TRANSLINK

BURNABY MOUNTAIN GONDOLA
TRANSIT PROJECT

Wednesday, July 27, 2011
Whattlekainum Housing Co-op and Ron Beamish Place
8740 Forest Grove Drive
Burnaby BC
Notes from a Burnaby Mountain Gondola Transit Project meeting, held Wednesday, July 27, 2011 at the Whattlekainum Housing Cooperative Commons Room, 8740 Forest Grove, Burnaby, BC.

FACILITATOR:
Andrew Brooke, TransLink

PRESENT:
There were approximately 25-persons present. Names are not disclosed due to privacy reasons.

ALSO PRESENT:
Jeff Busby, TransLink
Kristin Lillyman, TransLink
Susan Campbell, Note Taker, Corporate Consulting

The meeting commenced at 7:00 p.m.

1. INTRODUCTION AND SESSION OBJECTIVES
Andrew, Facilitator, thanked everyone for attending and explained that the purpose of the meeting was to provide an overview of the project, clarify issues and understand concerns so that they can be addressed. There will be a brief presentation and then an open Question & Answer format for discussion.

Participants were advised that this public consultation was a part of the Phase Two consultation of the project and that this sub-phase will include six small group meetings with residents in the overall Forest Grove area. Finally, it is important to note that no decisions have been made at this point.

2. PRESENTATION
Jeff Busby, TransLink reviewed the parameters of the study and set the context for the meeting:

What will I cover?
- Why are we studying a gondola?
- Planning process
- Project status and next steps
- Comments to date

Why are studying a gondola?
- Significant transit destination – 25,000 daily trips, most connect to SkyTrain
- Buses every 1 minute:20 seconds today; 50-seconds as mountain grows or mode share increases
- Weather and reliability
TransLink

- Plans call for:
  - Increased transit ridership
  - Reduced environmental impact
  - Cost effective investments

Planning Process
- Previous feasibility study sponsored by others in 2009
- TransLink sponsored an independent planning study and business case
  - Ground based and aerial technologies were reviewed
  - Sought to improve travel time, reliability, environmental impacts at reasonable cost
- Aerial alignment options
  - Minimize residential and conservation impacts
  - Maximize connectivity to SkyTrain and SFU
  - Minimize length (travel time and cost)
- 15 minutes to 6.5 minutes; Every 3-10 minutes to every 40s; similar hours SkyTrain
- High ratio of benefits to costs

Project Status and Next Steps
- Operating Savings up to $3m annually compared to buses
- Project not included in our 2012 plans (base or supplement)
- Seeking senior government or partner funding
- Implementation requires
  - Funding in annual plan
  - Environmental assessment
  - Access agreements (Burnaby and others)
  - Design and construction plan with public input

Comments to Date
- Comments either strongly supportive or strongly opposed; very few moderate responses
- Environmental, travel time and reliability benefits
- Resident concerns
  - Privacy
  - Safety
  - Noise
  - Neighbourhood character
- Impacts to conservation areas (trees and wildlife)
- The cost of the project
- Relationship to Evergreen Line
- Priority

TransLink is interested in a gondola because of its potential to offer better reliability, faster travel times, higher transit capacity with fewer diesel buses, reduced noise and emissions for greenhouse gases (GHGs) and other pollutants and reduced operating
times. TransLink recognizes that concerns exist specific to the residents of Forest Grove and wants to do their best to understand address them.

3. **QUESTIONS, ANSWERS AND COMMENTS**
   *(The following abbreviations will be used and mean: Q=Question, A=Answer, C=Comment.)*

   **Q:** You mentioned that the gondolas have windows and that is fine. Will we have people on the gondolas and their coffee cups and will they throw those coffee cups out of the gondola onto our property?

   **A:** *Jeff Busby, TransLink:* Throwing things out is not a problem because the gondolas are designed to be sealed so that nothing can be thrown out while they are travelling. For air circulation there is venting on the bottom and on the top of the gondola.

   **Q:** With respect to the towers how far apart will they be?

   **A:** *Jeff Busby, TransLink:* There will be about 5 towers needed - the first tower will be located in the industrial area, then a tower will be close to the trail (hydro right-of-way), Gaglardi, a tower at University Drive and the final tower at SFU. The towers will be above the trees and will be about 70-meters tall (approximately 200-feet). Towers can be designed to blend into the surroundings.

   **Q:** There are two things; look at the clear cut around the bottom of that tower (illustrated on the presentation board) and you know that this is in a conservation area and that is not acceptable and; my second thing, is how much sag is there between towers?

   **A:** *Jeff Busby, TransLink:* At Whistler and Grouse they did clear the area under the tower area and they did that for evacuation reasons. However on the new Whistler tower they cannot do that type of evacuation. In other areas the towers are located by helicopter and we have assumed that method and we will not be cutting the trees. With respect to your last question remember that the ground is going up and the gondola would no closer than 30-meters above the tops of the roofs of the houses. The trees would grow to their natural height over 25-years.

   **Q:** If pollution is an issue, there are more people that go to UBC than SFU, the Evergreen Line would have to come first before this - why would they take this into a residential area rather than Gaglardi Way?

   **A:** *Jeff Busby, TransLink:* Right and the priority for TransLink is to build the Evergreen Line first and there has been discussion by the Mayors Council to raise the gas tax by two cents. The gondola is not in the (TransLink) Base Plan. I agree that there are other needs for transportation and this is one of the projects to address those other needs. The gondola acts like a rubber band and so if we made curves in the route we would have to make stations in order to curve it and that works against the time savings and would be more expensive. It also might result in greater impacts to turning points as the gondola would
have to come down to the station and then up again. As currently contemplated the gondola would be quite high over the residential area to minimize the impact on the residential buildings. So in summary the reasons are: higher costs, longer travel times and a desire to avoid impacts. All of the feasible routes passed over residential neighborhoods.

Q: The end point seems to serve UniverCity rather than the campus?
A: Jeff Busby, TransLink: The upper route of the gondola was illustrated on the map and the preferred route splits the difference between the two. SFU is working on their road network and is looking to change some of their one-way roads to two-way roads as this would assist in the traffic flow distribution. Right now the bus exchange is very busy and a lot of academic areas are moving there.

Q: You said that the two stationary cables are a meter apart and are they that big going up the mountain with a cable in between?
A: Jeff Busby, TransLink: This was illustrated on the presentation board – there are two cables on the outside and the third one is somewhat smaller and is inside of the two outer cables and that cable pulls the gondolas up the hill. This type of mechanism makes the gondola very stable in winds.

Q: I was lead to believe that the Evergreen Line is the priority. I moved to Coquitlam 25-years ago and you know what is happening with the Evergreen Line. The Clark Road route is shorter and better and I think that you should work on that first so why are you talking about Production Way?
A: Jeff Busby, TransLink: You mentioned connecting further to the east and the new station at Clark and Broadway/Burquitlam area. We looked at that and the new station will be built on the east side of the road and the gondola would be on the west so crossing the road would be difficult and that route also would cross over a residential area. This route is the preferred route and it equally serves people to the east and west and maximizes the integration of the project with the SkyTrain system.

Q: I think that the gondola is serving a small community and the Evergreen Line is huge and SFU is relatively small. UBC is so much bigger so why are you spending so much money on this? I think it’s a tourist gimmick from UniverCity and I don’t understand why you don’t understand the impact on the community?
A: Jeff Busby, TransLink: As I understand the question it is about value for money for the project. We took a pragmatic look at this transportation market and what is the problem and we can continue to meet the demand with the buses, they will be crowded and unreliable but that is what we are committed to do. If we want to do something different we think building the gondola is the best option. Buses work and so do gondolas. Gondolas have better customer service, they are more frequent and more reliable, and they save
time and are environmentally friendly and cost-effective. But, this is good because we need to have this conversation if we were to do something else. I will also admit they will be a novelty; there is one in Portland and in New York and this would be the first in Canada but it is solving an unique transportation challenge at SFU.

Q: Why are we looking at this? As I understand the projects in TransLink there is the Evergreen Line, SkyTrain to Langley and other infrastructure needs and this project might be in the base plan in 10-years. So why are doing this when this is probably 10-years down the road? You talk about the greening to this community yet the Broadway Line would dwarf the energy savings from this, so why is there so much attention to this?

A: Jeff Busby, TransLink: There are lots of other things we should be doing: UBC, Surrey, renovating the SkyTrain Stations and a lot of work we are working on investments to keep things running. This is a project requiring a $120 million investment and is not that much more expensive than buses and we think it is important enough to make you aware of it and so as we talk to senior level governments for funding we are aware of community concerns. We want to understand the community concerns and I would chalk up the attention the project has received to novelty. We just finished a consultation in Surrey and believe me Surrey is anxious for rapid transit.

Q: I too am wondering why this project is getting all this attention and it feels like a big elephant in the room - at first I thought it was a joke. The gondola is for a very elite group of people, and do we suddenly care about students who take transit; and, where is the money coming from because it seems like something else is going on?

A: Jeff Busby, TransLink: We think that at least 80% of the ridership will be students, faculty and staff. The university will continue to grow and we will either provide more buses or cancel the buses and put in a gondola. Currently, we are working on new bus loop at SFU. This is a transportation problem we are trying to solve. The students will benefit as will the residential community. There are 22-buses on the #145 route during peak times. The schedules are adjusted four times during the year and during the summer we scale back although the university is trying to move to more of a 12-month schedule.

Q: You mentioned that buses cost about $3-million and are you just talking about the #145 route?

A: Jeff Busby, TransLink: The gondola project would remove the #145 bus route and the savings are up to $3-million – the #145 bus route is $5-million and would be a savings of $3-million per year. We would just be eliminating the #145 bus route. The #143 bus route will change with the Evergreen Line so the section between Burquitlam Plaza and SFU could also be eliminated if the
gondola is built. If the Evergreen Line were funded this year it would open in 2016.

Q: If there was a safer way to ride or walk to SFU more people would walk or cycle. At this point it is not safe.
A: Jeff Busby, TransLink: One of the opportunities here that doesn’t require the gondola is that we make investments in roads and we could think of improvements that could help Forest Grove area if we built the gondola. We would want to work with the community.

Q: You said the bus service would not change when you were speaking at Pine Ridge and how will you accommodate disabilities on the gondola?
A: Jeff Busby, TransLink: That was the #136 bus and it won’t change as a result of the project. The #145 bus could be eliminated and we think the vast majority of riders would select the gondola. On the gondola there are 19-cabins and they can come on and off the line depending upon the demand and at night they sleep in a garage at the base. There are attendants at the top and bottom and their job is to manage the loading and unloading. The cabins can be slowed down or brought to a complete stop to load and continue. It is a level boarding. The cabins are quite spacious — about 35-seats. Not all the cabins have to be the same and one or two could have fewer seats that would allow for bicycles or strollers.

Q: You said that the bus route on Hastings will continue, will you eventually reroute?
A: Jeff Busby, TransLink: No, the #135 bus is largely unaffected by project.

Q: Will there be a premium fare to get up there? On another note, I anticipate SFU property values will go up and ours will go down so how will we be compensated? I think for the first year everyone will want to take the gondola. If you were going directly over my house, it wouldn’t happen.
A: Jeff Busby, TransLink: In our analysis we didn’t assume any additional charge. We want the ridership and most students have U-Pass. The financial analysis is based on the savings from not running the buses and that is not fixed. As you do today to get on a bus, SkyTrain and/or SeaBus and use the same ticket to travel on all those modes. With respect to your second comment around property values that is trickier and it is very difficult to speculate and there are lots of things that governments do to change things for the better or the worse. For those owners directly affected there will be a process of negotiation for the right to operate the gondola that may include financial compensation. However on property values, I don’t have a great answer and I can’t speculate.
Q: You said that the buses carry 1,000-passengers and the gondola can carry 3,000-passengers because travel time is reduced, was that right? What about bicycles?

A: **Jeff Busby, TransLink:** We can run the gondola much more frequently because it is always moving people up the mountain and they are very efficient. If the gondola is successful you can expand capacity with a maximum practical passenger load of 4,000-passengers an hour and that is approximately the same amount of passenger load as is on the Millennium Line. You can bring bicycles into the gondola although it might be too crowded during the rush hour.

Q: Is this money coming from UniverCity or a portion? How much job loss do you anticipate?

A: **Jeff Busby, TransLink:** In terms of money (funding) UniverCity paid for their own study which was finished in 2009 and since then they haven’t paid. TransLink paid for this study with assistance from the federal and provincial governments. They (SFU and SFU Community Trust) have been a partner on the study and we meet with them regularly to understand the development on top of the mountain. We can’t answer the question on funding for construction as the project has not been put into the projects that are planned. Largely the funding will come from the savings and we will be asking for other levels of government to assist. As well asking developers to assist with the funding is not unheard of. With respect to your last question there are two conditions for the bus drivers; TransLink could raise revenues for transit, expand service and redeploy drivers. The other condition is to reduce service and then the drivers would be out of work however it is very unlikely there would be lay-offs as approximately 50-bus drivers retire every 6 months and likely we would just not hire new bus drivers for a short period of time.

Q: Can an electric bus go up Gagliardi Way?

A: **Jeff Busby, TransLink:** We did look at it but they do not produce travel time savings and are not very cost effective. We would have to build trolley wires infrastructure up the mountain and then back to the depot where the trolleys are stored and that would be very expensive. Overtime technology will change and will allow TransLink buses to buy buses that aren’t fueled by diesel. Hybrid buses don’t work well on the mountain. At this point, there is not an existing technology that doesn’t do better.

C: Just briefly about the snow myth – a couple of years ago we had a big snow dump and we couldn’t get a bus up there and the SkyTrain didn’t run either. Gondolas work on ski resorts but won’t work when you need it.

Q: About noise levels – did you say gondolas only make noise when they are passing over towers? Right now, I can hear the SkyTrain which is about 3 long blocks away and just as an aside I think that all lines should go through industrial areas and not residential areas.
A: Jeff Busby, TransLink: Noise depends on source and the figures that I am going to give you are average – if you take the same distance from a tower it would be 110 decibels for SkyTrain, 90 decibels for diesel and 50 decibels for the gondola going over a tower and that is less than the conversation we are having now.

Q: So 19 or 20 cabins and they will hit the tower how often?
A: Jeff Busby, TransLink: Every 20 seconds they will roll over the tower, they don't hit a tower as they roll over rails on a tower. We will have some noise readings and we know that at Whistler we could stand and have a conversation under a tower and you won't even know when the gondola is passing.

Q: But my neighbors on the 3rd floor will hear - what about what they will hear?
A: Jeff Busby, TransLink: You can stand under the towers and you won't be disturbed by it.

Q: Fire really concerns me and we know about forest fires and it is bad enough to have a pipeline and a tank fuel farm in near vicinity because those are real dangers however the niceness of our neighborhood makes up for this. What is the fire risk from a gondola?
A: Jeff Busby, TransLink: The cabins are sealed and there is nothing going through the vents – there are thousands of gondolas built world-wide and there is not any example where there is a fire risk.

Q: How long is construction?
A: Jeff Busby, TransLink: Once the decision to go ahead has been made it will be 3.5 years total with 18 months of construction. TransLink would need to undergo design consultation and we would do it with the community input as we would with the construction plan. The plan would be to minimize inconvenience to the neighborhood. This is a much faster project than the Evergreen Line.

Q: What happens if when you get on you trip - does the cabin stop?
A: Jeff Busby, TransLink: There are attendants to make sure the doors shut so they would be available to help if someone tripped.

Q: So there would be no jumpers (from the gondolas)?
A: Jeff Busby, TransLink: No.

Q: This is an interesting route besides being the most direct it also goes over low income housing and we don't pay as much taxes as some homeowners - is that any part of the reason you chose this route?
A: Jeff Busby, TransLink: No.

Q: What about Lake City?
A: Jeff Busby, TransLink: It crosses over tank farms and that is a safety concern for us.
Q: With respect to lightning – at Whistler they shut them down the gondolas when there is lightning? Do you know how long they are out of service?
A: Jeff Busby, TransLink: I don’t know the details and we would have to work that out with BC Safety Authority if the project proceeded. They don’t have to shut down their systems in Europe however I don’t know what extra measures they take to shield the cabins.

Q: With respect to your figure for growth – where do they come? I know there are cutbacks at the university and I am just wondering?
A: Jeff Busby, TransLink: We know there is growth at UniverCity. We got those figures from Burnaby’s OCP and it is permitted up to 10,000 persons. As well we worked with the planner at SFU and have projected what facilities they need to have in place for future growth in students, faculty and staff. While there is uncertainty this is their sense.

Q: Has the business case been completed and made public?
A: Jeff Busby, TransLink: We are working on the last draft and while I can’t give you a specific date we will post it to the website when it is completed and if you have left us your contact information we can send you a link. As well we are trying to compile a list of questions and we will post answers.

Q: Who are your partners?
A: Jeff Busby, TransLink: The Ministry of Transportation, Federal Government, SFU, SFU Community Trust and the City of Burnaby.

Q: Is the project started because of bad weather because, if your concern is about the environment and GHGs – can it be reduced other ways since we don’t have that much snow every year?
A: Jeff Busby, TransLink: You understand the project is about bad weather, reliability, environment and waiting. At TransLink we are trying to make more people take transit and therefore we want to address reliability, environmental improvements, reduced travel time, improved customer service and it is cost-efficient.

Q: Will it stop at Forest Grove? I think that the bus service are atrocious.
A: Jeff Busby, TransLink: That is an interesting question. This could be investigated further

C: The project does not benefit this community.
A: Jeff Busby, TransLink: If the project moves forward I want to have a conversation about transportation in your community and that is the business we are in.

Q: I was surprised to hear UniverCity was getting a special deal and they are the only people benefitting for this, what happens in the future?
A: *Jeff Busby, TransLink:* The community transit pass is unrelated to this project. It was created to encourage people to use transit and funded by UniverCity (developers), VanCity and TransLink. TransLink has decided to stop the program because the other partners decided not to participate. The community pass (payment) is included in their strata fees.
Question Sheet: The record notes that this sheet of questions was circulated at the meeting and following the conclusion of the Question & Answer period Mr. Busby reviewed the questions and noted where they had been answered earlier or provided the answer.

1. Where exactly are you in this project and what is the purpose of these meetings with Forest Grove complexes/strata’s when your public consultations were over at the end of June? What influence will these meetings have on the project? Answered

2. Is the business case for this project complete? When do we see it? Is this project going to be included in the 2012 Base Plan? The project is not in the 2012 Base Plan but a comment was in about the study. The rest of the question was answered.

3. Would this project remove only one bus route to SFU? How many cars do you anticipate would be taken off the roads with this project? How does this compare with the Evergreen Line, Surrey/South Fraser, UBC Line and so on? As I indicated earlier we would remove the #145 bus route. I don’t have the specific number on cars and work is still on-going for Surrey and UBC.

4. Have you given serious consideration to alternative solutions? Other TL projects have had alternatives, why not this one? (Broadway corridor – 6 alternatives; South Fraser – 8 alternatives). Where is the evidence that alternate routes and technologies were studied? Yes answered - we talked about different technologies and routes.

5. Have less expensive transit options been explored, such as a low profile urban gondola for instance? What about light rail? It is effective in both cost and performance in other parts of the world. Why not here? Answered

6. Most uses of gondolas have been in rural areas, especially over water. Wouldn’t the costs be higher for a gondola line in an urban area? Yes, the cost estimate is much higher than a typical gondola project for example the Whistler gondola was built for $50 million. We want it to integrate well with SkyTrain and there will be more consultation and design if the project goes ahead.

7. How many riders do you project would use this transit line? Who would they be? How does this compare with the ridership numbers of Evergreen Line, Surrey/South Fraser, UBC line and so on? We don’t think there would be more fare revenue but we would be reducing bus service and there would be savings there.
8. Would the income from ridership be sufficient to cover the capital outlay and maintenance costs of this project? How accurate have these types of projections been for other transportation projects such as Golden Ears and Port Mann? Answered and in the business case.

9. Where is the money coming from to fund this project? Identify who and how much? What is the cost of financing? What is the return on investment? Answered relative to the funding for study and we don’t know what the future funding will be but we will talk to senior levels of government. Let me review the community pass for the UniverCity development - everyone paid for it through their strata fees. We think this project is a way to address transportation issues. Examples of other community passes are relatively common and it is a tool used to encourage the use of transit. Community passes are extensively used in California. The community pass issue is one TransLink can get you further information on this however there is a need to keep the issues separate.

At this point several residents expressed ‘displeasure’ and ‘shock’ upon hearing about the community pass for the UniverCity residents expressing the belief there was some sort of collusion that had taken place between TransLink and UniverCity.

10. What happens if or when the project runs over budget? Where would additional funds come from? Who would be responsible? TransLink would be responsible, the budget has been estimated with contingencies and we believe it will come in on budget.

11. How big are the gondola cars and how many cars would be on the line at one time? How often would a gondola car pass by our homes (going up and down)? Size of small bus, 35-people. We can get you further information on cabin dimensions.

12. How many hours per day and between what times would these gondolas run? 6:00 a.m. to midnight – answered.

13. What are the noise levels for this type of transportation? Would these noise levels affect the birds and other wildlife that live in the forests below the line? We talked about noise levels earlier.

14. Would you have to clear the forest under the line to allow for maintenance and rescue? No. We want to document the communities concerns and we have heard that the residents want the trees to stay. A construction plan will be developed. The project would need to be funded in the annual plan, an environmental assessment needs to be undertaken, access agreements need to
be negotiated as do construction plans - your question about cables breaking are four steps away.

15. How many days a year would this line break down, like the Whistler gondola? The Oregon line has only been down one day in five-years. Maintenance shutdowns are planned. The cables don’t break and are replaced at the end of the 25-years they restrung the cables. There is a very high level of reliability. At Whistler they close for lighting and that is something we have to learn more about.

16. Is there a fire hazard with this technology? There is a lot of flammable material in the forest. Answered

17. On a more personal note, why would we ever support this project when it would not even serve our community yet we would have to endure the stress due to decreased privacy, increased noise, disturbed sleep, decreased enjoyment of the natural setting, and fear of accidents and malfunctions in the line? There is a potential for modifications on residents’ homes – TransLink would work with the residents to determine what would fit their needs. The remainder of the concerns has been addressed through the earlier discussions. The environmental assessment will be examining the environmental concerns and there will be a procurement process for that section of the project.

QUESTION AND ANSWER SESSION CONTINUED:

Q: My recollection is that everyone was promised things when SkyTrain was being built and none of the things promised ever came to pass. You are going right over our property and you promise things but it doesn’t end up that way? That was my experience with SkyTrain.

A: Jeff Busby, TransLink: I understand your skepticism and I take this very seriously as a professional - legal mechanisms come through the environmental assessment and any agreements negotiated with you or the City of Burnaby will be enforced. There will be lots of legal agreements for laying out the project if it moves forward.

C: Thank you very much for the extended Q&A and going through the questions. We really appreciate it.

C: One of the partners missing is Kinder Morgan and we have an incredibly close relationship with them, they fly the pipeline every Wednesday with a helicopter. Have you meet with them? That’s a real big one. Have they identified any concerns?

A: Jeff Busby, TransLink: Julia (Kinder Morgan) and I have been touch about this project and the person who oversees their assets and we know we have to
work with them. They had a huge concern about going over the tank farm. We will negotiate a statutory right-of-way and it will spell out the obligations.

4. **NEXT STEPS**
   - Thank you to all for participating.
   - TransLink will continue to meet with the strata and co-ops in the next few weeks.
   - Email: if you leave us your email address we will advise you when the business case is posted and the dimensions of a gondola car and the background information on community passes.
   - If you have any further questions please contact Kristen Lillyman at TransLink directly. Kristin.lillyman@translink.ca

5. **CLOSURE**
The meeting closed at 9:10 p.m.