

# Burnaby Mountain Gondola Transit Project Backgrounder

Summer 2011



## Project Background

TransLink is exploring the feasibility of constructing and operating a gondola to improve reliability and travel times to and from Burnaby Mountain and reduce the greenhouse gas emissions currently produced by the buses that serve the area. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty, staff and visitors as well as residents and businesses of UniverCity.

The phase of work currently being completed is a planning study (which includes a business case) to determine the costs and benefits of the project and identify whether a decision to proceed to detailed planning and procurement is warranted. The planning study is to conclude in Summer 2011. Preliminary findings indicate that the gondola could cost about the same to build, operate and maintain as the existing bus service, on a life cycle basis. The study further demonstrates that the benefits – including reductions in greenhouse gas emissions, improved travel reliability, and reduced trip times – create a strong case for the gondola as a project.

## Current Transit Ridership

25,000 transit trips a day are made on and off Burnaby Mountain. To serve this volume, a bus leaves the bus loop at the top of the mountain every 90 seconds in the peak hours. Despite this frequency, people are lined up waiting for service. This number is projected to increase to 40,000 trips (*one bus every 50 seconds*) in the next 20 years. If nothing is changed, more buses would be required and additional space for parking and storing buses would be built.

## Recommended Technology

The planning study identifies 3-rope gondola technology (*like the Peak to Peak gondola in Whistler Blackcomb*) as the solution that best meets the study criteria:

### 1. CAPACITY

The 30 – 35 person gondola cabins could carry 4000 or more people per hour per direction in approximately half the time of the current bus trip. Initial capacity would be about 3000 per hour. Cabins would circulate continuously during operating hours, arriving every 40 seconds in peak periods.

### 2. ACCESSIBILITY

Loading and unloading is universally accessible due to the very low speeds in the terminal buildings and a level threshold with no step. Gondola cabins could be outfitted with flip seating to accommodate wheelchairs, strollers and bikes.

### 3. RELIABILITY

About 10 days each year, bus service to SFU is interrupted or delayed due to winter weather. Standard buses must be substituted for articulated buses, reducing capacity. Steep grades make it difficult for buses to navigate the grades and trip times are increased. The 3 rope gondola technology is tolerant of high winds and can continue to carry riders regardless of snow and icy road conditions.

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#### 4. ENVIRONMENTAL

By eliminating the need for many buses to travel up the steep mountain grade, the Burnaby Mountain Gondola Transit Project could eliminate 35,000 - 55,000 hours of diesel bus operation from Burnaby Mountain. Land impacts would be modest, as the number and location of support towers can be selected to minimize impacts.

A key consideration in reviewing the feasibility of the project is minimizing impacts on the conservation area. All decisions including tower locations and construction methodology would be driven by this objective.

#### 5. NOISE

Operation is quiet and would be lower than background noise in residential areas.

### Recommended Route

Potential gondola routes were evaluated based on their ability to:

- Minimize conservation area impacts
- Minimize neighbourhood impacts
- Minimize length of route – (reduce cost and travel time)
- Minimize impacts of tower locations
- Maximize transit integration - with SkyTrain and SFU/UniverCity

The route that best meets the criteria is the direct route from Production Way to the UniverCity/SFU terminus. This route:

- Minimizes impacts on conservation area
- Minimizes residential property crossing
- Minimizes travel time (6.5 minutes versus 15 minutes by bus)
- Maximizes integration with transit facilities
- Presents the least conflict with existing utilities
- Provides potential lower-impact tower locations

### For Information

Learn more about this project, and get involved at:

[bepartoftheplan.ca](http://bepartoftheplan.ca)

Contact Kristin Lillyman, TransLink 1600-4270 Kingsway, Burnaby, BC  
604.453.4687 or [kristin.lillyman@translink.ca](mailto:kristin.lillyman@translink.ca)

### Project Funding

The cost of the project is estimated to be approximately \$120 million. Sources of funding from three levels of government are being considered. Grant funding may be available due to the environmental benefits and innovative components of the project.

### Benefits to Taxpayers (by 2021)

- Up to 2 million hours of transit and auto travel time savings
- Up to 26 million reduction in vehicle km (auto driving)
- Up to 7,000 tonne annual reduction in GHG emissions from cars and buses
- \$2.9 million in annual vehicle collision savings
- \$4.2 million in annual auto operating cost savings
- \$1 to 3 million annual transit service operating cost savings

### Public Consultation

TransLink is committed to a consultation program to gather and consider community and stakeholder input on the proposed project.

Stakeholder and community input will be considered, along with technical and financial considerations, in three phases of project planning:

**PHASE ONE** – *Pre-Consultation* – November 2010 (completed) – involved six small group meetings of stakeholders including students, recreational users, environmental advocates, and residents.

**PHASE TWO** – *Spring/Summer 2011 (current)* – will include small group meetings and open houses to raise awareness about the proposed project, provide information, and solicit participation and feedback from the community.

As part of the planning process, we will continue to meet with Forest Grove community residents and other stakeholder groups.

**PHASE THREE** – *timing to be determined* – will take place if a decision is made to proceed with the project. This phase will provide more detailed planning information and solicit feedback to be considered in final design and construction.