

West Seattle Deserves a Well-Conceived Feasibility Study For an Aerial Gondola Feeder to Light Rail System

On April 7, 2022, Sound Transit issued a “Feasibility Report” on utilizing gondola technology to connect West Seattle to our region’s light rail system at the SODO Station. The report was in response to the request by a West Seattle civic group known as West Seattle SkyLink (“SkyLink”) that has advocated for a technical engineering study by gondola experts. SkyLink is concerned about the potential displacement of hundreds of housing units and dozens of businesses that will result from a light rail feeder to the North Delridge, Avalon, and Alaska Junction areas of West Seattle. In addition, SkyLink maintains that the estimated five years for construction of the light rail feeder would do harm to a large number of businesses and cause major traffic disruption for a substantial portion of the residents of West Seattle on the heels of transportation problems caused by the closure of the West Seattle high bridge and the construction of the RapidRide H line on Delridge.

SkyLink is also troubled by the \$3.2 billion estimate to bring the light rail feeder approximately 4.7 miles from the SODO Station to West Seattle. By comparison, the cost to build an aerial gondola feeder connecting to both SODO and the International District may be as low as \$200 million and the total project cost certainly less than \$1 billion. Sound Transit estimates a light rail feeder may open by 2032 to SODO while the information SkyLink has obtained from engineering firms indicates that an aerial gondola feeder could be operational much sooner.

The Report by the Sound Transit agency did not rise to the level of a “feasibility study” and focuses on using gondola technology for regional lines

rather than the unique challenges of West Seattle. SkyLink had never proposed to use gondolas that way, instead suggesting the possibility of another light rail line to South Park and surrounding low-income areas of the south Duwamish peninsula. The Feasibility Report was prepared in-house without any analysis by an engineering firm that has experience with gondola technology, design, or construction as is usually the case. There are several US firms qualified to undertake a feasibility study for an urban gondola feeder. In fact, there is a firm very near Seattle that has undertaken many such studies: SCJ Alliance located in Lacey, Washington¹.

Another glaring deficiency in the Sound Transit Report is the lack of a review of current urban gondola projects. Urban gondola technology is not static. There are constant improvements being made, and new applications are being undertaken to meet challenging topography. For the most part, Sound Transit's report relied upon a paper written by them in 2014. Since then, many new projects have been built and numerous urban gondola projects are being considered by governmental agencies, both foreign and domestic, which Sound Transit fails to mention.

First, most of these urban gondola projects are being considered as feeders or connectors to a light rail or rapid bus system, just like an urban gondola would be for West Seattle. Second, most of these projects are being considered because an urban gondola is particularly well suited for topography where steep hills are involved or when it is necessary to cross a navigable waterway. A few of the projects not considered by Sound Transit are discussed below.

¹ <https://www.scjalliance.com/expertise/cable-transit/>

LA METRO has created the Los Angeles Aerial Rapid Transit (“LAART”). This urban gondola feeder will go from Union Station, a hub for both bus and light



rail, to Dodger Stadium. It also will stop at the underserved communities of El Pueblo, Chinatown, and Solano Canyon². There are several steep hills between Union Station and Dodger Stadium that make an urban gondola a suitable choice for this Los Angeles feeder.

Recently a feasibility study³ and an alignment study⁴ were completed for an urban gondola in Pittsburgh. Urban gondola technology was the desired choice because of a river crossing that had to be



made. Crossing a navigable river with plenty of ship traffic suggests that the best

² See Community Slide Deck, <http://www.laart.la/documents/>

³ https://apps.pittsburghpa.gov/redtail/images/8370_Pittsburgh_Gondola_Report_2018.pdf

⁴ <http://www.mgmclaren.com/projects/alignment-study-pittsburgh-sky-car/>

choice is a transportation feeder with the smallest footprint. This situation is also a factor for West Seattle where the transit feeder must cross the Duwamish River.

On April 11, 2022 an urban gondola feeder went into commercial operation in Haifa, Israel⁵. Once again, gondola technology was the preferred choice because of the extremely hilly



Haifa cable car on April 11, 2022

topography. The Haifa urban gondola is expected to take thousands of automobiles off congested highways.

The San Diego Association of Governments (“SANDAG”) completed an extensive mobility study for the Pacific Beach Corridor in which urban gondolas were a key feature for connecting with light rail⁶. The hilly



terrain played an important role in considering an urban gondola as a connector. The study concluded that *urban gondolas were considered high-capacity transit*.

⁵ <http://www.jewishpress.com/news/Israel/new-haifa-cable-car-begins-operation/2022/04/11/>

⁶ http://www.sandag.org/uploads/publicationid/publicationid_2094_21561.pdf

The Report also fails to mention the urban gondola feeder in Paris that will go into commercial service in 2025. An urban gondola feeder was chosen because it is much cheaper than light rail, leaves a very small footprint, and is the best modality to use when crossing obstacles such as road, rail and water-ways.⁷



The Sound Transit Report did its best to throw as much dirt as it could on urban gondolas as a feeder to its light rail system without noting the many other public transportation agencies, both domestic and foreign, that have found an urban gondola feeder is exactly the appropriate complement to their bus and light rail systems. The challenges posed by urban gondolas pale in comparison to the cost, disruption, and implementation timeline of a light rail feeder for West Seattle.

The Report fails to mention a light rail feeder to West Seattle would cost at least \$2 billion dollars more than an urban aerial gondola feeder. Even assuming the elimination of the Avalon Rail Station or putting the Fauntleroy Rail

⁷ <https://www.weforum.org/videos/cable-cars-for-paris-commuters-to-launch-by-2025>

Station underground, the cost differential between a light rail feeder and an urban gondola feeder for West Seattle is gigantic. It is interesting to note how Sound Transit is now pushing rail tunnel alternatives, which are notorious for cost overruns. Last week a light rail project in Austin, Texas upped the cost of its proposed tunnel from \$2 billion to \$4 billion.

In its Draft Environmental Impact Statement (DEIS), Sound Transit mentions dozens of businesses and thousands of residents will be “disrupted” by construction of the West Seattle light rail feeder. Yet in its Report with all its comparisons, Sound Transit fails to make any mention of the comparison in “disruption” between an urban gondola feeder versus a light rail feeder to West Seattle. This is extremely telling. *A major advantage of a gondola feeder is avoiding having to condemn properties with residential dwelling units or businesses.* The DEIS speaks of residential and business “disruptions.” What a term! The DEIS seems to imply that if a place of business is lost due to condemnation, the business can just move down the street and reopen. There is so much wrong with that assumption. By the same token, when a property with a residential dwelling unit is condemned, that does not mean there is another affordable dwelling unit close by.

West Seattle residents and businesses have had enough suffering due to closure of the West Seattle Bridge for over two years. The five years for construction of a light rail feeder would inflict more distress on much of the business community through detours, noise, and in some cases outright elimination of affected businesses. Following are a few businesses at risk of destruction by Sound Transit choosing a light rail feeder for West Seattle.

Grocery Stores: Trader Joe's, Safeway and Bartell Drugs at Jefferson Square, Delridge Deli.

Daycare: Alki Beach Academy in the Frye Commerce Center.

Restaurants and music venues: Skylark, Ounces, Jones BBQ, Pecos Pitt BBQ, Taco Time, Buddha Ruksa, West Seattle Brewing, Subway.

Auto Mechanics: Pep Boys, Les Schwab, Tom's Auto, Maestro Motors, Jiffy Lube.

Banks: US Bank, Home Street Bank.

Fitness: YMCA, LA Fitness, Sound Physical Therapy.

Harbor Island: Many marine-related businesses.

Sound Transit's Report fails to compare the environmental impact of urban gondolas with its light rail alignments, in particular the tall guideway Sound Transit envisions which will require record amounts of steel, concrete and construction trucks, eliminate greenspaces, and negatively impact wildlife and the Duwamish river. Paris is integrating an urban gondola into its multi modal system in order to reduce dependence on cars and create a more sustainable public transit system. Bogota's mayor is looking to use urban gondolas in several places in that hilly city in order to cut carbon emissions. And Germany is making urban gondolas a standard public transit option as they are quicker and easier to integrate into existing urban settings and meet transit affordability and carbon reduction goals. An urban gondola could start reducing carbon emissions SOONER by offering a reliable, convenient, efficient, high-capacity public transit option to West Seattle residents this decade.

Nearly 1400 residents of West Seattle have signed a petition requesting Sound Transit undertake an urban gondola feasibility study by outside aerial technology experts. That is not what the Sound Transit agency produced. Instead,

a document was written in-house by individuals seemingly unaware of recent urban gondola projects under consideration or completed by public transportation entities considering the integration of urban gondola feeders with light rail systems and/or public bus networks. This is the reason why feasibility studies are usually undertaken by outside firms having experience with the design or construction of urban gondolas. Sound Transit could learn from its neighbor, the City of Kirkland, which is considering use of a three-station urban gondola feeder to connect its downtown transit center with Sound Transit's rapid ride bus station at I-405 / 85th Street. A feasibility study for an urban gondola feeder was conducted for Kirkland by SCJ Alliance, a firm with the credentials to produce such a study.

The residents and businesses of West Seattle deserve to have a properly produced study that compares a light rail feeder for West Seattle with an aerial gondola feeder. This study should include a comparison of the cost, number of residents and businesses at risk of being asked to move, disruption to businesses and residents during construction, environmental impact, and projected comparison dates for when the new feeder alternatives (light rail vs. gondola) would be in operation and providing service.

The Sound Transit Board is very concerned about cost savings as evidenced by their recent approval of contracts to find cost saving solutions and last week's announcement of potential cost savings ideas that would be changes to the DEIS. ST3 language allows the Board to make changes to the voter approved plan in case it turns out to be impractical or much more expensive. They could decide to commission a proper feasibility study by an outside expert for a West Seattle urban gondola feeder.

