Burnaby Mountain Gondola: Making the Rapid Transit Connection

Holly Foxcroft
Lead Planner, TransLink

1. Project Overview

Burnaby Mountain Gondola Route

Technical summary

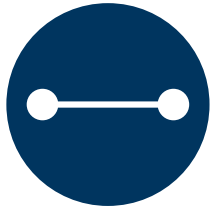
These components have been confirmed

- Gondola technology
  - 3S gondola technology
- Infrastructure
  - Two terminals, four towers
  - Terminals located at Production Way-University and near SFU Town Square (east side of campus)
- Attendants
  - Attendants in each terminal to assist with boarding and alighting

These components may be refined through future design phases

- Capacity
  - Opening day: ~3,000 passengers per hour per direction
  - Ultimate: ~4,000 passengers per hour per direction
- Trip time
  - 6 minutes
- Travel speed
  - Between terminals: 6-8 meters/second or 27.5 kilometers/hour
  - In terminals: 0.18 meters/second, can slow down more or stop if needed
- Cabins
  - Capacity of about 30 passengers

Benefits

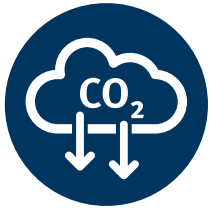


Direct Route

Offers the most direct route connecting Skytrain with Burnaby Mountain

Rising Demand

Enough capacity to meet rising demand over the next 30 years



Environment

Reduces GHG emissions and air pollution

Reliable

Addresses overcrowding and weather-related reliability issues

Cost-Effective

Requires less annual operating costs than current bus service

Customer Experience

Improves customer experience through reduced travel time and ease of travel

Working project timeline

Planning	Business case development	Approvals of Investment Plan & senior government funding	Procurement, design & construction	Opening day
2020-2021	2022-2024	2025	2-3 years	

2. Urban Transit Gondola Considerations

Heuristics and project understanding

Availability

Anchoring

Representative

“Heuristics is the process by which humans use mental shortcuts to arrive at a decision”

The Burnaby Mountain Gondola Experience

TransLink considerations: Service and financial accountability considerations

Key Considerations:

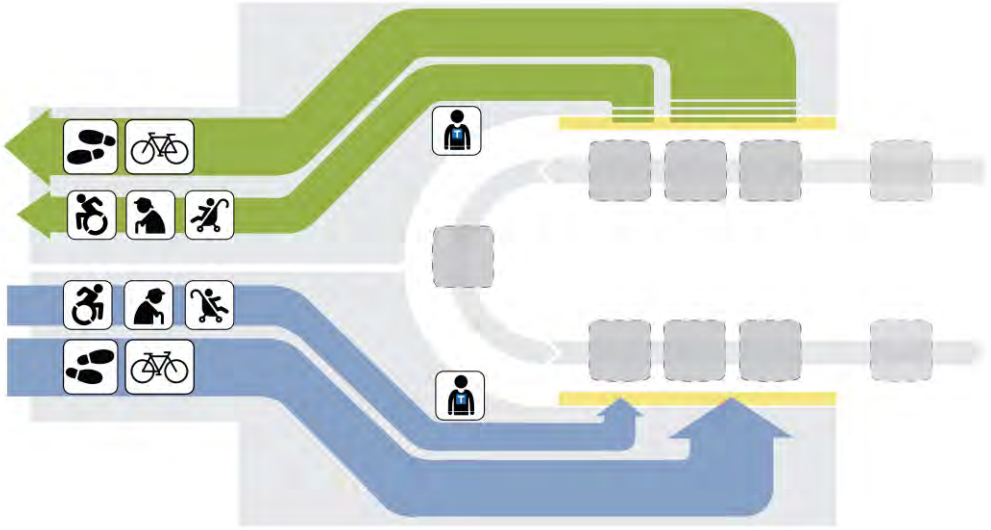
- Align with TransLink and Partners' Plans and Visions
- Advance Reconciliation through ongoing engagement to understand interests and rights; prioritized environmental and archaeological work
- Provide a positive and safe customer experience
- Support integrated transit supportive developments
- Financial accountability

What We Did:

- Upfront definition of project requirements (including Concept of Operation and Maintenance, Technical Safety BC engagement)
- Develop project in holistic system approach, including integration needs
- Consider long term O&M Needs and costs
- Optimize alignment to minimize property, utilities, and development opportunities impacts

Understanding design, operations, and maintenance

Lower terminal conceptual rendering

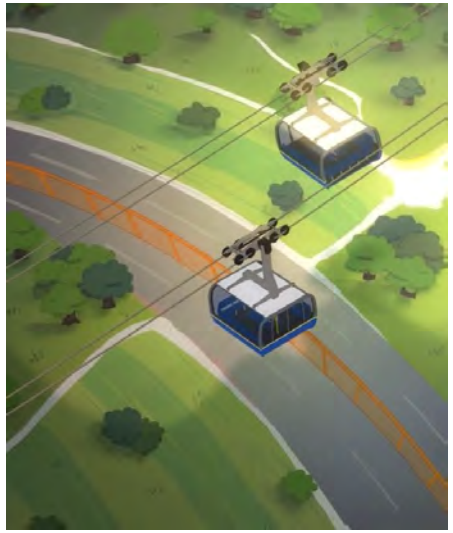


Boarding and alighting areas organization

Urban considerations

BC Hydro 69kV Transmission w/ Distribution

Lower terminal area and utilities



Air rights

Environmental and archaeological considerations

Burnaby Mountain Conservation Area

kʷikʷəƛ̓əm
(Kwikwetlem)

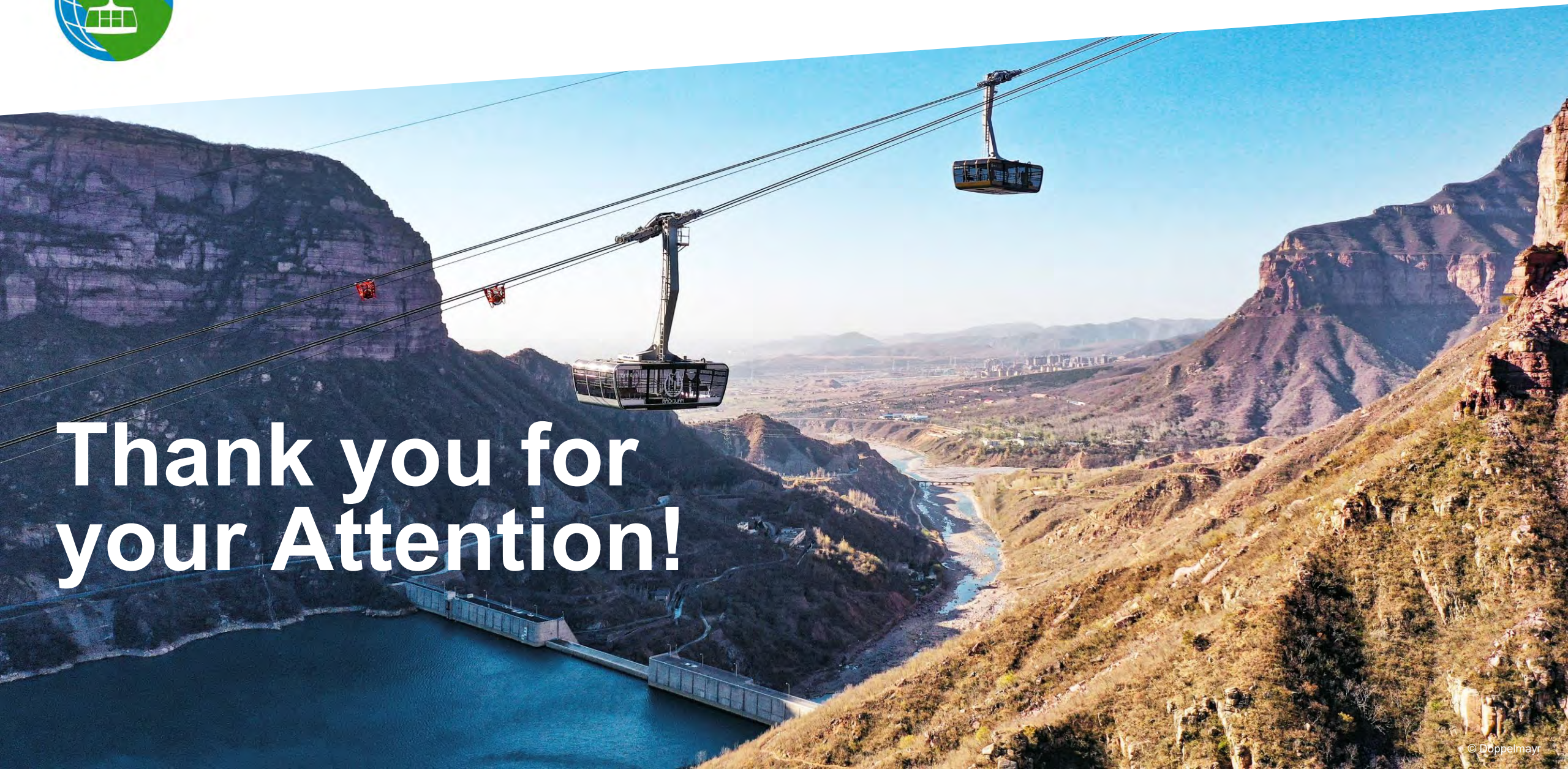
xʷməθkʷəy̓əm
(Musqueam)

Sḵwx̱wú7mesh
Úxwumixw
(Squamish)

səlilwətaɬ
(Tsleil-Waututh)

Summary

- ***Tools and technology:*** Understanding heuristics and taking steps to visualize, share and develop project understanding
- ***Partnership approach:*** Early understanding and continued engagement of public / municipality / Senior government / Indigenous interests / Partners / stakeholders / consultants
- ***Peer Experiences:*** Education and leveraging the growing industry of urban ropeways
- ***System Approach:*** Developing the project through a holistic systems approach from opening day to long-term operations and maintenance needs


Thank you for
your Attention!
© Doppelmayr