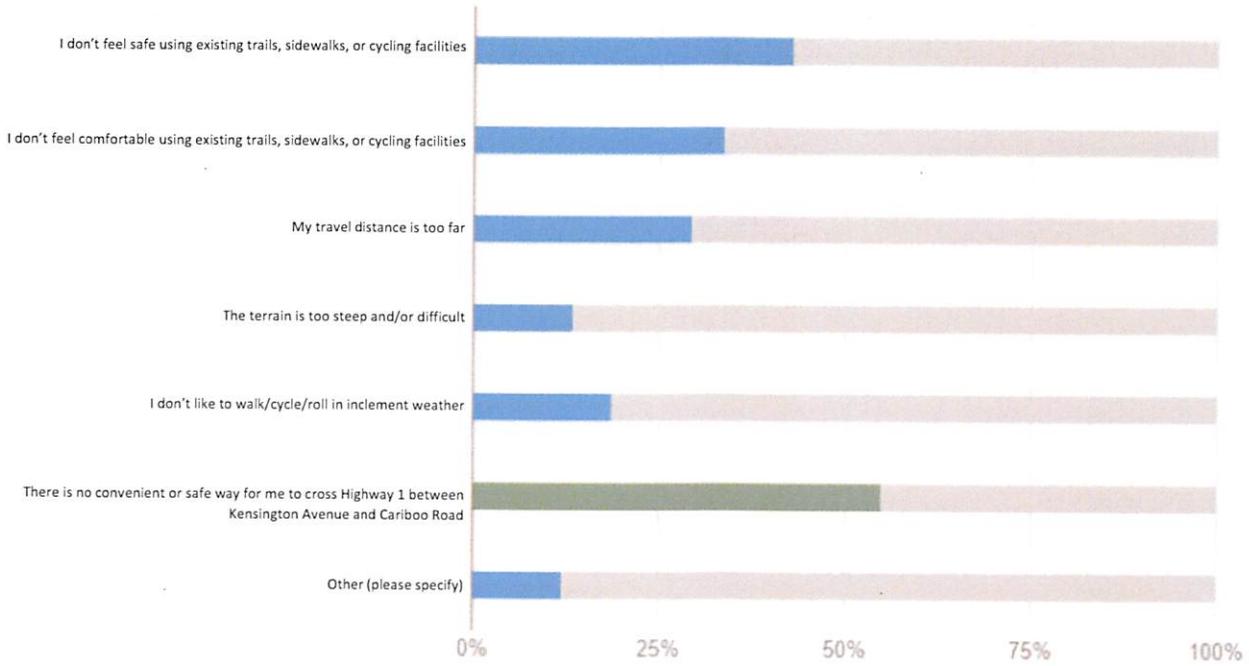
Which destinations do you visit in the area around Canada Way and Kensington?



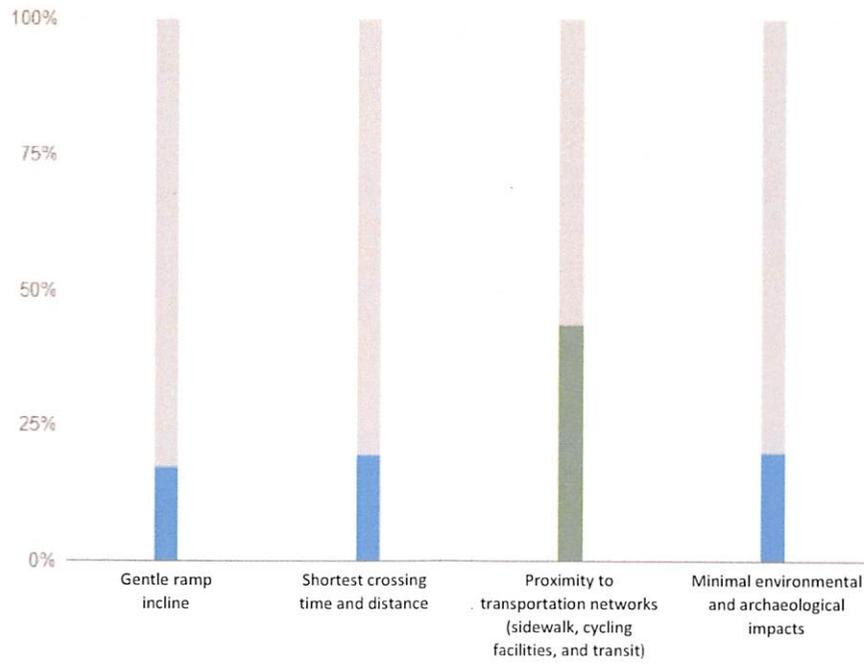
Does your travel in this area typically include using Kensington Avenue to cross Highway?



What factors most prevent or limit you from walking, cycling, or rolling to visit destinations across Highway 1?



Please let us know which factor would be the most important to you when using the pedestrian-cyclist overpass.



What types of public amenities would you like to see for the pedestrian-cyclist overpass?

