

Sound Transit Community Oversight Panel Virtual Meeting Summary

September 14, 2022

COP Members Present: James Peyton, Helen Powell, Larry Sauvé, Joe Scorcio, Paul Thompson, Tracy Oster, Carston Curd, Lucas Simons, Charlotte Murry, Lorenzo Frazier, Tian Pierce, Diana Cambronero Venegas, Tom Norcott

COP Members Absent: Gabriel Clark, Scott Lampe

Others Present: Kathy Albert, Katie Flores, Adam Montee, Chris Hoffman

Meeting New Panel Members

Larry began the meeting by welcoming new members and describing the general process of how the meetings work. He then indicated that he'd like for COP members to introduce themselves, starting with current members. He started by introducing himself, his tenure on the COP, and his experience. The remaining current COP members introduced themselves and shared their background and experience. Larry then asked new COP members to introduce themselves, provide a brief overview of their background and experience, and then invited the COP administrator and Sound Transit staff to introduce themselves as well.

Larry then used the additional time allocated to review the process of approving the meeting summaries and emphasized that the summaries are not minutes. He said that the administrator prepares a draft summary, submits it to staff for review, and then sends it to the panel for their review. Larry asked if there are any comments on the August 10th summary, which was subsequently approved.

Larry shared that the agendas usually include topics for the next meeting and that panel members should feel free to ask any questions they'd like answered in the upcoming presentations. Larry indicated that COP members are encouraged to ask questions as that is one of the COP's primary duties.

Kimberly Farley, Deputy Director of Sound Transit, welcomed the new COP members.

Vertical Conveyance Program Update

- John Carini, Deputy Director of Vertical Conveyance

Sound Transit staff began the presentation with an overview of the vertical conveyance program, which included a vision statement that embraces a passenger-focused program centered on safety and reliability. Staff reviewed the number of escalators and elevators in the system; it's grown from 71 in 2015 to 193 in 2022. By 2041 they estimate they will have 575 escalators and elevators. Staff then talked about growth, optimizing performance, enhancing communications, and their asset replacement program. Staff said there is an emphasis on communications with riders about outages and their resolution. Sound Transit does not have real-time information on outages; they rely on security staff and other employees to report outages. They are updating their technology to better track usage and performance. Staff then reviewed escalator availability with a target of 95%. For elevators, they have a 97% availability performance target.

Staff provided documentation for outages and the cause of each outage. To date in 2022, they have had 1108 unplanned outages. Staff provided examples of different outage causes. A COP member asked why downtown facilities are not included in the total outages. Staff said they are tracking them separately due to ongoing known repairs needed to get these aged assets safe and operable for passengers, but once these

issues are resolved they will include them in the totals. Staff then reviewed the four downtown tunnel stations, indicating that Sound Transit took over the management of vertical assets in January 2021. The age of these assets dates back to 1992 when the tunnel opened. Sound Transit is in the process of taking ownership of the downtown tunnel from King County, which goes into effect later this year. Fifty-seven of the 58 assets in the tunnel are over 30 years old and the typical life span for that equipment is 25 years. The Sound Transit board approved \$8.7 million to spend on addressing the tunnel asset issues.

Staff then reviewed the components of the elevators and escalators and the vertical conveyance replacement program, highlighting that the first priority is safety, followed by maintenance and replacement. Sound Transit is approaching replacement as if they are building a new station because replacement includes a comprehensive upgrade of structural, mechanical, and HVAC elements. In response to a question from a COP member about the need to program escalators, staff replied that the new escalators include advanced coding that accounts for different levels of use. There are several constraints to the replacement program, including the number of qualified vendors and contractors, manufacturing lead times, and long installation timelines. They also must consider staggering the replacements to minimize service and passenger impacts. Staff reviewed current replacement progress, beginning with the International District Station (IDS), where construction is scheduled to begin in late 2023 or early 2024. Staff then reviewed progress on the remaining downtown stations. COP member asked why the construction timeline is “to be determined” in some stations. Staff responded that they won’t know timelines until they go through procurement at the IDS, which is effectively serving as a pilot. A member asked if there might be an uptick in staffing availability as we emerge from COVID. Staff indicated that available staff is at full capacity, but it appears that there will be additional resources becoming available in the next several months.

Construction Projects Update

- Kimberly Farley, Deputy CEO

Sound Transit staff began with an overview of the presentation, which included construction challenges, strategies to address them, and opening dates. Current challenges include COVID, supply chain issues, staffing shortages, and the four-month concrete strike. Some of these challenges are more significant on some projects than others due to the various stages of construction and what’s needed during each stage. The overall strategy for managing risk is to analyze them at the programmatic level. On East Link, which includes 14 miles of new rail, with 19 stations and the first rail line to cross a floating bridge, top risks are related to quality – concrete plinths and pre-cast block rail fastener bolt inserts. Regarding the concrete plinths on the I-90 segment, Sound Transit first discovered a problem on the east side of Lake Washington in 2019. The contractor used repair mortar to address the problem, which unexpectedly failed. In 2021, the contractor began to implement a range of solutions. However, when rebar was exposed during the repair process, additional quality issues were evident. In June 2022, it was discovered that the new repair mortar was not working. Sound Transit hired a specialist to look at these problems and to help resolve them. Currently, there is a plinth replacement and repair strategy in place. With regards to pre-cast blocks on the I-90 bridge, blocks were flaking or spalling. Contractor testing of the blocks indicated they are generally sound, but blocks that are showing issues are being replaced—which amounts to a very small percentage of blocks. It was also discovered that the nylon inserts in the blocks were getting stripped so all of them have been replaced. Sound Transit has increased training staff for inspection and quality control to help address these quality issues, and the agency is confident that these issues are not insurmountable.

On the Federal Way Link Extension, which is a 7.8 mile long mostly elevated alignment along I-5 with three new stations, the issue is unstable ground just south of the Midway Landfill. Analysis has identified

a liquefaction zone deep underground. Soil movement was discovered, and the contractor planned to place piles to stabilize the soil. However, in July a slide occurred that required a lane of I-5 to be closed for 3 days. Sound Transit is currently working with WSDOT and the US Army Corps of Engineers to address the issue. This issue is expected to delay opening until early 2025, which is several months later than the original opening schedule of late 2024. For Lynnwood and Downtown Redmond Link Extensions, risks are relatively minor. Delays are primarily due to the concrete strike and staffing shortages. For reference, Lynnwood Link is 8.5 miles long and has four new stations. Downtown Redmond is 3.4 miles long and has two new stations. Schedule impacts on these two projects are 4-6 months.

A programmatic risk assessment is ongoing. All projects are connected so it is vital to do this assessment. There are potential resource constraints if all projects need resources at the same time. Staff are analyzing what might happen if Bellevue does not open first and how that might be managed from a system perspective. The next steps include additional analysis to determine revised opening dates.

Discussion

Vertical Conveyance Program Update – COP members asked several follow-up questions, which included a question about a planned second elevator at the SeaTac Airport Station. Staff indicated that a second elevator will be built, and construction should begin in late 2023 or early 2024. Staff noted that the current elevator experiences extremely high usage compared to other elevators in the system. The COP asked additional questions about different grades of escalators, ranging from affordable ones to more durable and expensive ones. Staff said they learned a lot of lessons from the escalators that were installed at the University of Washington Station and said they changed their design standard to include higher-grade escalators at future stations. COP members asked additional questions about performance metrics and communicating outages via Trip Planner. Staff indicated that they track metrics separately during peak hours in the morning and evening and that plans include adding that information to the website. With regards to the Trip Planner question, staff said that outages are not included there but customers can receive outage information by signing up for rider alerts. The remaining questions focused on water damage occurring to escalators at IDS and vandalism. Staff responded that due to water intrusion from the environment water does fill up escalator pits, but the issue is being addressed in the design process. With regard to vandalism, staff said that the majority of damage is to glass in elevators and that when glass is damaged the elevators have to be shut down. There are also operating panel and door issues. A COP member asked why escalators can't be used as stairways when they are inoperable. Sound Transit staff replied that it's a building code issue. The size of escalator stairs are not up to code and there is a potential for the escalator to reset and begin again while people are walking, which is a safety issue. Staff noted that all new escalators will have the ability to reverse direction.

Final Comments – The COP noted that seeing the availability threshold above 95% threshold is positive. They also shared that the presentation was very analytical and well done. Finally, they voiced how important vertical conveyance systems are and that significant problems occur when they are not working.

Construction Projects Update – COP members asked if Sound Transit and the contractor identified a root cause of the plinths and blocks. Staff replied that it's unclear why the repair mortar failed and that they are no longer pursuing repair mortar as a solution. The damaged plinths are being demolished and replaced. There are workmanship issues with the original plinths and the contractor has agreed that they are responsible for repair. Staff noted that plinths are used almost everywhere there is not a roadbed on all projects and this issue has not been seen elsewhere. When asked about the costs of the repairs staff said they aren't known but because the issue was due to the workmanship, and repair costs will be borne by

the contractor. A COP member asked if there will be any restitution from the contractor for poor workmanship and if the work is under warranty. Staff replied that the repair costs will be the responsibility of the contractor and that warranties do not come into effect until the acceptance phase so until the project is accepted as complete warranty is not an issue. COP members asked how Sound Transit is applying lessons learned to future projects. Staff said that on East Link they are stopping work and assessing quality at more frequent intervals and have incorporated that into other projects. The contractor is responsible for quality oversight but Sound Transit needs to be on-site to see when breakdowns occur; training has been approved to facilitate this change effectively. In Federal Way, the issue is different. In long, linear projects it is difficult to do enough borings to understand every inch of the alignment. It's a balancing act to determine the right number of characterizations to do without blowing the budget. COP members asked how the current delays affect the construction of projects that are being planned. Staff responded that planning staff and construction staff skills are very different so staffing shortages are not anticipated. COP members asked if there was any research or efforts with WSDOT to identify potential problems along the I-5 alignment for the Federal Way Link Extension. Staff responded that a full Environmental Impact Statement was done and that they worked with WSDOT closely. However, I-5 was built a long time ago so there is not a lot of information about the geotechnical explorations that were done. In response to a follow-up question about the chance that there are unstable soils elsewhere in the corridor, staff said that there is active construction along the entire Federal Way corridor and those issues have not been seen elsewhere. Lastly, a COP member asked if Sound Transit is considering combining the opening of East Link and Downtown Redmond Link Extensions. Staff replied that they hope to have an answer on that possibility later this year.

Final Comments – The COP said they appreciated the honesty and openness with the difficult news, and that type of communications they expect from the agency.

Member Reports

Larry reported that this will be his last meeting as chair. At next meeting, James Peyton will be taking over. James asked if potential impacts related to the rail strike could be presented at the next meeting.

Next Meeting: Wednesday, October 12, 2022, 5:30 – 8:15 PM

- Climate Vulnerability Analysis
- 2023 Service Plan
- Safety Office Update