



## Summary Minutes

### Rider Experience and Operations Committee Meeting March 7, 2024

#### Call to order

The meeting was called to order at 1:01 p.m. by Chair Walker and was available for viewing in person and online.

The meeting was recorded and can be found at <https://www.soundtransit.org/get-to-know-us/board-directors/livestream-video>.

#### Roll call of members

Chair	Vice Chair
(P) Kristina Walker, Tacoma Councilmember	(A) Ed Prince, Renton Council President

Board Members	
(P) Angela Birney, Redmond Mayor	(P) Dave Upthegrove, King County Council Chair
(P) Christine Frizzell, Lynnwood Mayor	(A) Peter von Reichbauer, King County Councilmember
(P) Kim Roscoe, Fife Mayor	(P) Girmay Zahilay, King County Council Vice Chair

Josephine Gamboa, Board Relations Specialist, announced that a quorum of the committee was present at roll call.

#### Report of the Chair

##### Welcome new members to Rider Experience and Operations Committee

Chair Walker welcomed the newly appointed Committee members following the February 2024 Board action to update committee appointments. Angela Birney was Mayor of Redmond and Girmay Zahilay was a King County Council Vice Chair.

##### 1 Line Incident

Chair Walker took a moment to acknowledge the incident on the 1 Line last week and noted this committee was unwavering in its support for a positive rider experience and understood the perception of safety was equally as important as safety itself on the light rail and other services. She thanked staff for their ongoing work to provide a safe experience for riders.

##### REO Metrics Annual Report

There was no monthly REO Metrics report on the committee's agenda. The team would return at the April 2024 meeting to present their annual report. The December 2023 data was included in the written report in committee members' packets.

#### CEO Report

Interim CEO Sparrman provided the CEO Report.

##### Activation Update

The 2 Line from South Bellevue to Redmond Technology Center opening was planned for Saturday, April 27, 2024. Interim CEO Sparrman shared that the ribbon cutting would take place at 10 a.m. at the Bellevue Downtown Station Plaza followed by festivities from 11 a.m. to 4 p.m. at all eight of the new stations. Sound Transit was partnering with Eastside organizations such as the Pacific Science Center, Downtown Bellevue Association, Eastrail Partners, Meta, Wright Runstad, the Bel-Red Arts District, Move Redmond, Centro Cultural Mexicano, One Redmond, Microsoft and many more. More updates about Opening Day activities would be provided in the coming weeks.

For Lynnwood Link Extension, the testing phase was taking place and on target to begin pre-revenue service this Spring 2024.

### 1 Line Incident

On February 26, 2024, Interim CEO Sparrman alerted the Board of a shooting that took place onboard a 1 Line train in the early morning hours that led to a death. He shared that the suspect had now been apprehended by authorities and assured the Board and the public that Sound Transit's concern is that passengers feel safe when and wherever they are on the system.

Since May 2023, the agency had increased site security presence, with over 500 officers providing security throughout the system, which allowed more real-time insight and presence for passengers and staff. Interim CEO Sparrman shared the importance of safety and educated ways to contact the Security Operations Center.

### Completion of Link closure / Retrospective

In early February 2024, the agency concluded a planned major service disruption of the 1 Line in the downtown tunnel. The agency successfully delivered all planned projects, including replacing track, repairing numerous signal boxes, and completing other simultaneous projects. The team also successfully collaborated on timely resolution of unexpected issues and stayed on schedule as a result. Many agency staff went far above-and-beyond their daily job duties to make this planned major service disruption a success. Interim CEO Sparrman thanked staff for their ongoing dedication to this work.

The agency aimed to continue to improve how to plan and execute planned disruptions in order to preserve planned service, minimize disruption to passengers, and create efficient project delivery. Later in the meeting, Moises Gutierrez and Pam Wrenn, would provide initial outcomes of an internal retrospective as part of the regular Passenger Impact Portfolio Plan update.

### Link Seat Pilot

Starting this week, passengers would begin seeing new vinyl seat covers on 10 Link trains as part of a three-month pilot. The pilot would test durability and maintainability of the covers and aimed to improve passenger experience and reduce operations and maintenance costs. Onboard these trains, passengers would find posters with a QR code to direct them to a survey where the agency could collect feedback about Link seats.

## **Public comment**

Chair Walker announced that public comment would be accepted via email to [emailtheboard@soundtransit.org](mailto:emailtheboard@soundtransit.org), in person, and would also be accepted virtually.

The following people provided virtual comments:

Chris Ramirez

Venu Nemani, P.E.

There were no written or in-person comments submitted.

## **Business Items**

### **For Committee final action**

February 1, 2024, Rider Experience and Operations Committee meeting minutes

**It was moved by Board member Roscoe, seconded by Board member Birney and carried by the unanimous vote of all committee members present that the minutes of the February 1, 2024, Rider Experience and Operations Committee meeting be approved as presented.**

### **For Recommendation to the Board**

Resolution No. R2024-03: Adopted the second phase of the 2024 Service Plan, which includes major service changes to ST Express routes serving Snohomish County when the 1 Line extends to Lynnwood in Fall 2024.

Brian de Place, Director of System and Service Planning, Marie Olson, Acting Chief Passenger Experience and Innovation Officer, and George McGinn, Executive Operations Director – Light Rail, provided the presentation.

**It was moved by Board member Roscoe, seconded by Board member Birney.**

Board member Frizzell recognized the agency's collaborative and creative approach to move this process along while managing expectations with the public.

Board member Birney asked what ridership was like during the early mornings and late evenings at the bookends of the stations and how outreach was performed to riders in that area to offer alternative routes for travel. Mr. de Place replied roughly 100 riders on either end could be recorded during those early or late-night services and it was advertised that those bookend stations had service connections available to transfer to.

Board member Birney asked when the agency would make service adjustments based on rider feedback. Mr. de Place replied that it was dependent on the type of feedback such as operational or structural changes. He added a structural change could engage a formal service plan change.

Board member Birney asked if staff anticipated security issues with parking trains along the line to store overnight. Mr. McGinn replied that the team was working with security to determine how to best staff officers at those station platforms. He noted overnight vehicle storage occurred at raised platforms and the only access to them would be through the station.

Board member Roscoe referenced slide 13 which spoke to passengers possibly experiencing variability with timeliness, train length, and cleanliness and understood that was the core focus of this discussion. She recognized the communication aspect to make riders aware of the changes and was hopeful those communication efforts were being positively responded to by passengers. She asked how long staff anticipated these efforts to happen. Mr. de Place replied that it was an interim condition until the 2 Line opened. Interim CEO Sparrman added that the anticipated schedule of mid to late 2025 was lower confidence by the agency to complete.

Board member Roscoe expressed the importance of keeping open communication about these uncertainties with the Board and the public. She also noted it was helpful in understanding the affects this could have towards another event within the agency that may seem unrelated. Interim CEO Sparrman added this was important context for the Board to understand how to deal with the 1 Line extension and how it fits into the overall long-term picture.

Chair Walker asked if smaller service changes could be made immediately throughout the day on a regular basis. Mr. de Place provided an overview on the complexities for preparing for pre-revenue service and how it correlated to vehicle storage. Mr. McGinn's efforts included trying to implement the plan while taking note of lessons learned from situations that have not occurred in Sound Transit's

history. Mr. McGinn saw more challenges within the maintenance side of this rather than operational in case of unplanned disruptions on the 1 Line. Mr. de Place added that larger schedule changes occurred every 6-months. Interim CEO Sparrman added the agency was working closely with partners to ensure every position was able to respond to unanticipated events.

Chair Walker asked if services weren't near anticipated ridership levels, could that route be altered or would it wait until that 6-month schedule. Mr. de Place replied that it would likely wait until the 6-month schedule as to not change the route prematurely.

Chair Walker called for a roll call vote.

**Ayes**

**Nays**

Angela Birney  
Kim Roscoe  
Dave Upthegrove  
Girmay Zahilay  
Kristina Walker

**It carried by the unanimous vote of five committee members present that Resolution No. R2024-03 be forwarded to the Board with a do-pass recommendation.**

## **Reports to the Committee**

### Passenger Impact Portfolio Plan

Moises Gutierrez, Chief System Quality Officer, and Pamela Wrenn, Deputy Project Director of Service Delivery, provided the report. Mr. Gutierrez began by sharing the team's plan for continuous improvement following the Rail Replacement and Bond Box service disruption on the 1 Line from January 13 to February 4, 2024. The insights were from recent Sound Transit Evolving Practices (STEP) Program in System Quality.

Internal staff and the agency's King County operating partners conducted a joint retrospective which took place mid-February immediately following the completion of the major service disruption. The retrospective focused on identifying lessons experienced and potential actions for continuous improvement. The team successfully delivered all planned projects, including 500 feet of northbound track replacement, 58 bond boxes, and 8 simultaneous State of Good Repair projects. The team also successfully collaborated on the timely resolution of unexpected issues which allowed them to stay on schedule.

Mr. Gutierrez noted this retrospective was not an isolated effort at the agency. In August 2023, following the planned major service disruption for the Royal Brougham crossing repair, the team identified insights for continuous improvement, and in response to feedback, successfully implemented several improvements in time for this January-February 2024 service disruption. As an example, they strengthened security presence at stations and continued the use of staff ambassadors. Fare Ambassadors were also placed directly on shuttle buses to help passengers better navigate their active trips. Additionally, the team strengthened communication efforts to the public before and during this disruption and improved on-site signs to guide passengers. From this disruption, the team heard directly from about twenty percent of passengers that communications and signage were still confusing and should be improved further.

There were a few focus areas discovered from the feedback collected, where the team was diving in further to explore potential improvements between now and the next service disruption of equal scale. For example, there was clear communication from staff and passengers on the wait times being too long. This concern comprised nearly three-quarters of customer complaints for this period. The next step for agency staff was to identify possible solutions to improve passenger wait times. Additionally, many

agency staff worked above their daily job duties to make this planned major service disruption a success. The agency recognized that its needs had outgrown its current resources and was looking into how to staff the planning and execution of these projects in a more sustainable and scalable way.

The Passenger Impact Portfolio Plan was a relatively new addition to the agency with it less than a year old in its current form. Alongside active coordination efforts to preserve planned service, minimize disruption to passengers, and create project delivery efficiency, the team would continue to build a repeatable and scalable structure for the program itself. Mr. Gutierrez noted that the agency's identity would continue to evolve as its operating footprint grew. As the new capital expansions become operational in the coming years, the agency would need to ensure its state-of-good-repair approach was robust. In the coming weeks, agency staff would continue to invest in structured continuous improvement efforts in order to make future service disruptions of this scale go even more smoothly for staff, operating partners, and the riding public.

Ms. Wrenn briefed on a smaller disruption for riders to expect during March 9 at 10 p.m. to March 10 at 9 a.m. in 2024. The electromagnetic interference (EMI) replacement would require single tracking between University of Washington (UW) and Northgate stations. Teams would also work on electrical portions of the artwork in the University District Station during this event. During this disruption, passengers would use the southbound platforms to board trains at the four stations between UW and Northgate. Headways would be 24 minutes at these stations, and 12 minutes in the rest of the system. Passengers would be required to transfer at UW station for through-travel.

Sound Transit's Maintenance Department would soon begin its annual program of rail grinding, which would result in several short passenger disruptions from 11 p.m. until the start of service the next day during 12 nights in April 2024. Headways would be 5 minutes longer than usual. Rail grinding was preventative rail maintenance which increased long-term rail health by maintaining profile to prevent wear. Grinding removed surface defects and also maintained rail profile for ideal wheel rail interface, lowering noise and vibration. Performing this work in a timely manner was critical because a delay in rail grinding can lead to surface corrugation or surface defects requiring a slow order or rail removal.

On June 1 and 2, 2024, a full downtown tunnel closure would allow construction and testing teams to start the final integration of the 2 Line signal system into the downtown tunnel. This work required a full closure of the downtown tunnel to run trains under test conditions. A bus bridge would serve passengers between SoDo and Capitol Hill stations. Piggyback projects were still being recruited but would be limited by the live electrical system and moving trains in the tunnel. This closure conflicted with two Mariner's games over the weekend but avoided other more-impactful weekend events such as UW Commencement. The team would work to ensure that passengers were served by the bus bridge over the weekend, including during events. The 2 Line team worked to accelerate this work prior to the opening of Lynnwood Link. However, the last portion of 2 Line power and signal integration into the 1 Line system would still need to be done once structural remediation was complete, and the overhead catenary system was built out between the downtown tunnel and I-90.

For next steps, the Passenger Impact Portfolio Plan team would act on retrospective findings in the next few months to deliver an improved experience for future service disruptions. There were also performing detailed planning and preparation of the disruptions that were planned for the rest of spring 2024. Lastly, the team was also preparing to intake several more disruption requests for the remainder of 2024 and would share more information at the next meeting.

Board member Roscoe asked how many service hours occurred between 11 p.m. and later, noting one of the closures. Ms. Wrenn clarified the outage would take place at 11 p.m. until service began the next morning and approximately 2-3 trains would run during that time.

Board member Roscoe asked what a rider could expect during platform closures. Ms. Wrenn explained a rider would board the train from the opposite side of the platform and if the platform was central then they would board on a single side.

## Presentation on At Grade Crossing

David Wright, Chief Safety Officer, provided an update on the Rainier Valley at-grade crossing. Service opened in 2009 in the Rainier Valley corridor with approximately 4.5 miles of semi-exclusive right of way. There were 3 at-grade stations: Columbia City, Othello, Rainier Beach stations and 27 at-grade crossings, including 9 pedestrian-only crossings. The program's priorities included reducing collisions and near misses with trains, vehicles and pedestrians, providing a consistent and safe passenger experience system-wide, supporting reliable service, mitigate impacts to operational performance, increasing community perception of safety of Sound Transit's service, building positive, proactive relationships with surrounding communities that foster trust, increasing ease of access within the immediate community, and increasing accessibility of the Sound Transit network for all.

There were two phases of community engagement efforts. Phase 1 took place in winter 2022 and phase 2 began in 2023 and was ongoing. The engagement summary for phase 1 included reaching out to over 30 community-based organizations, receiving responses from 13 organizations and community leaders, circulating a survey created by the Accessibility Services Division, surveying Link operators, and a partnership agreement signed with the Seattle Department of Transportation (SDOT) in August 2022. Phase 2 included continuing to engage and maintain established relationships, sharing internal efforts underway to address community concerns, and utilizing the Equitable Engagement Toolkit.

For screening safety enhancement ideas, the evaluation process overview included collecting all safety enhancement ideas, team research and discussion, prioritizing efforts based on screening, and further research and planning. Mr. Wright shared a table of safety enhancement ideas organized by three categories: administrative controls, engineering controls, and roadway design. Administrative controls touched on safety education, encouragement, and operations procedures. Engineering controls touched on audible, visual, and physical infrastructure, technology, and vehicle. Roadway redesign included consolidating crossings, eliminating crossings, grade separate, amongst others. Safety enhancements that were scored highly were prioritized and others with lower scores were placed on hold.

Mr. Wright briefed on the safety education that took place before, during, and after construction but mentioned the Rainier Valley community felt abandoned after the station opened in 2009. As part of the at-grade program, the agency enacted community engagement in the community in order to hold to values to being responsive and transparent and engage in two-way conversations. Mr. Wright shared the community events the team actively participated with. Mr. Wright shared that the FTA released a report in summer 2022 which stated having a robust community safety engagement program reduced fatalities by 33 percent. The Rainier Valley area had Sound Transit security staff that were trained to communicate and encourage riders to safely interact with the trains. This practice would be implemented once East Link was in service and was also happening on the Sounder service.

Suraj Shetty, Executive Director of Operations, reviewed completed engineering projects such as adjusting the light rail bell volume. With SDOT, the leading pedestrian intervals and retroreflective tape around signal heads projects were completed. With other partnership, the following projects were completed: LOOK pavement markings, RxR pavement markings in left turn pockets, refreshing all crosswalk and lane line markings, updating static signs, upgrading "No Left Turn" dynamic warning sign, and upgrading "Another Train Coming" dynamic warning sign. Sound Transit, in partnership with SDOT, applied and was awarded \$2 million in grant funding (SMART grant) with \$465,000 Sound Transit local contribution to demonstrate innovative emerging technologies to enhance safety. This pilot would test real time multi-modal detection for 24/7 365-day awareness. Technologies included video analytics, touchless pedestrian push buttons, vehicle to everything (V2X) communications, smart technology traffic signals, and signal system battery backup. The traffic signals along Martin Luther King (MLK) Jr. Way south corridor between S Walden and S Henderson St currently allowed for full prioritization of light rail vehicles (LRV). The current corridor was designed in a way that a LRV placed a call to the traffic controller then the traffic controller would adjust the signal operations to minimize the stops between the stations. The current agreement with SDOT, east/west pedestrian places were allowed to be skipped

once. However, due to limitations of traffic controllers, it was skipped more than once. Northbound and Southbound movements were allowed to be skipped multiple times which could result in long wait times for vehicles and pedestrians. The Signal Reprioritization Pilot would change how the signal system prioritized the 1 Line service through the corridor. The goal was reducing pedestrian wait time and north/south left turning vehicle wait time. Phase 1 of this pilot had already begun and phase 2 would complete in Q2 2024.

Craig DeLalla, Acting Chief Engineer, reviewed exploring pedestrian gates at stations. Through engagement work and idea screening efforts, gates or some sort of barrier treatment to prevent pedestrians from entering intersections when a train is approaching was recommended for further development. The team took this feedback and formed data collection activities, consulted regulatory standards, interviewed peer agencies, coordinated with partners at SDOT, and coordinated a feasibility study which concluded late 2023. Based on the study, it was feasible to install gates at the crossings that were adjacent to Columbia City and Othello stations. Other locations were constrained by auto traffic lanes and installations would have trade offs with impacts to the corridor such as removal of automobile lanes. This project was moving forward with 30 percent design and safety analyses traffic studies and service impacts and expect to begin early fall 2024. This summer, the team planned for community engagement, activities to collect stakeholder feedback. The team will report back with findings in fall 2024.

Mr. Wright reviewed the MLK safety enhancements throughout the years which began in 2022. Next steps for 2024 showed how the team would advance safety enhancement projects, begin design of potential gates and collecting community feedback, and coordinating with the Graham Street station project team. Mr. Wright emphasized that strong community involvement was crucial to these steps.

Board member Roscoe praised the agency for its efforts to provided crossing safety by means of internal staff, security officers, and fare ambassadors. She found it a great opportunity for security officers to communicate with riders on a proactive level and all training efforts were integral to a zero incidents percentage. She recommended a visible countdown at intersections to show when to cross, however, that also required passenger knowledge as one may confuse the countdown with how much time they had left to cross.

Board member Zahilay reflected on the shared data and asked whether the majority of Sound Transit's safety issues occurred in the Rainier Velly comprised of 50 percent or more of incidents. Mr. Wright confirmed that was correct and noted other areas along the line were elevated and, in those areas, there were no interactions between trains and pedestrians or vehicles.

Board member Zahilay asked for confirmation on the agency having no community engagement with Rainier Valley between 2009-2022. Mr. Wright clarified that engagement took place, but it was minimal and not on a proactive basis. Currently, there was a more structured and proactive engagement plan to speak to the community as opposed to being reactive towards complaints.

Board member Zahilay communicated that South Seattle felt their responses had not appropriately been addressed by the agency and was pleased to see the agency taking action and providing more attention. He asked whether staff had analyzed these incidents, including fatalities, and pulled trends to determine the recommended solutions' success or vice versa. Mr. Wright replied that when he created the team, they looked at every fatal incident and, of the 8, 2 was intentional, 1 was caused by intoxication, and the other 5 shared a common denominator. That commonality was that a train was at the station and an individual was focused on that train while not observing potential incoming trains from the opposite direction; this is what created the safety message of "look both ways." That strategy was created by the incidents that could have been prevented. Mr. DeLalla added that "another train coming" signs were also installed at the intersections. Mr. Shetty added the importance of analysis of near misses was also critical because a near miss was something to learn from to ensure those events would

not turn into fatal incidents. He also noted partnership with SDOT was critical because the operational train signals could also cause incidents with vehicles.

Board member Zahilay asked staff how they were certain louder bells and better signage would work and if that decision was data driven. Mr. DeLalla replied those were industry standards and from safety analysis and data.

Board member Zahilay asked whether there was thought into analyzing feasibility costs of raising platforms or placing them underground. Interim CEO Sparrman mentioned the immediate, short-, and long-term pictures to address and that grade separation was on the agency's radar.

Board member Birney was pleased to learn of the engagement for learning opportunities with children and asked whether there was Federal funding to consider for these efforts. Mr. Wright noted the team engages with schools in the communities to provide safety education when near trains and train tracks. Interim CEO Sparrman emphasized that lessons learned with Rainier Valley would be applied systemwide and that there would be Federal funding opportunities to explore.

Chair Walker emphasized the importance of a balance act when communicating safety on and near trains while promoting ridership.

#### Presentation on ST3 Light Rail Service and Ridership Demand

Matt Shelden, Deputy Executive Director of Planning and Integration, provided the report. He reviewed main takeaways received from 2023 briefings. From April, pressures on service and fleet could result in less initial service to Lynnwood when it opened. From June, continuation of those pressures through ST3 system expansion, if not addressed, could result in needing more fleet and operations and maintenance facility capacity, or less service. From September and October, fleet constraints through ST2 program completion could result in crowding and discussed potential mitigations, including advancing some LRV procurement. From November, the Board authorized negotiations for 10 additional Series 2 LRVs to augment ST2 fleet until ST3 fleet and Operations and Maintenance Facility (OMF) capacity were available.

For the future, considering all of the assumptions and recent experience, the agency was now forecasting needing approximately 90 more LRVs than the agency could currently have programmed to provide the planned 6-minute rush hour service on all lines by the end of the ST3 program. The key drivers from those assumptions were added running time in the system, an increasing proportion of vehicles out of service for maintenance (spare ratio), and the need to add some contingency in planning for unknowns that may arise in the future. Staff assumed a 5 percent contingency for now but may need to change it as they learn more.

Key analysis questions included asking what service levels could be operated with available fleet when ST3 was complete, what could passenger loading/crowding conditions look like when looking at PM peak hour, the highest demand period when most service and maximum fleet was needed.

Mr. Shelden reviewed a visual that depicted four levels of crowding as reference. At the lowest end, it showed everyone having a seat. Trains got more crowded standees were added. The Board-adopted crowding standard included in the agency's service standards was one standee for every seat, or 148 people per train. Crowding beyond that level made it increasingly difficult for people to get on and off the train and called for mitigation. Once it reached around 195 people per train, there was no room for people to get on.

Given the changed operating conditions laid out in briefings last year, Mr. Shelden shared an image that showed how close the agency could get to the originally assumed 6-minute headways with the fleet the agency currently planned to have by the end of the ST3 program. This would use all 460 LRVs in the Finance Plan with all ST3 light rail extensions opened, all ST3 LRVs available, and all OMFs in operation. Though the realigned ST3 program was due to be completed by 2044, it was showing 2048



conditions to reflect how it would look after full system operation settled out. For the 1 Line, Ballard to Tacoma Dome, the planned headways were 6-minutes with 4 cars, this remained possible as is. For the 2 Line, Mariner to Downtown Redmond, the planned headways were 6 minutes with 4 cars, now it was possible for 8-minutes with 4 cars. For the 3 Line, Everett to West Seattle, the planned headways were 6-minutes with 4 cars, now it was possible for 8-minutes with 4 cars. For the 4 Line, South Kirkland to Issaquah, the planned headways were 6-minutes and the assumptions for number of cars was not specified in ST3, now it was possible for 10-minutes with 3 cars. The headways did not fully account for forecast demand.

Mr. Shelden shared a graph that he previously had shared from briefings last fall when the presentations were focused on the ST2 program. It showed a range of forecast ridership, with a light blue line denoting the lower end and a dark blue line the upper end of the range. He reviewed an example showing what crowding could look like on the 1 Line with 6-minute peak service a couple of years after the ST3 Plan was complete. That level of service was not enough to accommodate all of the forecast demand, especially at the high end of the forecast range.

Mr. Shelden reviewed how the agency planned to address the forecasted crowding, which there was time to work on it as the system was being built out. He noted some mitigations had long lead times, so the agency needed to make sure it was reflecting the Board's desires as the agency began to work on them. There were two primary approaches for the Board to consider that bookend a range of possibilities. There were some efficiencies that could be pursued under either of the bookend mitigation approaches and they fell into four categories: things the agency could do to reduce run times, reduce the spare ratio, accelerate purchase of additional light rail vehicles, or increase the capacity of each car. This was a list of possibilities to give the Board a sense of the range of opportunities and was not exhaustive. Staff proposed to focus on those that appeared most promising, such as high benefit for lower cost. There were a few approaches already being worked on such as completing warranty work, advancing 10 Series 3 LRVs to Series 2, and configuring future LRVs for more capacity. Staff believed efficiencies would help reduce identified gaps, but efficiencies alone were not likely to fully close them.

Approach 1 would be to modify expectations about how much service would be provided on each line when the expansion program was complete. Rather than provide 6-minute peak service everywhere, the agency would tailor service levels to serve forecasted demand more closely. Available fleet would be reallocated to provide service where it was needed most, modifying the level of peak period service provided on each line. The agency would actually need more service on the 1 Line but might live with a bit less on the 2 and 3 lines, and significantly less on the 4 Line. 1 Line with 5 minutes, 2 and 3 Lines with 8 minutes (4 combined north of downtown), and 4 Line with 16 minutes. This approach would continue to provide frequent service on all lines, address most forecast crowding and allow to live within means by utilizing only the fleet and OMF investments already included in the agency's financial plan. If the Board decided that more frequent and comparable headways on the 4 Line was needed, the agency would need to purchase about 12 more LRVs at a cost of approximately \$100 million. These vehicles could be accommodated within the planned OMF capacity. The tradeoff with this approach for riders was that longer run-times were being accepted and longer headways on most lines. More service may be possible if the agency was able to find further efficiencies. Mr. Shelden shared a graph of what crowding on the 1 Line could look like at the previously mentioned modified service levels. Five-minute peak service on the 1 Line from Ballard to Tacoma Dome would largely address overloads, though the line would still be crowded through downtown and the Rainier Valley. He noted service could not operate any more frequently through the Valley without major changes to traffic operations on MLK Jr Way, which would require SDOT agreement.

Approach 2 would require significant new capital investment to close the gap and would help stay on track to provide 6-minute peak service on all lines by the end of the ST3 program. The agency would need to buy upwards of 90 more LRVs at close to \$1 billion and expand OMF capacity to accommodate up to 60 of them for another approximate \$1 billion. More LRVs and expanded OMFs would also require

another \$300-\$350 million in operating expenses through the life of the ST3 program. This alternative would require significant new revenues or cost savings elsewhere in the program and was not currently affordable under the agency financial plan. Costs may come down if other efficiencies were discovered.

Mr. Sheldon noted the two approaches offer very different choices. The staff recommendation was to pursue elements of each by creating a hybrid approach. This would search for efficiencies where able, match future service levels to ridership demand, and maintain flexibility in the capital program to respond as conditions may change in the future. Flexibility could be built in by including options for additional vehicles in future fleet procurements and asking OMF designers to include options in the designs for more storage and maintenance capacity, if needed.

Staff asked the committee and Board for guidance on which alternatives and strategies to pursue and would return in the following month to receive feedback. The team would be ready to update the agency's long-range service and financial plans and prepare an updated Rail Fleet Management Plan for the FTA with the Board's guidance. The Board would have an opportunity to review and change assumptions about long-term service levels as they considered the Service Implementation Plan each year.

Board member Birney referenced long-term plans for the agency and whether this was within that topic and showed what's next and the perceived requirements to begin this work now. Interim CEO Sparrman confirmed this was a part of the long-term plan and would be incorporated over the next few years into the long-range financial plan, but time was available to the Board on how to best approach.

Board member Roscoe noted the legalities of changing the structure of the adopted program and asked whether this was under that realm. Interim CEO Sparrman replied it was and that voter approved measures set a framework and this was a way to alert the Board of any changes to headway assumptions. He emphasized there were no urgent decisions coming up and that this was a request for guidance.

Board member Roscoe requested staff to help facilitate Board member interaction with affected communities and ridership and how they could assist, such as with the 4 Line. Interim CEO Sparrman noted those efforts were slightly premature as the 4 Line was still many years away and this report was to raise issues proactively, but at the time of action, staff could facilitate those interactions. Mr. Sheldon added some of the projects discussed were decades out and the forecast could change as ridership evolves and develops throughout time. He reiterated the purpose of the report was to receive guidance and noted the importance of setting expectations.

Chair Walker asked about the OMF capacity. Mr. Sheldon clarified that if the Board were to decide to accommodate additional vehicles, the agency would require additional OMFs.

Chair Walker asked if staff would return to this committee for direction. Mr. Sheldon replied yes and that the materials would also be presented to the full Board as staff welcomed all input.

Chair Walker noted a request for presentation on marketing efforts for the future on how to find balance with marketing efforts of encouraging safety while promoting ridership.

**Executive session – None.**

**Other business – None.**

## **Next meeting**

Thursday, April 4, 2024

1:00 to 3:00 p.m.

Ruth Fisher Boardroom and Virtually via WebEx

## Adjourn

The meeting adjourned at 3:02 p.m.



Kim Roscoe  
Rider Experience and Operations Committee  
Chair Pro Tem

ATTEST:



Kathryn Flores  
Board Administrator

APPROVED on April 4, 2024, JG.