### **Burnaby Mountain Gondola Transit Project**

Feedback Form

1.	The Burnaby Mountain Gondola Transit Project is being proposed to improve reliability and travel times to and from Burnaby Mountain and reduce the greenhouse gas emissions currently produced by buses that service the area.						
	To what extent do you agree that this would be a good solution to solving some of the challenges of travelling to and from Burnaby Mountain?						
	1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
	Please provide comments to explain your response:						
2.	Tower location options						
	The gondola would be supported by five towers. There may be an option to select preferred tower locations. Which would you prefer?						
	On or close to existing roadways In the forested area, or close to it						
3.	Visual impact of towers						
	The visual impacts of towers could be minimized by landscaping or paint treatments. Minimizing the visual impact of these towers is:						
	Very important to me Somewhat important to me Not important to me						









#### 4. Integration with the transit system If the gondola project proceeds, the bus service will be restructured to accommodate new travel patterns. What factors should we be considering when planning these changes? 5. Other topics of interest No decision has been made about whether this project will proceed. If it does proceed, more consultation will take place on specific features of design and construction. What topics are of interest to you that you would like to see included in the next round of consultation should the project proceed? Topic of interest: Topic of interest: Topic of interest: Your input is important to us. Please provide us with your feedback, on this form or online at beapartoftheplan.ca. Public input will be considered along with technical and financial considerations should a decision be made to move this project forward.

Feedback Deadline: Please submit your feedback by June 30, 2011

» by mail: 1600-4720 Kingsway, Burnaby, BC V5H 4N2

» by fax: 604-453-4677, or

» by email: andrew.brooke@translink.ca









## Why do we need a Gondola?



#### Volume

Translink buses serve 25,000 transit trips a day 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 (requiring a 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.



#### **Air Quality**

The current diesel bus service from SkyTrain to Burnaby Mountain produces over 1,700 tonnes of Greenhouse Gas emissions per year. This will grow to 1,900 tonnes by 2030.



#### Reliability

About 10 days each year, bus service to SFU is interrupted or delayed due to winter weather. Standard buses must be submitted for articulated buses, reducing capacity. Steep grades make it difficult for buses to navigate and trip times are increased.









## Who is involved in the planning?



#### Who is involved?

TransLink led the planning study, which includes a business case for the project. TransLink's main interests in looking at a gondola are its potential to deliver service more cost-effectively and reliably than buses while increasing transit ridership and reducing greenhouse gas emissions. These objectives are consistent with TransLink's long-range planning objectives as described in Transport 2040. A review of the potential for a gondola was therefore included in TransLink's 2010 Ten-Year Plans

The City of Burnaby is the local approving authority (for land use, zoning, civic property access and permits). SFU, SFU Community Trust, and the BC Ministry of Transportation and Infrastructure were also consulted.

#### What is the planning process?

Early feasibility work on the idea of a gondola up Burnaby Mountain showed promise as a project that could improve transit service, reduce impacts on the environment, and save operating costs. In November and December of last year, TransLink held six pre-consultation meetings to provide stakeholder groups with preliminary information about feasibility work being undertaken, and ask for input on the ways in which people would like to be contacted and consulted should a decision be made to proceed. TransLink then commissioned a planning study and business case – to study feasibility and impacts of potential technologies, routes, capital and operating costs, bus service savings, and overall affordability for taxpayers. The Planning Study is almost complete. Consultation input will be considered in finalizing the report, which will be made available on our website.









# What technologies were considered to meet the need?

The planning study reviewed a number of potential transit solutions for Burnaby Mountain. These included ground based technologies: trolley buses, light rail transit, funicular, rack railway, and SkyTrain; and aerial technologies: reversible ropeway tram (like the Grouse Mountain tram), and different types of gondolas – monocable, 2 and 3 rope, and funitel.



















Accounts	Diesel bus	Trolleybus	SkyTrain	LRT	Rack railway	Funicular	Aerial tram	Monocable gondola	3S gondola
Transportation							0		
Environment									
Financial			0	0	0	O			
Deliverability			0	0	0	0			
Urban Development									
Social & Community								0	

SCALE RELATIVE TO BASE:





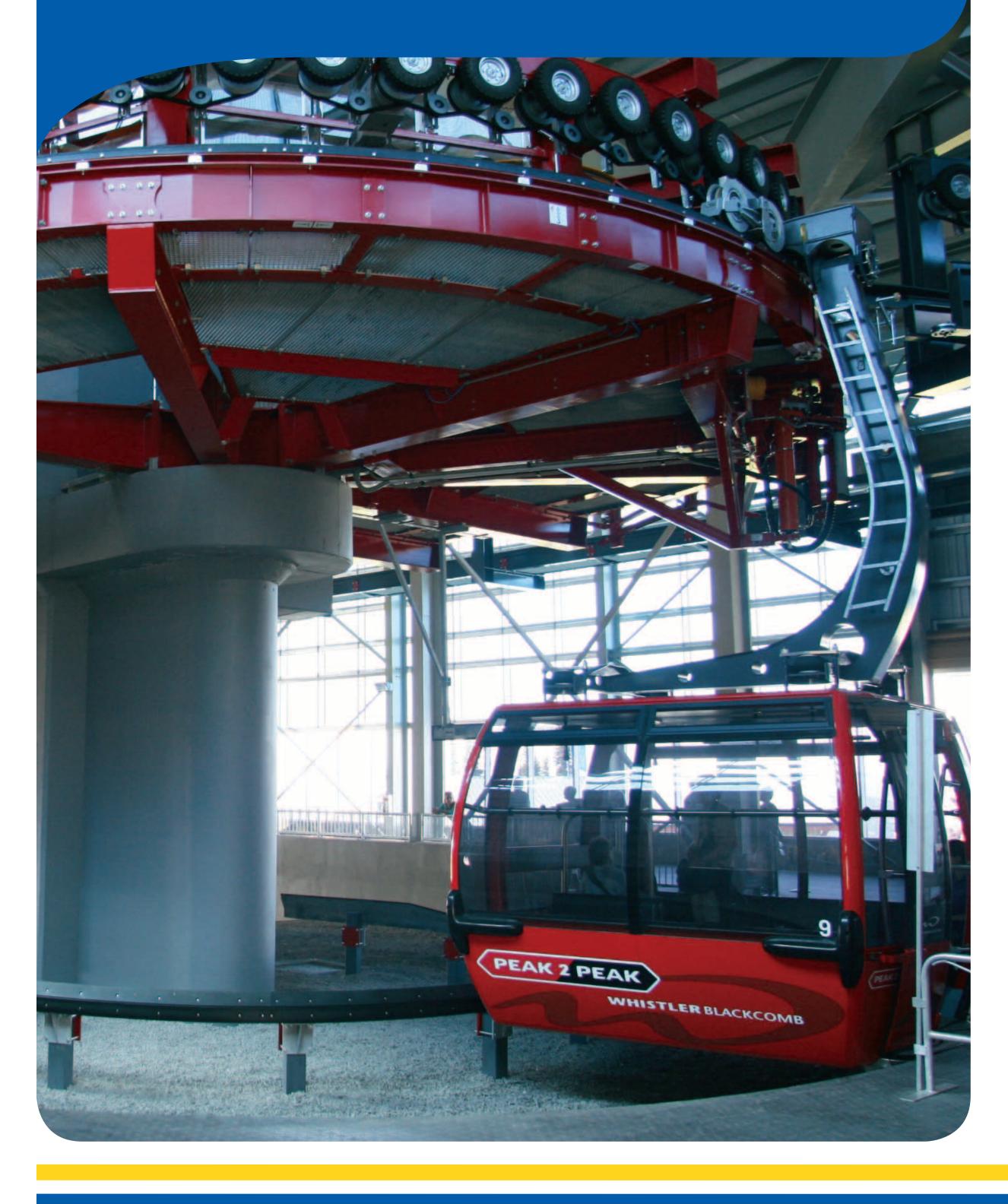






### Recommended Technology: 3 Rope Gondola

(like the Peak 2 Peak in Whistler Blackcomb)



#### Why?

#### Capacity



30-35 person gondolas can 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 will circulate continuously during operating hours, every 40 seconds in peak periods.

#### **Environment**



By eliminating the need for the majority of buses traveling up the steep mountain grade, the gondola could eliminate 35,000 – 55,000 annual hours of bus operation from Burnaby Mountain. The locations of support towers can be selected to minimize land impacts.

#### Reliability



The 3 rope gondola technology is tolerant of high winds and can continue to carry riders regardless of snow and icy road conditions.

#### 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.

#### Noise



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









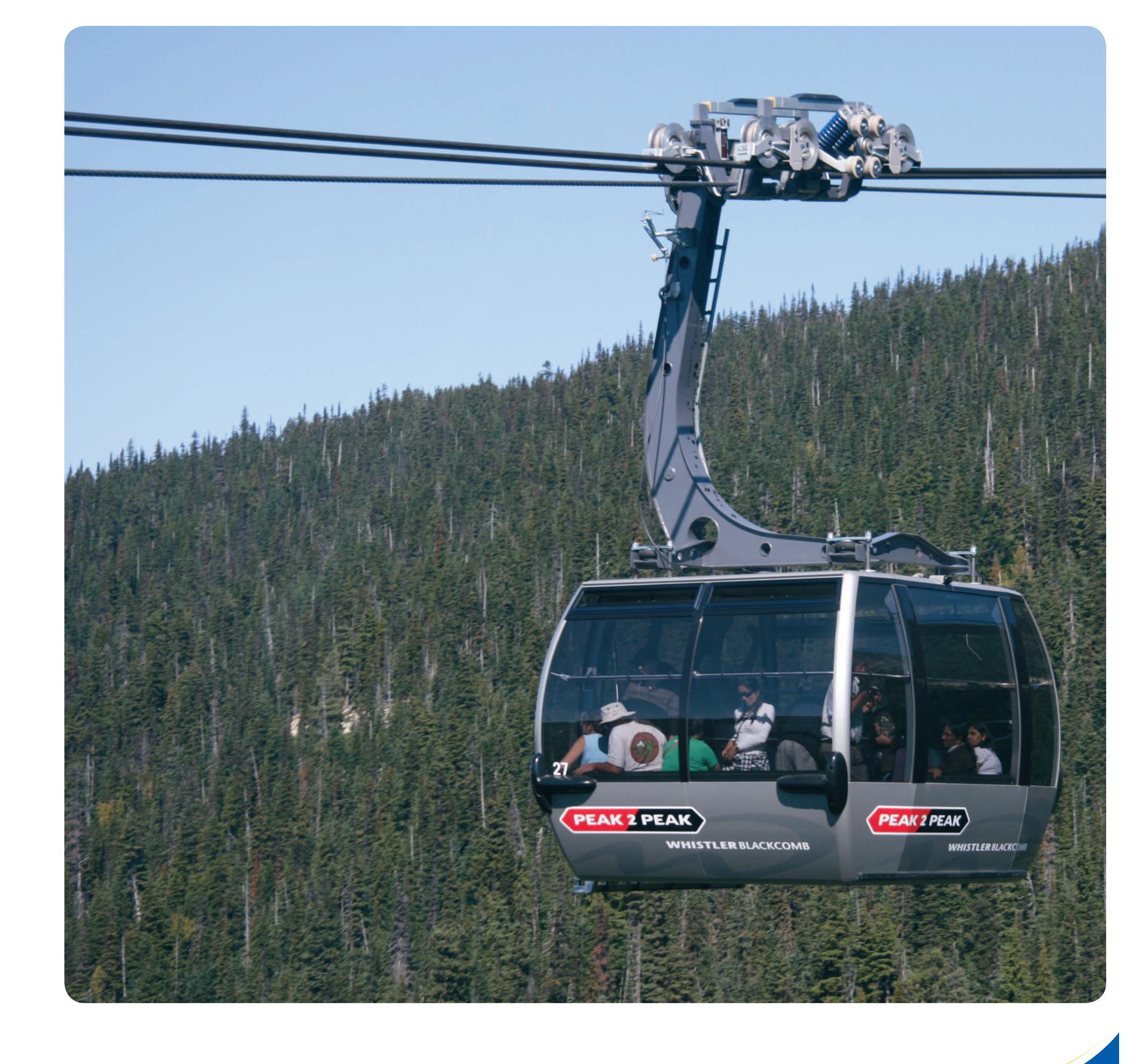
## How much would it cost to build and operate?

#### A gondola would:

- Cost about \$120 million to build
- Reduce annual operating and bus costs by \$2 to \$5 million
- Avoid the need to build a \$10 million bus facility at SFU

## By 2021 a gondola would deliver the following annual benefits:

- 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 auto operating cost savings













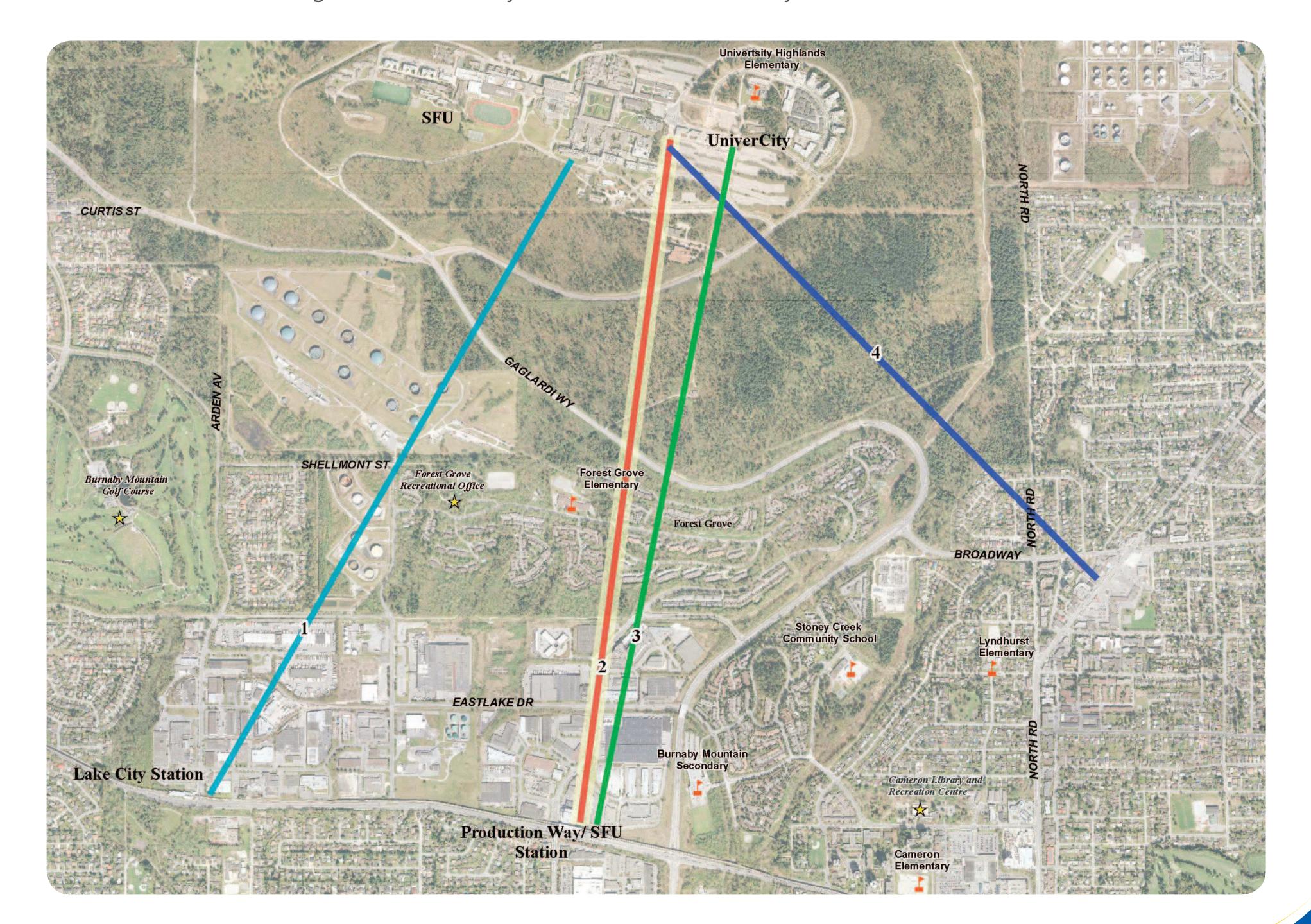
## How were different routes evaluated?

#### **Gondola Route Evaluation**

Issue	1: Lake City	2: Production Way – Transit Hub	3: Production Way – Tower Rd	4: Burquitlam	
Conservation Area Impact				0	
Residential Impact			O	0	
SkyTrain/Transit Integration					
SFU Campus/ UniverCity Integration					
Property acquisition risk	0				
Safety & Approvals (external causes)	0				
Cost (including property)					
Worse <del>(</del>		SCALE		Better	
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#### 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, avoiding kinked alignments)
- Minimize impacts of tower locations
- Maximize transit integration with SkyTrain and SFU/UniverCity











### Recommended Route

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

- 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
- Least conflict with utilities
- Potential low impact tower locations



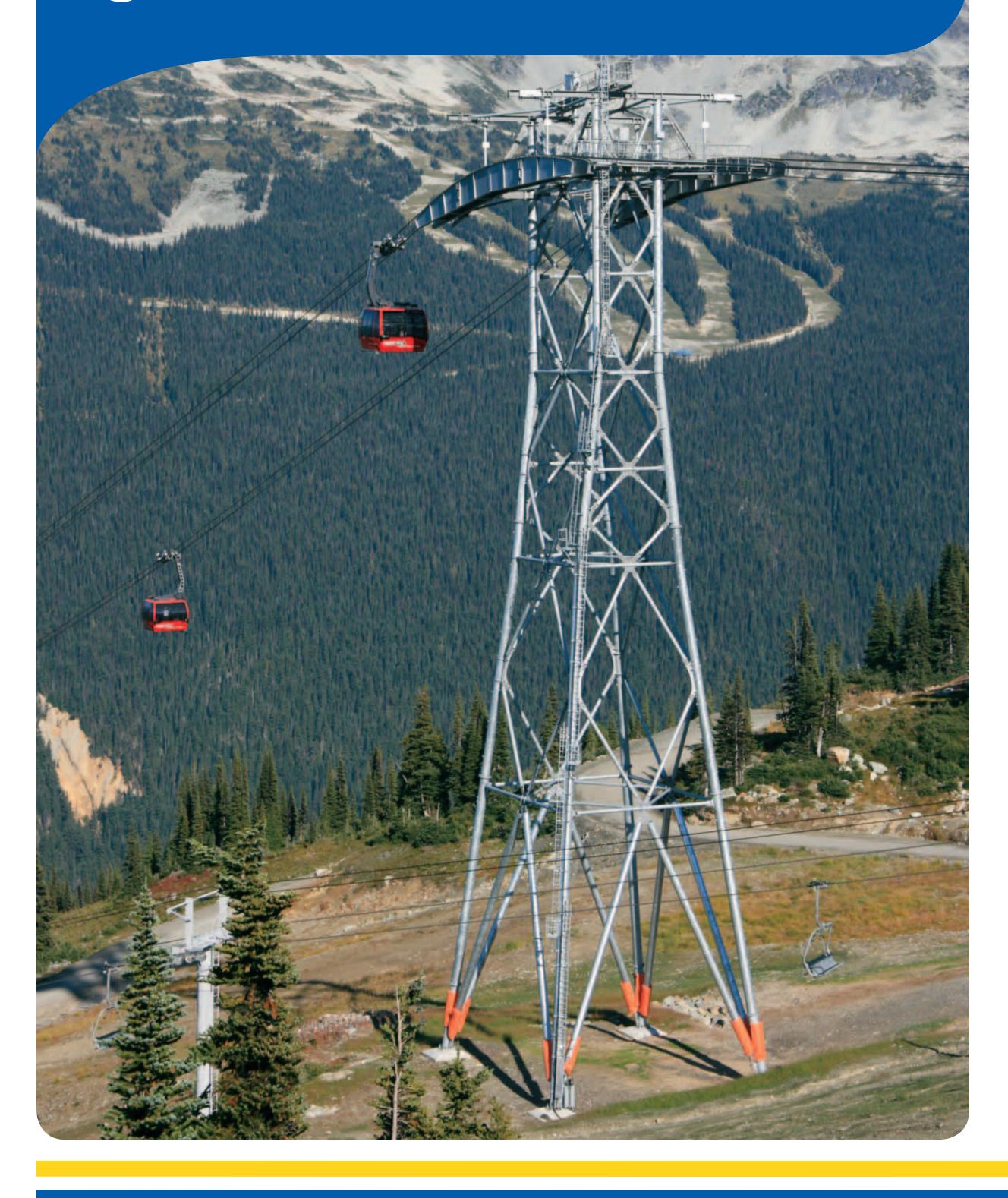


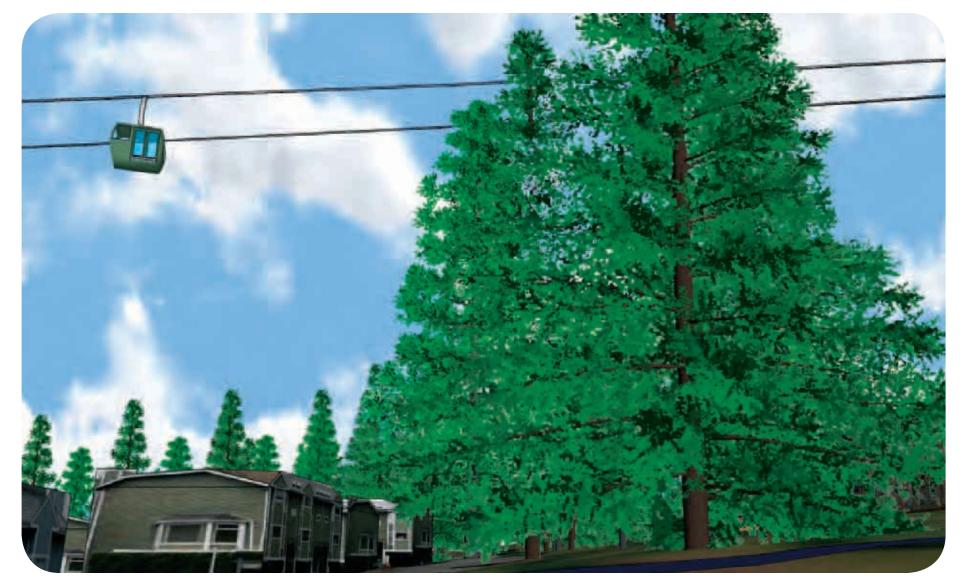






## What would the gondola look like?





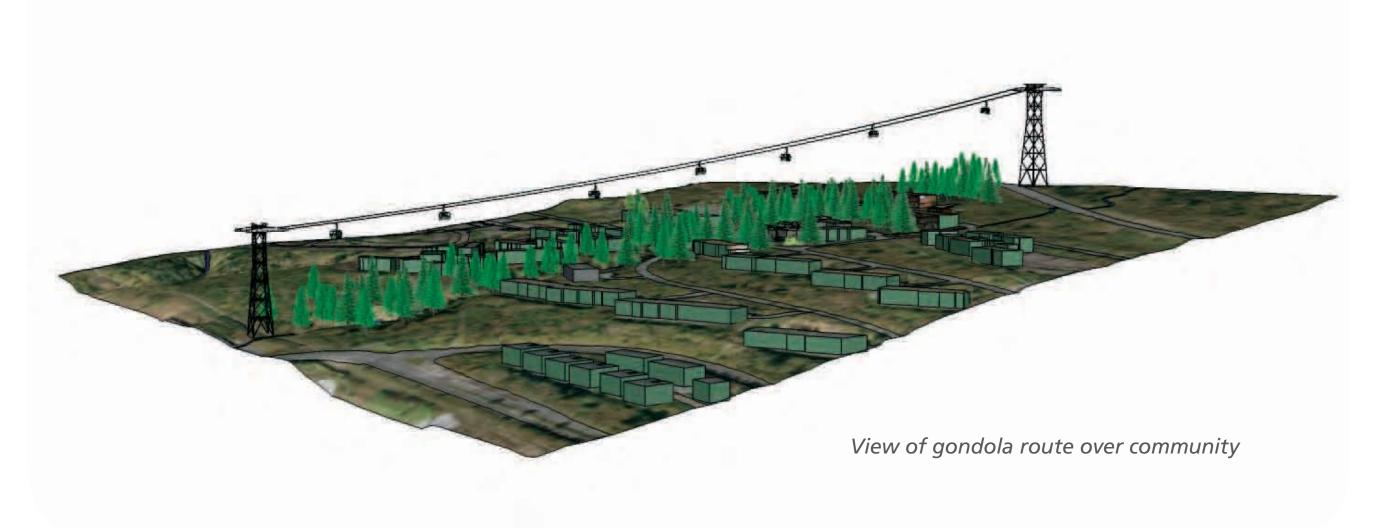
View from a residential property

The gondola route would travel over a portion of the Forest Grove residential community at the foot of Burnaby Mountain. The gondola would travel approximately 40 metres (130 feet) above the ground and over top of the tree canopy. The operation is very quiet.



View from a gondola cabin over community

The tree canopy would be left largely intact, minimizing the visibility of homes from the cabins.



A key objective would be to minimize any impacts on residents. Construction methods permit the installation of the cable with minimal disruption to the trees and land, and much of the road access for tower construction is already in place.









# Where would the gondola towers be located?

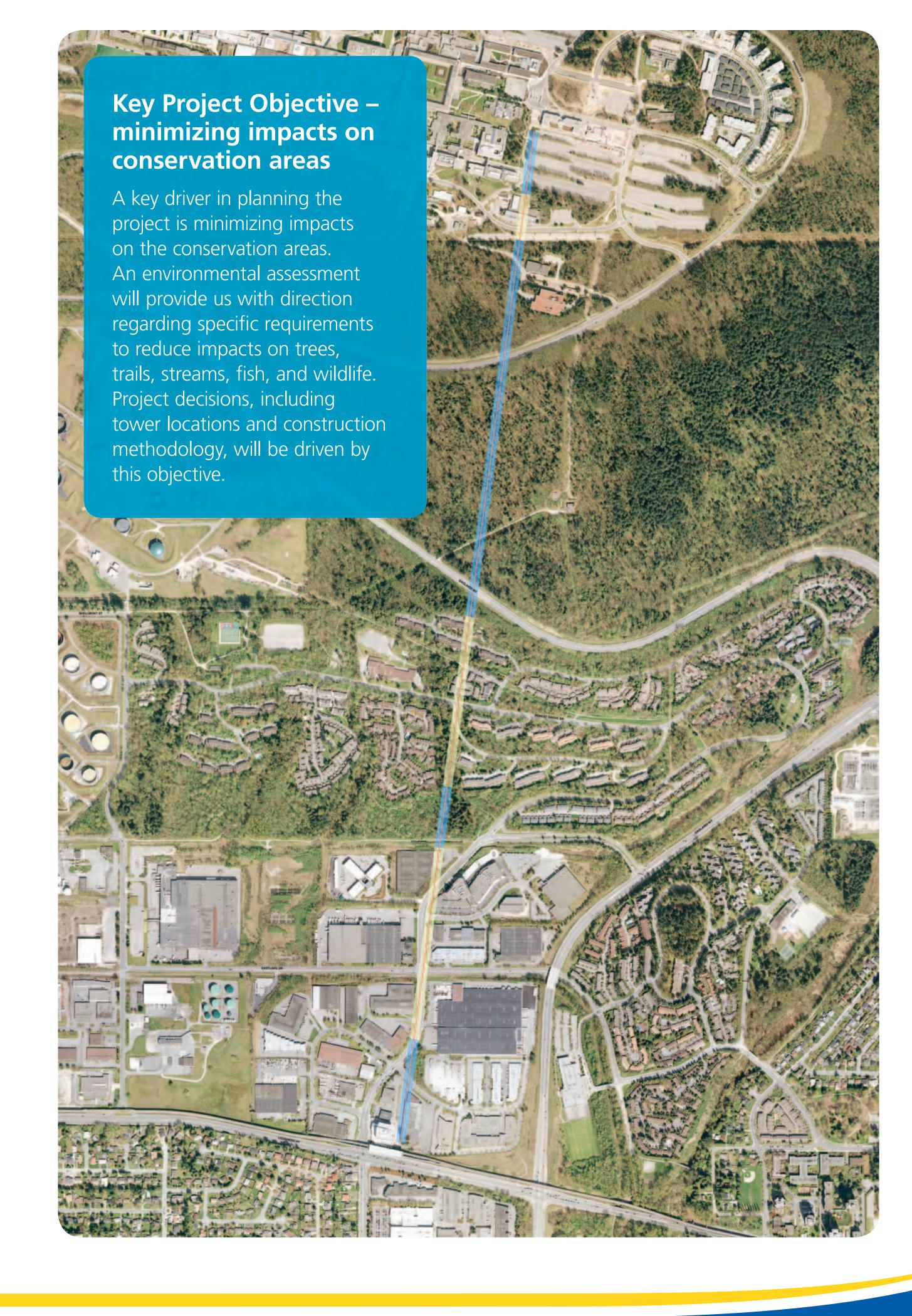
There would be 5 towers of up to 70 m (230') to support the cables carrying the gondolas. The heights and exact locations of these towers have not been determined, as this is a key topic requiring input from stakeholders and the community. Tower locations and environmental impacts will need the approval of the City of Burnaby and an environmental assessment will be undertaken. A key commitment of this project is to minimize impacts on the environment and in the conservation area in particular.

Locating the towers on the road would make them more visible, but visual impacts could be mitigated by landscaping or paint treatments. Locating towers in the forested area would have greater environmental impacts but may make them less visible.

#### **TOWER LOCATION OPTIONS:**

- Edge of forest/next to roads
- In forest
- Over/straddling roads

Please provide comments on this topic in the feedback form.











# How will the gondola integrate with the existing transit system?

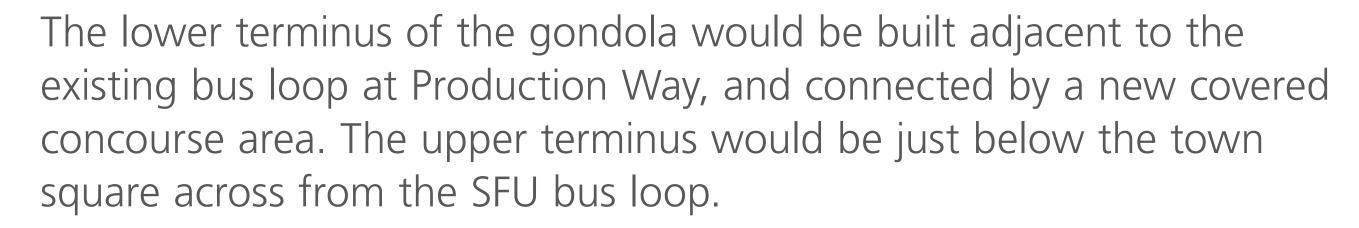
### Bus routes would be changed to avoid unnecessary duplication with the gondola.

- Bus 145 would be replaced by the gondola
  - » Bus 145 would still operate very early mornings and late nights when the gondola is closed, and during gondola maintenance.
- Bus 143 would be replaced by the gondola once the Evergreen Line is built and operating
- Routes 135 and 144 would be unchanged.
- Other routes in the area (such as 110 and 136) may be slightly modified to maintain coverage

Please provide comments on this topic in the feedback form.









Ticketing would be integrated with the rest of the transit system.



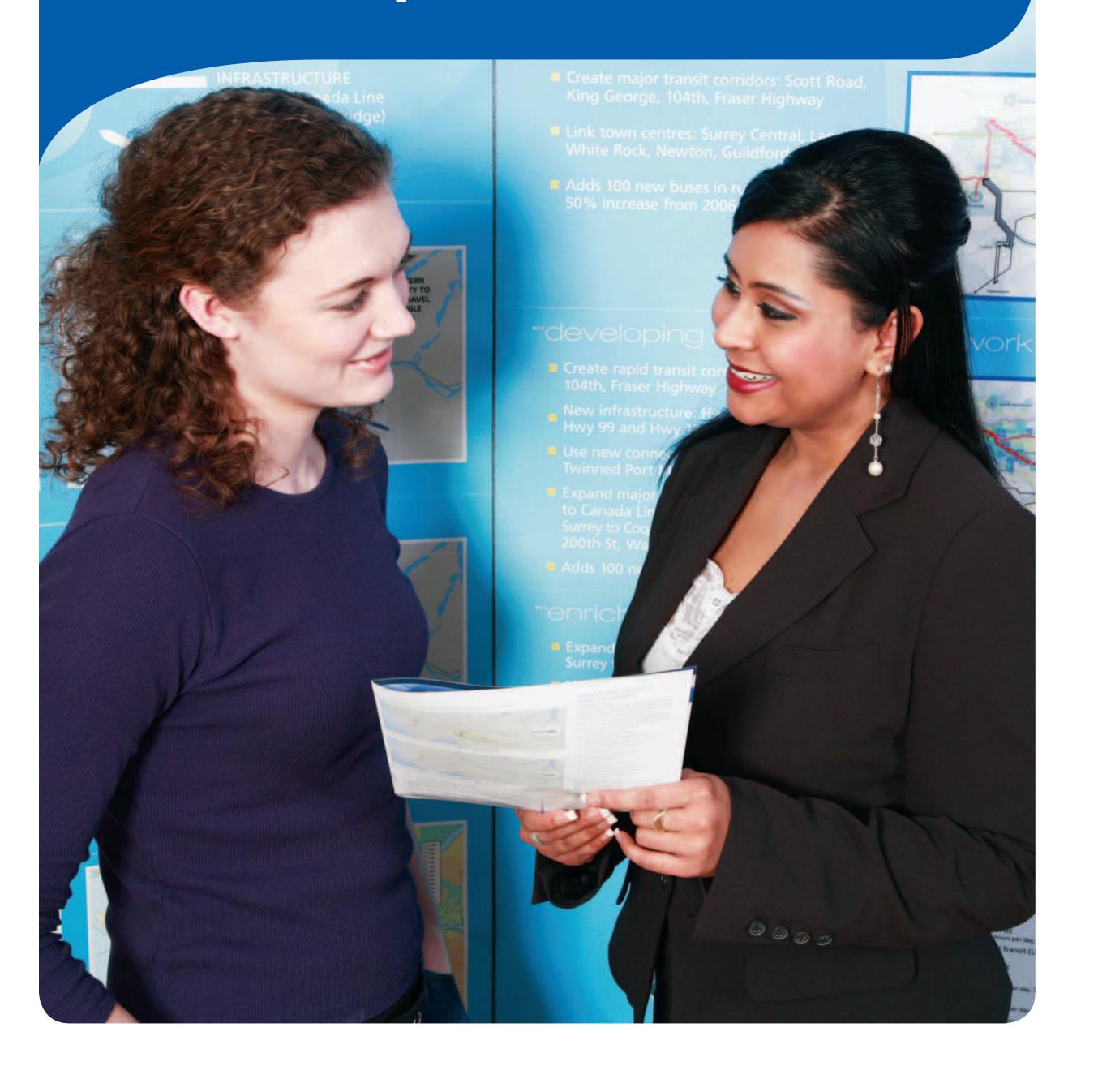








### Next Steps



- The planning study and business case are being completed consultation input will be considered in final recommendations.
- Sources of funding from three levels of government are being considered. Some grant funding may be available due to the environmental benefits and innovative components of the project.
- Investment in this project will be considered among other regional transportation priorities.
- An environmental assessment process for the project will be determined.

A final decision regarding the proposed Burnaby Mountain Gondola Project will be made by TransLink. In making this decision, TransLink will consider findings in the planning study and business case, and input from public consultation.

#### We want to hear from you.

Your feedback is important to us. We are seeking public input on these topics:

- Tower location options
- Topics that are of interest to stakeholders for consideration in design and construction
- Integration with the existing transit system

Please complete a feedback form provided at the Open House or online at **translink.ca.** The deadline for submitting your feedback in this consultation is June 30, 2011. TransLink will consider this input as it makes a decision on whether to proceed.









#### **APPENDIX 3**

#### **BURNABY MOUNTAIN GONDOLA TRANSIT PROJECT**

#### **OPEN HOUSE ADVERTISEMENT SCHEDULE**

	Publish/Distribute		
Buzzer Blog	Tuesday, May 10		
Burnaby Now	Tuesday, May 10		
	Wednesday, May 11		
Burnaby NewsLeader	Monday, May 9		
The Peak (SFU Student Newspaper)	Monday, May 9		
SFU News	Thursday, May 26		
Mail Drop	Wednesday, May 16		
Campus/Community Posters	Monday, May 25		
Campus Trust – Community e-newsletter	Monday, May 3		
SFU Public Affairs & Media Relations	E-blast to staff & faculty		



#### Your input is important to us!

Please come to an open house to learn about the proposed Burnaby Mountain Gondola Transit Project and provide feedback to the planning team.

TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability and travel times, and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Two open houses will present the outcomes of the planning study, and solicit community input about the proposed project.

#### **COMMUNITY OPEN HOUSE 1**

DATE: Wednesday, May 25, 2011
TIME: 5:00 p.m. – 8:00 p.m.
PRESENTATIONS: 5:30 p.m. and 7:00 p.m.
LOCATION: Cameron Elementary School
9540 Erickson Drive, Burnaby

#### **COMMUNITY OPEN HOUSE 2**

DATE: Thursday, May 26, 2011 TIME: 1:00 p.m. – 4:00 p.m. 5:00 p.m. – 8:00 p.m.

PRESENTATIONS: 1:30 p.m., 3:00 p.m., 5:30 p.m. and 7:00 p.m. LOCATION: Saywell Hall Atrium, SFU Burnaby Campus

If you can't attend an open house but would like to learn about the project and provide input online, between May 24th, 2011 and June 30th, 2011 please visit **bepartoftheplan.ca** 

Contact Colleen Sondermann at: colleen.sondermann@translink.ca or 604.453.4687 for more information.









#### **TRANSLINK**

#### BURNABY MOUNTAIN GONDOLA TRANSIT PROJECT

Monday, May 16, 2011 SFU Community Trust Boardroom Suite 150 – 8960 University High Street Burnaby BC



Notes from a Burnaby Mountain Gondola Transit Project meeting, held Monday, May 16, 2011 at the SFU Community Trust Boardroom, Suite 150, 8960 University High Street, Burnaby, BC

#### **FACILITATOR:**

Nancy Spooner, Spooner Consulting Ltd.

#### **ALSO PRESENT:**

Ian Fisher, TransLink Colleen Sondermann, TransLink Susan Campbell, Note Taker, Corporate Consulting

The workshop was called to order at 6:00 p.m.

#### 1. INTRODUCTION AND MEETING OBJECTIVES

Nancy Spooner, Facilitator, welcomed everyone and reviewed the agenda for the Burnaby Mountain Gondola Transit Project meeting. Participants were advised that TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability, travel times and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Participants were further advised that this public consultation was Phase Two of the project and that this phase will include small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community. Finally, it is important to note that no decisions have been made at this point.

#### 2. PRESENTATION

Power point presentation: Ian Fisher, TransLink reviewed the study overview, the planning process and participants, the technology and alignment assessment, what the gondola would be like and the upcoming consultation activities. A copy of the power point presentation may be viewed on the TransLink website at: <a href="https://www.bepartoftheplan.ca">www.bepartoftheplan.ca</a>

Specifically, TransLink is seeking input on:

- Tower location options
- Design and construction considerations
- Lower terminus options



#### • Upper terminus options

#### 3. **QUESTIONS, ANSWERS AND COMMENTS**

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)

- Q: In the cost benefit analysis did you include increased business opportunities and or increased commercial opportunities etc.?
- A: *TransLink:* No, we didn't and we also didn't include tourism opportunities and other such economic values either.
- Q: What about the station on the upper section what impacts will there be on residents from that station on the residents in this building (Cornerstone Mews)? What are the anticipated hours of operation for the gondola? How will reduction in less buses impact the residents? Could you provide a noise study for residents that reside in the area because remember that the gondola load will be much more than the current bus load.
- A: *TransLink*: There will be an overall net reduction in noise because the gondola will be quieter and the terminal operation is facing away from the residents. The hours of operation are anticipated to be roughly from 6:30 a.m. until midnight and a bus service will be run to fill in on either side of that service. Finally, with respect to your question about noise, we have some noise data already but we are anticipating conducting more noise studies.
- C: Facilitator: And, TransLink's noise study would be about encompassing noise levels in the surrounding area not only from the gondola operation but would include people coming and going from the transit area.
- A: *TransLink:* Yes, we would look at all those areas in a noise study.
- O: This is really just a clarification won't most of the noise be channeled south?
- A: *TransLink:* That is correct.
- C: Facilitator: And, we have planned on taking stakeholders to the Peak-to-Peak gondola at Whistler/Blackcomb Mountain so that they can really evaluate the technology because it is the same technology there as is proposed here.
- Q: What about vibrations?
- A: *TransLink:* I suspect there won't be much vibration because I don't think there is much to transmit vibrations here. The lower terminal would be a larger area because that is where the (gondola) cabins would be stored.
- Q: Will you think about decreasing the number of cable cars on weekends?
- A: *TransLink:* Yes and we can also slow the lift down if we don't need the capacity.
- Q: I have a comment and then a question. First my comment is that it seems to me that a university this size not having a rapid transit system is tragically overdue one and the same with UBC just look at Montreal and Toronto



- because they have rapid transit systems that serve their universities. My question is would there be turnstiles and gates and an operator on site?
- A: *TransLink:* TransLink is moving to an integrated Smart Card system by 2013 (the Compass) and this would be incorporated into that system. It is more than likely that there would just be gates at the lower terminal. With respect to your question around staffing the upper and lower terminals would be staffed at all times and we anticipate having CCTV<sup>1</sup> and passenger intercoms in the (gondola) cabins so there will be a reasonably high level of security. Further, the attendant can ensure compatible loads if for example people did not want to ride with rowdy students. In the budget, we have budgeted for an extra shift of Transit Police.
- Q: My concern is about the privacy of residents that live along the gondola route because it is high up and people can look down and see in the units from the lower terminal to Burnaby Mountain?
- A: *TransLink:* That is an issue and we would have to buy air space above the properties that the gondola passed over and so that would be compensation for those home owners. The bigger question is those that live near it because they will have a bigger issue. We know that SkyTrain does pass close to bedroom windows and there wasn't any compensation for those home owners. However, likely with the angles, it would be challenging to see into resident windows and remember that the (gondola) cabins will be moving quickly.
- A: Facilitator: Also, remember that the gondola is high up above the tree canopy.
- Q: What about emergencies?
- A: *TransLink:* Redundancies are built into the drive system; there are two sets of main bearings and other redundant systems that can take over and get the (gondola) cabins back to the main terminals. The Peak-to-Peak has a winching system in place to bring the cabins back in because it is much too high for a land-based rescue. So, we are looking at a high level of redundancies on the drives and the safety track record on the gondola is very good.
- Q: And, you will have emergency diesel generators, is that correct?
- A: *TransLink*: Yes, that is correct.
- Q: Are you looking at a specific design, is there a specific manufacturer that you are looking at?
- A: *TransLink:* There are two manufacturers, both located in Austria and both the manufacturers are very interested in the project.
- Q: Will it be similar to the one recently built in Rio de Janeiro, South America?

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<sup>&</sup>lt;sup>1</sup> Closed circuit cameras



- A: *TransLink:* Yes and there are also three in Columbia, South America, that are operational. As well, London has just approved one over the Thames River; there is one in south Tyrol, Italy and another one in Germany (for a garden show). The record notes that pictures of several operational gondola systems were shown to participants.
- Q: I would just like to say that I think it would be good to have rapid transit for the university and the residents. My question is about financing, what can you tell us about the financing?
- A: *TransLink:* We don't know where the financing will come from entirely however we believe that the federal gas tax money could be used it would be a good candidate for this project.
- Q: Are you thinking of private, public partnerships?
- A: *TransLink:* P3s are not as promising as this project is too small.
- Q: Has this project gone to Partnerships BC? And, if it has is that why there is the delay in the business case?
- A: *TransLink*: Partnerships BC has undertaken the procurement analysis for us and TransLink just wants to see the best outcome for the taxpayers' money and serving the needs of the users. There are lessons learned from the Canada Line and we don't want to repeat those contractual issues. We have asked for an extension on the business case TransLink believes it has a good business case and that the P3 is not important.
- Q: When you were talking about the gondola as an urban transit system I was recently in Hong Kong and they have built a gondola over the open sea and it was very impressive. We were in a gondola and there were 80-kilometer an hour winds and we didn't feel anything.
- A: *TransLink:* We had a similar experience when we travelled to the Peak-to-Peak gondola on our field trip they stopped the gondola in 80-kilometers an hour winds and we couldn't feel anything.
- Q: Is there any thought of rerouting buses etc. to use the gondola?
- A: *TransLink*: Bus #144 services the residential area around Lake City and then comes up the mountain and the #135 is on a different corridor we would have to see how it would work out before making a decision about rerouting buses.
- Q: My question is related to weather conditions and what would shut a gondola down?
- A: *TransLink:* Our consultants report that it is barely windy up here and we know that the gondola can operate in 80-kilometer winds and higher. Electrical storms are more of an issue.



- Q: But if the gondola was shut down because of weather conditions would you try and find bus services in its place?
- A: *TransLink:* Yes, we would try and find buses to replace the service.
- Q: I am wondering about the power source and I know that the Community Trust has been talking about alternative energy sources?
- A: *TransLink:* We haven't considered an alternative energy source yet but it is interesting to consider. Wind power could be looked at.
- Q: Didn't the Community Trust do thermal heating studies?
- A: Facilitator: Yes, that is correct.
- Q: You said that you couldn't use the gas tax money on the Evergreen Line how would one project impact the other project?
- A: *TransLink:* This project is almost breakeven to TransLink over a 25-year period and it doesn't have much bearing on the financing of the Evergreen Line or on other projects. We believe this would work well with the Evergreen Line in serving the northeast sector.
- Q: What about tying into the Evergreen Line?
- A: *TransLink:* Yes we would and we have been getting very good results on the modeling.
- Q: What is the track record of the Peak-to-Peak gondola?
- A: *TransLink:* This project is proposing the same technology and they (Peak-to-Peak) haven't experienced any problems.

#### 4. NEXT STEPS

The small group meeting was informed that the next steps in the process are:

- Completion of business case;
- Determine funding sources;
- Regional conversation on transportation priorities;
- Environmental assessment; and,
- Decision on implementation.

#### 5. CLOSURE

The meeting closed at 7:20 p.m.

#### **TRANSLINK**

#### BURNABY MOUNTAIN GONDOLA STUDY ALL RESIDENTS MEETING

Tuesday, May 17, 2011 Cameron Recreation Centre Burnaby, BC



Meeting notes from Burnaby Mountain Gondola Study All Residents Meeting, held Tuesday, May 17, 2011, at the Cameron Recreation Centre, Burnaby, BC

#### PRESENT:

Andrew Brook, TransLink Jeffrey Busby, TransLink David Clutton, City of Burnaby Nancy Spooner, Facilitator

The workshop was called to order at approximately 6:00 p.m.

#### 1. INTRODUCTION AND MEETING OBJECTIVES

Nancy Spooner, Facilitator, welcomed everyone and reviewed the agenda for the Burnaby Mountain Gondola Transit Project meeting. Participants were advised that TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability, travel times and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Participants were further advised that this public consultation was Phase Two of the project and that this phase will include small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community. Finally, it is important to note that no decisions have been made at this point.

#### 2. PRESENTATION

Power point presentation: Jeff Busby, TransLink reviewed the study overview, the planning process and participants, the technology and alignment assessment, what the gondola would be like and the upcoming consultation activities. A copy of the power point presentation may be viewed on the TransLink website.

Specifically, TransLink is seeking input on:

- Tower location options
- Design and construction considerations
- Lower terminus options
- Upper terminus options



#### 3. QUESTION AND ANSWER SESSION:

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)

- Q: Are there extra copies of the feedback forms for me to take to the 57 units in to the strata I belong to?
- A: *Jeff Busby, TransLink*: We will give you as many as we can. The form is also available online. A mail drop will be done for all area residents. Look for the flyer in your mailbox providing information in advance of the open houses.
- Q: Slide #2 of the presentation talked about the Co2 produced. What is the estimate for what is produced by SFU buses?
- A: *Jeff Busby, TransLink*: The slide referred to the buses that would be replaced by gondola. Although there would always be a bus to SFU, most of the 1,700 tonnes of greenhouse gases was produced by buses that would be made redundant by the gondola project. Carbon today would be worth \$10/tonne, which equates to a total of \$100,000 in savings. The gondola does not require a carbon source as it is run by electricity.
- Q: The current transit commute to SFU is awful. The congestion is awful. I am pleased to see alternatives presented. I do not feel safe taking the bus. You also mentioned two housing developments. Which ones were they?
- A: *Jeff Busby, TransLink*: One is a co-op called Pine Ridge. As well, the Mountainside strata would be underneath the gondola alignment. We have a detailed map that shows routes. Tower locations have not been determined there is a lot of flexibility to move them as far from communities as possible if desired. Approximately five towers are needed.
- Q: Have you had opportunity to meet with strata from those strata councils? What has been their general feedback?
- A: *Jeff Busby, TransLink*: Concerns were expressed regarding privacy and noise. However, the gondola noise is very modest, operating almost silently between towers. There may be some whooshing sounds. In some areas the noise levels may go down. Regarding privacy, work has been done to mitigate privacy issues, including minimizing the downward view in the design of cabin sides. As well, trees will block views. There is a need to work with the public directly to know what options would be best.
- C: My choice would be to block the views from the cabins.
- C: Blocking views may cause concern for riders who may feel closed in.
- A: *Jeff Busby, TransLink*: It is not necessary to close the whole cabin to block the view. There was a similar project in Portland, Oregon. We worked with the project manager and talked about a number of different measures, i.e. putting sides up higher, frosting glass. Some improvements were made in building of



the tram, i.e. increased pedestrian access.

- C: They will be able to see into peoples' yards easily.
- Q: What about safety while riding? Will there be an attendant on board?
- A: *Jeff Busby, TransLink*, responded: 19 cabins will be constantly circulating. Attendants will be positioned at the top and bottom to ensure safety while getting on/off. It was not envisioned to have an attendant in every cabin. Security cameras would be placed in the cabins. There would be 40-second waits between gondolas if a person did not want to ride with someone.
- C: People I have spoken with have huge concern that this will alter the character of the neighbourhood. We are a conservation-minded community with emphasis on protecting trees. This type of infrastructure seems like violation of our type of community. This is not part of the regional transportation plan and there is need to understand the alignment. Tank farms would have to leave? Where does that information come from?
- A: *Jeff Busby, TransLink*: There are detailed maps that can be referred to. In regard to the tanks, TransLink was concerning about ensuring that customers were not exposed to risk if something were to go wrong in a tank. BC Safety authority indicated that it would not approve a project over tanks.
- Q: What would happen to people if something should happen with the tank?
- A: *Jeff Busby, TransLink*: There is fuel stored in the tanks. If those were to ignite, it would create a safety problem.
- Q: Is this a realistic fear?
- A: *Jeff Busby, TransLink*: If we can avoid putting people in that circumstance, we will.
- Q: This does not seem reasonable. Is the risk realistic?
- A: *Jeff Busby, TransLink*: Presumably everything possible is being done to keep those tanks safe.
- Q: Can you elaborate on the Evergreen stop?
- A: Jeff Busby, TransLink: Information on this will be provided at a later time.
- Q: I have a fear regarding the cabins being over a residential area. Could cabins drop onto residences?
- A: *Jeff Busby, TransLink*: There is more severe risk of a fire from a tank farm. Structural fires are easier for fireman to extinguish as compared to fires fuelled by oil and gas that would be the contents of these tanks.



- Q: Would the amount of people moved really be 3,000 per hour? Does this figure include the number of students at certain times during the day?
- A: *Jeff Busby, TransLink*: An essential challenge is to serve UniverCity. Today, with buses departing every three minutes, there are 1,800 riders/hour. Gondolas would be circulating all the time and would be able to handle high capacity needs. This would be advantageous during peak times and would give ability to accommodate those travelling up the mountain for recreational purposes.
- Q: Would the gondolas be replacing buses? If the gondola does not work out, will buses come back?
- A: *Jeff Busby, TransLink*: There is need to ensure that the gondolas are designed so that they are more attractive to ride than the buses. A key goal of this project is to reduce climate impacts. Reducing bus services helps to reduce emissions. When there is major maintenance of the gondolas occurring buses would be used as shuttles. Hours of service (6 a.m. to 12 a.m.) make sense but this needs to be looked at in more detail. If hours need to be narrowed to allow for maintenance there will need to be buses available at that time.
- Q: Would the cost of the gondola be the same as riding the bus?
- A: *Jeff Busby, TransLink*: Yes, the same.
- Q: What is the life span of a gondola? Do they wear out in 25 years? Where are we realizing the savings?
- A: *Jeff Busby, TransLink*: Different pieces of the gondola system wear out at different times, i.e. cables and cabins have a life of approximately 25 years, but towers last longer. Because of technological innovations there may be desire to renew cabins. The Whistler Village gondola was built 1983, and the first thing replaced were the cables. Renewal would add 25 years of life to the project.
- Q: Will replacements cost another \$120 million in 25 years? People underneath the gondola route do not gain anything from this.
- Q: If the Evergreen Line is built, will riders come from the Tri-cities area?
- A: *Jeff Busby, TransLink*: People coming from the Evergreen Line would disembark at Production Way and go up the mountain from there. The model shows that the gondola is so much faster than buses that it will attract riders to use gondola. 80% of people travelling will change their route to use the gondola because it is so much faster. Route 135 will probably remain in tact because it is more direct. The current population of 3,000 on the mountain is expected to increase to 10,000, which accounts for a portion of the growth. The number of students, faculty and staff are also expected to grow.



- Q: Would it not make more sense to go down the back of the mountain?
- A: *Jeff Busby, TransLink*: People would like to use the SkyTrain, and the other side of the mountain does not offer transit connections for riders.
- Q: Could you not have the gondola on the back of the mountain so that it is not going over houses?
- A: *Jeff Busby, TransLink*: There are no transit connections close by.
- Q: What is the timeline for the Evergreen Line to be built?
- A: *Jeff Busby, TransLink*: TransLink is anxious to build the Evergreen Line. Of the \$1.2 billion needed, \$800 million has been committed to that project. TransLink now has to identify a revenue source to contribute its share and is working on identifying that. Once funding has been identified, the Evergreen Line will take four years to build. The project planning has been done and the route has been decided.
- Q: What considerations were given to those who fear riding gondolas?
- A: *Jeff Busby, TransLink*: Some buses will continue to operate. 5% of people have a fear that would prevent them from riding the gondola.
- Q: In the future, will transit for cycles be blocked during peak times?
- A: *Jeff Busby, TransLink*: The cabins will accommodate cycles. Although the gondolas may at times be crowded, we will encourage use for bicycles. TransLink will continue to review policy to balance cycling, walking, and transit.
- Q: What is the distance to the Evergreen Line? Are you way overestimating capacity? Where will 4,000 riders come from?
- A: *Jeff Busby, TransLink*: We anticipate having approximately 3,000 riders on any given day, with an upper capacity limit of 4,000. There is ability to add more cabins over time.
- Q: What infrastructure is put in place to ensure safety? For people using aids, i.e. wheelchairs or strollers, what program in place to help them? Is the best practise model you are using for an area that is similar to this area?
- A: *Jeff Busby, TransLink*: Regarding safety, there will be attendants at the bottom and top monitoring people as they board the gondolas. While in transit, the cabins will be monitored on closed circuit. The 40-second frequency between cabins allows people to make the choice of not boarding a cabin with anyone that causes them to feel uncomfortable. Attendants can assist those with strollers, wheelchairs, etc., and will manage people getting on and off the gondola. Cabins can be slowed down to aid those with mobility needs, to



allow them to board. The system will be built with a lot of redundancy, monitored by the BC Safety Authority. Although the gondola use is novel idea in this region, there are a number of cities that have had success in running gondolas. People appreciate the ease of use of gondolas. Some South American cities have built gondolas to connect isolated communities.

- Q: Will there be infrastructure in place for those who live there to ensure safety? Will this attract more transients to the area?
- A: *Jeff Busby, TransLink*: Ridership will be concentrated at the SkyTrain stations. It will be no different than what currently exists the only difference will be the mode that people use to travel up the mountain.
- Q: Will there be increased police to monitor the greater numbers of people coming into the neighbourhoods? I am concerned about transients, etc. coming right into the neighbourhoods? What supports will be put into place to manage this?
- A: Jeff Busby, TransLink: We will have to look at that concern in more detail.
- Q: It will take 25 years to pay this off. Where is the funding coming from? Will there be additional revenue coming from this project? Will the funding come from the Evergreen Line?
- A: Jeff Busby, TransLink: This project will not compete for Evergreen Line dollars. The first priority is the Evergreen Line. This project is unique in that it frees up revenues on the first day of usage. There is currently not enough money for the construction of the gondola. TransLink is looking to different levels of government for funding. This project has a lot of interest because it reduces the environmental footprint. TransLink has not yet identified the source of funding.
- Q: What is the timeline for this project?
- A: *Jeff Busby, TransLink*: No decision has been made. We want to have consultation first and feedback. Once funding is in place, it will take 3.5 years for design, environmental review and construction. This will be approved for 2014/2015 at the earliest. Actual construction would take 18 months.
- Q: Does the gondola actually travel vertically over residences? It is legal with safety and air rights?
- A: *Jeff Busby, TransLink*: TransLink would have to get permission to operate from property owners. Towers would be built on property owned by the city.
- Q: Will the safety authority allow this project?
- A: *Jeff Busby, TransLink*: They do not seem to have an issue with this. SkyTrain currently goes over private properties.



- Q: Is there concern that a gondola could fall on a house or worse? You are also talking about savings in greenhouse gases. How many cabins would be needed if they did not expand UniverCity?
- A: *Jeff Busby, TransLink*: An elementary school is being built up there. We are looking at ways to reduce the environmental footprint.
- Q: I have an environmental concern regarding the towers. What is the prognosis for cutting trees along that line? You will need to have access to the towers would that require some kind of road?
- A: *Jeff Busby, TransLink*: An objective is to minimize impacts on the conservation area. We will do everything possible to minimize the impact on trees, and have not yet identified where towers would be located. When constructing the gondola, we will need to build a narrow 1 m swath. Projects in other areas have built gondolas and did not need to cut down trees they used helicopters to construct the gondola. We want to minimize the impact to trees so this option is very attractive.
- Q: How will this be determined? What would it take to use this option?
- A: *Jeff Busby, TransLink*: TransLink is already interested in minimization and will choose the option that would minimize the impact.
- Q: How about access? Would there be need to cut trees in order to put in access roads?
- A: *Jeff Busby, TransLink*: Do you need to cut trees to build? No. Do you need to cut trees to access the line? No. For access to towers there will be need for roads, which will be considered when determining their placement.
- Q: If there are more cabins, will that decrease wait time in between cabins?
- A: *Jeff Busby, TransLink*: Yes.
- Q: Do you have any comparable data from Whistler on the effect on the cabins during windy conditions?
- A: *Jeff Busby, TransLink*: Gondolas are safe up to 100 km/h winds, but it can be disconcerting for those in the cabin. From personal experience of 80 km/h winds in Whistler, I did not feel swaying. The three-rope system helps to minimize the sway and stabilize the cabins.
- Q: What types of statistics do you have relating to how reliable it is? If it breaks down what is alternative?
- A: *Jeff Busby, TransLink*: We would bring in buses to help in emergency situations. In terms of reliability, closest example is Portland, which has been very reliable and has only had one day where they had to close down for



maintenance reasons. Routine maintenance can be better planned for to ensure service reliability. It will be more reliable during the winter conditions that cause problems for diesel buses.

- Q: Has TransLink been in touch with the National Energy Board (NEB) about this project? Due to oil pipeline being monitored by helicopter is there a small risk of a pipeline exploding?
- A: *Jeff Busby, TransLink*: The NEB works with pipeline companies on issues of safety.
- Q: Pipelines move and shift. My concern is what kind of discussions will you have with NEB and Kinder Morgan if you put in a 25 ft. high post? How will this shift the pipeline?
- A: *Jeff Busby, TransLink*: We have not discussed the project with the NEB. We have had discussions with Kinder Morgan and they will work with us on the gondola crossing their property but will not consent to use of their property. TransLink will take these into consideration when doing this work.

#### 4. NEXT STEPS

The small group meeting was informed that the next steps in the process are:

- Completion of business case;
- Determine funding sources;
- Regional conversation on transportation priorities;
- Environmental assessment; and,
- Decision on implementation.

#### 5. CLOSURE

The meeting closed at 7:20 p.m.

## **TRANSLINK BURNABY MOUNTAIN GONDOLA** TRANSIT PROJECT Wednesday, May 18, 2011 Jennifer Atkinson Environmental Centre 2740 Beaverbrook Crescent Burnaby BC



Notes from a Burnaby Mountain Gondola Transit Project meeting, held Wednesday, May 18, 2011 at the Jennifer Atkinson Environmental Centre, 2740 Beaverbrook Crescent, Burnaby, BC

#### **FACILITATOR:**

Nancy Spooner, Spooner Consulting Ltd.

#### PRESENT:

Jeff Busby, TransLink Colleen Sondermann, TransLink Susan Campbell, Note Taker, Corporate Consulting

The workshop was called to order at 7:00 p.m.

#### 1. INTRODUCTION AND SESSION OBJECTIVES

Nancy Spooner, Facilitator, welcomed everyone and reviewed the agenda for the Burnaby Mountain Gondola Transit Project meeting. Participants were advised that TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability, travel times and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Participants were advised that this public consultation was Phase Two of the project and that this phase will include five small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community. Finally, it is important to note that no decisions have been made at this point.

#### 2. PRESENTATION

Power point presentation: Jeff Busby, TransLink reviewed the parameters of the study and set the context for the meeting. A copy of the power point presentation may be accessed on the TransLink website at: www.bepartoftheplan.ca



Specifically, TransLink is seeking input on:

- Tower location options
- Design and construction considerations
- Lower terminus options
- Upper terminus options

#### 3. QUESTIONS, ANSWERS AND COMMENTS

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)

- Q: Regarding construction techniques, you mentioned 20-meters of width would be required; would that be a corridor underneath the entire gondola line?
- A: *TransLink:* We have looked at a variety of construction ways and you don't need to clear a corridor under the gondola we would be interested in construction methods that don't remove the trees at all. A project in Germany connecting a main train station with an exposition at the top of the mountain goes up the mountain and the trees haven't been removed at all (note: the picture of this gondola is in the power point presentation.) In situations where it doesn't work you can cut about a one-meter cut. So there are three methods of construction and they are: the towers are constructed by helicopter, one-meter width is cut; and, a wide swath is cut. TransLink did assume, in the cost projections, that the helicopter construction method would be used.
- Q: I was up at SFU this afternoon at a student seminar and some of the students were positing an intermediate station midway along the line, how feasible is that? This was about 500-meters south of the existing area at the top of the mountain and they were looking at an area that will become residential in the future and if an intermediate station was put in there it would save them from walking up the hill.
- A: *TransLink:* The gondola would have to slow down, drop off passengers and then speed up again and we would have to look at this proposal, if it came forward, very carefully. The stations are quite large and also there would be an additional cost.
- Q: Is this going to be similar to the gondola at Whistler in terms of what people can put into it, bikes, etc.?
- A: *TransLink:* Yes, the Peak-to-Peak gondola at Whistler is similar technology. TransLink encourages more sustainable transit and would like to have as many sustainable policies as possible and there would be many times when bikes etc. can board the gondola.
- Q: Has any environmental assessment been done on the additional pressure on the conservation area that could occur from greater access?
- A: *TransLink:* I remember when speaking with the Burnaby Mountain Group that they raised this same issue and we haven't done the assessment but we will.



- Q: What is the City of Burnaby's position with respect to the proposal?
- A: *TransLink:* The City has not taken a position one way or the other and eventually we will be seeking permission from the City to proceed if the project goes ahead.
- Q: The City of Burnaby will have to have increased operational funds to service the conservation area?
- A: *TransLink*: That is something to contemplate.
- C: From my perspective we have too many people and too few animals and if there is an increase of the people it will impact significantly on the wildlife function of the area. There will be a need to upgrade trails and put in proper signage and some of that funding has to come from the TransLink side.
- A: *TransLink:* There will be impacts from growth on the mountain regardless of whether this project goes ahead and UniverCity will grow regardless of whether we put in the gondola or not and the question should be is it better to continue to meet that need with buses or is it better to serve those growing needs with a gondola?
- C: I agree, the gondola part is fine, but there is a whole other area that someone has to deal with to become successful.
- C: If towers are built in the forest it is not that simple, roads will need to be built to get the construction equipment in there. The conservation area is quite frail and recovery isn't fast rather it will be long-lasting. I would like to see the towers in the forest off the idea list.
- Q: Are Gaglardi and Ring Road locations for two towers?
- A: *TransLink:* This is best illustrated on the map.
- Q: Are you aware that Burnaby has plans to put in a new trail in the conservation area?
- A: *TransLink:* The towers would be a square shape, lattice towers like at Whistler and would have to clear a 20 X 20 square.
  - The record notes at this point that a large aerial photographic map was laid out on the table and the remainder of the questions, answers and comments were asked referencing the map.
- C: If I was designing the towers I would put them on the inside of any potential road curve.
- C: There are some waterways but they are not significant and would not be a problem to avoid. It is significant to keep the water clean but not significant in terms of fish.



- Q: Would this completely replace buses coming up the east side?
- A: *TransLink:* Bus #145 would be eliminated, #135 would stay no change, #143 would be replaced. There would be a #144 that would continue its current run and that would be an option for the small share of the population that is concerned about heights. Approximately 20-buses would be eliminated.
- Q: Did the hydrogen buses not pan out?
- A: *TransLink:* The hybrid buses don't perform well on steep, continuous grades and I am not that familiar with the hydrogen buses. The buses on the #145 route wear out about 10% faster than buses on flatter routes.
- C: I must say that this is better than I expected.
- Q: What about handicapped people getting off the gondola, will there be attendants?
- A: *TransLink:* Yes, the gondola will be staffed and attendants will manage the load and help people with boarding on the gondola. It is a level boarding and the gondola can actually be brought to a complete stop so there is quite a bit of flexibility there. Inside the cabins, the cabins are electrified and would have LED lights and solar panels can be put on the roof and there is two-way communication from the cabins. Some systems have CCTV to monitor the cabin. Also, the gondolas are very frequent every 40-seconds.
- Q: With respect to bikes will it be the same rules as it is on SkyTrain and they won't be allowed during rush hour?
- A: *TransLink:* We would design the cabins for bike usage and likely it will be very busy however there should be quite a bit of time when bikes can be taken aboard. It may become an issue because likely it will be quite crowded at certain times.
- C: Student may take their bikes up and ride down.
- C: Yellow post it notes have been placed on the map which illustrate a consensus of opinion with respect to tower locations.
- Q: What would happen if a gondola got stuck in the middle?
- A: *TransLink*: There has been an evolution in thinking about rescue and at Whistler they have designed rescue vehicles that slide down the cables and pull the cabins back because it is too high for a land-based rescue. However, more and more systems are building redundancies into the systems. Enough redundancies on standby and the operator can just haul the cabins back to the terminus. The rescue strategy would be to get the haul rope back to operational condition to haul the cabins back. The BC Government Safety



Branch would regulate the operation of the gondolas and they believe the redundancy system is good.

- Q: What phase, or where are you with respect to the consultation?
- A: *TransLink:* We started with the residents of the condos and then we are meeting with students on Friday; tomorrow night we are going back to the condo community and providing a more detailed presentation. Then there will be two open houses.

#### 4. NEXT STEPS

The meeting was informed that the next steps in the process are:

- Completion of business case;
- Determine funding sources;
- Regional conversation on transportation priorities;
- Environmental assessment; and,
- Decision on implementation.

#### 5. CLOSURE

The meeting closed at 8:20 p.m.

# **TRANSLINK BURNABY MOUNTAIN GONDOLA** TRANSIT PROJECT **Thursday, May 19, 2011** #30 8650 Cinnamon Drive Burnaby BC



Notes from a Burnaby Mountain Gondola Transit Project meeting, held Thursday, May 19, 2011 at #30 8650 Cinnamon Drive, Burnaby, BC

#### **FACILITATOR:**

Andrew Brooke, TransLink

#### PRESENT:

Jeff Busby, TransLink Susan Campbell, Note Taker, Corporate Consulting

The workshop was called to order at 6:10 p.m.

#### 1. INTRODUCTION AND SESSION OBJECTIVES

Andrew Brooke, Facilitator, welcomed everyone and reviewed the agenda for the Burnaby Mountain Gondola Transit Project meeting. Participants were advised that TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability, travel times and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Participants were further advised that this public consultation was Phase Two of the project and that this phase will include five small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community. Finally, it is important to note that no decisions have been made at this point.

#### 2. PRESENTATION

Power point presentation: Jeff Busby, TransLink reviewed the parameters of the study and set the context for the meeting. A copy of the power point presentation may be accessed on the TransLink website at: <a href="https://www.bepartoftheplan.ca">www.bepartoftheplan.ca</a>

Specifically, TransLink is seeking input on:

- Tower location options
- Design and construction considerations
- Lower terminus options
- Upper terminus options



#### 3. QUESTIONS, ANSWERS AND COMMENTS

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)

- Q: There have been media reports saying that the gondola project will cost \$70 million and now your estimate is \$120 million so why is there that difference?
- A: *TransLink:* The gondola study started with UniverCity and we reviewed the work and that study concluded it would cost about \$70 million. In November, TransLink took a fresh look at it and we don't think those estimates were accurate. The difference is that our study took into account the cost of permissions.
- Q: What permission do you need?
- A: *TransLink*: There are a variety of landowners along the route and TransLink would need to negotiate with those parties. For example, the strata council for this community would need to give permission and we would need to reach an agreement.
- Q: No one asked before, how much do you want to pay us? It is above my townhouse so why not pay me \$1 million, so how much do you want to pay me? How did the estimate jump? My second question is about privacy, what about my privacy?
- A: *TransLink*: TransLink has a lot of experience in building rapid transit projects and all the projects involve negotiations with private property owners and we have experts available to give us advice and we made estimates based on those opinions as well as expert engineering advice so this is the combined wisdom of experts that resulted in this estimate. Privacy is a very serious issue and we know this is a very big concern in this community and you will get to know us very well if the project goes ahead and we will determine what the impacts will be and we will have lots of discussions and we will explore what measures we can take to minimize the privacy impacts both in your homes or from the cabins. The project would need to pay for that. With respect to the cabins, in Portland, Oregon, the cabins were designed with input from the community and there is a layer of solid frosted glass which limits the ability to look down rather a rider can only look out. So there are measures that can be taken to minimize privacy impacts.
- Q: Can we discuss the route and can you confirm which route you are suggesting?
- A: *TransLink*: I will show you that when we come to the map.
- Q: I have a number of questions. When is the Evergreen Line coming in and if you don't have money to do that how will you have money for this?
- A: *TransLink*: Unfortunately, the funding for the Evergreen Line is outside of our control at TransLink. The Federal and the Provincial Governments each have pledged \$800 million for the Evergreen Line and TransLink's share is about



- \$400 million and it cannot raise the money without the permission of the Mayors Council and we are working very closely with the Mayors Council as well as the provincial government and as soon as that is concluded then we can build the Evergreen Line.
- Q: As soon as the Evergreen Line gets going it will reduce emissions and it doesn't matter what it costs. If you want to pay me \$500,000 to \$1 million for my home, I am cool with that. Realistically, what are you going to do for me because I don't mind moving. Let's be realistic because this project will cost way more than you estimate and it is still probably going to go ahead.
- A: *TransLink*: I know that this project raises anxiety but in terms of timing we have not decided to implement it and we can't afford it. In terms of a timeline for the project, if for example, the project came up for approval in next year's budget and was approved it would take 3.5 years to design and build.
- Q: On the actual routes it is 6.5 minutes versus 15 minutes on the bus and if it went the longer route (Lake City) how long would that be?
- A: *TransLink*: About 10 minutes but it doesn't land in a good place at SFU. The gondola is north and south and the connection is challenging at Lake City.
- Q: Still it is shorter than the bus time even with the kink in alignment is it not?
- A: *TransLink*: Kinks are more challenging and we would have to build a station to accommodate the kink to negotiate the kink the gondola has to de-attach, slow down and then speed up.
- Q: If it does go ahead and I appreciate that SFU would love it to go ahead for the students, residents, etc. and it is also a great opportunity for them to expand UniverCity every time they expand it is a concern for the conservation area. How much is the environmental assessment being considered?
- A: *TransLink*: We started by looking at Burnaby Mountain and what will come and they are already approved to go to 10,000 units and those people will move to the top of the mountain over the next 20-years. Today buses arrive every 90 seconds. And, the buses will continue to have to meet that need and it raises the question if the buses are the right choice to bring people up and down the mountain. The growth is expected to happen. So TransLink needs to find a solution and TransLink wants to encourage people to take sustainable modes of transportation and reduce the environmental impacts.
- Q: But the more you build the more pavement you get?
- A: *TransLink*: Right but TransLink isn't building the units.
- Q: Did you approach Kinder Morgan for permission for the gondola to travel over the tank farms?
- A: *TransLink*: Yes and they did not agree to that and there is no ability to compel them to negotiate.



- C: Facilitator: I suggest that we go through the questions and then move to the maps to look at the route alignments.
- C: I want to talk about schools and my kids and how can the kids study for 18 months with noisy construction all around them? Last year they cut money for the schools and there is nothing new for the kids and how do you want to find this money for the kids? We want something new for our kids. How much do you want to pay for our school?
- C: With respect to the comment about construction noise that is only if there is a tower it depends on where the towers are.
- A: *TransLink*: I can only answer about things I know about and with respect to construction activities we need to learn more about how the cables get strung and we will learn that together. It will not be constant noise for 18-months. In terms of where the money would come from TransLink is responsible for providing transportation services and investment in schools comes from other places and with respect to noise we can have discussions with the community to mitigate.
- Q: When you were talking about the Evergreen Line, are you able to say definitely that this project would ahead if it (Evergreen Line) goes nowhere? Is this project contingent upon the Evergreen Line being built? With respect to the process for compensation it is my understanding that you would negotiate with the strata as a whole?
- A: *TransLink*: This project makes sense without the Evergreen Line because the need is there now and it could be built without the Evergreen Line. However, we have promised for a long time about the Evergreen Line and it would help make it more complimentary but this project could proceed independently. I do not know the specific details of the negotiation process with the community however we would not start the process until after the decision to approve the project is made.
- Q: Would you need an environmental assessment?
- A: *TransLink*: Yes and they would go in parallel.
- Q: Looking at the trees they would be close to the gondola, is it going to look like it does at Grouse Mountain and you would clear cut along the line?
- A: *TransLink*: There are a variety of ways to build a gondola and photos were circulated of a gondola in Europe. In that picture the gondola goes up over the side of the mountain and there are no trees that were cut. One of the key objectives for TransLink is to minimize the impact on the trees. The gondola would give enough room for 25-years of growth and we would try and build it



in a way to minimize the impact to the trees. In some applications they have built where they have cut a one-meter width.

- Q: So you are talking about 100 feet and how high is the tower?
- A: *TransLink*: The gondola would be 100-feet above the top of the buildings.
- Q: It sounds like you have a plan for 25-years so what happens after that?
- A: *TransLink*: Different elements have a different life. Towers can last up to 100-years but the cables wear out in about 25-years and then the cables will have to be re-strung. So some investment will be needed in 25-years and then the gondola can continue. At Whistler Village the gondola was built in 1983 and they are now repairing and rebuilding it.
- Q: So then you would take the cable down to repair it but there would be no buses and everyone would be stranded at the top of the mountain? What about maintenance?
- A: *TransLink*: The best example is SkyTrain and sometimes we shut the SkyTrain down on weekends to do maintenance and then we run buses to bridge that gap. So we could schedule the maintenance of the gondola in the summer when it is not in as much demand as it would be during the academic year and use surplus buses to bridge that gap.
- Q: You are talking about growth of capacity from 3,000 up to 10,000 and we know that people are not leaving their cars, where did you get those numbers?
- A: *TransLink*: You are talking about a couple of different numbers, the #145 bus carries 13,000 daily riders but what is important is the number of people in a single hour in a single direction that is what is important and 1,800 all want to go up in one hour. The gondola model says 2,800 in an hour because it is so much more attractive. On opening day the gondola could move 3,000 people so there will be room to spare and we could add more gondolas and the 10,000 number is the growth from 21,000 a day of people at SFU that will grow to 35,000. SFU is planning to expand.
- C: Remember a gondola every 40 seconds really means every 20 seconds to us so there is a real impact on us.
- A: *TransLink*: The cabins will be more frequent in busy times and then we can slow it down and can take cabins off when it is not busy.
- Q: Talking about reliability, I don't know, what is the outage rate on the Peak-to-Peak?
- A: *TransLink*: I don't know the detailed statistics on the Peak-to-Peak however we do have statistics on the Portland, Oregon, gondola. It has been running



for 5-years and one weekend it was shut down for maintenance and other than there was one day it was down. SkyTrain has broken three or four times in the same time period.

- Q: Do you have a concern with ice falling off?
- A: *TransLink*: I will have to ask our engineers about that and it would be good to look into the gondola at Whistler.
  - Q: I don't think Portland is a good example because it is a warmer climate and inland. I am surprised that you didn't take into account Whistler.
  - A: *TransLink*: We were looking for something that was similar and not a remote ski resort. The engineers found that the area (Burnaby Mountain) is not that windy but if there is wind one of the strategies is to slow the gondola down. My experience on the Peak-to-Peak was that in 60-kilometers an hour wind you couldn't feel the cabin moving.
  - Q: How much input does the City of Burnaby have?
  - A: City of Burnaby: The City of Burnaby has control over rezoning at the stations and the conservation area and there is a covenant on the conservation area in the hands of the province. In principle before any rezoning or construction permits are issued Council would be required to approve the project in-principle and that was the same as the Millennium Line. There are a lot of little approvals and an overarching blanket approval.
  - C: This whole area is a conservation area and has to be considered.

At this point the large topographic maps were rolled out and participants gathered around the maps.

#### 4. NEXT STEPS

The meeting was informed that the next steps in the process are:

- Completion of business case;
- Determine funding sources;
- Regional conversation on transportation priorities;
- Environmental assessment; and,
- Decision on implementation.

#### 5. CLOSURE

The meeting closed at 8:20 p.m.

## **TRANSLINK BURNABY MOUNTAIN GONDOLA** TRANSIT PROJECT Friday, May 20, 2011 SFU Community Trust, Boardroom Burnaby BC



Notes from a Burnaby Mountain Gondola Transit Project meeting, held Friday, May 20, 2011 at the Boardroom, SFU Community Trust, Burnaby, BC

#### **FACILITATOR:**

Andrew Brooke, TransLink

#### **Present:**

Jeff Busby, TransLink Ian Fisher, TransLink, **Presenter** Susan Campbell, Note Taker, Corporate Consulting

The workshop was called to order at 2:00 p.m.

#### 1. INTRODUCTION AND SESSION OBJECTIVES

Andrew Brooke, Facilitator, welcomed everyone and reviewed the agenda for the Burnaby Mountain Gondola Transit Project meeting. Participants were advised that TransLink is studying the feasibility of a gondola from Production Way – University SkyTrain station to Burnaby Mountain to improve transit reliability, travel times and reduce greenhouse gas emissions. The proposed Burnaby Mountain Gondola Transit Project would serve SFU students, faculty and staff, residents and businesses of UniverCity, and visitors.

Participants were further advised that this public consultation was Phase Two of the project and that this phase included five small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community. Finally, it is important to note that no decisions have been made at this point.



#### 2. PRESENTATION

Power point presentation: Ian Fisher, TransLink reviewed the parameters of the study and set the context for the meeting. A copy of the power point presentation may be accessed on the TransLink website at: <a href="https://www.bepartoftheplan.ca">www.bepartoftheplan.ca</a>

Specifically, TransLink is seeking input on:

- Tower location options
- Design and construction considerations
- Lower terminus options
- Upper terminus options

#### 3. QUESTIONS, ANSWERS AND COMMENTS

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)

- Q: When you talk about cost savings was that just by eliminating bus routes?
- A: *TransLink:* What we have assumed is that the Evergreen Line will be built and there will be an elimination of a bus route there one route #143 would be eliminated.
- Q: Did that increase in cost savings came from the savings in eliminating the #143?
- A: *TransLink*: In the ridership model we left the buses in and looked at performance and we were still getting about 85% ridership and we then concluded that we could get rid of those two routes. The #144 bus is the alternative transit option which people that have a fear of heights could use.
- Q: What is the lifetime of a gondola?
- A: *TransLink:* There is a lifecycle to the components for example the cabins need replacing in about 30-years but other components have to be replaced sooner like the cables which need to be replaced every 3-5 years and in that case, when the maintenance is occurring, substitute buses would be added to cover the service.
- Q: There are about a dozen of these systems in the world and have any been operational long enough to determine accident rates?
- A: *TransLink:* The '3S' system is about 10-years old but the technology has been tested on older monocable type systems so this is really a merging of technologies and there is not much risk because it is based on well-developed systems. As well, we looked at the Peak-to-Peak between Whistler and Blackcomb Mountains and they have had no unscheduled down time on that system.



- Q: You mentioned that the anticipated frequency is a gondola every 40 seconds. Would there be a change in that between daytime and nighttime operating times would there be any change in operating times?
- A: *TransLink:* The #145 bus has actually quite short operating times and we are looking at making the service more consistent with SkyTrain hours although we may have a bus service on either end of the service.
- Q: Who builds it? What company?
- A: *TransLink:* There are two companies, one is in Austria and the other is in northern Italy and they both have a history in the region.
- Q: When you considered the Burquitlam stop and I agree that it doesn't make sense now but is the model sophisticated enough to predict density around the Evergreen Line when it is built? I recently attended a design study by UniverCity and they do want another gondola from Burquitlam because if the #143 was eliminated and there was an increase in density then that could impact what they are hoping for.
- A: *TransLink:* The distance is the same from Production Way to SFU as from Burquitlam to SFU however Production Way is more centrally located.
- Q: What about multiple?
- A: *TransLink:* If the service was filled then we could look at it but what you are suggesting does go through an area of land that the university has projected development on and what you are suggesting would impact it. From the information we have there does not appear to be a need for a second lift and from a cost perspective we would just look at building one and then in 30 to 40 years we could look at a second lift.
- Q: What would happen if you eliminated the #144?
- A: *TransLink:* We assumed the #144 would continue and there is no loss of service coverage.
- Q: Will there be any change to the bus routes on campus?
- A: *TransLink:* There has been a SFU campus transportation plan in existence for several years and one proposal is a two-way road system which could make it easier for the bus to loop around however while that is related it is not dependent upon this project.
- Q: With respect to the user experience, how does the whole boarding with the new fare media all line up?
- A: *TransLink:* We have assumed that the system would be gated with the fare gates at the lower terminal and operationally it would be staffed at all times both at the upper and lower terminals to assist with safe loading and to cover off security issues. The attendant can ensure that people ride with compatible



loads and there will be CCTV, two-way communications and LED lighting in the cabins.

- Q: Do they stop at the bottom?
- A: *TransLink:* In the terminals it is very slow moving and can be slowed even further and one alternative is to slow the gondolas down in off peak periods.
- Q: Since you are building towers is there any opportunity for solar panels and wind capture?
- A: *TransLink:* We haven't looked at that but we could look at solar panels at the terminals. With respect to the question around wind records indicate that it is not that windy at the top.
- Q: What are the cost differences between placing a tower in the forest and placing a tower on a road? What about the cost for the consultation process to place a tower in the forest because wouldn't that cost more? I just came from a meeting and they were talking about DFO and how it would have to get involved if there were fish bearing streams involved.
- A: *TransLink:* The cost difference is not that much different although potentially to locate a tower in the forest could cost more in the consultation process. With respect to DFO involvement we would have to undertake an environmental assessment process. The tower footprint is approximately a 5 by 5 meter footprint.
- Q: What is the timeline?
- A: *TransLink:* It is about 3 years from project approval to opening day. The Peak-to-Peak at Whistler was built in two construction years but it could be different here.
- Q: How many people, how many houses are there that would be impacted?
- A: *TransLink:* There are about four or five buildings that the gondola goes right over. One strata unit and one coop and we have been in direct contact with them. They have concerns that are very different from the concerns of the students or people that work up here or people that come in from elsewhere and that is why we are undertaking different stakeholder small group meetings and then holding open houses because we hope to get a wide range of feedback.
- Q: But you are concerned about the privacy issues, aren't you?
- A: *TransLink:* Yes and the effect on the look and feel of the community and visual pollution are all things that TransLink is very concerned about. These are all things that will need to be worked on with the property owners and we would have to buy rights-of-way over the property.



- Q: Can you calculate the change in property value?
- A: *TransLink:* We have estimates on how much it will cost to acquire rights-ofway.
- Q: I know that in Portland all the property values in the area increased and that might be good information to look into.
- A: *TransLink*: I know Portland offered to buy out property owners.

At this point the topographic maps were rolled out and participants gathered around the map to discuss the proposed location of the towers and other potential impacts.

#### 4. NEXT STEPS

The meeting was informed that the next steps in the process are:

- Completion of business case;
- Determine funding sources;
- Regional conversation on transportation priorities;
- Environmental assessment; and,
- Decision on implementation.

#### 5. CLOSURE

The meeting closed at 3:15 p.m.

## **TRANSLINK**

## BURNABY MOUNTAIN GONDOLA TRANSIT PROJECT

### **OPEN HOUSE**

5:00 p.m. to 8:30 p.m.

Wednesday, May 25, 2011 Cameron Elementary School 9540 Erickson Drive Burnaby BC



Notes from a Burnaby Mountain Gondola Transit Project Open House, held Wednesday, May 25, 2011 at Cameron Elementary School, 9540 Erickson Drive, Burnaby, BC

#### **FACILITATOR:**

Nancy Spooner, Spooner Consulting Ltd.

#### PRESENT:

Ingrid Bowles, TransLink Andrew Brooke, TransLink Jeff Busby, **Presenter,** TransLink Adam Hyslop, TransLink Margaret Wittgens, TransLink Ian Fisher, TransLink

#### **ALSO PRESENT:**

Susan Campbell, Note Taker, Corporate Consulting

Overall approximately 200-persons attended the open house however at the time of the second presentation there were approximately 95-persons in attendance.

#### **FORMAT:**

The Burnaby Mountain Gondola Transit Project open house commenced at 5:00 p.m. The record notes that the public was invited to review the presentation boards and use the opportunity to talk directly with TransLink staff prior to the commencement of the presentation. At 5:30 p.m. the first presentation commenced and following that presentation participants were invited to review the large maps and talk with the TransLink planners. At 7:00 p.m. the second presentation commenced. Following that presentation a question and answer session took place.

#### 1. WELCOME

Nancy Spooner, Facilitator, welcomed everyone and advised that this public consultation was Phase Two of the project and that this phase included five small group meetings and two open houses to raise awareness about the project, provide information, and solicit participation and feedback from the community.

#### 2. PRESENTATION

Power point presentation: Jeff Busby, TransLink reviewed the study overview, the planning process and participants, the technology and alignment assessment, what the gondola would be like and the upcoming consultation activities. A copy of the power



point presentation may be viewed on the TransLink website at: www.bepartoftheplan.ca

Specifically, TransLink is seeking input on:

- Gondola as a potential solution to the transportation challenges of Burnaby Mountain
- Tower location options
- Visual impact of towers
- Integration with the transit system
- Other topics of interest

#### 3. QUESTIONS, ANSWERS AND COMMENTS

(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment. All questions and comments are from the public, who did not identify themselves, and the answers are from Jeff Busby, TransLink unless otherwise noted.)

C: The following submission was read into the record:

"My name is Christian Rarinca and I am a homeowner and resident in Simon Fraser Village. I live on the eastern side of the complex, and my neighbors and I strongly oppose the Burnaby Mountain Gondola Project in its currently proposed location. This project threatens to destroy our living surroundings and to degrade our quality of life.

"We have our categories of reasons for our opposition, but first let us express our anger at the less-than-transparent way TransLink has conducted the planning for this project and this so called "public consultation." Whatever information about this project may have transpired over the last two years, two key elements of the proposal were kept from the public at large. One is the precise proposed location of this busy transit line and the other is how disruptive it could be in terms of frequency of passing gondola cabins, daily hours of operation and other factors. Only a few selected groups of people were given hints of these facts during Phase One of the "consultation", which appears to have been conducted without adequate notice.

"As a result the majority of people affected by it still don't know how close to their houses it is planned to be and how disruptive it would be to their lives. Even the TransLink flyer announcing this Open House that we received just a few days ago, only vaguely alludes to the route of the proposed line (and, before I drew a line on the map, most of us thought it would be somewhere else). It is totally outrageous and completely unacceptable for TransLink to claim that, after these two Open Houses, the project is ready to get the green light, and only design details could be discussed afterwards. More importantly, this misleading process conflicts with a key principle of the Metro Vancouver Sustainable Region Initiative that TransLink is mandated to



follow which is to "develop and apply decision-making processes which are transparent, inclusive and respectful of the interests of all affected parties." "The following are the four categories of reasons for our fierce opposition to this project:

- "1. The deterioration of our way of life. The proposed gondola would destroy our chosen way of life, surrounding by trees and birds and not concrete and metal urban structures. This is the very reason why people buy homes in residential neighbourhoods like ours instead of high rise ones. With its projected high-traffic frequency, the gondola would bring the sights, sounds and dangers of a busy SkyTrain-like transit line almost overhead, with no escape for 21 hours/day. It would also infringe on another principle of the Metro Vancouver Sustainable Region Initiative to, "protect, restore and enhance natural ecosystem" since no birds will ever nest near such a busy transit line.
- "2. The devaluation of our houses. Hardly anybody would buy a house situated away from amenities and fast transportation, but not really offering peace and tranquility either, being next to a busy transit line with cabins whizzing by every minute, which would be inaccessible from our neighbourhoods.
- "3. The deal danger of accidents. In addition to the gondola riders, townhouse residents, children playing in the yards and around the school, or any bystanders, could be endangered. Accidents happen! Three cables or not, such a gondola system could be extremely dangerous in high winds and in case of a long-overdue major earthquake (when objects may not always fall straight down). It takes just minutes for anybody to find information on recent gondola accidents like this Wikipedia article: <a href="http://en.wikipedia.org/wiki/Gondola lift#List of accidents">http://en.wikipedia.org/wiki/Gondola lift#List of accidents</a>
- "4. The loss of privacy. At a height of about 160 feet, gondola riders would be able to see through our windows, skylights and into our private rooftop terraces."
- Q: What is the safety factor of the gondola if you were to rate it from 1-5 with one being poor and five being excellent?
- A: *TransLink:* The gondola will be designed to a very high safety standard and safety standards will be regulated by the BC Safety Authority. The biggest challenge is when the gondola stops circulating and there are many redundancies that will be built into the system if the project goes forward to ensure that it operates at very high safety standards.
- C: I would also like to say that I endorse everything the previous speaker said. Why doesn't it go over the tanks if the safety is that good?
- A: *TransLink:* We looked at it going over the tanks and we spoke to the owners of the tank farm and they said we would not be allowed to cross over the tank;



as well, the BC Safety Authority had grave concerns as well. The concerns are not about the operation of the gondola rather they are around the risk of something happening to the tanks.

- Q: When you talk about process and how it came to be can you talk about the funding between TransLink and the university. I am cynical about private interests and I don't think they should be involved or influence.
- TransLink: The idea started with SFU, UniverCity, the City of Burnaby and A: TransLink and initially we looked at a new bus exchange at the top of the mountain for the university. We stared looking at different options and looking at how to integrate into the neighbourhood and it was through that process that the idea of an alternative technology came up. Community Trust commissioned a study and found it had benefits and that study finished in 2009 and we undertook this independent study in November 2010. We wanted to understand if we moved from buses what would be the next logical alternative technology that would speak directly to what TransLink wants to accomplish and provide sustainable alternatives. The people at SFU and the SFU Community Trust are happy because the project speaks to its objectives. With respect to your question around funding – the original study was paid for by the SFU Community Trust and we paid for this study with some assistance from the Province. We know that if the project proceeds that there will be a need to develop funding sources.
- Q: I attended one of the stakeholder meetings, about a month ago, and they said it would cost \$70-million and now you say it costs \$120-million, can you explain the difference?
- A: *TransLink:* I apologize for the confusion. When we started this consultation we wanted to meet first with the residents that are directly under the gondola and that \$70-million is an outdated number and the \$120-million number was arrived at through our own independent assessment. Engineering experts were consulted and it was by putting it together we got the higher estimate which we believe is reasonable and that figure includes an accounting for all costs.
- Q: My comments are in the macro area and I note that you say only 30% of your funding comes from ridership and I am reminded of the implications of the gas tax and my concern is related to priorities because there are businesses that are losing business because of the gas tax. The more the gas tax is the more people will get out of the GVRD to do their shopping. With respect to sustainability everyone at SFU has a U-Pass and we know that it is not economic and there are some government subsidies and yet the government is proposing reducing the HST so is there any reliability in relying on that continued funding? If the funding isn't there that raises a whole bunch of



- issues including private, public partnerships and then who is running our transit system?
- A: *TransLink:* I am not the expert on all the issues you addressed with respect to the policy issues; however, this project doesn't rely on fare revenue. We looked at whether we should continue to run buses as opposed to what the alternative was.
- Q: I am all for reducing the carbon footprint but maybe they (SFU) have reached capacity and maybe we should stop development at SFU. On another note, have you considered tunneling have you looked at tunneling from Burquitlam?
- A: *TransLink:* There are some things that are out of the control of TransLink and growth at SFU is beyond TransLink's control. The residential development on the mountain has already been approved by the City of Burnaby and our question is what is the most efficient way to service that area with transit? In terms of tunneling, it is an option however it is not very cost effective and we are trying to make sure that the project is not an additional burden on the resources in the region. This is the cost effective way to meet demand.
- Q: Where is the City of Burnaby on this?
- A: *TransLink:* The City would issue permits and rezoning approvals and observers from the City are here tonight but this is absolutely TransLink's consultation.
- Q: I appreciate you coming. My question is what if a catastrophic earthquake occurred, what is the potential for a six ton unit to come crashing down on the elementary school? What is the real cost of ridership and what about the potential for drunk students to get on and shake it off the rails? What about the 25-year projected life-cycle of the pieces, isn't that a bit short?
- A: TransLink: This is really the completion to the planning study and the design of the facility will consider various conditions and it won't just be TransLink that will ensure it is designed to high safety standards and seismic conditions. The BC Safety Authority will also be involved with respect to safety standards. With respect to the students rocking the cabin I am glad that you asked that question because it has reminded me that nothing can be thrown out of the cabin and about the rocking etc. the system is very stable. I have visited the Peak-to-Peak gondola at Whistler and rode in the cabin in more than 60kilometer an hour winds and we could not feel any movement inside the gondola cabin. The manufacturers say it is safe to operate in up to 100-mile an hour winds. With respect to the lifecycle costs of components we can do more work to show the cost of the project and 25-years is a reasonable life cycle and then we will have to renew some of the components. Finally, if fuel prices continue rising it may result in even more people using transit to go up the mountain.



- Q: You said that 50% come from the east and 50% come from the west but people can go up Hasting Street and take the #135 bus so where did you get your background study information? There are other ways to get people up the mountain and it would be interesting to look at that how many on the Hastings bus and how many come from the east and how many come from the west? In Forest Grove we are living in a conservation area and that is a concern and it seems backwards to be talking about green technology when you are encroaching on a special conservation area.
- A: *TransLink*: We respect to your request about the ridership statistics we can make them available.
- Q: My question is about home insurance and with the gondola's overhead an accident did happen at Whistler and would we be covered and even if we were covered wouldn't the home insurance be very high?
- A: *TransLink:* We have already met with the residents that live underneath the gondola and what you are pointing to are about the detailed negotiations that would have to take place if the project proceeded however that is not work we can start right now as we need to get the project approved first but we will continue to consult with the residents.
- Q: I did some research into the Portland gondola and how contentious it was and how the cost escalated and how unhappy the residents were and the government purchased their homes. Is part of the funding to buy homes?
- A: *TransLink:* I know that there is a lot of anxiety and we know we will need to negotiate and that will include all the affected land owners and what will be required and we will do that in good faith with your faith. We also want to mitigate through design to minimize impacts and all those costs will be in the project costs. The experience in Portland is instructive and I have met with the project manager in Portland and we know that the initial conversations are difficult. We would work to design a compatible design with residents and mitigate impacts and we want to learn from the Portland experience.
- Q: Thank you all for coming. I have lived here for 20-years and I volunteer with the Stoney Creek Mountain Conservation Committee and that area is a protected designated area. With respect to this public consultation we have been invited to one meeting which was last Wednesday and unfortunately I had to miss it because I was working but one meeting is not enough. The whole argument is that SFU Community Trust wants to put 35,000 people in a limited space and the problem transit has with small buses that can't go up the mountain in a snowfall. You have polluting diesel buses and have you heard about WestPoint Innovations?



- A: *TransLink:* We are very interested in options and we know that hybrid buses don't work well on the steep slopes and we will continue to look at it.
- C: Did you know that at the Albion Ferry they put natural gas into diesel engines and all you have to use is use bio-diesel.
- A: Facilitator: Thank you for your comments but if you are going to get into detailed discussions I suggest that you meet later with TransLink staff as there are a lot of other speakers that are waiting their turn.
- C: You are just shutting me down.
- Q: I am one of the residents that the gondola will go over and I only just heard of this meeting so I never got any of the information and never meet anyone from TransLink so I think that you never are concerned about public safety. We are there 24-hours and I am scared for my children that the gondola will drop on my house or drop on my children. What will happen to the residents?
- A: *TransLink:* We have had a lot of discussion about safety and I am not sure I can add more to what I have already said. We have heard concerns about privacy and safety and we will continue to have discussions with the residents this is something we take very seriously and we will have more detailed conversations.
- Q: You said you need to do a very comprehensive engineering study and isn't this public consultation a bit premature without the studies?
- A: *TransLink*: It is always challenging when it is the right time to consult however we wanted to share the findings of our technology studies and we wanted your feedback. It is important to understand the issues and it is about a balance without going too far in committing resources to a project. More consultation will be coming.
- Q: Before I start I would just like to point out that there is half the number of people here than were here earlier when we weren't allowed to ask questions. I am concerned about wording such as 'minimal impact on conservation' and one of the major threats is forest fire; and, sparking from the gondola and danger on the forest below. I would guess that the BC Safety Authority didn't want the tram going over the tank farm because of sparkling issues and the pipelines in the area and you need to look at that. We need a copy of the complete proposal and how much money spent thus far on the study because that will tell us how committed you are. The areas that this gondola are going over are very precious and the number one thing people should remember is that SFU must listen to the City of Burnaby, unlike UBC which is a fiefdom, and you have the option of going to Burnaby Council and talking to them. Remember that Phase 3 is only about the design and at that point you will have lost your chance to stop the project from going forward - what will it take for TransLink to abandon this outrageous proposal?



- A: *TransLink:* With respect to your issues around safety I don't have much more to add and the route over the tank farm is not going ahead. About the pipelines we know that more study is needed. Cost I don't have the specific cost but our group is looking at various studies, for example the UBC Rapid Transit Study and others, and we spend about \$1-million a year on all those activities. This is on-going planning work. Your input is important moving forward and you are right TransLink will be working with the City of Burnaby going forward. We think the project meets TransLink's goals of improving sustainable transit and reducing greenhouse gas emissions and there will be lots of additional conversations that will take place going forward. The detailed conversations will include many more opportunities for feedback. TransLink thinks this speaks to our goals and we should go ahead.
- A: Facilitator: All the input received will be considered by TransLink in making a decision going forward.
- Q: Is it not unusual to hold to public consultations outside of a community that is the most impacted will future consultations be held in Forest Grove?
- A: Andrew Brooke, TransLink: When we look at public consultation we not only look at specific areas but we consider the region as a whole as well, we look for accessibility to transit and other factors are taken into account. Before the open houses we have already had the opportunity to meet with various residential groups.
- C: I have two points and the first one is that I don't think you understand what people are saying about the consultation. We are not being presented with a full range of options and TransLink is shaping the discussion we wanted to be consulted in a much broader way and know what other options are available. The second thing is that our area is crisscrossed with pipelines and if Kinder Morgan thinks it is too dangerous to cross over their tanks then what about the danger of drilling bases for the towers into an area that is crisscrossed by pipelines. We have written to the National Energy Board asking for their feedback.
- Q: Talking about instances of sparking I live in an 88-unit complex and we are in the process of putting a new roof on our complex. How do we prepare for unforeseen incidents like fire when we are putting up a new roof?
- A: *TransLink:* My earlier advice was that the cabin is contained and there is no source of sparking that could come from the cabins. I am not familiar enough to know if there are any other places that sparking could come from. However, there are measures that can be taken to mitigate risk and there are over 10,000-gondolas operating world-wide but we will provide more detail.

#### 4. CLOSURE

The open house closed at 8:21 p.m.

#### **APPENDIX 5**

#### **RETURNED FEEDBACK FORMS**

Feedback forms were returned to TransLink from Open Houses, Consultation Meetings, and Other (Internet, Mail, Fax). Hard copies of the feedback forms can be made available and are kept on record at TransLink. Please contact Kristin Lillyman at <a href="mailto:Kristin.Lillyman@Translink.ca">Kristin.Lillyman@Translink.ca</a> or (604) 453-4687 for more information.

#### **APPENDIX 6**

#### **SUBMISSIONS (EMAIL AND LETTER)**

Comments sent to TransLink from the website on the Burnaby Mountain Gondola Study are listed below.

Note: Questions raised have been forwarded to TransLink staff for response.

#### Comment:

Hi I live in Burnaby Heights off Hastings St. I think this is an interesting idea, however I was concerned when I heard that this may lead to less bus service coming along Hastings (135). Thiis is a very popular bus route and serves NOT just SFU, but the many people who live off the Hastings corridor. There are more multifamily developments being built on Hastings - we need to keep the bus route as it relieves pressure on the skytrain, which frankly is overcrowded right now.

#### Comment:

It all depends on the route "up the hill". I used to live in the Forest Grove area and it's a quiet, forested oasis. It would be a shame to cloud it up with towers and noise.

#### Comment:

Please build this it would be so much better for the community, Vancouver, and environment. Waiting for buses and not being able to get to school on snow days is a mess.

#### Comment:

I think that this is great continue

#### Comment:

Best idea ever, I am glad we are adopting it. It makes a lot of sense for this location, and cost effective.

#### Comment:

Great, a gondola for SFU while we still wait over here on the North Shore for our promised 3rd Sea Bus. We pay more taxes per capita over here due to our high land value and still can't get another Sea Bus. Great to have an unelected body overseeing Translink.

#### Comment:

I just want to applaud Translink for even considering such an unusual (and promising) project. "Thinking outside the box" is an overused expression, but it really applies here. -Colin Stewart (former SFU student and instructor)

#### Comment:

Please consider not going over the Forest Grove community. I strongly oppose this project over Forest Grove homes; it will ruin our neighborhood. I am a resident of Forest Grove and do not want thousands of people looking into our backyard and windows daily. I am strongly pursuaded a better option would be over Lake City Way over the oil tanker.

#### Comment:

I think it's a fabulous idea; a great way to reduce GHG emissions.

If you build it, I will use it and give up my car ride. Good idea, it would still take me a bus ride to get to it though. Nothing is perfect.

#### Comment:

This project is the best transit alternative for Burnaby mountain. It should be built.

#### Comment:

I'm all for it. It would free up buses to improve transit in other parts of Greater Vancouver; it would quicken and improve the commute to and from Burnaby Mtn for thousands of daily riders; and it would reduce our carbon footprint. Obviously needs to be done with cooperation of affected residents.

#### Comment:

I moved away to Kyoto, then Stuttgart. Both have funicular railways and Stuttgart has a cogwheel railroad, integrated into the transit system. You'll hit a mental block, but this is a good idea. Make sure that the capacity can be several times higher than you think you'll need and that the thing will work in a windstorm (funitel or something with many very large cabins?).

#### Comment:

Dear TransLink, When will you publicly post the online consultation materials for the Burnaby Mountain Gondola project? I wish to pass this on ASAP to fellow friends so they can take a look.

#### Comment:

Assuming an environmental assessment has been done, I think this would be a great project - it would cut down fossil fuel use, facilitate transportation during snowy days, and potentially save lives by cutting down on traffic. It would also be iconic and just plain cool.

#### Comment:

I'm currently an SFU student and i see a couple of issues with the concept. Firstly, where would students be parking their cars? Also, with the last skytrain going to lougheed mall at around 01:15 am, would this solve the problem of students being able to commute back to SFU late at night? Also, what happens to the students that are travelling? - The current transit system allows students to go to various locations around campus to catch a bus - will the gondola do the same?

#### Comment:

Hello, Can you please advise the logic behind holding the public consultations on the gondola outside of the neighbourhood that is going to be directly impacted by the gondola (if it proceeds)? This appears to be an overt and cynical attempt to minimize the potential for negative comment. A timely response will be appreciated, ideally before tomorrow evening's event at Cameron School.

#### Comment:

I am strongly opposed to any type of Gondola in this neighbourhood. Reasons include loss of privacy, potential accidents, negative impact to our property values. Additionally we have a quiet way of life in a forest - this would impact it greatly. Do not take this away from us. Have Forest Grove Elementary staff and parents of children been advised and consulted?

This particular route pass right through Pine Ridge Housing Co-op, there are no absoultely safe gondolas, why is it have to pass through residential neigbourhoods? this is just too dangerous for people live in that neighbood and surrounding areas.

#### Comment:

Vous avez de bons points il, c'est pourquoi j'aime toujours verifier votre blog, Il semble que vous etes un expert dans ce domaine. maintenir le bon travail, Mon ami recommander votre blog. Mon français n'est pas tres bon, je suis de l'Allemagne. Mon blog: regroupement credit conso et au <u>Rachat de credit</u>

#### Comment:

The gondola is one of the best ideas. It is nice to see that Canada is finally catching up to 3rd world countries for transportation. I hope this is the first of MANY urban gondolas in GVRD, BC and Canada.

#### Comment:

Great idea! Kudos to the person who thought outside the box and came up with this brilliant idea. I am sick of seeing loud big buses belching blue smoke onto the beautiful green surroundings of Burnaby Mountain.

#### Comment:

(1) Has Lake City skytrain been considered instead of Production? If it has been ruled out - why? This may have less impact to residents. (2) When do you plan to publish a report that contains info such as (a) noise in DB of gondola system (b) lighting impac (c) route considerations with a detailed map (d) height above ground for entire route (e) hours of operation

#### Comment:

I am a resident of this area and I am completely opposed to this silliness. There are much higher priorities for Translink (Evergreen) than a gondola. This is a perfect example of bureaucrats run amok without any sense of reality. Hopefully when Translink realizes there is no money to pay for this sanity will be restored. If not look forward to the lawsuits launched by residents of this area whose lives will be effected by this ridiculous pet project. Give your head a shake.

#### Comment:

I think a gondola would be a great idea, also for tourism and everybody would make it up to the mountain in all weather conditions which would eliminate being stranded on the mountain, etc. as we have seen in the past. Good for the environment, buses would not have to go up the mountain anymore - it is a win-win solution for all.

#### Comment:

Is a suspended gondola really the best option? Has rack-railway or a cable-railway been considered? Railway solutions would allow for cars to be added more easily to deal with heavier loads.

#### Comment:

while I applaud the desire to reduce greenhouse gas emissions, you don't use that argument successfully when you're robbing Peter to pay Paul....'cause in the grander scheme of things, the negative impact on, and undeniable dangers to the 'communities' of families who reside under the proposed path of the gondolas AND the resulting destruction of natural habitat would make it evident that there will have to be another less invasive / dangerous 'route' to consider.

My family and I are residents of Forest Grove that will be negatively impacted by this project. Not only will it ruin the tranquil peace of our community, but it will also bring structures that do not belong in this setting. Native plants and animals will also be negatively impacted. Gondolas over residences where people live, children play is not only extremely invasive, but also extremely dangerous.

#### Comment:

I am against this project. I don't want my neighborhood to become a tourist attraction. I have concerns about the environmental impact that will occur if this is built - habitat destroyed during the construction, garbage thrown out gondola windows, impact on wildlife, etc. Translink is always complaining about money problems. I'm shocked that this frivolous idea is being considered. There are plenty of other high priority issues Translink should concentrate on.

#### Comment

A pdf feedback form? Why not a web based form? The pdf is cumbersome and really not too inviting to use.

#### Comment:

It seems this gondola is a great idea but I haven't see in the presentation the difference in altitude.

#### Comment:

Is the cost to setup a trolly bus system up to Simon Fraser University the same or less than the gondola?? It couldn't run during snowy days days, but would achieve all the other goals of the gondola.

#### Comment:

We will fight this tooth and nail! How dare you try and run a gondola over top of our townhouses. Especially with skylights in our upstairs bathrooms. If you want your riders to watch us go to the bathroom and bathe... then go for it I guess. Not that you care. Translink has thier own agenda. Lets stop pretending.

#### Comment:

Strongly disagree with the plan for the gondola How does it benefit the Forest Grove Community? Translink show how great it is for the SFU community, students, & university. All I see r negative impact on the FG Community. eg privacy, noise, safety, property value, & so on. Maybe another solution is to stop developing the UniverCity. That won't happen the owners in the UniverCity wants their property value to go up & they don't care what happens to other property value.

#### Comment:

Is there a place we can see the proposed routing? What would it look like? How do you plan to accommodate parking, both on top and also down near the Prod.Way Skytrain station? Will you add my email address to your newsletter group. With thanks, we live off Forest Grove Drive.

#### Comment:

I am a student at SFU and plan to eventually live in the UniverCity Community. I LOVE this idea and think it would be really helpful on snowy days, and it would be much better for the environment. Awesome idea!:)

I personally am in favor of the project. As the parent of three children who are going to or will go to SFU I think it is a sound environmental addition to the transit system. Burnaby Mt. is a gem of the lower mainland and should be a destination point. I would hope that all aspects of safety are researched as there are houses and people living below the area and that should be the first order of business. Thank you.

#### Comment:

Please provide me with the following: 1) specific information on how privacy will be protected for residents under the proposed route; 2)noise level assessment studies to support the contention that these will be 'very quiet'. This should include decibel levels for the proposed technology; 3)detailed financial information that supports the cost effectiveness of this option versus other alternatives considered (if any). Thank you for your help in providing this information.

#### Comment:

There was a General Meeting at our Whattelekainum Houseing Coop. Everyone is against the construction of the Gondola line...

#### Comment:

I am a resident of Forest Grove and strongly oppose any cutting of the forest to install the Gondola. I moved here because of the forest. The Gondola does not serve the residents of Forest Grove and as such should not be built over us.

#### Comment:

I think this is a fantastic idea. Of course, the concerns of the citizens whose property lie under the gondola path needs to be addressed, but the benefits from the gondola system are clear. Integration with the Production Way Skytrain station would provide many benefits for years to come.

#### Comment:

Am concerned about the extent of noise and use of space above the residential properties the gondola would have in the Forest Grove Community. Needless to say most people do not know there is a 3,000 person community there which is 25 years old. The gondola will also be going over Kinder Morgan's pipeline which needs some mention. Sorry but it is difficult to be part of Translink's controlled agenda. Not open to answering some tough questions. Too much PR with pointed views.

#### Comment:

I support this plan. It is environmentally sustainable. I think the towers should go in the forested areas.

#### Comment:

Hello, I admire your vision in planning a gondola; however, I would like to know what security measures you have in place for those occasions when a woman is travelling alone on the gondola at night and might encounter a creep or creeps who accost her, or worse. It's not like she can get off the gondola, and a lot of awful things can happen in 6 minutes.

#### Comment:

The SFU Gondola is a fantastic idea. As a SFU staff, I commute from downtown vancouver to SFU daily by bus (135) and find that although efficient, diesel buses will ultimately become cost and environmentally prohibitive. Your biggest challenge will be NIMBY of the residents who will fight to oppose this innovative project. You will need an innovative approach to appease their needs.

I am disgusted with the process to push this project forward. As a resident that will be impacted, it was only this week that I found out about the proposed route. It seems to me that this info was purposely held back from residents that will be impacted, and only allowed to voice their concern during two "Open Houses". I express my disapproval of the both the proposed route & the process. I will express my displeasure to both the Mayor and to my MLA.

#### Comment:

I run the community childcare in the elementary school, so I speak to 74 different sets of parents pretty much daily and not one family wants this to happen, as a matter of fact they are all extremely opposed to it. We love our home, we cherish out neighborhood, hidden away, not often visited by strangers. It's such a peaceful place a tranquil place and I beg you not to change a single part of it.

#### Comment:

In fairness to the Forest Grove residents, I believe that using route number one would be the best option. People have been living in this area for a long time and no matter the placement of the towers or minimizing of noise the cabins would still run over houses where people live. That is unfair to residents who have purchased homes in this area, including myself.

#### Comment:

PLEASE do it. It's a brilliant idea that will get it's money back quickly while provided a much needed way to get up and down throughout the year, including the winter months. In January of this year I walked down the hill, along with many, many other students, because the buses were unable to get to SFU. It was horrible and in this day and age it's incredible that during snow there is not an alternative to walking down the hill from SFU.

#### Comment:

1. Lack of community involvement to select a route is shocking & deplorable. 2. Information inadequately presented. 3. The assumption that negotiation of air rights will be straightforward is foolhardy. 4. Advancing one community at the expense of another is inept planning. 5. It was admitted that the system would not make money or perhaps break even. Misappropriation of tax payers money. 6. The chosen gondola system can change directions & accommodate additional stations. Explore this!

#### Comment:

Will all residents in the Forest Grove neighbourhood be compensated financially should it be proved this depreciates the value of property beneath and to the side? Put yourself in the position of the residents - public sponsored organisations have no place forcing tax payers in a democratic society into negative equity situations in the cause of transit where the place being served already has one of the best and most reliable services.

#### Comment:

Go back to the drawing board to figure out how you could collect the other SFU commuters at the Hastings access as well. Be cautious with private business influence. I fear this is a marketing gimmick to put UniverCity on the map & drive up their land prices to increase returns. Sure, it is ideal for the students but UniverCity does not have their interests at the forefront of their planning. They develop & sell land.

#### Comment:

Privacy and safety are over-talked about as concerns. It is the fact it is overhead & in your face at every turn that has people riled up. Nowhere else in this region would transit be so intrusive. It will be a visual distraction to drivers along Forest Grove by the school! The colour and location of towers and cabins is an irrelevant discussion at this point. If it goes ahead, Burnaby needs to hold you accountable & expect a world class design. Anything less will be a disaster.

#### Comment:

Holding public consultations on back to back days does not provide a fair opportunity for interested to parties to ensure their participation. I was out of town for work from Tuesday to Friday morning and have no other opportunity to see the presentations and draw informed conclusions about the impact of this project. I am a resident of BBY mountain, and the proposed route crosses over my home, so this concerns me entirely. If you want cooperation, you'll have to do better.

#### Comment:

Can't wait for all the nightlights to avoid aircraft collisions!

#### Comment:

#s refer to feedback form. 1=1 2=ex'ing roads 3=not important 3=NC 4=NC I am a strong supporter of the proposed gondola, provided the project will have minimal impact on existing trees and vegetation in the conservation area.

#### Comment:

I would like to place my vote in the NO category regarding this project. I'm a resident of Forest Grove and I don't think this project is safe. You state you want to reduce harmful air emissions, then you should concentrate on getting all the commuters in the Valley and in Tri Cities area out of their cars by giving a better option in transit. Thank You.

#### Comment:

You folks had better think of how you will stop unsupervised college students from throwing things out of those gondola cars - it could easily become an annual ritual with videos posted on Youtube. I have seen them already throwing ice chunks out the windows of the Peak2Peak at Whistler. I don't live under the proposed line, but I wouldn't be very happy if I did. Buy those folks out and put in a green belt. Or better yet, drop the whole idea and stick with the buses.

#### Comment:

Hello, I am a current SFU student that lives in residence during my study semesters. I was wondering what time the gondola would start and stop running. Already, I have found it difficult to get back home from other parts of the city as it is difficult to connect from the Skytrain to the N35 route after the 145 bus up the mountain (12:30pm). I am hoping that with the Gondola project, the hours it will be open will be increased.

#### Comment:

Your form will not allow me to fill it out online and where it directs me to doesn't have a form regarding this topic. There were two open houses held in the same week (this week) so many people were unable to attend. We just found out that you are proposing putting this up through our neighbourhood and cutting down trees and we as a neighbourhood are concerned that is just being made clear now. Please reply as to a way we can submit our comments online.

#### Comment:

I put my strong support to the Gondola Transit Project. I assure that this project will give very positive economic effect to all around burnaby mountain community.

#### Comment:

Gondola Transit Project will make a broad channel for the public to the UniverCity. It make the people have different view to the SFU Community. I really want to see this project start as soon as possible.

#### Comment:

TransLink may as well have a secure transit way to the SFU in winter snow season. That is a Gondola.

#### Comment:

strongly support the project

#### Comment:

I think its good trasport option but the route should not cross over residential areas. I live in the Forest Grove community and I am concerned about the safety risks, the negative impact on the neighborhood's peaceful, wooded feel and, consequently, on our property values. Another route should be found.

#### Comment:

Once you build it at a very high cost, user fees will be high as well. Students can't afford those fees and the gondola, just like the Golden Ears bridge, won't be used. You also claim this project is more environmentally friendly but in reality you are putting this unsightly commercial project right in the middle of a prized forested area. Get your priorities straight and concentrate on the Evergreen line and other areas that have limited effective public transportation.

#### Comment:

If a gondola was such a great idea why don't more cities do one? There are lots of other places that deal with snow much more than we do! Why? Because it is not the best solution given the price tag. A gondola is simply a tourist attraction, not a daily commuter service. And gondolas are weather dependent as well - think wind conditions and snow/ice. There is definitely another agenda here that is not being discussed at all and it's just plain wrong.

#### Comment:

This gondola project is a complete waste of taxpayers money. I can't believe the project has even made it this far.

#### Comment:

This Project is NOT a good idea for our community. The cost of the gondola project can easily be used to get more buses. The effects of the gondola such as noise, the eye sore look of the gondola and wires, the change in our beautiful landscape in our community and other effects will not out way the suppose benefits of this project. If there is a need for a better commute than the answer is more renewable energy buses. This project is definitely not good for the community.

#### Comment:

I welcome the idea of a gondola to SFU. As a student and now as an employee, I cannot tell you the number of times that I've been stuck on that mountain due to bad weather or traffic. As long as the gondola is fast and efficient, it makes sense on all levels, financial, ecological and logical. It would be a great tourist attraction as well as a practical solution...please do it!

Remember how great the fast ferries were going to be? A gondola? You have got to be kidding!

#### Comment:

Our family strongly opposes this gondola system. We have reviewed the plans and have learned the line is to be suspended extremely close above our property. I will not feel safe having my son play outside underneath this machine, i will not feel protected, and I do not wish to be looked down upon by transit users. We will no longer have privacy in our backyard. This gondola will destroy our way of life. We chose to live in a peaceful, natural wooded environment. DO NOT BUILD!

#### Comment:

A trolley or rail car with solar cells and regen braking would have been a cool idea to explore as it would work almost as well. Just a matter of getting around the vehicle traffic on the hill. It might also tie in nicely to a light rapid transit system I'd love to see around BC but we'd have to move away from our dependence on combustion automobiles first.

#### Comment:

As a resident and homeowner in Forest Meadows, I do not wish to see this gondola in our area! We have so much beautiful greenspace up here and many forest animals, that would be affected by this. Also we would have the lack of privacy! Please, do not do this in our area!

#### Comment:

I strongly against the idea of this project. It affects the peacefulness of the whole Forest Grove Area. Translink should improve the bus services instead of wasting money of building Gondola.

#### Comment:

Being a residente of Univercity I'm potentially excited about the Burnaby Mountain Gondola project, but the website does not appear to have been updated despite saying "Updated project information will be posted here on May 24, 2011." Is this information available elsewhere?

#### Comment:

Opposed to the route. It has most impact to those least able to oppose your bullying tactics, and has least negative impact to UniverCity, so the plan was obviously put together by the developers. I live in Simon Fraser Village on the side that would be impacted, and you're darned right I am upset about having my privacy & tranquility affected. I promise to fight you every step of the way.

#### Comment:

While I support greener projects, this is a very poor idea. Disruption to local wildlife, and to residents who chose this area for it's quiet and "green" environment. Please don't be pulled in by the idea of a "new toy" and look at better alternatives. Thanks

#### Comment:

I think the proposed idea is really great. Getting to the top in a faster time period is important. It is also appealing to use a technology that is cleaner, quieter and more efficient. The gondola idea makes a lot of sense in this application.

#### Comment:

Reducing the time required to get from the skytrain to SFU would have a huge impact on the overall transit time of students. That bus route (Bus #145) is already horribly congested, and will only continue to get worse as both the university expands and the size of the residential community grows.

#### Comment:

I just rode the awesome mountain bike trails at Burnaby mountain, for the first time yesterday, and just wanted to say that a gondola would be a huge incentive to keep going back to the area more often!

#### Comment:

The proposed gondola should go exclusively over non-residential areas on the east side of Burnaby Mountain, from Production way, along Gaglardi and then straight up.

#### Comment:

I think the Gondola, though it won't be important to me at the time of completion as I won't be attending SFU at that time, is a wonderful, green, and innovative development that will reduce "snow days" at Simon Fraser and prevent the current four-bus-waits for the 145. I believe running the two systems in tandem during peak hours (8-10am going up, 2-5 going down) would be the most efficient mode of transportation for students and staff alike.

#### Comment:

I strongly oppose the construction of a Gondola on Burnaby Mountain. This is NOT what I want my tax dollars spent on.

#### Comment:

To Whom it May Concern: The 'public consultation' was a joke - putting the meetings outside our community so fewer people could come was a sneaky tactic and ebbs our trust in the process. Also, we were not able to hear questions of our neighbours because of the way you 'divided and conquered' with the small table discussions. NO GONDOLA IN FOREST GROVE for environmental reasons, privacy concerns, economic concerns about our land value and noise concerns.

#### Comment:

The project in principal is good, but it should not have ANY impact on the Forest Grove Community - find another route along existing roads.

#### Comment:

My worry is about noise. The reason we bought on Forest Grove is to be in a quiet setting. Birds wake me up in the morning. I don't want the squeek of a gonola all day. I suggest you build the hub at Gaglardi and built the gondola rail up that road.

#### Comment:

Amazing idea! Can't wait to see it all come together - translink continues to lead the future of transportation!

#### Comment:

This approach is far more expensive than several alternatives such as electric buses or trams. Have you been to Grouse Mountain? Moving people via Gondola isn't the best option. Where's your budget, let's see your review of the alternatives. It's inappropriate to say this is the best option, what colour do you want. Do the right thing and present the taxpayers with an impartial review of the alternatives. It's their money, at some point they deserve a say on how you spend it.

As a concerned resident in the area, the thought of a Gondola going up that area is a really concern. I believe other alternatives should be discussed and put on the table.

#### Comment:

As a resident of the Forest Grove area I am strongly opposed to the gondola project. There seems to be no concern about the people who will be living with this thing going right over their heads. The open house was a joke. There was no consultation with residents, the only question asked of us is "Where do you want the towers?" WE DON'T WANT THE TOWERS!!!!

#### Comment:

I think the gondola idea is a great idea. It will reduce the number of buses going up and down the hill, be a fun way to travel, may bring in tourist dollars, be more environmentally friendly than the bus, and be faster. I would like to suggest, if it isn't in the plans, that there be a mid-station (like on the ski hills) in the Forest Grove neighbourhood so the residents there can use it ot go down the hill to skytrain as well as the students going up to SFU.

#### Comment:

I am writing on behalf of the members of Misty Ridge Co-op to notify you of our very deeps concerns about the Burnaby Mountain Transit Project. We are vehemently opposed to this project for several reasons. . The university is totally assessable by bus and which is augmented now by the sky train which brings transit users from all over to access the buses that run very regularly to and from SFU. The only times that that this service is delayed is during periods of heavy snow. This winter there was 2 or 3 snow storms that delayed transit service to SFU. But that is not an issue exclusive to SFU, we all deal with being snow bound during periods of heavy snowfall because we choose to live on the side of a mountain. . The residential area that we live in is unique to Burnaby in its ability to blend in with the surrounding forest. We value the trails, strerams and surrounding wooded areas as well as the seclusion this provides. The installation of towers into ecologically sensitive areas and having gondola running up and down from SFU will greatly diminish the atmosphere of this area. The residents already deal with the issues related to the Kinder Morgan pipeline and traffic noise on Gaglardi Way. The residents of the Forest Grove have demonstrated that they have the ability to protect their community. The cutting down of a wooded area adjacent to Forest Grove Drive by Kinder Morgan is an excellent example of the how fiercely we are willing to protect this area. . We believe that this system could be hazardous given that the area is a wooded and densely populated residential area and the gondolas will be unmanned. Security cameras are no good at controlling issues in the moment but only after the fact. . I am sure there are recent statistics on how often the bus going to SFU is full to capacity. You would note that when classes are not in session there is a limited amount of transit users on the bus. Especially having the gondola service going 20 hours a day. This is insanity! . This is not a ski hill or a snowy get away that leads to a recreational area. These gondolas will be going over strata and co-op complexes. Think about where you live and how you would feel with gondola's full of students running overhead day and night. We would appreciate you advocating on behalf of the residents of the Forest Grove area to be a voice for our concerns regarding this project. Thank you for your support.

#### Comment:

Pls reconsider - there are many other projects that should have priority (Evergreen; UBC line; Surrey-Langley service). Consider the impacts to the local environment & the residents that chose this location for it's qualities: quiet, green, peaceful. What happens with the gondola breaks down (and it will

eventually)? Consider other options - hydrogen/electric buses, ground-level trains & please don't inflict this on the residents & inhabitants of Bby Mnt. Thanks

#### Comment:

Why not buy buses that work on natural gas or biodiesel? It would be much cheaper, eco-friendly and you can use your money for the green line.

#### Comment:

This is a VERY BAD idea.....PERIOD!! How do you plan to compensate those of us whose property values are about to go down the toilet? I seriously doubt you will come up with a viable solution!

#### Comment:

I am a current resident of UniverCity and work in south Burnaby. It would help when it snows and the buses can not run up the hill. I would not be left stuck at Production with no ride up. Another benefit would be less wait time. I think the towers should be built as close to existing roads to reduce the amount of trees that have to be cut down. There are some that are against this project but there are many in favour. You just mostly hear complaints from those few that oppose it. Good idea!

#### Comment:

I am a resident directly effected. Buy a snow plow and salter. SFU doesnt provided larger community/city wide events (sporting or arts) to warrant expense. I have lived in the area for 6 years and never used SFU facility.

#### Comment:

I strongly support this project, because it would provide faster, more frequent, and more reliable transit service to SFU and UniverCity. Current bus service up Burnaby Mountain is maxed out during peak times and planning needs to begin now to deal with the expected increases in student population and number of residents at UniverCity. As the project (hopefully) moves closer to the design phase, I would like to see some public consultations on station design at both ends.

#### Comment:

I think this project should be funded by the users of SFU... including a SFU property owner fee, or SFU improvement fee for students much like how YVR funds its own expansion throught YVR improvement fees. Translink should provide funds to operate the line once the project has been completed, and bus service is phased out.

#### Comment:

I strongly disagree with the building of a Gondola up the side of Burnaby Mountain. The area that the Gondola is planned to built in is a rare and beautiful green belt. This is an environment for which we should protect, with a variety of wildlife, streams and vegetation that is rarely found/protected in the Greater Vancouver area. We promote ourselves as a city that protects our green spaces, please do not destroy this one.

#### Comment:

500 characters is not an adequate amount of space to truly provide constructive feedback. This is the second part of my input. Lastly, the families who have bought in this area have purchased their homes specifically to have a little bit of rural living while still living close to their employment and the amenities of the city. The Gondola will affect how future home buyers view our oasis and will devalue our properties, a challenge already faced with these economic times.

YES!! Build the Gondola for the Burnaby Mountain Community

#### Comment:

I strongly oppose to the Burnaby mountain gondola transit project. I believe by building the gondola it will affect the peacefulness of the surrounding residential area. Also the building of towers will disrupt the wildlife that is living in the forest by the Burnaby mountain. The noise generated by the construction and the operation of the gondola is unfair to the children and adults living in the surrounded area. I strongly urge trans link to reconsider.

#### Comment:

Exciting idea. Location doesn't work for the residents as they will not have access to it. Should not pass over strata units - This is not fair & seems unprecedented in the Lower Mainland. Seriosly concerned with the effect on habitat, trails & the 2 conservation areas. Too early to provide input on design issues - route needs work. Will be quite unsightly crossing Forest Grove - a distraction for drivers by the elementary school.

#### Comment:

Seems like there has been too much influence from UniverCity. Recent scrapping of low cost transit passes in the area suggests residents on top of the mountain are not using transit. The gondola may be more attractive but seems like a marketing gimmick to raise land prices to sell to condo developers. No good can com from that starting point.

#### Comment:

Issues of concern: Visual distraction to drivers on Forest Grove by the school. Pipelines on Burnaby mountain. The towers will be lit up at night so that they are not hit by low flying aircraft. Sounds beautiful. This will not be a tourist attraction.

#### Comment:

A grand scheme like this is not always the answer. It should be figured out to carry all the students up the mountain not just those taking skytrain. The length of the line should be of lesser concern.

#### Comment:

The possibility of a route up the East side of the mountain via a secondary station avoids passing over houses. Longer, yes, but what does that matter? The slope on the East side seems less severe. A spur of skytrain could be explored along the flat part of Gagliardi to a gondola station. Alternatively, is there an opportunity for a mid station which would intercept the other 50% of students arriving by bus from the Hastings Street access?? This project seems rushed.

#### Comment:

Planning requires foresight and communities should be linked in harmony. This proposes advancing one community with zero benefit to the community nearest to them. The natives are restless. Unfortunately only a tiny proportion of Burnaby residents will raise concerns.

#### Comment:

Despite the intended route being located 30m from my house - the gondola is a good idea. Translink's process & attitude towards the public is appalling. Projects like this need to be open to public input at feasibility - planners looking at maps do not always make the best decisions let alone those working with private agendas.

I doubt our land values further down the mountain will be positively influenced - especially as there is no station planned that the Forest Grove community may utilise.

#### Comment:

The relative cost effectiveness of the system worries me as we may pay for a quick fix, such is life. The time it takes to reach SFU from the skytrain connection is irrelevant as the end of the skytrain is 40 mins (ish) in each direction. It doesn't have to compete with the bus travel time if it is to be the only option. Trees, of which there are scores of stunning conifers along the route, will undoubtedly be removed.

#### Comment:

Please reconsider the route & overall concept. Do not rush this. It has the potential to be beautiful but your track record in the area is not great. Should be exemplary if it goes ahead - this should not require trespassing on air rights whether you can buy people or not. It is a great opportunity. Don't ruin the area.

#### Comment:

Great stuff, you hleepd me out so much!

#### Comment:

It is crucial especially for winter months

#### Comment:

Please weigh the needs of the users of the service higher than the NIMBYs in the area. The people at the co-op are not owners, they are basically renters. If the co-op owners want to complain, so be it. But renters don't have that right. There will always be people on the route of rapid transit that prefer nothing at all to be done, and while it is important to listen and mitigate their concerns, they should never be able to veto a project.

#### Comment:

As a resident on forest grove drive, I feel a jesture of compensation for what I feel would be a decrease in my house value because I live near the lines. I see this project as an environmental benefit which I competely support however i am in no position to be losing money. My daughter uses translink everyday and always thought of it as positive mode of transporation but unfortunately this hits to close to home:

#### Comment:

As a resident of the Forest Grove neighbourhood, I am strongly opposed to this project. I am not satisfied with Translink's plan. I do not understand why the only route being proposed is right above my townhouse complex. What about the invasion of my privacy? What about the constant noise of the gondola? I am not at all convinced that the benefit (is there a benfit?) to SFU residents is worth the costs to residents of my neighbourhood. Shame on you!!!

#### Comment:

you people cannot even afford to build the nevergreen line or even build the skytrain out to ubc and you really think you can afford a gondola up to sfu......the public is laughing at you people.

#### Emails sent to TransLink on the Burnaby Mountain Gondola Study are below:

Note: Questions raised in the emails have been forwarded to TransLink staff for response.

I have serious concerns about the Burnaby Mountain Gondola Project. I have cc'd MP Kennedy Stewart as well to express my concerns to him. I have high hopes he will treat my concerns with fairness and objectivity despite his tenure with SFU. Mayor Derek Corrigan is also copied, as he presents as being a Mayor who cares about the citizens of his city.

I reviewed the feasibility study, which I have interpreted to be an exercise in pushing the agenda of building this project, and I am not impressed. It was slanted, and glossed over the impact this project will have on residents who will be negatively impacted by the construction and operation of the gondolas. It seems the established neighbourhoods in the Forest Grove Drive area around SFU are the "sacrificial lamb" in the goal of pushing through the agenda of SFU and the developers of UniverCity, as well as the "green" agenda of special interest groups.

I would like to note that this is just another blow to some of the established Forest Grove Drive neighbourhoods around SFU and UniverCity. The development of UniverCity has already contributed to significant water pipe damage in at least one of the residential complexes from increased water pressure, and its residents have had to absorb the cost of fixing pipes and water damage. Now the residents are facing yet another project that is obvious in its disregard for the residents in the Forest Grove Drive area.

The photos included in the feasibility study were not attractive at all; to suggest that the towers, gondolas and wires can "blend" into neighbourhoods is absurd. And the notion of "relative" quiet? You are talking about gondolas going overhead every few minutes almost 21 hours per day. It is ridiculous to suggest this will be anything but completely disruptive to life as we know it right now. This area is a treed oasis of quiet comfort, and this project will make it a highway in the sky.

Also, has safety been assessed in the event of major earthquake? Or a freakishly high windstorm? A lightning strike? Personally, I do not want a gondola falling on my head.

The study asserts that falling objects are "unlikely" due to screens in the cabins. In my opinion, this assertion is "unlikely." You must be aware that the main ridership of these gondolas will likely be teens and young adults, age groups that are not known for maturity. This age group is notoriously immature and influenced by peers. Screens can be tampered with, and things can be dropped – from 160 feet up! This could be comparable to what happened when large rocks were dropped from overpasses by youths who did not think of consequences. What kind of liability would be involved with holes in roofs, or people being hurt or killed? You are also reminded that the wires would pass over a school; what value do you place on the safety of children in a playground? Yes, these are worst-case scenarios, but not out of the realm of possibility. There are already plenty of opportunities for mishaps without adding to them.

In regards to privacy, it is absolutely inevitable that privacy will be compromised. We have inventions called zoom lenses and binoculars – and cameras. In the same vein, this will invite predators to scope out our homes for potential targets. Even a high speed gondola will allow a good view of potential targets – and allow a predator to track patterns and movements of residents and children at the school.

It is ridiculous to suggest that it is "unknown" how property values will be affected. They will go down! There will be a loud, unattractive and permanent fixture in our backyard that will remove privacy and add the prospect of the criminal element... without any direct benefit to Forest Grove Drive residents. This gondola will almost exclusively benefit SFU, UniverCity, and those who travel to those areas from the base of the mountain. In other words, NOT Forest Grove. It appears we are being thrown under the proverbial bus in order to accomplish the Gondola Project goal, and forward the agenda of powerful and resourceful special interest groups. I also wonder why the Evergreen Line is not a higher priority, given how long it has been on the backburner.

As a taxpayer and concerned resident, I am feeling "mowed over." I am being a bit selfish, but I take no solace in "taking one for the team" in an effort to be "green."

On the bright side, there was comedy in the feasibility report in the section about the views from the gondola. It made me laugh when I read "the availability of these views may even alleviate some concerns over privacy from the residents adjacent to the alignment." Why would gondola riders having a good view of mountains make me feel better about my privacy being compromised? Is it being suggested that a nice mountain view will avert the eyes of somebody looking for an open window? Absurd.

The only way a project like this should proceed is if the wires ran along an existing major roadway, such as Gaglardi Way, and completely avoided residential areas. I have to admit I did not know about this project before I bought my home, but I have heard from others that this was not a well-publicized project in the beginning. My faith in politicians would be shaken if this project were allowed to proceed as is - given we would be included in the price tag. Frankly, as an SFU grad, I am feeling disappointed because I never thought SFU would consider disregarding a community like this.

Please do not sweep us under the rug and push this project through. Many of us spent a great deal of money on our homes, and enjoy the current natural environment of our area. I strongly believe this project will result in the sacrifice and decline of the area I live in. I love living here, so even the option of buying me out at "fair market value" would not fix things. Not even close.

One issue that has not been addressed is the use of pilings for the towers. The pile drivers used for the Port Mann Bridge are so noisy that the homes on Cape Horne actually vibrate when they are being driven or drilled into place (usually over night). The construction vehicles working on the Port Mann project are extremely noisy and have run all night long for the past 2+ years. Their back up tones can be heard all along Cape Horne Avenue and Mariner Way.

I have a relative living on Cape Horne Avenue - nearly 2 km's away and the noise impact is huge! What's the plan for the proposed construction zone and noise which borders our property and an elementary school that is less than 1/2 a block away?