



**PORT of vancouver** | Vancouver Fraser Port Authority

## Pitt Meadows Road and Rail Improvements Project

---

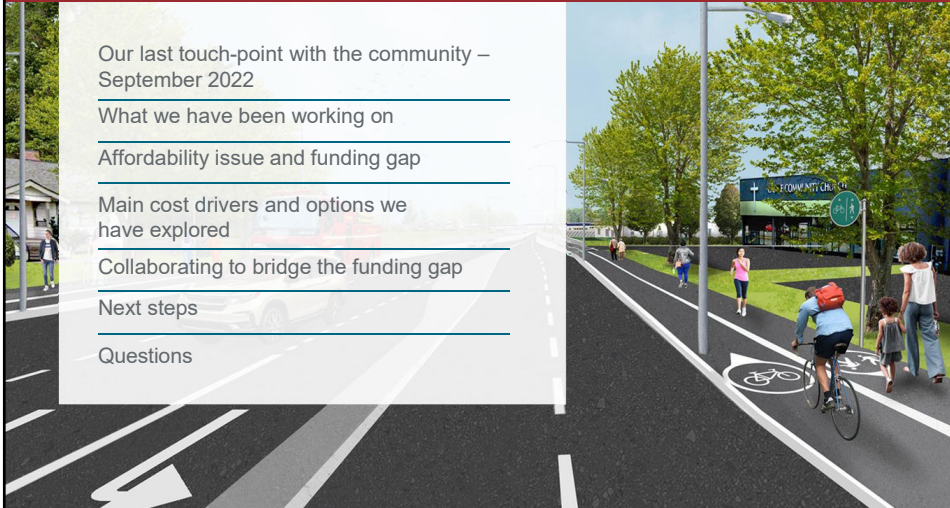
### Community update – Harris Road underpass

Devan Fitch, program director, Roberts Bank Terminal 2  
Charlotte Olson, director, infrastructure delivery  
Jason Braun, acting manager, infrastructure delivery


March 28, 2023

Canada

## Presentation overview



- Our last touch-point with the community – September 2022
- What we have been working on
- Affordability issue and funding gap
- Main cost drivers and options we have explored
- Collaborating to bridge the funding gap
- Next steps
- Questions

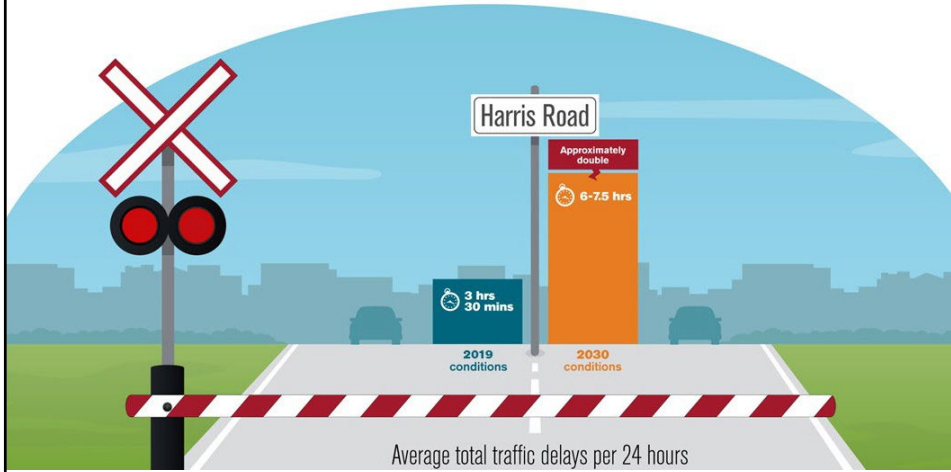


**PORT of vancouver** | Vancouver Fraser Port Authority

2

## Train activity at Harris Road

! Identified in the Top 500 highest risk railway crossings in Canada



## Summer 2022 engagement – overview of key themes

Feedback:

-  Progress and timing for Harris Road underpass
-  Design of the multi-use path
-  Future access to West Coast Express station
-  Noise and vibration mitigation
-  Traffic management during construction

## What we have been working on since then

- **Draft indicative design for the Harris Road underpass**  
To incorporate partner requirements and develop preliminary construction plans
- **Estimating construction costs**  
To understand current project costs and concurrently update the budget
- **Continuing consultation with Indigenous groups**
- **Exploring scope reductions and investigating alternative design concepts**  
To reduce construction costs
- **Continuing engagement with key stakeholders**
- **Heritage relocation design**  
In collaboration with the Pitt Meadows Heritage and Museum Society
- **Preliminary noise wall design**
- **Permitting**  
Developing application for dewatering permit and others
- **Utility relocations design**  
Municipal utilities, BC Hydro, FortisBC and telecommunication service providers



## Original cost estimate and secured funding

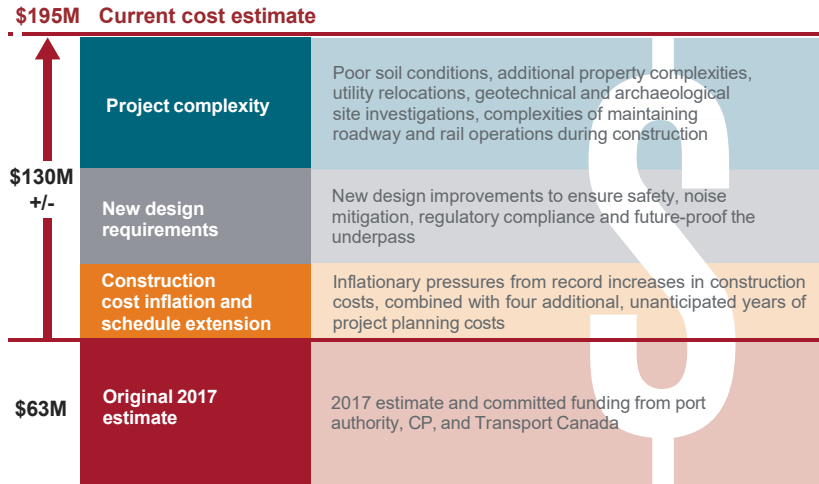
In 2018, federal funding for the project was secured **based on a feasible level of design and a preliminary cost estimate of \$63.3 million** (developed in 2017). Assumed construction completion by March 31, 2023

**Cost estimates now significantly exceed available funding, and the project is at risk**  
We will need to consider how to proceed

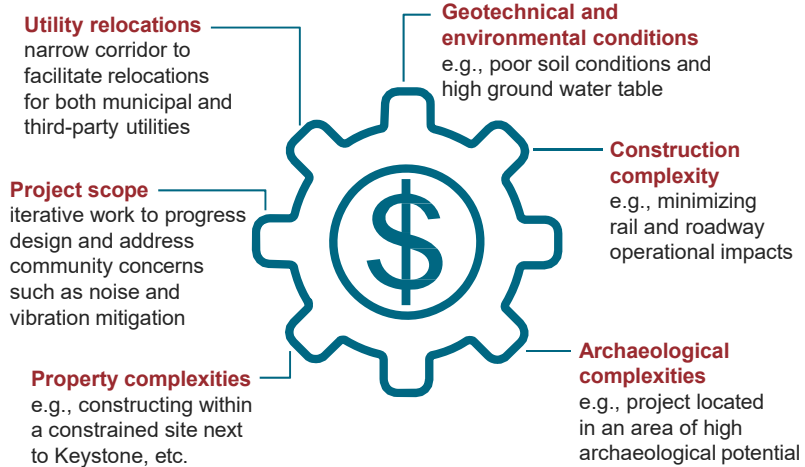
Project has proven to be **significantly more complicated than originally anticipated** from a technical, commercial, and partnership perspective

If partners can agree on project scope and funding this year, **construction could start in 2024 and be complete in summer 2027**

## Harris Road underpass – funding gap and breakdown of key cost drivers



## Cost driver – overall project complexity



## Cost driver – new design requirements

### New regulatory requirements to improve safety:

- 2020 National Building Code of Canada came into effect in 2022 and increased seismic loads by about 25% for the Harris Road underpass
- More robust ground improvements and foundations
- Deeper excavations
  - Compounds project's cost pressures when combined with increased market pricing for materials and labour



### Requirements to future-proof the underpass:

- Expanded active transportation facilities
- Pump station design criteria
- Change in clearance requirement under rail bridge
- Noise walls

## Cost driver – construction cost inflation

### Record increases in non-residential construction costs

- Costs generally increased 12.5% in 2022 compared with 2021 – the highest annual increase since the inception of the Non-Residential Building Construction Price Index in 1981
- Overall, limited availability and higher prices for materials and labour
- Cost of materials – fuel, concrete, structural steel
- Shortage in skilled labour

### Price increases for construction inputs

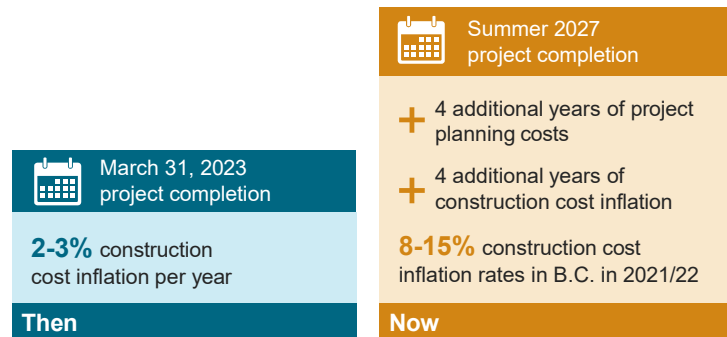
Year-over-year change in November IPPI

Inputs	2020/2021
Asphalt	38%
Communication and electric wire and cable	73%
Diesel and bio-diesel fuels	59%
Iron or steel pipes and tubes	63%
Softwood lumber	27%

Source: Statistics Canada's Industrial Product Price Index (IPPI) series

## Cost driver – construction cost inflation + schedule extension

**Market pricing has significantly increased for construction materials and labour over past few years – in line with global inflation**



## Key cost increases – actions taken in response

- ✓ Port authority has led several rounds of value engineering assessments with both the owner's engineer and design-build team to minimize design costs
- ✓ Port authority has investigated scope reduction options to drive down project costs, such as reducing number of travel lanes, reducing /eliminating multi-use path (*savings not significant relative to overall project estimate*)

### Conclusion

**No substantive opportunities to reduce costs are possible with consideration of partners' requirements, e.g., accommodating roadway and railway traffic during construction, incorporating two multi-use paths, and four vehicle lanes in design**



## Key cost increases – actions taken in response

- ✓ Port authority has completed technical due diligence of alternatives – such as an overpass, which could save \$25 million, however this was not supported by the City due to the City's concern over adverse impacts
- ✓ Port authority has secured additional federal funding for the Harris Road underpass from the National Trade Corridors Fund in the amount of \$11.4 million
- ✓ Port authority is committed to the project and prepared to request governance body approval to increase Harris Road underpass funding by reallocating Kennedy Road overpass funds
- Potential opportunity to re-allocate Kennedy Road overpass federal funds to Harris Road underpass (*subject to Transport Canada approval*)

### Conclusion

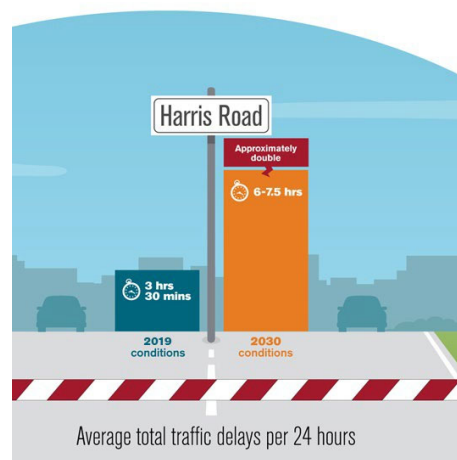
While we are progressing conversations to secure additional funding, a significant funding gap still exists



## Next steps – progressing the Harris Road underpass

### The project has a large funding gap, which puts the project at risk

- We remain committed to this project
- Progressing the Harris Road underpass requires shared responsibility among all partners
- To respond to this risk, we are progressing conversations to secure additional funding in order to close the funding gap
- If project partners cannot close the funding gap, we cannot lead the project into construction





## Next steps – preserving the Harris Road underpass

### Our ask of the city

In response to the significant project risk, we are asking the City of Pitt Meadows to help **close the funding gap**.

We ask that the city commits to becoming a **funding partner** and provides 25% of costs up to a maximum of \$49.6 million.


This includes up to \$5 million for 25% of costs spent to date and expected to be spent to progress design and construction planning up to the end of 2023.

The \$5 million would still be payable in the event the City of Pitt Meadows withdraws funding for the construction phase of the project.




## Implications of decision delay



 With high rates of construction cost inflation, every month of delay is expected to increase project costs and the funding gap by approximately **\$1 million**

If project partners cannot close the funding gap, the port authority cannot lead the project into construction

 With this in mind, a provisional commitment is needed from the City of Pitt Meadows by **April 14, 2023**, subject to a community process



## Thank you

---

[portvancouver.com/pittmeadowsroadandrail](https://portvancouver.com/pittmeadowsroadandrail)  
[portvancouver.com/pittmeadowsengagement](https://portvancouver.com/pittmeadowsengagement)  
[pittmeadowsroadandrail@portvancouver.com](mailto:pittmeadowsroadandrail@portvancouver.com)

