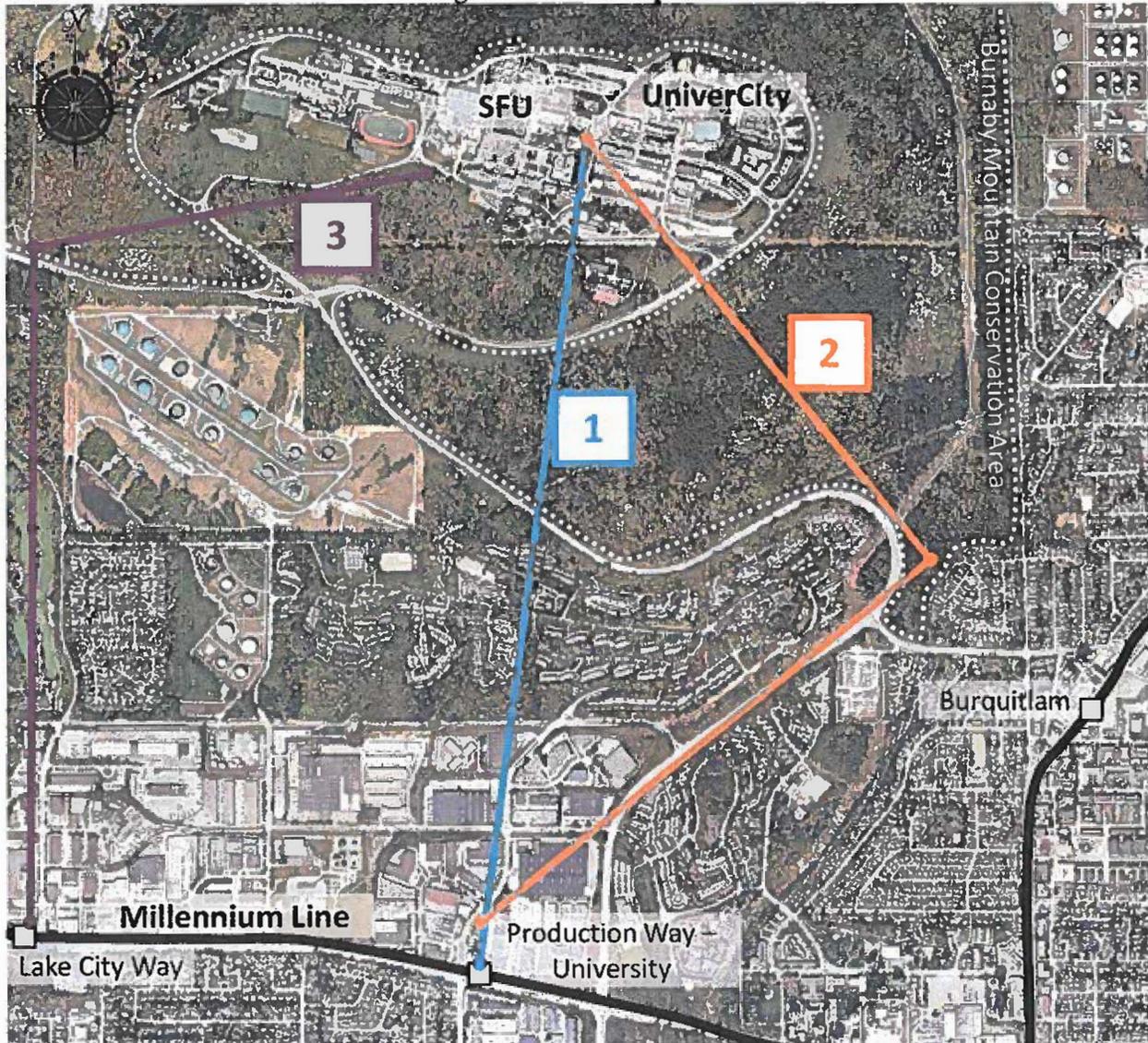


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Figure 1: Route Options



TransLink's public consultation process demonstrated that the gondola has strong public support across the city and region, except in one neighbourhood. Forest Grove residents expressed concerns about certain aspects of the project, including:

- noise, privacy, visual presence, property impacts, and compensation;
- system safety and objects falling from cabins;
- environmental impacts including trees, streams, and land; and,
- exploring alternative transit solutions, including battery electric buses.

Arising from this process, TransLink has made several commitments to Council and the community if the project proceeds. These are shown in *Appendix A*. The strongest commitments relate to noise and compensation. The gondola will not exceed background noise levels in Forest Grove, and TransLink will compensate property owners for passage over their lands and the footprints of the towers and

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terminals. TransLink's compensation process is consistent with provincial legislation and comparable to that of other agencies.

Other commitments reflect work that would be done if the project advances to further design refinement and Business Case completion. These include measures to reduce potential impacts related to privacy, property, safety, visual presence, environment, and First Nations cultural heritage resources.

The current report informs Council of additional work done since 2021 July and seeks Council's endorsement of the Burnaby Mountain Gondola project via Route 1.

2.0 POLICY

The gondola project is supportive of all three targets and all six goals of *Connecting Burnaby, Burnaby Transportation Plan (2021)*. It is consistent with directions found in the *Climate Action Framework (2020)*, *Economic Development Strategy (2007)*, *Social Sustainability Strategy (2011)*, and *Environmental Sustainability Strategy (2016)*. It supports the Connected Community goal of the *Corporate Strategic Plan (2017)*.

3.0 RECENT WORK

In the last half year, TransLink has engaged in additional technical work in support of a Business Case (in progress) and to answer questions raised by Council. The following information is new since July:

1. **Privacy:** TransLink conducted a drone flight simulating Route 1. The drone travelled at the correct gondola car elevations, rising at proposed tower locations and dipping in between. It travelled at the anticipated speed of the gondola cars. The video simulation footage was provided to Council, illustrating that privacy intrusion was minimal due to factors including gondola height, viewing angle, and the presence of numerous mature trees that restrict sight lines.
2. **Ridership:** Modelling indicates that 21% of gondola riders are expected to be Burnaby residents, followed by Surrey (19%) and Vancouver (17%). Every trip using the gondola would either begin or end in Burnaby, and some would do both. The improved service would attract more people to transit, eliminating 9,000 daily car trips on Burnaby Mountain by 2035.
3. **Safety:** A review of other urban transit gondola systems demonstrated that gondolas are one of the safest modes of transportation. Objects cannot be ejected from the cars, which would be fully enclosed. The three-cable design is inherently resistant to vandalism, with physical and monitoring measures available to prevent unwanted access to infrastructure.
4. **Environment:** A baseline report of existing conditions is currently being compiled. Findings to date indicate that there are no aquatic or terrestrial species of concern in the gondola corridor, and no critical habitat. There are relatively few trees impacted (compared to other alignments), and none of exceptional value.

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5. **Visual impact:** While details can change, the current concept anticipates only five towers for the entire route, with visual impacts comparable to hydro towers. All towers are outside the Forest Grove neighbourhood, with minimal visual impact from homes due to the screening effects of the forest. The most prominent tower is likely to be south of Broadway, near Production Way. Currently estimated to be 115 metres tall, this height helps to minimize privacy impacts and development constraints for businesses below, and provide clearance above trees. Between towers, there are visual impacts from the cables and cars. TransLink has provided Council with images simulating this impact, which is minor due to the gondola height (distance of the gondola from an observer on the ground) and the screening forest.
6. **Property:** TransLink will be able to enter into negotiations with property owners once the gondola is an approved and funded project. However, in the interim TransLink has provided additional information on their *approach* to property negotiations. They will provide compensation to owners of private properties where the gondola has a footprint on the ground (terminals, towers). They will also provide compensation for aerial passage above private properties within the 20-metre gondola corridor. TransLink will first seek to minimize the property impacts, and then provide compensation to remaining owners based on fair market value. Major bends are impossible without introducing a large mid-station, but TransLink has already fine-tuned Route 1 with smaller bends to minimize the number of impacted residential properties. TransLink has outlined a five-step process for discussions with individual property owners: *informing* them of the project and property impacts, *engaging* in discussions, *appraising* the property, *agreeing* on compensation, and *acquiring* the property.
7. **Engagement:** TransLink provided additional information on the extensive engagement process with residents, businesses, and First Nations. If the project advances, additional consultation is anticipated in 2022 (and subsequently).
8. **First Nations:** Dialogue to date indicates that the First Nations view the project favourably. Key interests expressed to date include the cultural significance of Burnaby Mountain, the protection and enhancement of cultural, archaeological and environmental values, the cumulative effects of development, and climate change. TransLink is committed to ongoing engagement and participation of First Nations as the project proceeds, including minimizing impacts to Indigenous rights, title, and interests. Through a Partnership Agreement, below, there is an opportunity for the City to participate in this process.
9. **Partnership:** TransLink has expressed a desire to enter into partnerships with the City and Simon Fraser University (SFU) for advancement of the project. Partnership Agreements would clarify the roles and responsibilities of each agency. In negotiating an Agreement, TransLink would be interested in discussing the potential role of the City regarding: protection of the corridor through the City's development approvals process, acquisition of lands that may come on the market before TransLink has project funding, waiving of City fees, and contributions to the capital cost. These would all be subject to negotiation, and approval by Council prior to execution of the Agreement.
10. **Benefits:** Aside from the direct benefits that have already been identified (capacity, travel times, mode shift, emissions, etc.), TransLink is exploring a range of opportunities to provide benefits to communities along the corridor. In principle, these could include amenities such as

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improvements to bus service, infrastructure for active transportation, admission to SFU facilities, and enhancements to natural areas and streets through planting of replacement trees.

11. **Mayors' Vision:** Since 2014, TransLink service priorities have been guided by *Regional Transportation Investments – a Vision for Metro Vancouver*, more commonly referred to as the *Mayors' Vision*. Funding was provided in the 2014 *Vision* to explore the feasibility and potential routing of a gondola connection between the SkyTrain network and Burnaby Mountain. The Mayors' Council on Regional Transportation is now in the process of developing a *New Vision* to guide TransLink's priorities and investments for the next decade. With exceptional financial performance (benefits exceed costs by a factor of 2.5), the gondola is a strong contender for inclusion in the *New Vision* and implementation within the decade. However, this can only happen if the project is endorsed now by Council. The projects to be considered for inclusion in the *New Vision* will be identified and assessed in January and determined in early February. That list of candidates will not include projects that lack local council support. Due to its financial performance, inclusion of the gondola would not preclude the City from obtaining an *additional* major transit project within the *New Vision*, such as rapid transit in the Willingdon corridor as discussed in a separate report.

4.0 DISCUSSION

TransLink has followed through on Council's requests, continuing the evaluation of a possible gondola project using the Core Principles identified by Council in 2019. As a result, significantly more is now known about the project details, benefits, costs, and impacts. TransLink has worked diligently to answer Council's questions.

4.1 Benefits

A gondola is a unique form of urban transport that has been gaining acceptance globally. The proposed Burnaby Mountain Gondola offers increased capacity, shorter travel times, more frequent departures, better customer experience, mode shift from car to transit, greater winter reliability (particularly important for people with mobility challenges), and reduced noise and emissions when compared with buses. Capital costs are low for the level of service being provided, resulting in superior financial performance.

The project is also strongly supportive of directions established in *Connecting Burnaby*, the City's recently-adopted transportation plan. It supports all three major targets of mode shift, reduced emissions, and improved safety. It also supports all six goals of the plan: transportation options and choice, safe and secure mobility, healthy community, green mobility, prosperous community, and connected community. The gondola also supports growth of the campus and UniverCity, consistent with the *Official Community Plan* and SFU's *Campus Master Plan*.

4.2 Impacts

The aerial routing allows for unusually small impacts. The physical footprint on the ground is smaller than any other rapid transit technology (e.g., elevated SkyTrain, surface Light Rail Transit, etc.). This, in turn, means a very small impact to trees, streams, habitat, soils, and potential archaeological resources. Because of its elevation, the impact on in-home and business privacy is less than is

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experienced all over the city near SkyTrain lines, or even bus routes. Other than the towers, the gondola would have a smaller visual presence than the concrete guideway of an elevated SkyTrain. Gondolas are a very safe mode of urban transport. This report identifies numerous commitments made by TransLink to continue to reduce the project's impacts.

While performing very well by almost any measure, the gondola has one unique impact: it would pass above two multi-family residential properties, with approximately 18 homes within the 20-metre gondola corridor (though, unlike SkyTrain, the homes and residents can remain where they are). If the project advances to the project delivery phase, TransLink has committed to fair market compensation for residential and business property owners.

In summary, the gondola has lower impacts than any rapid transit project previously endorsed by Council, or any other rapid transit project that would arise from *Connecting Burnaby*.

4.3 Endorsement

The current initiative by the Mayors' Council on Regional Transportation to develop a *New Vision* has created a unique decision point for the gondola project. An endorsement by Council would see the gondola considered for inclusion in the *New Vision*, for possible implementation within a decade. A lack of endorsement would exclude the project from the *New Vision*, deferring the project for at least ten years.

The project has demonstrated some of the strongest benefits (per unit cost) and smallest impacts of any rapid transit project. It is supportive of *Connecting Burnaby*. TransLink has demonstrated a strong commitment to continue mitigating the project impacts, and compensating property owners for aerial passage and the physical footprint of the gondola.

To allow for advancement of the project to the next stage of development, recommendations are listed below.

5.0 CONCLUSION

TransLink has completed the work that Council requested, conducting additional technical analyses and public engagement consistent with Council's Core Principles for the project. The results of that work indicate significant challenges and a lack of public support for Routes 2 and 3. In contrast, the analyses show Route 1 has the highest benefits, lowest impacts, and strong support across most of Burnaby and the region. The gondola has uniquely low impacts for a rapid transit project. TransLink has committed to continue mitigating those impacts and compensating private property owners for aerial passage and the physical footprint of the gondola. The project allows for rapid progress on all the targets and goals of *Connecting Burnaby*.

Council, at the Closed Council meeting held on 2022 January 24, endorsed the Burnaby Mountain Gondola project via Route 1. It is therefore recommended that Council receive the report for information a copy of the report be forwarded to:

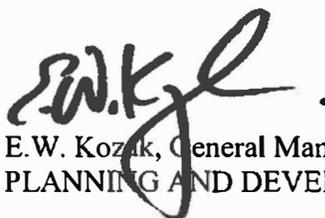
- Marisa Espinosa, Director of Major Studies, TransLink;

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- Terry Beach, MP; and
- Honourable Katrina Chen, MLA.



J. Jota, General Manager
ENGINEERING



E.W. Kozak, General Manager
PLANNING AND DEVELOPMENT

SR:tn

Attachment

cc: General Manager Parks, Recreation and Cultural Services
General Manager Community Safety
General Manager Corporate Services
City Clerk

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APPENDIX A: TRANSLINK'S COMMITMENTS

Avoid increases in noise

- TransLink commits to designing and operating a gondola system that does not exceed background noise levels in Forest Grove.
- Additional noise monitoring and modelling will be conducted to verify this commitment; in addition, TransLink will model in-cabin noise impacts on the Forest Grove neighbourhood.

Protect privacy

- TransLink will explore outfitting gondola cabins with tinting windows that will automatically block visibility into homes and businesses.

Minimize property impacts

- TransLink will continue to refine the gondola design to minimize the number of properties and residential units within the gondola right of way.

Compensate impacted property owners

- TransLink will provide compensation to impacted property owners for aerial passage of the gondola. Residents and businesses can remain during operations and are not required to move.

Maximize safety

- TransLink will complete a safety assessment to better understand risks to the system from external sources and incorporate mitigations into the design.
- TransLink will develop operational safety procedures with guidance from ropeway experts.
- TransLink will conduct industry-standard maintenance to ensure the integrity of the system.
- TransLink will implement design and policy measures to ensure passenger safety.

Minimize visual presence

- TransLink is committed to assessing the visibility of the gondola and using natural topographic features and design elements to minimize the visual presence of the gondola in the Forest Grove neighbourhood.

Minimize environmental impacts

- TransLink will continue to assess and mitigate potential environmental impacts of the project.
- TransLink will seek to minimize construction-related environmental impacts.
- TransLink will adhere to tree replacement and other requirements in the City of Burnaby's Tree Bylaw.

Minimize impacts to Indigenous heritage resources

- TransLink will commit to conducting an Archaeological Impact Assessment (AIA) for ground disturbing activities in areas identified as AIA required.
- TransLink will ensure that all crews conducting ground disturbing activities within any portion of the project area receive Chance Find Training and a project specific Chance Find Procedure.
- TransLink will continue to engage with the Indigenous Nations to better understand areas of current and traditional cultural importance.