



Summary Minutes

Rider Experience and Operations Committee Meeting June 1, 2023

Call to order

The meeting was called to order at 1:32 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 Deputy Mayor	(A) Ed Prince, Renton Councilmember

Board Members	
(P) David Baker, Kenmore Councilmember	(P) Kim Roscoe, Fife Mayor
(P) Christine Frizzell, Lynnwood Mayor	(P) Dave Upthegrove, King County Council Chair
(A) Debora Juarez, Seattle Council President	(A) Peter von Reichbauer, King County Councilmember

Katie Flores, Board Administrator, announced that a quorum of the committee was present at roll call.

Report of the Chair

Monthly Contract Report

The monthly contract report was included in members meeting packets for review.

CEO Report

CEO Julie Timm provided the CEO Report.

PIMS Update

The new Passenger Information Management System (PIMS) went through its first round of revenue hour testing last month. CEO Timm reminded the committee that this was a complex, multi-year undertaking to replace multiple passenger information systems which weren't designed to provide real-time information with a new enterprise multi-modal system that would have the capability to do that and more, including dispatching trains and targeting messages to the passengers who needed them most. PIMS had critical integrations with fire, life, and safety systems. The team and vendor were continuing work to test and refine PIMS' functionality throughout June 2023 with agency personnel acting as observers.

CEO Timm mentioned riders may see the team at Link stations recording test results and may see arrival predictions that look off, or other test messages as the team worked through testing. More details could be found on the Sound Transit blog post which had been used to keep passengers informed. For stations that had cutover to PIMS for testing, the digital signs occasionally displayed and announced a

message that stated, “We are testing the passenger information system, incorrect messages may be displayed.” Once the new system was tested and launched, passengers would have access to real-time arrival predictions. Upgrades for increased functionality and improved accuracy in real-time arrival predictions would roll out over time, including integration with the new Rider Alert system in fall 2023, and toward the end of 2023, riders would see Link station signage beginning to be replaced with the new PIMS signs.

Vertical Conveyances

CEO Timm reported positive passenger feedback on vertical transportation. In 2023, there had been a 38 percent decrease in the amount of downtime with all escalators and elevators with the portfolio that had increased 47 percent from 2020 – going from 94 assets to 198 assets in that time. Mechanical outages used to make up almost 50 percent of the out of service time and currently they only made up about 28 percent.

Public comment

Chair Walker announced that public comment would be accepted via email to emailtheboard@soundtransit.org, in person, and would also be accepted virtually.

The following people provided written comments:

Joe Kunzler

The following people provided in-person comments:

Alex Tsimerman

The following people provided virtual comments:

Joe Kunzler

Zakariya Osman

Business Items

For Committee final action

May 4, 2023, Rider Experience and Operations Committee meeting minutes

It was moved by Boardmember Baker, seconded by Boardmember Roscoe and carried by unanimous consent that the minutes of the May 4, 2023 Rider Experience and Operations Committee meeting be approved as presented.

Motion No. M2023-44: Authorizing the chief executive officer to execute five, individual, three-year contracts with five one-year options to extend each with Cambridge Systematics, Inc., Flairsoft Ltd., DirectApps, Inc. (dba Launch Consulting), TYLin, and IT Works! Inc. (dba Volanno) to provide task-order based General IT Consultant services in individual contract amounts that may exceed \$2,000,000, provided that the aggregate total of all the contracts does not exceed \$30,336,000.

Boardmember Upthegrove joined at this time.

Jason Weiss, Chief Information Officer, provided the staff presentation.

Boardmember Baker asked if there was a limit to number of jobs per company and whether one company could be utilized more than the others. Mr. Weiss replied that each company would start with a base amount of \$2 million and requests would be sent to each company to capture a competitive response. Boardmember Baker asked if jobs would go for bids again. Mr. Weiss responded that work would be done through task orders and job availability and resources would be dependent on the companies.

Chair Walker asked whether the agency had engaged with these companies in the past or whether they were new to Sound Transit and its technology. Mr. Weiss replied this was the first time these companies would work with Sound Transit with this specific task order-based contract. Some companies had worked with Sound Transit previously and some were new. Chair Walker asked if there would be training required to learn the agency technology. Mr. Weiss replied that the IT knowledge wasn't agency specific.

Boardmember Roscoe reiterated that these were task-based contracts with external providers and asked if there was a reason in future years to incorporate these services internally. Mr. Weiss replied that the specific work that would be requested was work outside of internal staff's skill and this would complement IT staff rather than replace. CEO Timm added that the agency was looking at internal departments and how to use external staff to supplement in to have the best value to riders, to communities, and to taxpayer dollars. There was a benefit to using external contracts for term limited options or for fast turnaround options but the agency was looking to see where it could bring resources in-house.

Motion No. M2023-44 was moved by Boardmember Upthegrove and seconded by Boardmember Roscoe.

Chair Walker called for a voice vote.

It was carried by unanimous consent of all committee members present that Motion No. M2023-44 be approved as presented.

Reports to the Committee

REO Metrics Performance Reporting

Raj Cheriell, Director of Essential Data and Analytics, provided the report. Mr. Cheriell reviewed the process to access the System Performance Tracker and walked through the performance tracker menu which included metrics organized by category. He noted his return to the July committee meeting to receive feedback from committee members and review individual metrics in more detail.

Boardmember Roscoe requested reminders for the committee to spend time looking at the performance tracker prior to committee meetings. Mr. Cheriell committed to providing links to the tracker before the July 2023 meeting.

Long Term Light Rail Fleet and Storage Challenges

Matt Shelden, Deputy Executive Director of Planning and Integration, provided the report. He reviewed current assumptions that affected forecasts and began with assumptions that had not changed significantly since ST3 was approved. Staff continued to plan for eventually providing 6-minute rush-hour service on all light rail lines by the time all the extensions were in operation. That level of service was based on ridership forecasts done in 2015 to support ST3 Plan Development. Staff also completed the Operations and Maintenance Facility (OMF) East, increasing overall maintenance base capacity to 200 vehicles, and was planning two additional bases in the north and south corridors that would add capacity for nearly 300 additional vehicles. To help with interim needs, 16 temporary storage spaces were included in Federal Way that would be available until the new OMF South facility was available in the early 2030s. There may be other ways to increase storage that could require some operational tradeoffs. Regarding fleet, once all Series 2 Siemens vehicles were in service, there will be 214 cars available to support service until more vehicles were procured and delivered starting in the early 2030s. The finance plan currently includes funding for a total fleet of 460 vehicles to support build out of the ST3 system, accounting for replacement of the oldest Series 1 cars in the late 2030s.

Mr. Shelden reviewed the assumptions that were changing based on evolving operating conditions and lessons learned the agency gained more operating experience. Some were discussed at the April 2023

meeting as they affected current service and planned light rail extensions in 2024. They were being applied to longer-term needs as the system was built out. Staff found that it was required to add more running time into the system to account for slower-than-planned operations in some areas, like at-grade sections in the Rainier Valley and SODO, and in some tunneled areas where there were tight curves. Increasing daily maintenance needs were taking more cars out of service more often. This was known as the spare ratio, and staff believe it needed to increase to keep up with maintenance needs as the system expands to support reliable service. Fleet contingency was intended to provide some cushion for unpredictable maintenance needs, such as accidents or major retrofits and upgrades to keep up with technological changes, as well as unknowns like potential further slowing in the system. Finally, as ridership demand was evolving, staff was looking at what sized trains were most appropriate as the system was being built out. All of these changes were intended to support reliable service delivery over the long term. Mr. Sheldon noted these were planning level assumptions and this was work in progress - future work would help optimization.

Considering all the assumptions, the bottom line was forecasting that Sound Transit would require approximately 90 more light rail vehicles than the agency originally planned, in order to provide the planned 6-minute rush hour service on all lines by the end of the ST3 program.

Mr. Sheldon provided a chart to show the effect of key factors on the size of fleet that the agency would need to provide the planned level of service. It also showed how many vehicles the agency had planned for up to now, to provide a visual of where the agency would fall short. In the near term through buildout of ST2 extensions this decade, there would be 214 vehicles available, though the need to support planned service was closer to 260. There was not much flexibility in this period, as the agency wouldn't have additional vehicles until the early 2030s. Mr. Sheldon noted staff was starting to prepare the next vehicle procurement. That meant looking at modifying planned service levels to better match the fleet that will be available. It may require trains to run with less than 4 cars more often. Over the summer, staff would develop other options for the Committee to consider. In the long term, staff forecasted needing about 550 vehicles to eventually provide that 6-minute rush hour service on all lines, versus the 460 that were currently in the finance plan.

Mr. Sheldon reviewed a graphic that displayed the need for more fleet also created the need for more space to store and maintain them. The OMF Central facility was in operation, and the OMF East facility was anticipated to be fully available to support systemwide service when the East Link connection across Lake Washington was open. Current plans included building two more OMFs to provide systemwide capacity for 496 vehicles. OMF South was currently trending toward opening in the early 2030s, and OMF North later that decade. With an ultimate fleet need of about 550 vehicles, the agency would be 50-60 vehicles short in the long term. However, because fleet was capped in the near term, it currently appeared that there should be adequate OMF capacity as new facilities come on line, even as the fleet would start to grow in the 2030s. It wouldn't be until the 2040s to expect to fall short on space.

Between now and 2030, fleet would be capped at 214 vehicles, and that wouldn't be enough to provide the planned level of service. Even if the agency had more vehicles, and because OMFs would be full, finding other places to store them would require operational tradeoffs. Longer term, staff was projecting a need for 90 more vehicles than what was currently included in the finance plan, creating need for more OMF capacity than was currently planned.

Mr. Sheldon reviewed options to address the shortages. In the near term, options were limited because fleet was capped, so staff would need to look at adjusting service levels until there were more cars. Longer term, the agency could choose to buy more vehicles and build more OMF capacity, adjust the level of service provided, or some combination of the two. Staff would also continue to look for ways to more efficiently provide service to save time and reduce the number of vehicles needed, but this was not likely to solve the problem. This updated forecast was as of current conditions and there were continuing risks that could require even more vehicles and operations and maintenance capacity, such as increased rider demand that required more service, further slowing in the system, and higher space

needs at OMFs, for example if more space was needed for commissioning new vehicles or overhauling existing ones. Staff would report back if these risks emerge.

Mr. Shelden reviewed next steps which included developing mitigation options and estimated costs during June through August 2023, presenting near-term service options for mitigating capped ST2 fleet at the August 2023 Rider Experience and Operations and System Expansion Committee meetings, presenting long-term mitigation options, costs and affordability as well as seek Board direction on priorities at the September 2023 Rider Experience and Operations and System Expansion Committee meetings, and update plans to reflect the Board's direction sometime in the Fall.

Boardmember Frizzell questioned the 5 percent contingency for future needs with the requirement of 90 additional vehicles and how staff concluded the contingency amount sufficient. Mr. Shelden replied there were three factors leading to 90 additional vehicles. Those factors consisted of additional run time in the system, the need to carry a higher spare ratio or a higher number of cars that were out of service for maintenance. Boardmember Frizzell asked if the contingency should be raised. Mr. Shelden replied the contingency percentage was staff's current estimate given the levels of uncertainty of the aforementioned factors. Boardmember Frizzell voiced support to increase contingency in order to manage expectations of uncertainty.

Boardmember Roscoe asked what the ridership projections were based on. Mr. Shelden replied the currently planned levels of service that was measured were established based on prior ridership forecasts when the ST3 plan was put together. There were updated forecasts to take into consideration, such as changes to work from home patterns. Those had yet to be applied but would be used over the summer when staff returned to the committee with options to consider.

Link State of Good Repair and Maintenance

Suraj Shetty, Executive Director of Operations, provided the report. Mr. Shetty reviewed the Passenger Impact Portfolio Plan's (PIPP) program goals, which included coordinating and scheduling projects to minimize service impacts and integrate that activity as a regular business function. The methodology included recognizing passengers as customers, preserving planned service and urgency to return to fully planned service, minimal disruption to passengers and passenger flow, and project delivery efficiency.

Mr. Shetty reviewed upcoming planned repair maintenance projects. The electromagnetic cable hanger improvements project was planned for the June 9 and 16 weekends. This project would improve design of hangers on the floating slabs in the tunnels. This was necessary as a safe and temporary solution was in place, this project would complete the permanent repairs. Passengers would benefit from long term safety and reliability. This project impacted service by having nighttime single tracking for both Friday and Saturday nights on two consecutive weekend – normal service during the day.

Routine rail replacement work was planned for every Tuesday night beginning May 30, 2023 through July 25, 2023. This work was necessary as these replacements were part of the overall state of good repair, which would aid in the continued useful life of the track. This would improve rail safety, reduce noise and vibration, and reduce long-term maintenance costs. This work would fix a series of rail replacements within sections of the trackway at the south end of the system. Nighttime single tracking in segments between Rainier Beach Station and SeaTac Station and the closure of northbound platform on the evening of June 27, 2023 were the expected service impacts.

WSDOT bridge inspections would take place on June 4 from 4 a.m. to 9 a.m. WSDOT would conduct these inspections which required an overhead catenary system power shutdown in proximity and must be performed during daylight hours. This was a routine biannual bridge inspection and would impact service by causing full closure of four stations, Stadium to University St., in which a bus bridge would be available from SODO to Westlake stations.

Passenger Information Systems (PIMS) testing would take place on May 31, 2023 to July 3, 2023. This work was necessary to replace and consolidate end-of-life, incompatible information systems. Passengers would benefit from continued quality of service through better information. This work would test the system for reliability prior to full transition. Passengers may experience information that was inaccurate during this testing. Real-time information may be down from June 6, 2023 to June 23, 2023.

CVS overhaul switch replacement work was planned monthly beginning June 5, 2023. This would replace cascode voltage switches reaching end-of-life in trackways and improve switch performance and reliability. Single tracking was expected from 10 p.m. to end of service. Northbound platforms at Beacon Hill and Mt. Baker stations were closed with 15-minute headways system wide.

For Sounder, the Puyallup Station bulb-out removal work was planned for June 6, 2023 to July 3, 2023 to remove bulb-out causing impedance to optimal bus flow, creating improved bus service. This would cause temporary construction fencing on the platform and surface parking would be partially closed. Sound Transit and Pierce Transit bus stops would be temporarily relocated.

Mr. Shetty reviewed the Q3 shared closure considerations and briefed on next steps. Next steps included finalizing plans and beginning communications to prepare passengers for the Q3 projects, continuing to look for efficiencies and opportunities to consolidate the work impacts across the system, and develop a permanent office around the Passenger Impact Portfolio Plan to integrate this activity as a regular business function.

Boardmember Roscoe noticed a potential safety concern with a crossing arm at the Sounder platform in Tacoma. Mr. Shetty committed to work with appropriate partners to investigate the issue.

Chair Walker asked if there were alternative solutions to address pedestrian safety if the Puyallup bulb-out project could not be completed. Mr. Shetty committed to providing an in-depth response to Chair Walker's question by reviewing the technical aspects of the project.

Chair Walker asked where the public could find information on upcoming project work. Mr. Shetty replied all information was available on the Sound Transit website. Chair Walker acknowledge how helpful ambassadors were when stationed near platforms where work was occurring. CEO Timm added that alerts were also sent through various social media platforms in advance of the impacts these projects.

Fare Ambassador and Reduced Fare Programs Update

Sean Dennerlein, Deputy Director of Passenger Success, and Katie Drewel, Government and Community Relations Manager, provided the report. Mr. Dennerlein reviewed the compliance rate with compliant percentages at 85 percent with a 6-month average and non-compliant at 15 percent with a 6-month average. He shared a graph of the sample size to note the number of inspections that take place versus the number of riders due to the staffing levels of fare ambassadors – this was important to take into account of the data percentages.

Inspection rates were set at a 10 percent target rate and the actual rate for a 6-month average was currently at 1.77 percent. Staff recognized its current state and had created another way to view the program to capture targets with external variables beyond control. A model was developed with the available data to maintain targets. The model was: targets plus external variables equals evaluation metrics. Meaning program goals set by the Board using assumptions and forecasts with the external circumstances beyond control that impact the program's ability to meet targets would equate to quarterly success or failure measurements and would be used to judge program performance with real data. By using that model, performance levels were about expectations and helped staff determine future staffing levels or the level of staff provided at certain hours of the day to meet the 10 percent target.

Mr. Dennerlein noted the March 2023 inspections were much higher than February 2023 due to a disruption on a single day in February which the agency responded to by relocating ambassadors to support passengers. By doing this, it caused a days' worth of data to be unavailable but instead shift the

attention of support to another field which would not negatively impact the climb to reach the 10 percent target rate. March had a lower level of ambassadors available and certain operational decisions were made to shift the locations and timeframes ambassadors would be present due to higher ridership levels and inspection rates increased as a result.

Mr. Dennerlein explained how the model works by providing visuals of ambassador's capacity and how it was managed. About five percent of time was taken up by administrative tasks, such as training, which would take time away from an ambassador's "active" time. Low fare compliance had the greatest burden on performance, which added to time spent "inactive." For example, during a busier hour, more time would be taken to handle a non-compliant passenger versus those that were compliant. Higher compliance rates were expected through higher visibility of ambassadors. Adding additional lines, such as the decision to add East Link Starter line, would add more inactive time and take a performance burden due to lower ridership. Disruption support was also taken into account as those scenarios would shift passenger support directives. Dedicating an ambassador to non-peak hours for just 30 percent of their time would cause a significant reduction in performance due to lower ridership levels. Limiting three variables was enough to impact ambassador performance and capacity.

Mr. Dennerlein reviewed a cyclical prototype with the program's recruiting, training, and certifying system which was planned for pilot in September 2023 and go live in March 2024.

Additional updates to platform inspections and citations were provided. Platform inspections were planned to take place once staffing levels increased and was anticipated for September 2023 or sometime in the Fall of 2023. Citations were to be prioritized over platform inspections to avoid risks of errors with policy and procedures. Staff anticipated citation software to be available by end of July 2023 and staff was working with the Court systems to prepare for citations to be received.

Chair Walker asked if the program was fully staffed given the low number of staffing levels that was provided at the last committee meeting. Mr. Dennerlein explained the current staffing situation which included providing several promotional opportunities to current staff to support the growing program. By promoting internally, this caused the program to backfill those positions. Staff would know by December 2023 what the final staffing levels would be, but the program would be fully staffed by July 2023. Mr. Dennerlein noted being fully staffed would still be insufficient to reach the 10 percent target due to the program's previous model and forecasts.

Ms. Drewel provided updates on the ORCA LIFT program. The goal for enrollment was about 84,000 customers. The current enrollment was at approximately 62,000 customers. This increase in enrollment has caused for added community enrollment partners and new enrollment centers. Pierce Transit joined ORCA LIFT in April 2023 and Everett Transit joined Subsidized Annual Pass in April 2023. Updated Sound Transit communications materials and new grants to support regionalizing materials occurred as well as in-person engagement opportunities.

Challenges being addressed included barriers facing potential participants as well as administrative challenges with database and enrollment portal and limited resources for community partners. Next steps included in-person engagement during Summer and Fall of 2023, continued support for enrollment agencies, continued coordination with ORCA partners and community agencies to address enrollment barriers and administrative challenges, and regionalization of materials and website content to align message and improve user experience.

Boardmember Roscoe asked for more information on what the agency, or agency partners, could do to alleviate the burden of manual entry into the database when customers were being served. Ms. Drewel committed to gathering more information on the database for Boardmember Roscoe. Ms. Drewel added that customers were still able to enroll through enrollment agency partners, through DSHS, or online. However, there were multiple steps and platforms for data to be transferred and it was believe that an increase in staffing could assist with this multiple data entry points to receive more enrollment.

Russ Arnold, Deputy CEO – Chief Service Delivery Officer, added that the Fare Ambassador program aimed to have 24 ambassadors and the agency was currently at about 15 or 16 – including supervisors, who were out with the ambassadors. Mr. Arnold offered opportunities to the committee, and Board members, that shadowing opportunities were available for those that were interested in seeing the ambassadors training experience. CEO Timm encouraged members to take on the opportunity to experience the ambassador's work.

Chair Walker asked if ORCA LIFT materials were translated in other languages. Ms. Drewel confirmed that materials from the agency, and partner agencies, were all translated and noted streamlining of those materials would benefit communities and riders. Chair Walker asked if there were multi-lingual staff available when outreach occurred. Ms. Drewel committed to gathering more information.

Executive session – None.

Other business – None.

Next meeting

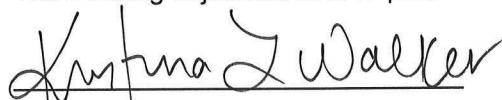
Thursday, July 6, 2023

1:30 to 3:30 p.m.

Ruth Fisher Boardroom and Virtually via WebEx

Adjourn

The meeting adjourned at 3:17 p.m.



Kristina Walker

Rider Experience and Operations Committee Chair

ATTEST:



Adam Montee, on behalf of

Kathryn Flores

APPROVED on August 3, 2023, JG.